

**Assessing Determinants of Customer Loyalty
in an Online News Service Context**

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Declaration

I certify that the ideas, results, analysis and conclusions reported in this dissertation are entirely my own effort, except where otherwise acknowledged. I also certify that this work is original and has not been previously submitted for any other award.

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Grainau, February 2013

Abstract

News consumption has become a central aspect of everyday life in modern societies and in recent years online news websites have become an increasingly popular source. This thesis examines online news consumption and customer loyalty to online news websites. Using the underlying theoretical perspective developed from the debate between social constructionist and technical determinist stances in technology acceptance and usage, this thesis examines the application of domestication theory to online news service consumption and loyalty. Based on loyalty literature and the conjecture from Oliver (1999) that customers can be enveloped in a community of loyalty which will aid and direct their (purchase) decisions, this thesis additionally looks into the role of an online news site's community in fostering loyalty. A research model to test the effect of online community participation on the previously empirically supported link between perceived value and loyalty was created. Constructs to support the community variable were derived from literature and refined through exploratory research and are introduced in this thesis. Furthermore, measures for domestication stages were derived from the literature and further developed through exploratory research with online news site users and are also introduced in this research.

This research examines the use of domestication theory in understanding news service consumption and adds to the growing body of domestication literature as well as adding to the emerging literature on, and increasing the understanding of acceptance and usage of online news services. The study helps to close a gap in the literature by employing a perceived value – community – loyalty model to identify which perceived value components have an influence on user loyalty to online news services. The loyalty enhancing value of an online community was also tested and supported in a news site context.

Table of Contents

CHAPTER 1 INTRODUCTION	1
1.1 INTRODUCTION	1
1.2 BACKGROUND TO THE RESEARCH	2
1.3 RESEARCH QUESTIONS AND OBJECTIVES	5
1.4 RESEARCH METHODOLOGY	6
1.4.1 <i>Phase One: Exploratory Research</i>	6
1.4.2 <i>Phase Two: Confirmatory Research</i>	10
1.5 SIGNIFICANCE OF THE RESEARCH	11
1.5.1 <i>Practitioner Contributions</i>	12
1.5.2 <i>Theoretical contributions</i>	13
1.5.3 <i>Summary of Practical Implications</i>	14
1.6 ORGANIZATION OF THE THESIS AND CHAPTER SUMMARIES	16
1.6.1 <i>Chapter 1 : Introduction</i>	17
1.6.2 <i>Chapter 2 : Theoretical Foundation and Conceptual Model</i>	17
1.6.3 <i>Chapter 3 : Methodology</i>	17
1.6.4 <i>Chapter 4 : Exploratory Research Results</i>	18
1.6.5 <i>Chapter 5 : Confirmatory Research Results</i>	18
1.6.6 <i>Chapter 6 : Discussion</i>	18
1.6.7 <i>Chapter 7 : Conclusion</i>	18
1.7 CHAPTER SUMMARY	19
CHAPTER 2 THEORETICAL FOUNDATION AND CONCEPTUAL MODEL.....	20
2.1 INTRODUCTION	20
2.2 LITERATURE OVERVIEW	23
2.3 NEWS SERVICES INDUSTRY	27
2.3.1 <i>Overview</i>	27
2.3.2 <i>Convergence in the news media industry</i>	29
2.3.3 <i>Online news services – business challenge</i>	31
2.3.4 <i>Technological impacts on news publishing</i>	32
2.3.5 <i>Citizen journalism and interactive discourse</i>	34
2.3.6 <i>Summary of News Services Literature</i>	36
2.4 THEORETICAL APPROACH	37
2.4.1 <i>Domestication Theory</i>	38
2.4.2 <i>Background of Domestication Theory</i>	40
2.4.3 <i>Components of Domestication Theory</i>	40
2.4.4 <i>Social Constructionism and Technical Determinism</i>	44
2.4.5 <i>A historical perspective to the debate</i>	57
2.4.6 <i>Summary: Technical and Constructionist Perspectives and Domestication Theory</i>	60
2.5 OTHER THEORETICAL APPROACHES IN ELECTRONIC SERVICES ADOPTION.....	62
2.5.1 <i>Diffusion of Innovations Approach</i>	63
2.5.2 <i>Technology Acceptance Model</i>	67
2.5.3 <i>Theory of Reasoned Action</i>	68
2.5.4 <i>Theory of Planned Behaviour</i>	69
2.5.5 <i>Unified Theory of Acceptance and Usage of Technology</i>	71
2.6 LOYALTY	73
2.6.1 <i>Brand Loyalty</i>	74
2.6.2 <i>Brand Loyalty and Customer Loyalty</i>	79

2.6.3	<i>Value, satisfaction and loyalty</i>	81
2.6.4	<i>Loyalty research in the electronic services context</i>	84
2.7	PERCEIVED VALUE	85
2.7.1	<i>Quality, Satisfaction and Perceived Value</i>	86
2.7.2	<i>Cost aspects of Value</i>	88
2.7.3	<i>Experiential and Non-Utilitarian aspects of Value</i>	90
2.7.4	<i>Measuring Perceived Value</i>	92
2.7.5	<i>The Conceptualization of Perceived Value in this Research</i>	93
2.8	ONLINE COMMUNITIES	96
2.8.1	<i>Evolution of the Online Community</i>	100
2.8.2	<i>Social and Technical drivers of Online Communities</i>	109
2.8.3	<i>Online Community Components Introduced in This Research</i>	111
2.9	SUMMARY OF THE LITERATURE REVIEW	125
2.10	INADEQUACIES IN THE LITERATURE AND CONTRIBUTIONS OF THIS RESEARCH	127
2.11	CONCEPTUAL MODEL	128
2.12	SUMMARY OF CHAPTER 2	129
CHAPTER 3 METHODOLOGY		131
3.1	INTRODUCTION	131
3.2	RESEARCH PHILOSOPHY	134
3.2.1	<i>Ontological Assumptions</i>	136
3.2.2	<i>Epistemological Assumptions</i>	138
3.2.3	<i>Philosophical approach to the understanding of human nature</i>	141
3.2.4	<i>Methodological Approaches</i>	143
3.2.5	<i>Inductive and Deductive Research Approaches</i>	144
3.2.6	<i>Research Philosophy Section Summary</i>	145
3.3	RESEARCH DESIGN OF THIS STUDY	147
3.3.1	<i>Mixed Methods Approaches</i>	148
3.4	EXPLORATORY RESEARCH PHASE	151
3.4.1	<i>Online Community Measures</i>	151
3.4.2	<i>Domestication Stage Measures</i>	155
3.5	CONFIRMATORY RESEARCH PHASE	158
3.5.1	<i>Method</i>	158
3.5.2	<i>Survey Design</i>	158
3.5.3	<i>Sample Selection</i>	158
3.5.4	<i>Explanatory Stage Data Preparation and Analysis</i>	160
3.6	CHAPTER SUMMARY	178
CHAPTER 4 EXPLORATORY RESEARCH FINDINGS		180
4.1	INTRODUCTION	180
4.2	ONLINE COMMUNITY MEASURES	182
4.2.1	<i>Community Survey Findings</i>	183
4.3	DOMESTICATION STAGE ITEM DEVELOPMENT	192
4.3.1	<i>Focus Group Description and Results</i>	193
4.4	CHAPTER SUMMARY	203

CHAPTER 5 CONFIRMATORY RESEARCH RESULTS	204
5.1 INTRODUCTION	204
5.2 DATA EXAMINATION.....	206
5.2.1 <i>Response rate</i>	206
5.2.2 <i>Respondent Profiles</i>	206
5.3 DESCRIPTIVE STATISTICS OF MODEL ITEMS.....	212
5.3.1 <i>Exogenous Latent Variables</i>	213
5.3.2 <i>Endogenous Latent Variables</i>	215
5.3.3 <i>Community Latent Variables</i>	215
5.3.4 <i>Domestication items</i>	216
5.4 MEASUREMENT MODEL ANALYSIS.....	223
5.4.1 <i>Procedure for Analysis Using SmartPLS</i>	223
5.4.2 <i>Evaluation of the reliability and validity of the measurement model</i>	225
5.4.3 <i>Reliability</i>	226
5.4.4 <i>Validity of latent constructs</i>	226
5.4.5 <i>Convergent Validity</i>	227
5.4.6 <i>Discriminant Validity</i>	230
5.4.7 <i>Missing Data</i>	233
5.5 FULL MODEL ANALYSES	235
5.6 ASSESSMENT OF THE PREDICTION QUALITY OF THE STRUCTURAL MODEL.....	241
5.6.1 <i>Assessment of relationships within the research model</i>	242
5.7 COMPARISON OF DOMESTICATION STAGE MODELS.....	257
5.7.1 <i>Domestication Group Comparison: High Soc vs. Low Soc</i>	261
5.7.2 <i>Domestication Group Comparison: High Sci vs. Low Sci</i>	264
5.8 SUMMARY OF CHAPTER 5	267
CHAPTER 6 DISCUSSION.....	268
6.1 INTRODUCTION	268
6.2 THEORETICAL PERSPECTIVE AND RESEARCH QUESTIONS.....	269
6.3 HYPOTHESIZED MODEL PATH DISCUSSION.....	270
6.3.1 <i>Hypothesized Path 1: Convenience value → Loyalty</i>	271
6.3.2 <i>Hypothesized Path 2: Social value → Loyalty</i>	273
6.3.3 <i>Hypothesized Path 3: Emotional value → Loyalty</i>	275
6.3.4 <i>Hypothesized Path 4: Epistemic value → Loyalty</i>	278
6.3.5 <i>Hypothesized Path 5: Conditional value → Loyalty</i>	279
6.3.6 <i>Summary of Hypothesized Path Discussions</i>	282
6.4 DISCUSSION OF DOMESTICATION RESULTS	285
6.4.1 <i>Convenience Value</i>	290
6.4.2 <i>Social Value</i>	292
6.4.3 <i>Emotional Value</i>	294
6.4.4 <i>Epistemic Value</i>	296
6.4.5 <i>Conditional Value</i>	298
6.4.6 <i>Summary of Domestication Results</i>	300
6.5 SUMMARY OF CHAPTER 6	302

CHAPTER 7 CONCLUSION.....	303
7.1 INTRODUCTION	303
7.2 CONTRIBUTIONS OF THE RESEARCH	304
7.2.1 <i>Practitioner Contributions</i>	304
7.2.2 <i>Theoretical contributions</i>	305
7.3 IMPLICATIONS FOR THE PRACTITIONER COMMUNITY	307
7.3.1 <i>Importance of Specific Perceived Value Components</i>	307
7.3.2 <i>Foster your community, but in what way?</i>	310
7.4 LIMITATIONS OF THIS RESEARCH	313
7.5 PROPOSALS FOR FURTHER RESEARCH	315
7.5.1 <i>Decomposing Perceived Value</i>	315
7.5.2 <i>Using the conceptual framework of domestication</i>	316
7.5.3 <i>Further development of domestication quantitative settings</i>	318
7.5.4 <i>Further examination of community in the online news context</i>	321
7.6 CONCLUDING STATEMENT	323
APPENDIX A EXPLORATORY COMMUNITY SURVEY.....	325
APPENDIX B NEWS COMMUNITY SURVEY	331
APPENDIX C FOCUS GROUP MEMBER PROFILES	335
REFERENCES	336

List of Tables

TABLE 2.1 TAXONOMY OF ONLINE COMMUNITIES, ADAPTED FROM HAGEL AND ARMSTRONG (1997)	101
TABLE 2.2 ONLINE COMMUNITY VALUE INTEREST FRAMEWORK (ÄKKINEN AND TUUNAINEN, 2004)	115
TABLE 2.3 COMMUNITY LITERATURE SUPPORTING THE MOTIVATION CONSTRUCT	120
TABLE 2.4 COMMUNITY LITERATURE SUPPORTING THE EFFECT CONSTRUCT	123
TABLE 2.5 ADDITIONAL PRACTITIONER COMMUNITY LITERATURE	124
TABLE 3.1 COMPARISON QUALITATIVE, QUANTITATIVE AND MIXED METHODS RESEARCH APPROACHES (ADAPTED FROM CRESWELL, 2009)	149
TABLE 3.2 COMPARISON OF STRUCTURAL EQUATION MODELLING TECHNIQUES	163
TABLE 3.3 SUMMARY OF DIFFERENCE BETWEEN PLS MODELLING AND COVARIANCE BASED APPROACHES..	164
TABLE 3.4 COMPARISON OF CONSTRUCT VALIDITY AND RELIABILITY GUIDELINES	170
TABLE 3.5 COMPARISON OF MODEL VALIDITY GUIDELINES.....	171
TABLE 4.1 FINAL PARTICIPATION ITEM STATISTICS AND CRONBACH’S ALPHA	185
TABLE 4.2 FACTOR ANALYSIS RESULTS	190
TABLE 4.3 THEMES FOR THE APPROPRIATION CONSTRUCT.....	195
TABLE 4.4 THEMES FOR THE OBJECTIFICATION CONSTRUCT	198
TABLE 4.5 THEMES FOR THE INCORPORATION CONSTRUCT	200
TABLE 4.6 THEMES FOR THE CONVERSION CONSTRUCT	202
TABLE 5.1 REASONS FOR VISITING THE ONLINE NEWS SITE	208
TABLE 5.2A SAMPLE CHARACTERISTICS.....	210
TABLE 5.2B SAMPLE CHARACTERISTICS	211
TABLE 5.3 CONSTRUCTS AND MEASUREMENT ITEMS –EXOGENOUS VARIABLES	219
TABLE 5.4 CONSTRUCTS AND MEASUREMENT ITEMS – ENDOGENOUS VARIABLES	220
TABLE 5.5 CONSTRUCTS AND MEASUREMENT ITEMS – COMMUNITY VARIABLES	221
TABLE 5.6 CONSTRUCTS AND MEASUREMENT ITEMS – DOMESTICATION ITEMS	222
TABLE 5.7 CONVERGENT VALIDITY AND COMPOSITE RELIABILITY MEASUREMENTS: AVERAGE VARIANCE EXTRACTED AND COMPOSITE RELIABILITY FOR VARIABLES	228
TABLE 5.8: T-VALUES AND LOADINGS OF ITEMS	229
TABLE 5.9 CORRELATIONS BETWEEN CONSTRUCTS	231
TABLE 5.10 CROSS LOADINGS OF MEASUREMENT ITEMS.....	232

TABLE 5.11 COMPETING MODELS: DIRECT EFFECTS MODEL AND SIMPLE MODEL WITHOUT COMMUNITY CONSTRUCTS	240
TABLE 5.12: COMPETING MODELS: FULL RESEARCH MODEL AND SIMPLE MODEL WITHOUT COMMUNITY CONSTRUCTS	240
TABLE 5.13 SIGNIFICANCE LEVELS FOR A ONE TAILED TEST	242
TABLE 5.14 MODEL PATH COEFFICIENTS FOR THE SOCIALLY DETERMINISTIC DOMESTICATION STAGES	259
TABLE 5.15 MODEL PATH COEFFICIENTS FOR THE SCIENTIFICALLY DETERMINISTIC DOMESTICATION STAGES	260
TABLE 6.1 SUMMARY OF HYPOTHESISED PATH RESULTS	283
TABLE 6.2 SUMMARY OF DIFFERENCES IN EXPLANATORY POWER OF SUB-MODELS.....	284
TABLE 6.3 DOMESTICATION STAGE DIFFERENTIATION.....	287
TABLE 6.4 SOCIAL VS. TECHNICAL DOMESTICATION GROUP PATH COEFFICIENTS FOR CONVENIENCE VALUE ..	290
TABLE 6.5 SOCIAL VS. TECHNICAL DOMESTICATION GROUP PATH COEFFICIENTS FOR SOCIAL VALUE.....	292
TABLE 6.6 SOCIAL VS. TECHNICAL DOMESTICATION GROUP PATH COEFFICIENTS FOR EMOTIONAL VALUE	294
TABLE 6.7 SOCIAL VS. TECHNICAL DOMESTICATION GROUP PATH COEFFICIENTS FOR EPISTEMIC VALUE.....	296
TABLE 6.8 SOCIAL VS. TECHNICAL DOMESTICATION GROUP PATH COEFFICIENTS FOR CONDITIONAL VALUE ..	298

List of Figures

FIGURE 1.1 STRUCTURE OF CHAPTER 1	1
FIGURE 1.2 STRUCTURE OF THE THESIS	16
FIGURE 2.1 STRUCTURE OF CHAPTER 2	22
FIGURE 2.2 MIT MODEL OF MEDIA CONVERGENCE (FIDLER, 1997:P26).....	29
FIGURE 2.3 THE RELATIONSHIP BETWEEN TECHNOLOGY AND SOCIETY.....	45
FIGURE 2.4 DIFFUSION OF INNOVATIONS APPROACH: ROGERS	64
FIGURE 2.5 TECHNOLOGY ACCEPTANCE MODEL.....	67
FIGURE 2.6 THEORY OF REASONED ACTION	68
FIGURE 2.7 THEORY OF PLANNED BEHAVIOUR.....	69
FIGURE 2.8 UNIFIED THEORY OF ACCEPTANCE AND USAGE OF TECHNOLOGY	72
FIGURE 2.9 REPRESENTATIONS OF SATISFACTION AND LOYALTY IN LITERATURE (OLIVER, 1999:34)	82
FIGURE 2.10 SAMPLE FROM AMAZON.CO.UK COMMUNITY FORUM SECTION	102
FIGURE 2.11 EVOLUTION OF TRANSACTION BASED AND RELATIONSHIP BASED COMMUNITIES	103
FIGURE 2.12 A THREE DIMENSIONAL TAXONOMY OF THE ONLINE COMMUNITY SPACE	104
FIGURE 2.13 POSITION OF NEWS SERVICE ONLINE COMMUNITIES WITHIN STOCKARD AND HUNTER'S (2009) ONLINE COMMUNITY TAXONOMY	107
FIGURE 2.14 CONCEPTUAL RESEARCH MODEL.....	128
FIGURE 3.1 STRUCTURE OF CHAPTER 3.....	133
FIGURE 3.2 SCALE DEVELOPMENT PROCESS IN THIS RESEARCH.....	150
FIGURE 3.3 OPENING PAGE OF THE THIS IS SOUTH DEVON ONLINE NEWS SITE	159
FIGURE 3.4 TWO LEVEL CONCEPT OF EMPIRICAL RESEARCH AS IT RELATES TO A STRUCTURAL MODEL	160
FIGURE 3.5 INTERACTION EFFECTS	173
FIGURE 3.6 PRODUCT MULTIPLIER METHOD FOR PLS PATH MODEL INTERACTION EFFECTS	174
FIGURE 3.7 PLS GROUP COMPARISON APPROACH FOR ASSESSING INTERACTION EFFECTS	177
FIGURE 4.1 STRUCTURE OF CHAPTER 4.....	180
FIGURE 4.2 SCALE DEVELOPMENT PHASES COVERED IN THIS CHAPTER.....	181

FIGURE 5.1 STRUCTURE OF CHAPTER 5.....	205
FIGURE 5.2 RESEARCH MODEL WITH INTERACTION EFFECTS	236
FIGURE 5.3 RESEARCH MODEL WITH DIRECT EFFECTS.....	237
FIGURE 5.4 PERCEIVED VALUE → LOYALTY MODEL WITHOUT COMMUNITY CONSTRUCTS.....	238
FIGURE 5.5 CONVENIENCE VALUE → LOYALTY.....	245
FIGURE 5.6 SOCIAL VALUE → LOYALTY.....	247
FIGURE 5.7 EMOTIONAL VALUE → LOYALTY.....	250
FIGURE 5.8 EPISTEMIC VALUE → LOYALTY.....	252
FIGURE 5.9 CONDITIONAL VALUE → LOYALTY.....	255
FIGURE 6.1 STRUCTURE OF CHAPTER 6.....	268
FIGURE 6.2 THE DOMESTICATION CONTINUUM	301
FIGURE 7.1 STRUCTURE OF CHAPTER 7.....	303

Chapter 1

Introduction

1.1 Introduction

This chapter provides an introduction to the thesis and a background to the research. It presents the research questions and the objectives of the research. The research methodology is discussed in its two stages, and the results of the research are briefly considered, including an overview of theoretical contributions and implications for practitioners. Finally, the way in which the thesis is organized is presented and a summary of each chapter is provided. The chapter is organized as depicted in Figure 1.1

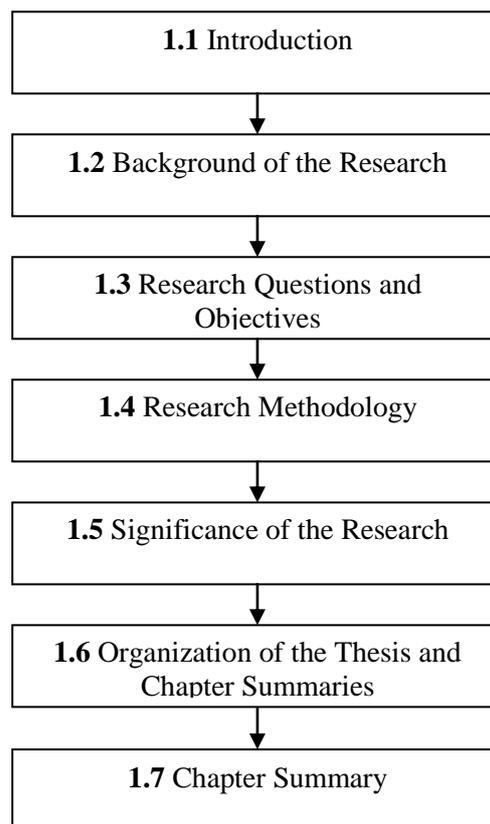


Figure 1.1 Structure of Chapter 1

1.2 Background to the research

The challenges currently facing the news industry are manifold. Techniques for news generation and distribution as well as patterns of news consumption have greatly changed from the time the first purported “newspaper” or news “scroll” appeared under Julius Caesar’s direction in the Roman Republic in 59 BC; introduced to inform the population of the latest military victories (Martin and Copeland, 2003; WAN-IFRA, 2010). Centuries later, mass production of reading material was made possible through the invention of the movable type printing press by Gutenberg in 1440 and one of the first regularly published newspaper followed shortly afterward in Strasbourg in 1605 (Rehm, 1997). This technological advance, coupled with an audience eager for information provided the basis for an increasingly prolific printed newspaper business.

Yet more recently, 150 years ago, technological advances provoked the editor of the New York Herald at the time, James Bennett, to state that “newspapers must submit to destiny and go out of existence” as a result of the success of the telegraph in delivering the news (Martin and Copeland, 2003). Even in current times, the pessimistic view regarding the demise of older media (e.g. printed newspapers) which are being challenged by newer ones (e.g. online news sites and news aggregators) remains, but is also being countered by research which states that new media often may not completely compete with, but rather supplement, existing media. Sage (2005) supports this in indicating that the decline in newspaper circulation does not mean a decline in actual news consumption, showing that while the print circulation of the New York Times decreased to just over 1 million copies (representing 4.7 million readers), the online site has attracted 13 million monthly users (as of 2007). Nevertheless, the business environment in this industry still demonstrates that news producers are struggling to understand how to maintain profitability and increase readership, or develop a loyal customer base in the modern on- and offline mix (Curran, 2009).

Whilst news publishers have benefited from and embraced new technologies for assembling and disseminating news items, they have increasingly faced challenges of audience segmentation and an explosion of competitive sources. Fenton (2010) writes that early arguments supported that the internet, due to its easy access and low costs for publishing news, would lead to an environment where wider discussions become the norm. Indeed, the internet has led to a proliferation of news sources, from national sources (in the UK such examples as the BBC and broadsheet newspapers) to alternative news sources such as Current TV (founded in 2008 by Al Gore and Joel Hyatt) and Indymedia.org.uk. Alternative news sources which Fenton (2010) names “non-news” sites - social networking sites such as Facebook and MySpace- also play a role in news generation and dissemination and provide platforms where people can interactively respond to and discuss the news. Clearly, traditional news producers are facing the challenge of an explosion of alternative sources from which their current and potential customer base can procure news. But what drives a customer to one source or another?

Although previous research has shown that internet use generally seems to have supplemented rather than substituted traditional media use (De Waal et al. 2005; Neustadtl and Robinson, 2002; Newell et al. 2008) there are signs now that new media are gradually replacing some of the older ones, and this is also the case in the news industry. Factors such as “intensity of use” have been cited as a reason for preference in using an online medium over a more static offline one. A change in intensity of use can clearly be seen in the news industry as users have moved from “inactive” consumption (e.g. just reading a newspaper) to a much more sophisticated level of user interaction made possible by new media via the internet. With the changing emphasis from “inactive” to interactive usage of the internet (one of the features of the “Web 2.0”), the increase in user participation in the generation and public interpretation of news has become a significant factor in news services in general, and online news services in particular. There is no doubt that user generated content has become a prominent contributor in the generation of news, and online communities, both affiliated with news sites, and in general, have become a powerful forum

for voicing opinions as well as validating and enhancing news items produced through traditional methods. But, have these “social” communities become an accepted and expected dimension in news services?

Clearly there are technology based influences which drive and mould the way in which news is consumed. The printing press, the telegraph, the advent of the internet, and the increased interactivity provided by the internet are examples thereof. However, what is the role of the social drivers, such as the ever more popular online community component in providing impetus for news consumers to make visits and return to a particular online news site? These two fundamental outlooks – the technical drivers and the social drivers and their influence on the acceptance and usage of news services, and in particular on online news services is the theoretical perspective which underlies this research.

In looking at the future success of news providers and the acceptance of their online services; in understanding how online news services can maintain and develop their customer base, it seems that the main constructs underpinning traditional customer loyalty research would be most pertinent, but the social context which surrounds these constructs must also be evaluated. There is a gap in the loyalty literature in that it fails to take into account or put enough emphasis on the effects of social factors such as community in the study of loyalty. Oliver (1999) supports this premise in saying that ultimate loyalty is supported by the convergence of product, personal and social forces, and proposes a direction of research which asks:

“Can the customer be socially integrated in a village (community) that envelops and directs the consumer’s choices in a satisfying way?”

Can something be said about the possibility of a community or social influence on the acceptance and use of services in an online news service context? The purpose of this thesis is to explore the difference in the influence of technical and social drivers in general and, in

particular, the effect of the social community aspect on customer loyalty to online news sites.

1.3 Research Questions and Objectives

The changing pattern of news consumption and technological advances mean that the traditional business models in the news industry are being challenged. The problem facing firms active in the news industry is how they can increase the likelihood of continued take up of their online products to counter the decrease in traditional offline readership and ensure survival. This business context led to the first of two research questions fundamental to this thesis:

R1: What are the drivers of customer loyalty to online news sites and can customer loyalty be enhanced by a news site's online community?

The second research question directly reflects the underlying theoretical perspective:

R2: Are there differences between the social perspectives and technological perspectives which drive loyalty in the online news services context and can these be measured and used to better understand customer loyalty?

Through the use of a research model which examines perceived value and online community components and their influence on customer loyalty in a news services context, this study is designed to answer the first of the research questions stated above. Previous research has been carried out supporting the link between perceived value and loyalty in an electronic services context (Pura, 2005), and this basic model was adapted for the news services industry by the researcher for this study. The researcher added online community components to this basic model to ascertain whether the previously empirically tested link between perceived value and loyalty could be enhanced by community aspects.

The higher order theory employed in this research takes into consideration the two philosophical positions of social constructionism and technical determinism and their influence on a user's acceptance and usage of technology. This debate is supported by Silverstone and Haddon's domestication theory. As detailed in the literature review, domestication theory has its origins in media and technology acceptance research and takes into account opposing perspectives of social and technical determinism in the study of integration of technologies into the everyday lives of consumers. Through the employment of domestication theory, which examines both the technically driven and socially driven components of media usage and acceptance, the primary underlying research question is addressed.

1.4 Research Methodology

Following a mixed methodological approach supported by Creswell (2003), a two staged method was employed in this thesis in which the first exploratory stage of the research informed the second explanatory stage.

1.4.1 Phase One: Exploratory Research

Phase one consisted of two stages. First, a qualitative focus group study was undertaken in order to confirm the components which would be used to measure the stages within the underlying theoretical perspective of this thesis, domestication theory. Secondly, a quantitative online questionnaire was administered to online community members in order to support the generation of community constructs used in the research model.

Exploratory phase stage one: Domestication measure generation

This phase of the research comprised a qualitative analysis of news service users and industry experts to determine domestication stage questions. In addition to a review of

literature, measures which ascertain domestication stage were developed quantitatively, through focus groups of people who are users of online news sites to ascertain their process of obtaining and using the site, the place which using the service has in their daily habits, and the meaning ascribed to the service by the users. The results of these focus groups were also further supported with expert opinion in the development of questions specifically for the context of online news sites. As there were no clearly defined measures for the context of this research, these were generated from literature and focus groups. An overview of the domestication theory stages follows.

Domestication theory breaks down media acceptance and usage into 4 components:

- Appropriation
- Objectification
- Incorporation
- Conversion

These components are defined as follows:

Appropriation

An object or product whether purchased or acquired, goes through a process of appropriation, whereby the individual or group take(s) possession of it. At this stage, objects acquire a meaning and become 'authentic' (Silverstone et al., 1992; Miller, 1987).

Objectification

Objectification then describes how and the extent to which an object finds a space and a place in the geographical area it has entered (Silverstone et al., 1992). For instance, domestic technologies entering the domestic sphere may not necessarily become integrated into the domestic landscape immediately and their physical place in the household is often the object of debates and negotiations. Any new object entering a given physical space is a potential threat to the existing order of this space, its aesthetic harmony and its logical

structure (Silverstone et al., 1992). Vuojarvi et al. (2010) describes the objectification stage as that in which the values, tastes and styles are expressed through the display of the new technology.

Incorporation

The incorporation of a new object or artefact into routines constitutes another dimension of domestication. An object becomes incorporated when it starts being integrated into temporal structures, both formally in form of schedules and rules and informally in form of routines and habits. The object reaches a ‘taken for granted’ status and it is given a function (or a series of functions) that may be different from those that were intended by the designers of the artefact or even from those that the buyer had in mind when acquiring it. Vuojari et al. (2010) support that the incorporation stage emphasizes how a technology is used and the temporal aspects of its use.

Conversion

At this stage, users signal to others their participation in the consumption and innovation process by displaying their ownership of a new product to the outside world. This may entail displaying the object either physically (as with parabolic antennas and mobile telephones, or white iPod earphones) or symbolically – by making it the topic of discussion, hinting at it more or less casually in conversation or by exhibiting new knowledge and competence to friends and colleagues. Such activities are grouped under the umbrella term of ‘conversion’ in the domestication model (Silverstone et al. 1992).

Most importantly, and as can perhaps be seen within the four basic components of domestication described above, the domestication approach takes into account the complexity of the relationship between the environment and the technology in attempting to understand acceptance and adoption (Silverstone and Haddon, 1996). A full discussion of domestication theory and the reason it was chosen as the underlying theory for this thesis is presented in the *Chapter 2: Theoretical Foundation and Conceptual Model*.

Exploratory phase stage two: Community measure generation

The second facet to the exploratory research stage comprised an online survey to solidify community measures which included open-ended questions. Based on a review of the literature of drivers and deterrents found to have an influence in online community usage, the following components were ascertained to be possible constructs to measure community participation, the drivers to participate and post visit consequences in online communities:

- **Participation**
- **Motivation**
- **Effect**

The construct *participation* was intended by the researcher be a measure of the level of activity a user demonstrates within an online community, *motivation* was determined to be those factors which drove a user to take part in the community whilst *effect* was the post visit consequences for the user. The derivation of these community constructs is fully discussed in the literature review contained in Chapter 2. The literature supporting these new constructs was subsequently used as the framework for the generation of survey questions administered to online community participants. Questionnaire results were analysed for the purpose of question reduction and question validity in SPSS using Cronbach's alpha and principal component analysis, based on the guidelines by Cortina, 1993; Cronbach, 1951; Grayson, 2004; Stevens, 1992; and Field, 2005.

1.4.2 Phase Two: Confirmatory Research

In this second phase of the study, the researcher created an electronic online survey to be administered to online news site visitors. The survey combined the first stage of the sequential mixed methods approach and integrated the consolidated and confirmed online community constructs and items. Additionally, the domestication stage measures which were created/confirmed in the exploratory stage were integrated into the final survey. Additionally, the survey also integrated the questions which would identify the exogenous perceived value components identified by the researcher and confirmed by industry experts to be pertinent to the online news industry, as well as the endogenous loyalty constructs used within the research model.

The results of this survey were then interpreted with partial least squares methods in order to assess the validity of the research model, and to ascertain whether community constructs would affect loyalty as proposed in Research Question 1. The domestication stage measures were then used to assess differences in responses based on domestication stage and enable interpretation as to whether socially and technically deterministic stances could be used to better understand a user's loyalty.

1.5 Significance of the Research

The contributions from this research can be broken down into practitioner and theoretically orientated. The gaps that the thesis aims to fill are directed into the fields of marketing and user acceptance of electronic services in a media and communications context. Within the field of marketing, it is important to understand if users are positively affected by their participation in online communities and if this participation or aspects of this participation do lead to customer loyalty. This, in turn, could help marketers better understand if effort spent nurturing an online community is an important act and one from which they will benefit. Within the field of user acceptance of services, this thesis is specifically looking at the application of an online community in the context of the online newspaper, as well as the perceived value constructs which are important in an online news paper context and thus makes a contribution to user acceptance and marketing in this media and communications context. Additionally, domestication theory is a more recently developed and less frequently used theory in explaining consumer acceptance (or non acceptance) of services and, as such, applying this theory and defining differences within user group categories can help marketers better understand their customer base and as such be better able to market to them. Partitioning users as done in this thesis is a new approach in striving to better understand customer acceptance of services and if this acceptance is perhaps different dependent on the categories used in the domestication approach. Whilst domestication research has been used to study adoption of technologies, it has done so mostly on an individual basis (for example, Berker et al, 2006; Hynes and Dougherty, 2010, Lie and Sorensen, 1996; Silverstone et al, 1992, Sorenson, 2005), and has not yet been used to look at groups of users. Heterogeneity of users has also been studied, for example in internet behaviour and attitudes (Lee and Kim, 2002) but no study has used the domestication categories to differentiate between groups. This thesis is the first to apply domestication theory in this manner, and in an online news service context.

The contributions can be seen to fit in the fields of research as follows:

Marketing:

- The effect of community participation on customer loyalty
- Development of online community measures to understand aspects of online community participation
- Segmentation of the customer base using domestication stages

Media and Communication:

- Perceived value components which add to user acceptance in a news site context
- The effect of community participation in an online news site context

A more detailed description of these contributions follows.

1.5.1 Practitioner Contributions

A perceived value – community – loyalty model for online news sites.

Even though more than a decade has passed since most newspapers have set up their online editions, little research has actually systematically evaluated online newspaper's performance (Chyi and Lewis, 2009). Chen and Corkindale, (2008) state that research into the use and adoption of online news services is still in its infancy and a comprehensive theoretical framework for understanding or predicting consumer's online adoption behaviour does not yet exist. This research helps to close that gap in employing a perceived value – community – loyalty model to help understand which perceived value components have an influence on loyalty of users to online news services.

The effect of online community participation

A gap in the loyalty literature in using social community as a loyalty influencer has been identified; thus this research could make an important contribution to the body of knowledge on loyalty drivers through including the social influences of community. Chung

(2009) holds that still very little is known about the effects of news presentation on user perceptions of news consumption experience, and that future studies should assess whether different interactive online news presentation styles enhance the processing of information as studies have shown that interactivity could lead to cognitive overload. Future studies should examine antecedents (what drives/motivates people to use interactive features) and outcome (what are the results from using interactive features). This research has tested online community participation in an online news site context and has supported the loyalty enhancing value of an interactive online news site community.

1.5.2 Theoretical contributions

Measures for “online communityism” developed

Based on the literature on online communities, this research also introduces three components for the measurement of “communityness”. Previous research has provided an insight into what type of community participation affects online news service usage (Larsson, 2011), but this research goes beyond just examining participation and evaluates users’ motivations to participate as well as the post visit sentiment in explaining loyalty.

Online community constructs have been developed for this research and will add to the growing body of literature which examines aspects of online communities and users’ motivations to participate as well as the effects they gain from their participation in such communities. Finally, the research provides an indication of which aspects of online communities may have a stronger correlation to loyalty, and as such could provide insight into how organisations can develop communities which are likely to foster loyalty.

In the taxonomy of communities discussed in the literature review, it is apparent that the rapid evolution in the nature of communities has rendered the formerly clear boundaries to be less distinct. It could therefore also be argued that the drivers of participation and the

effects of community participation are unclear. This research identifies a framework of facets for measuring a user's community participation in the community construct.

Domestication theory

The research examines the use of domestication theory in understanding news service consumption and adds to the growing body of domestication literature as well as adding to the emerging literature on and increasing the understanding of acceptance and usage of news services. Using domestication theory which supports the dichotomous positions of social and technical determinism in the acceptance and usage of service, this research adds to the body of literature which looks into the socio-technical nature of technology and service adoption and usage. In creating items for the domestication constructs, this research also provides a new perspective in the quantification of domestication stages which could be adapted and used in future research.

1.5.3 Summary of Practical Implications

1.5.3.1 Value drivers in loyalty

For online news sites, the most important drivers of loyalty in an online news site context were found to be *convenience value, emotional value, and conditional value*. The results of this study show that convenience value and conditional value explained the highest amount of loyalty, but emotional value was also a significant driver of loyalty.

Users are looking for a convenient, easy, instantaneous way of accessing news, and presenting local events and news items, at least for a news site with a smaller geographic reach, are the most important actions which can be taken to ensure readers return to the site. In addition to this, the research also found that emotional value was driver in getting people to actually return to the site. Thus, there is also a feel good factor about using the site which is making users want to return.

1.5.3.2 Community effects on loyalty

This research shows that participation in a new site's online community does have an effect on loyalty, and that a perceived value – loyalty model which includes community variables actually has better explanatory power than a model without these community constructs. The increased interactivity afforded by a community and its positive effects is supported in the literature and those who do participate in the community exhibit a tendency to want to return to the site, and this is an important implication for news site managers. The main drivers of participation and motivation to participate were to read comments posted by others and find out what others were talking about, as opposed to interacting with other members and posting comments and thus, an asynchronous communication seems to be taking place. Practitioners need to understand that participants in an online news site's community are not looking to foster relationships with others but simply understand how others are commenting on the news items, supporting Chung (2009) that for now, it appears that the ability to express or read other's views rather than engaging in two-way conversation has more intrinsic value to local online community residents.

1.6 Organization of the Thesis and Chapter Summaries

This thesis is divided into seven chapters as shown in the diagram below. Following the diagram is a description of the contents of each chapter.

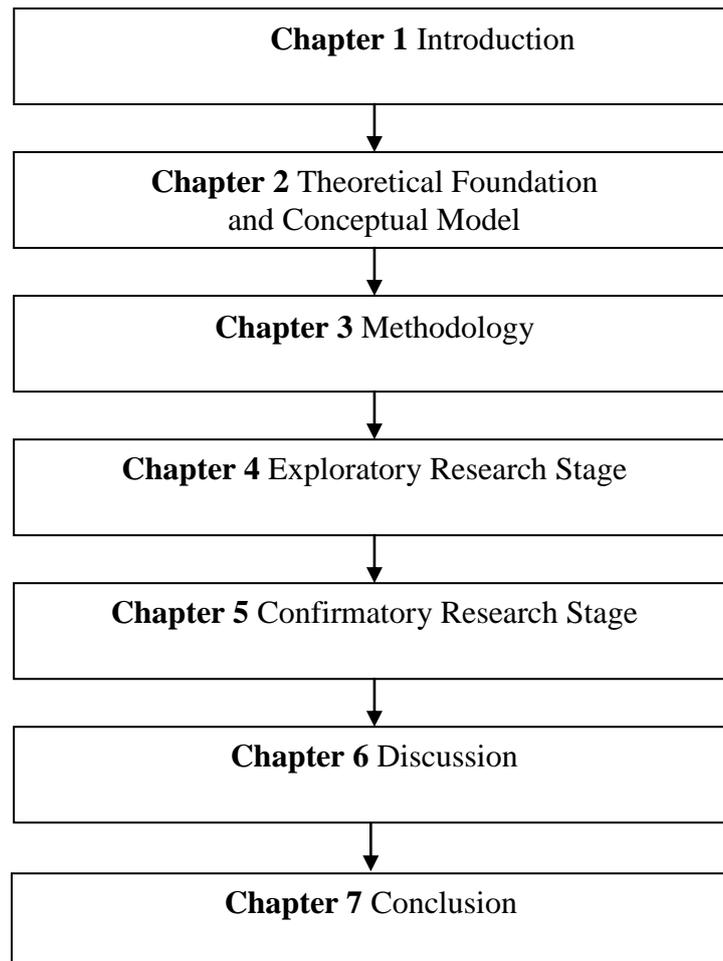


Figure 1.2 Structure of the thesis

1.6.1 Chapter 1 : Introduction

Chapter 1 offers an overview of the thesis and the concepts which are explored. The research questions are presented and the objectives of the research detailed. Chapter 1 introduces the methodology employed and discusses the implications of the research. It depicts the way in which the thesis is organized and provides a chapter by chapter summary.

1.6.2 Chapter 2 : Theoretical Foundation and Conceptual Model

Chapter 2 comprises the literature review of this thesis. First, the business context of the news industry and the challenges it faces are discussed. Following this, the overarching theoretical perspectives of social constructionism and technical determinism are examined after which the choice of underlying theory in this thesis, domestication theory, is discussed and supported. Additional theoretical approaches within information and communications (ICT) research are also presented.

A discussion of the components of the research model is then presented, divided into separate sections for research model's exogenous and endogenous variables: perceived value and loyalty, as well as an overview of literature of online communities which was used in the development of the moderating community model variable. The research model is presented in this chapter.

1.6.3 Chapter 3 : Methodology

Chapter 3 then covers the methodology employed within the research. The chapter begins with a discussion of the research philosophy and design which the researcher chose, a mixed methods approach. Further to this, the two main phases, exploratory and explanatory phases of the research are detailed.

1.6.4 Chapter 4 : Exploratory Research Results

Chapter 4 provides the results of the first, exploratory stage of the research in which the domestication measures which will be used for sample dichotomization and the community constructs for the moderating community variables are detailed. The results of this two pronged stage of the research was then used in the creation of the community construct items and domestication items.

1.6.5 Chapter 5 : Confirmatory Research Results

Following this, chapter 5 presents the results of the confirmatory stage of the research in which the results of the online news site survey are detailed. The Partial Least Squares method of model evaluation is discussed and results of the research models are shown.

1.6.6 Chapter 6 : Discussion

Chapter 6 then provides a discussion of the results of the explanatory research phase.

1.6.7 Chapter 7 : Conclusion

Chapter 7 finally provides a summary of the contributions of the research and the implications of the results for the practitioner community. This chapter also summarises the limitations of the research from the researcher's perspective and further research directions are discussed.

1.7 Chapter Summary

This first chapter in the thesis provided an overview of the research, starting with an overview and the business environment of the news industry from which the research topic emerges. The researcher then provided the research questions and objectives, after which an overview of the methodology used was presented. The significance of the research with practical and theoretical contributions was then discussed. The way in which the thesis is organized was then presented, accompanied by a chapter by chapter summary. The next chapter comprises the theoretical foundation and literature review for the thesis and presents the conceptual research model.

Chapter 2

Theoretical Foundation and Conceptual Model

2.1 Introduction

This research is designed to explore aspects of customer loyalty to online news services, and, employing the higher order theory of domestication, the research investigates the possibility that technically and socially deterministic approaches might be used to better understand customer loyalty in an online news services context. The research model is introduced in this chapter after a discussion of the theoretical perspective and a review of the relevant literature. The research model includes the concepts of perceived value and online communities in exploring loyalty to news sites, introducing three constructs for the conceptualization of online communities. The research examines the effect of perceived value on loyalty, the moderating effect of online community participation on loyalty and above all, proposes that differences between technically and socially deterministic stances can be used to shed light on a user's loyalty, and as such aid in a better understanding of customer loyalty, employing domestication theory to support this underlying perspective.

Chapter 2 comprises a review of the relevant literature. The structure of the chapter is shown in Figure 2.1. After this introduction, the researcher begins in section 2.2 with an overview of the literature reviewed and then a discussion of the news industry follows in section 2.3 in order to establish the context of the research. This is followed by section 2.4 which details the background for the choice of the theoretical foundation used in this thesis: domestication. Section 2.5 follows with an overview of other theoretical approaches used in electronic services adoption research and why these were not chosen.

The model employed in this research includes aspects of perceived value and loyalty and the additional effect of online community participation on customer loyalty. To this end, literature in the following fields is also reviewed:

- **customer loyalty** (section 2.6)
- **perceived value** (section 2.7)
- **online communities** (section 2.8)

The researcher then provides a summary of the literature review in section 2.9.

Subsequently, the contributions of this research and the conceptual model employed are described (sections 2.10 and 2.11). The model includes the perceived value and loyalty components presented in the respective literature reviews as well as the online community components which are further developed through quantitative methods as described in the methodology chapter. Additional tables of online community literature from which the community model components were derived are presented. Section 2.12 comprises a summary of the chapter.

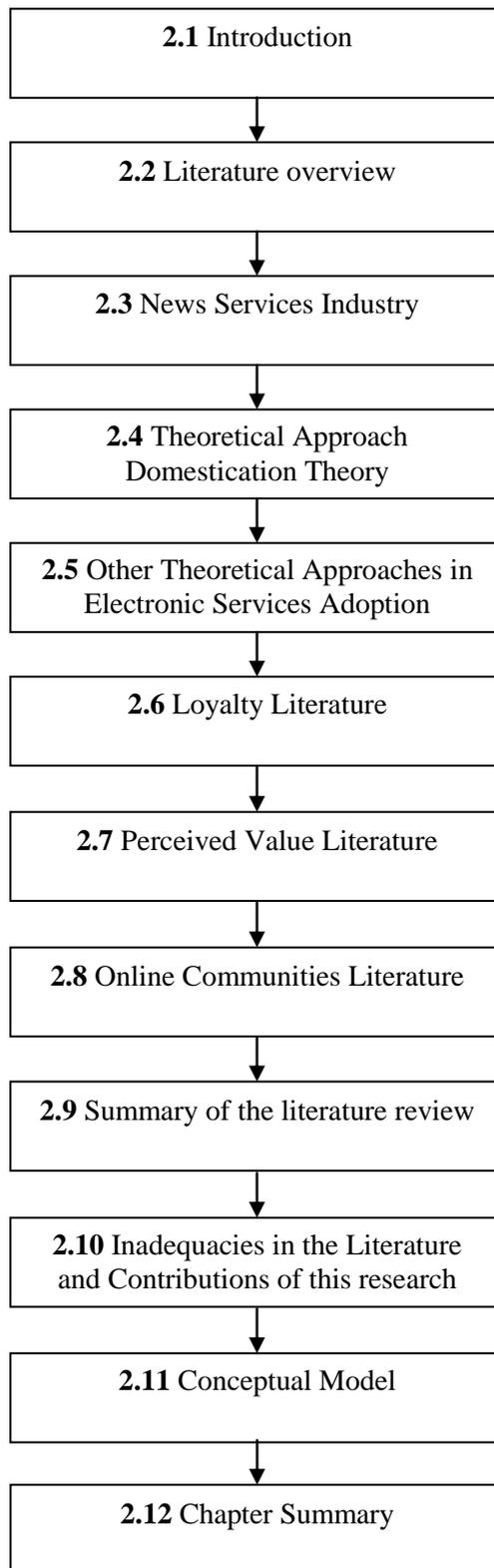


Figure 2.1 Structure of Chapter 2

2.2 Literature overview

Theoretical approach used in this research

Domestication theory focuses on four stages of technology adoption and provides an appropriate analytical approach to the study of how these processes take place (Berg, 1996). In an interview, Hynes (2010) noted that at that time,

“Little research existed outside of the traditional deterministic human-techno relationships where end-users were given little or no agency in making sense of technologies in their own individualised space. The processes by which technologies become part of everyday life, used and valued in our routines, habits and patterns of work, home and our leisure time always seemed to be overlooked or assumed or taken for granted”. (Hynes, 2010)

Domestication theory highlights that the process by which new technologies are integrated into everyday life is far more complicated than usually portrayed because technologies are not only shaped by their technological possibilities or by their functionality, but also by the micro-social context of the household, social circle or community. A discussion of domestication theory is provided in this chapter in section 2.4 followed by an overview of other theoretical approaches used in adoption research in section 2.5. The researcher also includes a discussion of the background to the theoretical approach employed in this research, detailing the concepts of social and technical determinism (section 2.4).

Loyalty

Customer loyalty was one of the dominant business research areas in the 1990s and continues on to the present. Additionally it continues to be a topic of much interest within the practitioner community as many companies are striving to gain loyal customers, investing considerable resources to maintain a loyal customer base as this is believed to increase profits and reduce acquisition costs. It has been broadly argued that lasting customer relationships are beneficial for the company (e.g. Reichheld and Sasser, 1990;

Grönroos, 1994; Rust and Oliver, 1994; Anderson et al., 1994; Berry, 1995; Reinartz and Kumar, 2000), and practitioners have defended the business argument for customer loyalty, indicating that a 5% increase in customer retention can lead to an increase of net present value of customers of between 25 and 85% (Reichheld, 1996). The trend in customer loyalty research has been towards a more detailed understanding of the subject, where both attitudes and behaviour are taken into account (e.g. Dick and Basu, 1994). The review of the loyalty literature expands these concepts and details the aspects of loyalty which are examined in this research. This discussion is found in section 2.6 of this chapter.

Perceived Value

A common thread through much of the loyalty literature (Yang and Peterson, 2004; Anderson and Srinivasan, 2003; Jones and Sasser, 1995; Oliver, 1999; Reinartz and Kumar, 2002, and in service quality literature such as Heskett et al., 1997) is the reference to the concept of value in discussing level of satisfaction, which leads to differing degrees of loyalty. Jones and Sasser (1995:95) write that “it is essential to understand what portion of a customer’s seeming loyalty is true loyalty based on a company’s delivery of superior value and what part is artificial.” Oliver (1997) contends that customers who are ill positioned to ever perceive a high level of benefit or value from a firm will probably never become loyal and enticing them to remain customers is a waste of a firm’s resources. Pura (2005) writes that perceived value has been proven to be a reliable construct in predicting purchase behaviour. The literature review on perceived value gives a background of the components of perceived value which are pertinent to this research and is found in section 2.7.

Online Community

Oliver (1999) promotes the important component of “the community of loyalty”. The concept of integrating one in a “village” or “community” as a driver of loyalty is adopted in this research. Online communities are becoming ever more prevalent and could function to influence adoption. An online community is “a group of people who come together for a

purpose online and who are governed by norms and policies” (Preece, 2000). DeSouza and Preece (2004) indicate that adopting this definition offers the advantage of taking into consideration a balanced view of both social and technical issues and thus fits into the overall framework of this research, looking at the competing views of social and technical facets as drivers of loyalty. An overview of online community research is necessary to understand the variety of facets which these communities comprise and is found in section 2.8, as well as the description of the online community components introduced in this research.

Online Community Model Components introduced in this research

Derived from literature on online communities, internet usage and acceptance, and technology acceptance, definitions of the three model components for online communities and the questions they should answer are:

- **Participation:** What are the characteristics of a user’s participation? (e.g. Preece, 2000; DeSouza and Preece, 2004);
- **Motivation:** What drives the consumer to the community and why does he/she begin to participate? (e.g. Ren et al., 2007; Brown et al. 2007; Peddibholta and Subramani, 2007); and
- **Effects:** What are the attitudinal and behavioural consequences of participation in the online community? (e.g. Algesheimer and Dholkia, 2007; McAlexander, Schouten and Koenig, 2002; Muniz and Schau, 2005; Algesheimer et al., 2005; Brown et al. 2007).

News Services Industry

Since its inception, the traditional newspaper business has been faced with challenges and opportunities which have helped it to expand and become one of the most important

information sources in the modern world. In the face of new technological advances in the 1990s, the traditional news media “fell over themselves” to set up on the World Wide Web, fearing, as called Roger Fidler called it, “mediacide” (Fidler, 1997), and attempted in the process to reinvent themselves to embrace this new communications channel (Alves 2001). This rush online was a result of the news business’s fear that the newspaper would eventually be rendered obsolete by yet another more efficient news medium. As competition for audience revenues has intensified in the new landscape of the media market, news providers are hoping to reap the benefits and opportunities the internet has to offer (Lin, 2001). How online news services achieve success, however, is still a challenge on many fronts. The current business environment as well as a description of these challenges and opportunities offered in the new media landscape starts the literature review in section 2.3 of this chapter. Here, the researcher provides a review of the news industry and the challenges which are being faced here to present the business context of this study.

2.3 News Services Industry

2.3.1 Overview

The news industry is currently going through a great upheaval, as seen in the recent decisions of some print news producers to stop their print and offer solely online services, directed at the ever more popular tablets. News generation, distribution and consumption patterns have greatly changed from the time the first “newspaper” or news “scroll”, The Roman Acta Senata et Populi, was printed in ca. 59BC, following a requirement by Julius Caesar that the general population be informed about victories within the ever expanding Roman Empire as well as being up to date with general government activities (Martin and Copeland, 2003; WAN-IFRA, 2010). Through the invention of the movable type printing press by Gutenberg in the early fifteenth century, mass production of reading material was made possible and one of the first regularly published newspapers followed shortly afterward in Strasbourg in 1605 (Rehm,1997).

Since this time, news publishers have continually encountered and embraced, with varying degrees of success, new technologies and methods for assembling and disseminating news items. Even more than 150 years ago, technological advances provoked the editor of the New York Herald at the time, James Bennett, to state that “newspapers must submit to destiny and go out of existence” as a result of the success of the telegraph (machine) in delivering the news (Martin and Copeland, 2003). More recently, Meyer (2004) indicated that the printed version of the newspaper will lose its readership in 2043, and even more pessimistically Steve Ballmer from Microsoft has estimated the demise of the printed paper already in 2018 (Thurman and Myllylahti, 2009). Usher (2010), supports that a new media news environment and harsh economic realities mean that the survival of newspapers in their current form is no longer certain.

One could argue that these forewarnings are overstated, but have new technologies heralded a business environment in which such statements could become true in the near future?

What are the current market conditions for the traditional newspaper business and what are the challenges (or opportunities?) faced within the new internet era? With still over 1422 daily published newspapers circulated in the United States alone, one of the largest media markets in the world, there is clearly still a large market for printed news (Chyi and Lewis, 2009). But how is the media landscape changing? Does the internet spell the demise of the traditional media as we know it and of news producers as we know them? How does the competition from newer web-only news aggregators affect the advertising supported business model of the traditional newspaper business and how has news consumption and generation changed from the consumer's perspective? These are pertinent questions at a time when traditional print news producers transition to a combination of off and online news services and frames the fundamental business context behind this research into customer loyalty to online news services.

A good summary of the changes in the news industry was introduced by Pavlik (2001) and explains that the reasons for the transformation of news production and journalism are neither simple nor one-dimensional. Instead, a set of economic, regulatory and cultural forces, driven by technological changes are coming together to bring about a complete shift in the nature of journalism. Pavlik additionally holds that new media are transforming journalism in four ways: (Pavlik, 2001:xiii).

- The nature of news content is changing as a result of new media technology
- The way in which journalists do their work is being retooled in the digital age
- The structure of the newsroom and news industry is undergoing a fundamental transformation
- New media are bringing about a realignment of the relationships between and among news organizations, journalists and different facets of the public.

This research considers the new media technology and the realignment of the relationships between news organizations and customers in looking at customer loyalty to online news sites.

2.3.2 Convergence in the news media industry

In 1979, MIT professor Negroponte illustrated the transformation of the media industry in diagram which described his prediction of the convergence of media spheres. The diagram shows that in everyday life, the worlds of publishing, communications and computing are merging (Walker and Lewis, 1998 in ed. Prosser, 1998 image based research.).

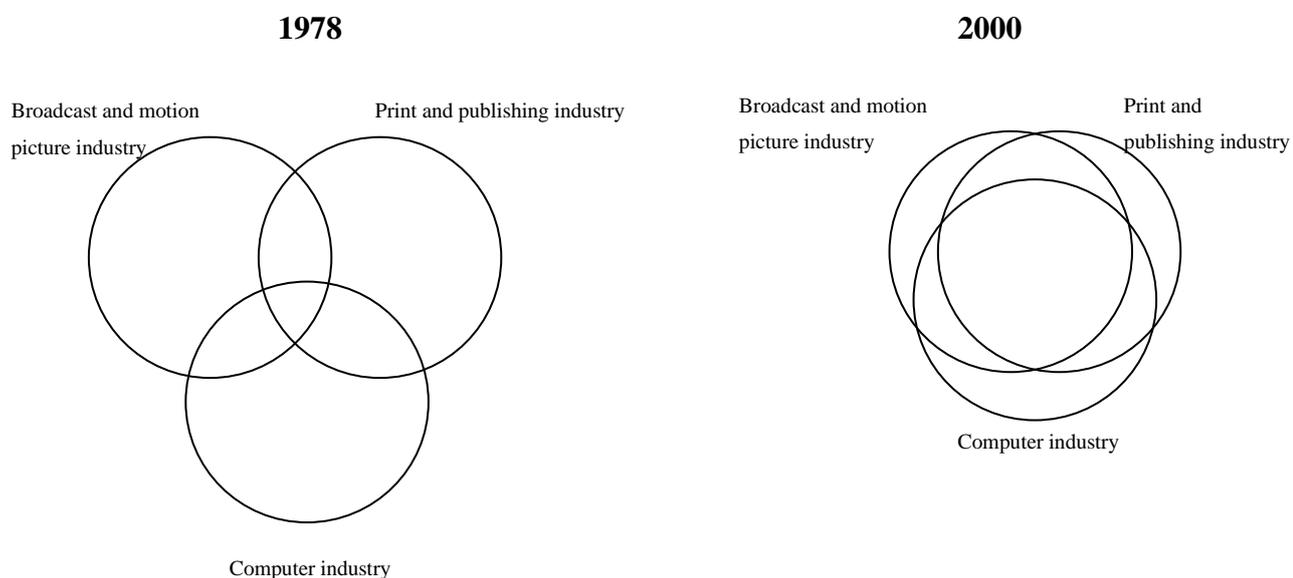


Figure 2.2 MIT Model of Media Convergence (Fidler, 1997:p26)

While this may indicate that the spheres of media and their respective content may be imposing on each other, there is evidence that the technologies can improve richness of content as adjunct sources. Deuze (2009) indicates that in such a convergence culture, (which describes the shift in how media industries operate) can be seen as the “alignment of production, mediation and consumption as constituent practices in all experiences of media

life” can be seen. Whether new media substitute or supplement existing media has been recently studied using, for example, displacement theory. Displacement theory in media assumes that when one new medium enters the arena, its users must reallocate their limited time resources to reflect this. DeWaal and Schoenbach (2010) support a that a co-existence is possible for older media threatened by newer ones and argue that new media often may not compete with, but rather supplement, existing media. The time that the different media use demands on consumers is, in turn, taken from non-media activities.

So are news sources mutually exclusive in the eyes of consumers, or are there benefits to using a specific variety or a combination? While ‘content loyalty’ may explain the joint use of old and new media, other research has contested the reasons that consumers use both the newer and more traditional channels are to maximize the information or entertainment offer they are interested in. Dutta-Bergman 2004 continues that this supports the two step flow theory of media use developed by Lazarsfeld et al. in 1944 which indicates that consumers tend to look for specific news or confirmation of news items at different sources. Thus, the type of news may hold keys for which channel a news consumer chooses. Kayany and Yelsma (2000) support that online media may eventually take over from television as a primary source of information whereas Kay and Johnson (2003) hold that online news services may replace news magazines and radio news for specific subjects such as politics.

The view that internet use generally supplements rather than substitutes traditional media use (Robinson et al., 2000; De Waal et al., 2005; Schulz, 2002) has also been contested. There are indications that new media are gradually replacing some of the older ones (DeWaal, 2010). DeWaal et al. (2005) found, for example that visiting online newspapers reduces print newspaper reading among the young. Additionally while demographics certainly seem to play a role in determining consumption of different types of media, the intensity of use also seems relevant. DeWaal and Schoenbach (2010) propose that whether news on the internet takes over traditional media or not depends on the functions those media best serve for their users. They hold that as the online news offer develops and

modernizes in both design and content, it will consequently attract more different people than before for different reasons.

2.3.3 Online news services – business challenge

Davis (2006) states that online news services have become one of the major channels which people in the developed and developing countries use to shape their views of the world. What, then, is hindering the development of the online news business as a profit generator? Not only is print advertising revenue falling, but online publishing has not yet found a successful business model (Brock, 2010). What is the competition faced by online news services? Chyi and Lewis (2009) define the competition both inter and intra media. Inter-media is the relationship between a newspaper's online and print operations while intra-media competition involves the relationship between a newspaper site and other news sites (such as portal sites). The business challenge becomes apparent as newspapers tried to adapt the business model used in traditional media to the web, and attempt to derive revenue through subscription and advertising. Brock (2010) writes that the production and consumption of news has been decoupled from advertising and its previous sources of income. Traditionally, readers of mass media have never paid the full cost of a subscription; this income has been supplemented by advertising which supports up to three quarters of the necessary income to keep a traditional newspaper establishment in business. However, with advertising revenues moving to the web, additional income sources are being sought. Even though previously few people were prepared to pay for news on the web (Alves, 2001), this subscription business model is starting to be introduced.

“Now pay up” sets the tone for a newer attempt for traditional newspapers at obtaining subscription revenue, where online news services are starting to revisit a subscription model of charging for articles within their “walled gardens” (Economist, 8/2009).

Advertising revenues have been a feature of online news services since their inception and one of the striking qualities of online newspapers is the dominance of promotion (Nerone and Barnhurst, 2001). Whereas advertising banners have been one of the main revenue

sources, customer acceptance of such intrusions has increasingly become questioned and the abundance of sources of advertising on the internet has resulted in a decrease of the prices of such advertising space, and as a result has diminished the revenues from this source (Alves, 2001). Such banner advertising across the top of a page and chimney ads along the side of the page, also overwhelm content (Nerone and Barnhurst, 2001), again leading to less acceptance from the consumer. Additional sources of revenue named have been permission marketing through opt in email sources and seminars (Thurmann and Myllylahti, 2009). It is clear to see that the traditional subscription and advertising based income which is a fundamental part of the business model for newspapers is radically changing. With advertising revenues falling and print circulation decreasing, traditional print newspapers are struggling to maintain and develop profitability even as they enhance their online presence. Clearly obtaining and maintaining a loyal customer base would aid news producers in procuring more sources of advertising income, or a subscription based service could aid the business model, but the problem of creating a base of customers who consistently return to a site is still outstanding. What facets will promote loyalty and will an active community aid this? These are questions to be explored in this research.

2.3.4 Technological impacts on news publishing

Whilst it may seem that the speed of technological change is ever increasing, Paul Saffo contends that throughout history there has been a consistent time frame of 30 years in which technologies have typically become adopted within society. The difference now is that more technologies are being created simultaneously and it is the amalgamation of these technologies, or “cross-impacts” which presents the challenge in forecasting the direction of new media (Saffo, 1992). George Brock (2010) indicates that ability of very small computers to combine, link, swap and replicate information has led to (amongst other things) an explosion of the quantity of information available.

Early editions of newspapers on the internet did not take advantage of the possibilities of online publishing to their full potential (DeWaal and Schoenbach, 2010). Often the stories

online were exactly the same as their offline counterparts and initially, most newspapers updated their online versions only once or at most twice a day (Jankowski and van Selm, 2000). At first, despite the almost unlimited space online, the number of stories online also did not exceed the number of stories in the printed version. Zürn (2000) showed that the number of newspaper articles shown on an online newspaper site ranged from 33% to 85% of that which was in the print version of the paper. Lewis and Chyi (2009) have also shown more recently that the use of online newspaper sites still lags behind print editions in that the reach of an online site was far less than its print counterpart. Alves (2001) indicated that online journalists limited most of their work to simply posting stories which were identical to those in the print version of the newspaper, and this simplistic transfer of content to the new multimedia platform has failed to entice online readers. As online newspapers have broadened their usage of the medium, there has been a reduction of text on the sites pages and an increase in the use of headlines, blurbs, index listings and links (Nerone and Barnhurst, 2001).

The reasons behind the stories which are published are also taking on a new light. Nerone and Barhurst (2001) indicate that content gains its prominence in the online environment from frequency of user activity, instead of priorities from public reporting. Similarly to the way radio first built up their audience through sports reporting, the prominence of sports in internet news is also seen (Nerone and Barhurst, 2001). This indicates that more popular types of news become more prevalent. Use of click through analysis which enables news sites to exactly analyze the number of readers a story receives, means news items can be given more weight or prominence as a result of their popularity. In a study of an online-only news site which was launched by a Finnish newspaper as they concluded their printed news business, a sub-editor was heard to comment “Your story is flying! In 12 minutes you have got 500 readers” (Thurman and Myllylahti, 2009). This has clear implications on the reasons behind the dominance of certain news stories and the standards by which their success is measured. The editor of this newspaper did, however, also indicate that generating a high click through rate was not the sole motive in creating news stories, and

that “certain types of stories are published for credibility reasons even though we know that they are not going to be hits with our readers” (Thurman and Myllylahti, 2009).

2.3.5 Citizen journalism and interactive discourse

Perhaps the most important aspect of the emerging news services is not just the extended technical features the internet offers news producers, nor is it the potential to extend a paper’s reach by being simply present on the internet. The technology itself can not be analysed in a vacuum as a driving force in the adoption of online news services. Pavlik (2001) posits that fuelling the changing environment of journalism has been the emergence of the medium of global interactive communications, and together, this new “media system” embraces different forms of human communication in digital format where the rules and constraints of the analogue world no longer apply. Rosales (2006) supports this interactive nature of the medium in the new phase of the internet: Web 2.0. This phase in the development of the internet integrates the power of the individual users, networks and online communities. In this new media culture, the public is no longer a passive consumer of media, but an active participant in the creation of the media landscape (Saffo, 2006 in Hermida and Thurman, 2008). Pavlik (2001) indicates that the structure of the news industry is evolving in that technology of the internet enables a low cost global forum for anyone with a message whose voices were formerly filtered through a news media “gatekeeper”.

The new interactivity provided by platforms offers users more of a chance than ever before to become involved, especially in a news service context. There is no doubt of that user generated content has become a prominent factor in the generation of news, and online communities have become a powerful forum for voicing opinions, as well as validating and enhancing news items produced through traditional methods. This has also brought about a well founded concern from news publishers about the quality of published journalism from professionals in the field. Rosales (2006) notes that there are two unique features which the internet offers and the print media do not: participation and dialogue in real-time. New

media offers a challenge to legacy news media and its practitioners particularly in light of the ways in which the new media include the artefacts and devices which extend our abilities to communicate (Usher, 2010). The technology the web has to offer has facilitated the creation of the “citizen journalist” and “participatory journalism”.

In the media literature, a precise definition of the “citizen journalist” is still emerging. Other terms have been used to describe the same phenomenon such as participatory journalism, community media, civic journalism and user generated content (Moeller, 2009). Brock (2010) indicates that journalism has now become a word wandering around in search of a definition. A concise description could probably be “the act by an individual or group on any media platform (print, radio, television online, mobile phones, etc. and using any medium (text blogs, podcasting, sms messaging, photography, audio etc.) of reporting, analyzing or disseminating news and information (Moeller, 2009).

The idea of citizen journalism is not new. Rosen (1993) indicated that part of journalism’s purpose is to encourage civic participation, improve public debate, and enhance public life - a function which he called “community connectedness”. Rosales supports this in saying that people in local communities usually have a “nose for news” and that as they know what is going on in their neighbourhood, they are well suited as reporters. Moeller (2009) supports that citizen journalists may become the 21st century’s most potent force for creating, supporting and building open and democratic societies. Bloggers are another component of the citizen journalism sphere (Rosales, 2006). Short for web logging, bloggers post their own running comments or reporting and typically also provide links to new pages, documents, interactive media, pictures and other multimedia objects pertinent to the blog’s subject (Rosales, 2006). In the 2008 US Presidential campaign, blog sites such as the Huffington Post were used extensively as a monitor of public opinion, and were widely integrated by, among others, television news networks in order to add an increasingly important user dimension in communicating pre-election and election results. But just how

important this relatively new phenomena is, especially for news establishments struggling to survive in the new news media arena, is only starting to be researched.

2.3.6 Summary of News Services Literature

Fidler (1997) supports that one of the main components of the “mediamorphosis” is that all forms of media are coexisting and co-evolving within an expanding, complex, adaptive system. DeWaal and Schoenbach (2010) support this coexistence, stating that the online equivalents of printed newspapers could quite plausibly be most valued for their background information and commentary and non-paper news sites for quick updates and breaking news. As each new form of news creation and publishing emerges, it influences over time and to varying degrees the development of every other existing form. Additionally, such new media are not widely adopted strictly on the merits of a technology alone. There must be an opportunity and a motivating social political and or economic reason for a new media technology to develop.

Along with the elusiveness of a profitable business model, Sullivan (2006) supports that

“A method for creating a successful, widely adopted online news services has remained ambiguous.”

Even though more than a decade has passed since most newspapers have set up their online editions, little research has actually systematically evaluated online newspaper’s performance (Chyi and Lewis, 2009). Chen and Corkindale (2008) state that research into the use and adoption of online news services is still in its infancy and a comprehensive theoretical framework for understanding or predicting consumer’s online adoption behaviour does not yet exist.

Therefore, there is substantial ground to be gained in understanding what influences customers to seek out online news sites, and what keeps them coming back. Additionally,

the focus of a community aspect to the research as a driver in loyalty is supported by existing literature of electronic services, and the popularity of the interactive element of news sites is impossible to oversee, but does this lead to loyalty?

In order to provide a framework for understanding and a model for testing customer loyalty in the online news context, the researcher sought an empirically tested model and found that the link between perceived value and loyalty had been confirmed previously in an electronic services context (Pura, 2005). In this thesis, the additional component of online community participation in analysing customer loyalty to online news services is introduced, as user participation in the news industry has become more prevalent. Additionally, this research proposes a method to better understand possible differences between users based on the higher order domestication theory which looks at technology acceptance from both the technical deterministic view as well as the socially constructionist view. Both of these perspectives are also examined in the following sections.

2.4 Theoretical Approach

In the following sections, the researcher reviews the approaches in ICT research and discusses why domestication theory, as opposed to other approaches was chosen as the fundamental underlying theoretical approach in this thesis. The discussion begins with the domestication theory used in this thesis and then, on order to better support why domestication theory was chosen by the researcher, the other theories which are commonly used in ICT research are also presented.

Pederson and Ling (2003) write that in studies of information and communication technology adoption, different concepts, such as diffusion, adoption and domestication are used to distinguish different research approaches. They contest that despite the diversity in their approaches, the concepts actually have some commonalities. Researchers studying adoption share a common interest in understanding how information technologies and services are being utilized by different kinds of end users in different contexts. However,

there are differences within the approaches and here the researcher makes a case for the choice of domestication theory within this thesis.

2.4.1 Domestication Theory

Domestication is a concept within media and communications studies but also within studies of the sociology of technology which has been developed to describe and analyse processes of acceptance, rejection and use of media technologies. The emergence of the domestication concept and application in technology related studies represented a shift away from modes which assumed the adoption of new innovations to be rational, linear, mono-causal and technologically determined. As a theoretical approach, domestication considers the complexity of everyday life and the place of technology within it, with its dynamics, rituals, rules, routines and patterns (Berker et al., 2006), thus offering a rich framework with which to study technology adoption and use. A discussion of domestication theory as well as the underlying social and technical approaches for acceptance, adoption and use of technology and services follows.

Vuojarvi et al. (2010) write that domestication is a concept widely used by researchers to explain how technologies and in particular media and computing technologies become part of our everyday life. Silverstone (1992) writes that domestication is the process in which the household and its surroundings, the private and the public and the moral and the formal or objective economy are related to each other, becoming mutually constitutive.

Research using domestication typically studies the adoption and use of technology in everyday life with the focuses being on the societal consequences of the domestication of technology, and the process in which the use of technology becomes integrated into everyday life. The domestication approach can be used to describe technological change in a wide range of situations: from households to institutional settings, and provides a basis for understanding the complex interrelationships of cultures and technologies as they emerge in institutions and individuals (Silverstone and Hirsch, 1992). Berker et al. (2006)

argue that as modern societies become increasingly technologically mediated, understanding daily transactions with technologies on the streets, in schools, and in other social circumstances becomes more and more important.

Conventionally, domestication is described as a process in which a wild animal is trained to adapt to life in intimate association with and to the advantage of human beings (Webster's Dictionary, 2011). Domesticated animals, plants, and other organisms are those whose collective behaviour, life cycle, or physiology has been altered as a result of their breeding and living conditions under human control. The word domestication is also used as a synonym of taming, and although this word can apply to a single animal, domestication can describe a population or a species as a whole. Domestication theory tries to describe the processes by which new technology is 'tamed' by its users. First, technologies are integrated into everyday life and adapted to daily practices. Secondly, the user and its environment change and adapt accordingly.

Haddon (2004) provides the following as a description of the basic assumptions of the domestication process:

Assumption 1: When we analyze technology, the emphasis should go beyond the function of the technology. For an example, social symbolic meaning should be considered (e.g. identity or status).

Assumption 2: Technology adoption is a process comprising the following steps:

- **Appropriation**
- **Objectification**
- **Incorporation**
- **Conversion**

Assumption 3: The process of domestication reflects the overall scope of technology adoption: from public domain (e.g. work) to private domain (e.g. home).

Assumption 4: Individuals, both end-users and non-users, have an influence on how the technology is used.

2.4.2 Background of Domestication Theory

The model of domestication of technology was originally developed in order to explain the processes of consumption of technologies used in the home, such as the telephone, television, VCR or home computers (Silverstone et al., 1992; Silverstone, 1994; Silverstone and Haddon, 1996; Lie and Sørensen, 1996). The domestication approach was then mainly concerned with the integration of new technologies into the domestic sphere and the ‘moral economy’ of the household (Silverstone et al., 1992). In the concept of the “moral economy”, “economy” refers to the fact that households are economic entities in that their contribution to the production and consumption are part of the general public economy. At the same time, the household is also an economic entity which acts on its own. “Moral” refers to the way that the meaning of public activities like work, relaxation or shopping are negotiated through the knowledge, values, norms, assessment and the aesthetics within the household. These aspects are the result of the “background and the biography of the household, its separate members and of the in-house politics” (Pierson, 2006).

2.4.3 Components of Domestication Theory

Thus, the core idea in domestication theory is that objects and products go through a process of domestication that renders them fit for use (or not) in the eyes of their owners or users, and that this process consists of the four dimensions as described below.

Appropriation

An object or product whether purchased or acquired, goes through a process of appropriation, whereby the individual or group take(s) possession of it. At this stage,

objects acquire a meaning and become 'authentic' (Silverstone et al., 1992; Miller, 1987). Ling (2004: 28) describes the appropriation stage as "the portion of the consumption process in which a particular object leaves the commercial world and enters our sphere of objects"

Objectification

Objectification then describes how and the extent to which an object finds a space and a place in the geographical area it has entered (Silverstone et al., 1992). For instance, domestic technologies entering the domestic sphere may not necessarily become integrated into the domestic landscape immediately and their physical place in the household is often the object of debates and negotiations. Any new object entering a given physical space is a potential threat to the existing order of this space, its aesthetic harmony and its logical structure (Silverstone et al., 1992). Vuojarvi et al. (2010) describes the objectification stage as that in which the values, tastes and styles are expressed through the display of the new technology.

Incorporation

The incorporation of a new object or artefact into routines constitutes another dimension of domestication. An object becomes incorporated when it starts being integrated into temporal structures, both formally in form of schedules and rules and informally in form of routines and habits. The object at this point is given a function (or a series of functions) that may be different from those that were intended by the designers of the artefact or even from those that the buyer had in mind when acquiring it. Vuojari et al. (2010) support that the incorporation stage emphasizes how a technology is used and the temporal aspects of its usage.

Conversion

At this stage, users signal to others their participation in the consumption and innovation process by displaying their ownership of a new product to the outside world. This may

entail displaying the object either physically (as with parabolic antennas and mobile telephones, or white iPod earphones) or symbolically – by making it the topic of discussion, hinting at it more or less casually in conversation or by exhibiting new knowledge and competence to friends and colleagues. It is the phase in the cycle that others incorporated their understanding of the artefacts in their broader understanding of the person consuming the artefact (Ling, 2004:30) Such activities are grouped under the umbrella term of ‘conversion’ in the domestication model (Silverstone et al., 1992).

Importantly and the unique perspective offered by the domestication approach is that the theory takes into account the complexity of the relationship between the environment and the technology in attempting to understand acceptance and adoption (Silverstone and Haddon, 1996).

Silverstone (1999) contested that media, which to some extent is represented and facilitated by ICT, are so embedded in everyday lives that we can hardly talk about our home without talking about them, while Silverstone and Haddon (1996) opposed the role of pure technological determinism in the process of technological innovation and adaptation as they argued that other factors, such as social and economical dimensions are involved in the process of innovation and adoption and provide crucial input into the design, acceptance and use of technology.

Domestication studies are found which describe both the adoption and usage patterns of groups in society (e.g. Townsend, 2000) as well as individual end users (e.g. Ling, 2004). Thus domestication research also investigates the societal consequences of adoption and use, both at the aggregate and individual level. Townsend (2000) analyzes the consequences of mobile telephony on the planning of cities, while Fortunati (1998) looked at the consequences for the family as an institution and for individuals using a mobile telephone as a way of expressing their individuality.

In a service context, Pedersen and Ling (2002) write that domestication studies of end-user service adoption focus on studying not only service use but also the consequences of use, and hold that studying consequences is relevant because such consequences could be then reinterpreted as reasons for the adoption of services. For example, in a mobile services context, increasing individuality is both a determinant and a consequence of using mobile end-user services for social network management (Palen et al., 2001).

Thus, domestication theory seems to offer the broadest capacity for incorporating social circumstances and technological factors as well as the complex and iterative process into which a technology enters a social realm and enables these aspects to be included into the study of technology adoption. It accepts and supports the co-creation of users and technology, thereby encompassing both the socially and technically deterministic philosophical approaches which the researcher will detail in the next section. Hynes and Richardson (2009), write that while much of the IS research examines the interaction between people and the technological artefact and the systems running on it, little attention is often paid to the social constructs in which computer use actually takes place, and how if at all, this influences how technologies are acquired, used and made sense of.

Domestication is about describing the place of technologies or media in everyday life and catches not only the practical, temporal and spatial aspects, but also importantly how these things are combined with the cultural as an expression of lifestyles and values. While many studies in the ICT acceptance arena use the theoretical approaches which were discussed previously (e.g. TAM, TRA, TPB), domestication has only recently been considered, making the possibility of a unique contribution to the study of the adoption of online news services using this theoretical approach greater.

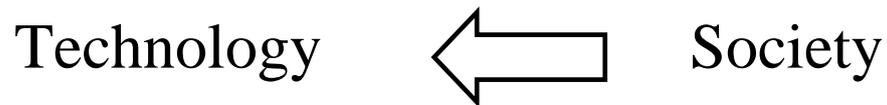
In order to further understand why the researcher chose domestication theory, it is necessary to look deeper at the foundation of technology or service acceptance and usage and examine the opposing views of social constructionism and technological determinism.

2.4.4 Social Constructionism and Technical Determinism

That users are at the heart of technological development is not a new concept and brings to light a debate which has been going on for hundreds of years – that between technical and social determinism - and which poses the persistent question “does technology drive society or does society drive technology?” What consequences does taking one stance or another influence the level of understanding one can gain into the ways in which consumers adopt new technologies – and how can this debate help us to understand why some technologies fail in the marketplace, others thrive and yet others take on new characteristics, meanings and forms – sometimes far from those the original developers intended. Figure 2.8 illustrates the two opposing views. The researcher starts the discussion from the point of view of social constructionism.



Technological determinism (Hard Version)
Society is influenced by technology



Social constructionism (Hard version)
Technology is influenced by society



“Soft” determinism or “weak” constructionism,
Technology both influences and is influenced by society

Figure 2.3 The relationship between technology and society

2.4.4.1 Social Constructionism - background

Social constructionism is a school of thought that attempts, to varying degrees, to analyze seemingly natural and given phenomena in terms of social constructs. A social construct or social concept is an institutionalized entity or artefact in a social system 'invented' or 'constructed' by participants in a particular culture or society and which exists solely because people agree to behave as if it exists, or agree to follow certain conventional rules (Burr, 1995). Social constructs can include such things as games, money, school grades, titles, governments, universities, corporations and other institutions (Czepczyński, 2008).

Social constructions can be described as arising from the institutionalisation of patterns of interaction and meaning in society and leading to a construction of social institutions and institutionalized perspectives and understandings. Therefore, knowledge, or truth here is based on the perception of the participants of the social entity (Hacking, 1999). Kukla (2000) writes that social constructionists hold that reality is constructed through human activity and that members of society together invent the properties of the world. For a social constructionist, reality cannot be discovered as it does not exist prior to its social invention. According to most social constructionists, social constructions are very much real and are a part of, or sometimes the entirety of, lived reality (Burger and Luckmann, 1966). For example, schools are a socially constructed institution for the purpose of educating – they are accepted by society and thus are integrated into everyday life.

Social constructionists support the following tenets (Burr, 1995):

That a critical stance must be taken towards commonly accepted knowledge.

This means that we should challenge the view that conventional knowledge is based upon objective, unbiased observation of the world. It also means that the categories into which we classify human beings or objects should be critically examined as they do not necessarily reflect “true” divisions.

That there exists cultural and historical specificity

This is the belief that the ways in which we commonly understand the world, the categories and concepts we use are historically and culturally specific. As an example, Burr states that the accepted methods and standards in which children are brought up and taught today are very different than they were only 50 years ago. An example of this is the working regulations which today protect a child’s right to concentrate on learning and playing as opposed to spending time in a factory. Even the manner in which parents are advised to bring up their children have changed – more recently apparent through the debate regarding

the appropriateness of striking children as a form of discipline. However, one could argue that although the rights of children could be seen as an example of historical specificity, perhaps the study of human nature has progressed in terms of our understanding of how to increase the length of life, or simply been extended to understand what improves the quality of life. This is simply an evolution in the understanding and acceptance of how to increase and sustain a higher level of health and happiness which produces, in the end, a higher level of productivity which in turn benefits mankind. A positivist could maintain that we are simply narrowing the gap between our understanding and the reality of human nature. Thus the accumulation of historical observation is bringing us closer to understanding the truth in human nature – meaning that there *is* a truth to be discovered.

Social constructionism holds that all knowledge is not only culturally and historically specific, but is a product of culture and history, dependent on the economic and social conditions prevailing in the culture at the time. Burr continues that particular forms of knowledge found in any culture are artefacts of that particular culture and we should not assume that our ways of understanding are any better (or any nearer the truth) than other ways. Additional tenets put forth by Burr (1995) include:

That knowledge is sustained through social processes

Knowledge is not derived from the nature of the world as it really is, but people construct it between themselves. Interactions in daily life cause the creation of our own knowledge or truth as we perceive it. Therefore, what we regard as truth, or our currently accepted ways of understanding the world is a product of social processes and interactions with others rather than of objective observation of the world.

That knowledge and social action go together

Finally, the accepted understandings of the world can take on a wide variety of forms, and hence there are many social constructions, and each invites a particular attitude or action. An example used by Burr is the way in which prior to the “temperance movement”

drunkenness was seen as a crime with a resultant prison sentence as the person was seen to be responsible for his own actions. More modern views accept that use and abuse of alcohol can be indicative of a disease of alcoholism which is more effectively treated medically and therapeutically than with a prison sentence. The same holds true for the change in the way patients with mental disabilities are treated. Formerly separated out of society and from others, such treatment has now been determined to be more detrimental to the health of the patient. Hence social constructionists hold that current knowledge dictates the actions of human beings, illustrated here in the examples of bringing up children or treating the mentally or physically ill. In a socially constructed world, the knowledge of how to treat people is a product of social interactions and resultant cultural and historical contexts. However, it could be argued again that through a more in depth understanding of the human psyche we are gaining a greater insight into what treatments produce better results, and that there is a best way to treat individuals - the “real truth” in medical or psychological terms – and through investigation and observation we are coming closer to that truth.

2.4.4.2 Social Constructionism and Technology

The above review of principles in the social constructionist school of thought can be extended to explore the relationship between society and technology. Social constructionism maintains the adage of “interpretive flexibility of artefacts” as fundamental to the understanding of the development of objects and technologies and their use and infiltration into society as well as their subsequent further enhancement (Bijker, 1993). This can be understood to mean that a single object can be interpreted as different to a variety of social groups. Bijker (1993) cites the example of the late 19th century evolutionary stage of the bicycle. At this stage it consisted of a large front wheel which made it undoubtedly an unsafe device, but was socially constructed by young men as a “Macho Machine” due to the risk one undertook when using it. For women and middle aged men, on the other hand, it was a dangerous method of transportation (Bijker, 1993).

Hence the socially constructed definition of the same object was different for two different groups of people, based on the perceived risk or value resulting from the usage of the item. Further extending this line of thought to modern day technologies, for example, the mobile phone, one can clearly see that the mobile phone for some is an annoying nuisance, the carriage of which is required by, for example, children of older parents to ensure their contact-ability and thus safety (Ling, 2004). On the other hand, there are social groups who have become dependent on mobile technology for the organisation and maintenance of their daily lives (those whose work requires them to travel extensively, for example). A mobile device is thus a socially constructed nuisance for one social group, but an irreplaceable convenience and necessity for another.

The aspects of social constructionism as they pertain to the interaction between society and technology can be further explored through looking at the schools of thought which have arisen to examine development of technologies and their infiltration and influence on society and the influence of society on technology.

2.4.4.3 Society and Technology – Schools of thought

Sociological aspects of technology are explored within several similar schools of thought, or philosophies such as those contained within *The Social Shaping of Technology and Science and Technology Studies* (Williams and Edge, 1996). These encompass the study of the development, usage and acceptance of technology from a societal perspective. They are branches of the Science and Technology or Technology and Society studies which examine the co-dependence and co-influence of technology and society. The synergistic relationship between technology and society can be seen to be present from the beginning of humanity with the invention of simple tools, and continues into more modern technologies such as the printing press, the telephone, and the many forms of computer-mediated communication and interaction. It could be argued that most technological advancements are due to some influence from society, and, conversely, many aspect of modern life are influenced by technology.

2.4.4.4 Science and technology studies (STS)

The origins of STS could be seen in the 1970s with several events in the academic community such as the founding of the society for social studies of science in 1975. STS is the study of how social, political, and cultural values affect scientific research and technological innovation, and how these in turn affect society, politics, and culture (Bauchspies et al., 2006). STS strives to discover and elaborate relationships between scientific and technological innovations and society, with the foundation that science and technology are socially embedded. In the mid-eighties, two seminal works appeared: the *Social Shaping of Technology* (MacKenzie and Wajcman, 1985) and *The Social Construction of Technological Systems* (Bijker et al. 1987). MacKenzie and Wajcman's volume provided a selection of modern academic works along with less recent essays from authors such as Karl Marx, all of which described the influence of society on technological design and provided arguments against the notion of technological determinism (Misa, 1988). Bijker et al. (1987) consolidated a mixture of ideas from the social studies of science and the history of technology through a collection of papers presented at a conference in 1984 which brought together technology sociologists and historians. The papers presented demonstrated the need for an examination of technology which takes into account social, technical, economic and political considerations and provided an intellectual foundation to the social construction of technology.

2.4.4.5 Social construction of technology (SCOT)

The conceptual framework of SCOT utilizes the following fundamental principles which can be employed to describe the origins, evolution and acceptance of technology. It sees the developmental process of a technical artefact as an alternation of variation and selection (Pinch and Bijker, 1984). This process comprises several dimensions which can be described as follows:

The seamless character of the “web” of technology and society

The seamless character of technology and society can be described as the way in which society and technology are intertwined; that there are no distinct pieces of scientific, technical social, cultural and economic “cloth” (Bijker, 1993) but that the phenomena which we can see and describe are comprised of a culmination of all of these factors.

The change/continuity dimension

The change/continuity dimension refers to the ability to explain and categorise phenomena in terms of their degree of change in history as well as the degree of “non-change”; in the SCOT model the concepts of “stabilisation” and “closure” are used here. Bijker (1993) writes that the degree of stabilization was introduced as a measure of the acceptance of an artefact by a relevant social group.

The actor/ structure dimension

This point emphasises the socially constructed character of artefacts. The interpretive flexibility of an artefact can be seen to define the artefact in the social context in which it is employed. This means that there is no structure to determine the definition of artefacts, but the actors construe meaning onto the device (Bijker, 1993). Additionally, Winner (1993) discusses the importance of identifying the “relevant social groups” to study as this will colour the outcome of any analysis of technology.

Importantly, relevant social groups form the starting point in the development of a model for the explanation of nature, and artefacts are described through the eyes of the members of these social groups (Bijker, 1993). As in the example of the early form of the bicycle above, the interpretive flexibility of an item is thus revealed by tracing the meaning attributed to it by the various (pertinent) social groups or those within the scope of analysis. Thus, the analysis should focus more on the problems and solutions that relevant social groups see with respect the artefact. Bijker (1993) further writes that an artefact does not simply spring into existence as a result of a momentous act by a superior inventor, but is

gradually constructed or deconstructed in the social interactions of social groups. This brings to mind the phrase “necessity is the mother of invention”; that were there no need for a technical innovation from a societal point of view, the innovation would not have taken place, or an innovation would not have been seen to be useful.

2.4.4.6 Social Shaping of Technology (SST)

In a review of the research on the social shaping of technology (SST), Williams and Edge (1996) provided an overview of the facets of the study of the interrelated relationship between technology and society. They held that “Social Shaping of Technology” was an umbrella term which encompassed a variety of facets and research directions on the topic. SST developed as a critique of deterministic approaches to technology development. SST researchers have sought to take into account both the content of technology as well as the processes involved in its innovation (Williams et al. 2005). Fundamental to the SST concept is that there are options available at every stage of technological development and there is an interplay between technical and social factors which influence which option is selected (Williams et al., 2005). This supports that there are different routes a technology could take and different outcomes which could come about. Williams and Edge (2005) hold that these differing outcomes would have different implications for particular social groups and society as a whole. Thus SST both agrees and conflicts with elements of other theories that tie sociology and technology together such as SCOT which argues that human action shapes technology, but technology does not shape human action, and technological determinism, which argues the opposite, that technology follows its own developmental path, outside of human influences, and in turn, influences society.

SST has gained increasing recognition in recent years, particularly in the UK and Europe, as a valuable research focus integrating natural and social sciences and offering a greater understanding of the relationship between technological innovation and economic and social well being (Williams and Edge, 1996). The SST approach draws upon a range of

academic areas and investigates the ways in which social, institutional, economic and cultural factors have shaped the following (Williams and Edge, 1996):

- *the direction as well as the rate of innovation*
- *the form of technology: the content of technological artefacts and practices*
- *the outcomes of technological change for different groups in society.*

SST thus goes beyond traditional approaches which are concerned mainly with the social impacts of technology and examines what shapes a technology which provokes such societal impacts, and the way in which these impacts are realized (MacKenzie and Wajcman, 1985).

Winner (1993) argues that social constructionism offers a clear, step by step guidance for doing case studies in innovation, and that it has led to insight in the way in which technological innovation is a multicentered, complex process, not an unilinear progression. Social constructionist research stresses contingency and choice in the development of technology as opposed to role of necessity. While Winner supports the conceptual rigour, concern for specifics, and the attempt to provide empirical models of technological change which more accurately reveal the actual course of events, he is also critical of social constructionism in its lack of regard for the social consequences of technical choice, holding that it is more focussed on explaining how technologies arise and how they are shaped through various types of interaction than the consequences of the technology in society, dealing solely with the inner workings of why things exist (what goes on within the black box), and does not concern itself with the consequences of the existence of a technology. Winner continues that what the introduction of new artefacts, means for people's sense of self, for the texture of human communities, for the qualities of everyday life and for the broader distribution of power in society are not matters of explicit concern from a social constructionist's perspective. In their example of the success of the Bakelite material (the first synthetic plastic which became popular in a wide variety of goods due to

its robustness, heat resistant qualities and low cost), Pinch and Bijker (1994) write that from a social constructionist's perspective the environment in which the product was first created was an essential factor in its success. A main component in Bakelite was phenol which was a readily available substance at the end of the war in 1918 as it was a war supply which was being discarded. The availability of this core component, at a low price, was essential in enabling Bakelite to be produced at a low cost and thus be more affordable. With this example, Pinch and Bijker argue that the success of a technology should not be taken for granted, but the social circumstances in which a technology or artefact is created needs also to be analysed. Additional concerns voiced by critiques of social constructionist approaches are the definition of the target group – or “relevant social group” which defines the purpose or usage of a technology or artefact. Who defines this group? And what effects will this definition have on the generalisability of a study?

The researcher supports that it is important to take a view which looks at both the influence of technology on society and the influence of society on technology to understand what influences loyalty in the use of technology. The approach taken in this research is that these influences can not be considered in isolation, and that societal influences as well as technological innovations comprise a bidirectional link. In the following, the researcher discusses the opposing view of technical determinism and furthermore provides a brief historical perspective.

2.4.4.7 Technical determinism

The belief in technology as a key driving force in society dates back at least to the early stages of the industrial revolution (Smith and Marx, 1994). Technological determinism maintains the belief that changes in technology have a greater influence on societies and their processes than any other factor, exerting a greater force on society than international conflict, national politics, the misdistribution of wealth, and difference of class and gender, because it (technology) precedes all of these (Smith and Marx, 1989). Misa (1988) writes that historians, philosophers and sociologists expounding on technology in the last ten years

have reached no consensus on technical determinism. One end of the spectrum is supported by some business historians who discuss technology's determining role in shaping modern business structures. The opposing perspective - how workers adapt, moderate, and reject a manager's efforts to introduce new technologies supports the other side of the argument that society is in the driving seat. More recently, historians and sociologists have taken an intermediate stance, showing that technology is socially constructed, yet can also shape society at the same time. Misa (1988) states that if machines make history, they do so only with the assistance of others and that machines are mute and illiterate and it is historians (and others) who decide the extent to which technology acts as an independent force to shape history.

Bimber (1989) writes that the reason technical determinism has been prevalent in historical accounts is that the definition of it is so broad and all-encompassing, that it would be difficult to find an example of technology in society which does not fall under the auspices of technical determinism. He categorizes accounts of technical determinism as Normative, Nomological and Unintended Consequences, such accounts ranging from positive descriptions of an inevitable technological order based on laws of nature (Nomological), to claims that technology is an important influence in history only where societies attach cultural and political meaning to it (Normative). He continues that the most common interpretation of technological determinism is the least specific as it relies on human attitudes for explaining the historical significance of a technology. Not clear is what the difference here is between this common interpretation of technological determinism and social determinism – it seems that a definition which relies on human attitudes would be better classified as a socially deterministic perspective. The Unintended consequences accounts (such as Hiroshima) are also reminiscent of the social constructionist “interpretive flexibility of artefacts” concept, that the relevant actors socially construct the meaning of a technology depending on their beliefs and perspectives (nuclear fission is a power source for some, yet a weapon of mass destruction for others, or by the same in another context). Indeed it could be argued that Bimber's normative definition of technical determinism,

(where societies attach cultural and political meaning to a technology to determine its influence in history) is actually social constructionism in disguise.

Within communications research, some writers contend that there exist essential preconditions for the development of modern industrial societies. As with Bimber above, some have made a distinction between 'hard' and 'soft' technological determinism, the latter allowing somewhat more scope for human control and cultural variation. “Hard” technological determinism is the extreme stance that a particular communication technology is either a sufficient condition (sole cause) for determining social organization and development, or at least a necessary condition (requiring additional preconditions). Social constructionists could argue that these preconditions could be defined as the historical or cultural context into which a technology enters and which enables its expansion, adaptation, success or failure – such as the example Bijker uses with the plastic Bakelite material which became popular based on the availability of raw materials enabling its cheap production. Thus, even hard technical determinism can be argued to hold that there is an environmental context which plays a part in the acceptance or use of a technology. “Soft” technological determinism on the other hand is a more moderate approach which is more widely accepted and contends that the presence of a particular communication technology is an enabling or facilitating factor leading to potential opportunities which may or may not be taken up in particular societies or periods (Finnegan, 1988). Historian Lynn White comments that a new device merely opens a door; it does not compel one to enter (White, 1978). Hence, it could be argued that the environment into which a new device enters is just as important as the device itself, that the environment and the device are mutually responsible for the acceptance, use or adaptation of technology.

Even the technical deterministic stance of Marshall McLuhan in his book *Understanding Media*, could be disputed as he asserts that “in a culture like ours, long accustomed to splitting and dividing all things as a means of control, it is sometimes a bit of shock to be

reminded that, in operational and practical fact, the medium is the message. This is merely to say that the personal and social consequences of any medium, that is, of any extension of ourselves, result from the new scale that is introduced into our affairs by each extension of ourselves, or by any new technology” (McLuhan, 1964:9). He goes on to write about the electric light. “Whether the light is being used for brain surgery or night baseball is a matter of indifference. It could be argued that these activities are in some way the "content" of the electric light, since they could not exist without the electric light. This fact merely underlines the point that "the medium is the message" because it is the medium that shapes and controls the scale and form of human association and action”. Thus, here the technological artefact is forming the type of human interaction and influencing society.

In summary, technological determinism views suggest that in the final analysis, it is technologies that form and mould society (Ling, 2004) whereas social determinism perspective supported by Bijker (1997) contests that technologies are continually reinterpreted by users and given new meanings and directions.

2.4.5 A historical perspective to the debate

Although the idea of technical determinism initially arose in Europe (Smith, 1989), it had a great impact on the shaping of America where there were debates and concerns about how to best implement technology which in turn had an effect on technological development there. Marx (1987) contends that if the question “does improved technology mean progress?” had been addressed to a group of Americans at any time since the early nineteenth century, the answer of a majority almost certainly would have "yes." At this time the U.S. was at its inception, just having entered into a post revolutionary war era in which sustaining liberty and progress were the main goals. Differing philosophies as to what constituted progress and prosperity developed. For example, opposing views were held by Benjamin Franklin and Thomas Jefferson, on the one side, and Alexander Hamilton and Tench Coxe (Hamilton’s associate in the Treasury Department) on the other. Jefferson and Franklin were proponents of pursuing technology in the interest of human betterment which

they defined as intellectual, moral, spiritual as well as material prosperity (Smith and Marx, 1994). Both held that prosperity meant little without betterment and that a balance between the two needed to be found. Jefferson considered discovery and invention as a means to achieving a better society and Franklin refused to patent his inventions as he felt they should be freely available for all to use for the benefit of all members in society. On the other hand, Hamilton and Coxe held that America's continued independence was reliant on economic independence, and technological innovations such as those employed in manufacturing were key. Whereas Jefferson emphasized technological development for the betterment of an individual's spiritual needs, Coxe shifted the importance away from human improvement and towards more general and impersonal societal ends, particularly the establishment of law and order in an unstable political economy (tension and discontent amongst factory workers at this time was why Coxe was more concerned with the "greater good" as opposed to ensuring the betterment of each individual). It could be argued that both of these objectives are in line with an increase in societal well being, one being more concrete and direct on a personal level, while one being for the betterment of society at a more aggregate level (but requiring the sacrifice of some).

The idea that technological improvements are a primary basis for, as well as an accurate gauge of progress has long been a fundamental belief in the United States. However, Marx (1987) continues that in the last half century, that belief has lost some of its credibility and a growing minority of Americans has adopted a sceptical, even negative, view of technological innovation as an index of social progress. The death and destruction in the recent history of the West is an example. Two world wars, the Nazi holocaust, the Stalinist regime, and the nuclear arms race indicate that technology may be negatively affecting social progress. Marx notes (supporting the social constructionist's interpretive flexibility of artefacts concept) how many of the fearful events of our time involve the destructive use or misuse, the unforeseen consequences, or the "disastrous malfunction" of modern technologies. Examples are Hiroshima and the nuclear threat, the environment damage as a result of industrialization, and nuclear accidents such as Chernobyl and Three Mile Island.

These examples could be used to illustrate the change in support for the argument that social progress is based or dependent on technological advances, from the old national faith in the advance of technology as the basis of social progress (Marx, 1987).

Other historical examples which could be argued to support the technical determinist point of view exist. The printing press was a development which facilitated the distribution of Martin Luther's critique of the church and enabled the mass distribution of information, and was instrumental in the shaping of Europe in the middle ages. It facilitated the creation of written language, as the mass distribution of information required that such information was written in a form which was understandable to the "target audience". The advent of the printing press also spawned the establishment of universities throughout Europe, as it was now possible to print and distribute information, a task which had been mainly carried out by the church prior to Gutenberg. This also meant that the balance of power in society started shifting away from the church. However, the press was not developed in a vacuum. There was a need to increase the distribution of information and this need drove the development of the technology. Necessity again was the mother of invention. Karl Marx has been quoted as saying "show me a handmill and I'll show you feudalism, show me a steammill and I'll show you capitalism", again a demonstration of the effect of technology on society.

More modern day examples can be found which reflect the ongoing debate. A recent statement from Jarkko Sairanen, the president of Nokia on the future of mobility is a current day manifestation in which he states that "the mobile industry is still growing - not only in volume but in increased usage and functionality as well, while the technologies are getting more complex, the challenge lies in making usage simple and seamless. Yet, the future of mobility is not only driven by technologies – though they are enablers. The future is driven by consumer experiences and business needs." This shows a recognition that there exists a relationship between users and technologies – and supports a co-creation of users and technologies.

In his book *The Mobile Connection: The Cell Phone's Impact on Society* Richard Ling (2004) discusses theories which examine the interaction between society and technology including technical determinism and its premise that it is technologies that shape society, not society that shapes the use and development of technologies. He points out that technologies do not “spring fully formed from the head of Zeus” and that there has to be some consideration given to the social context in which technologies are developed. On the opposite end of the spectrum, social determinism as defined by Bijker and Law (1992) suggests that technologies are constantly re-evaluated by users and given new functions with the emphasis on the user to determine the use to which the technology can be put. Ling (2004) and Love (2005) support that taking a practical approach between social determinism and technological determinism is advantageous with the emphasis being placed on assessing how individuals themselves make sense of the situation that they currently find themselves in. Ling supports using the domestication of information and communication technologies (Silverstone and Haddon, 1996) in the study of acceptance and usage of technologies as an approach which successfully combines both arguments. Hence, based on the discussion above, the researcher determined that domestication theory offered the best framework for understanding both the influence of technology and society in services adoption.

2.4.6 Summary: Technical and Constructionist Perspectives and Domestication Theory

Oudshoorn and Pinch (2004) write that the domestication process includes symbolic work, in which people create symbolic meanings of artefacts and adopt or transform the meanings inscribed in the technology, practical work, in which users develop a pattern of use to integrate artefacts into daily life and cognitive work which includes learning about the artefacts. Additionally, they note that domestication is a dual process in which both technical objects and people may change (so presenting a combination of social and technical determinism views). Domestication approaches have “enriched our understanding of user- technology relations by elaborating the processes involved in consumption”

through specifying the process involved in the diffusion and use of technology, and taking the dynamics of the world of users into consideration (Pederson and Ling, 2003; Silverstone, 1992).

It seems that the above discussion can be summarized by saying that there are more factors involved than just a technical artefact, or technical definition and manifestation of a technology which preclude its adoption, acceptance, usage and form of usage.

The approach in this research is that the technology itself can not be considered in a vacuum as in technical determinism, nor can the societal influences be considered without the technology, as in social determinism. It seems that the domestication approach takes both arguments into account and could be seen an approach to understanding user's motivations to use technology. Domestication approaches conceptualize the user as part of a much broader set of relations than user-machine interactions, including social, cultural and economic aspects (Oudshoorn and Pinch, 2003). Other approaches such as Latour's ANT fall short of being able to explain the complete set of dynamics involved in technological development (such as in the concept of "antiprogram" which attempts to describe how users try to counter the original intentions of the designer of a technological artefact, that the only option available to the user is to reject the intended use or meaning of such an object). There is no dynamic between the user and designer, no influence on the actual progression of the design exercised by the user. Thus, Oudshoorn and Pinch argue that such other approaches are "inadequate to understand the full dynamics of technological innovation where users invent completely new uses and meanings of technologies or where users are actively involved in the design of technologies". Domestication studies challenge the line between design and use, bringing up Karl Marx's claim that the process of production is not complete until users have defined the uses, meanings and significance of technology (Oudshoorn and Pinch, 2003). Silverstone and Haddon (1996) opposed the role of technological determinism in the process of technological innovation and adaptation as

they argued that other factors, such as social and economical dimensions are involved in the process of innovation and adoption and provide crucial input into the design of technology.

It seems to be clear from this discussion of the technical and social determinism that it is impossible to make an irrefutable statement, which is supported by the literature, as to which of the two sides of the argument between technical determinism and social constructionism offers a more conclusive approach in the understanding of society and technology and their interaction. As Ling supports, both approaches offer a researcher the ability to gain an insight into the acceptance of technology, and therefore a theoretical approach which encompasses both the social deterministic perspective as well as the technically deterministic stance would be beneficial. Hence, the researcher has chosen domestication theory as the underlying perspective in this research.

In the next sections, the researcher provides an overview of other theories which are used in technology acceptance and adoption research in order to provide a comprehensive picture of the field of study and support the use of domestication theory in this thesis.

2.5 Other theoretical Approaches in Electronic Services Adoption

Diffusion and Adoption Literature

In technology related literature, information systems theories such as the technology acceptance model and innovation diffusions theory are often used which endeavour to explain the initial adoption of technology in firms (Pura, 2005). However, more recently, literature has applied technology acceptance models in non-task, non-firm oriented settings. Researchers have also noticed limitations of the technology acceptance model and have added behavioural aspects such as emotions, subjective norm, perceived enjoyment and perceived needs (Pura, 2005). Kaasinen (2005) also replaced the perceived usefulness construct by perceived value in a recent study, indicating a shift in technologically oriented theories to the inclusion of more user and consumer behaviour oriented variables.

Below is a discussion of the theoretical approaches which are commonly found in the field of IT and Adoption research. Within each section, the author describes the reason the approach was not adopted in this research.

2.5.1 Diffusion of Innovations Approach

Diffusion is the “process through which an innovation, defined as an idea, a product, technology, process or service spreads, either more or less rapidly, in more or less the same form, through mass and digital media, interpersonal and network communication, over time, through a social system, with a wide variety of consequences positive and negative” (Rogers, 2003).

Rogers formulated this explanation of the process by which innovations are adopted and implemented within a society (Fidler, 1997). In his description of the diffusion approach, Rogers (1995) attempts to explain adoption behaviour using characteristics of the technology being introduced, defining diffusion as the process by which an innovation is communicated through certain channels and over time among the members of a social system. This diffusion process contains five elements which describe the stages through which a technological innovation passes. These elements are:

- **Knowledge:** or the exposure to a technology’s existence, and understanding of its functions
- **Persuasion:** the forming of a favourable attitude to the technology
- **Decision:** the commitment to its adoption
- **Implementation:** employing the technology (putting it to use)
- **Confirmation:** reinforcement based on positive outcomes from using the technology

An innovation in turn can be seen to have the following attributes:

- It offers relative advantage, or is perceived to be better than what it supersedes
- It is compatible with existing values, past experiences and needs
- It has a certain complexity in understanding and using it
- It offers trial-ability or can be experimented with on a limited basis
- It is observable, or the results of employing the innovation are visible

In terms of the roles of individuals in the adoption process, the diffusion of innovations theory identifies different categories of technology adopters which are Innovators, Early Adopters, Early Majority, Late Majority and Laggards. Additionally, the diffusion of innovations theory holds that there are various important influencers in the adoption process: opinion leaders who are influential over others, change agents, who are in a position to positively influence innovation decisions and change aides who primarily function to complement the change agent and although may have less competence, they may possess more trustworthiness than the change agents.

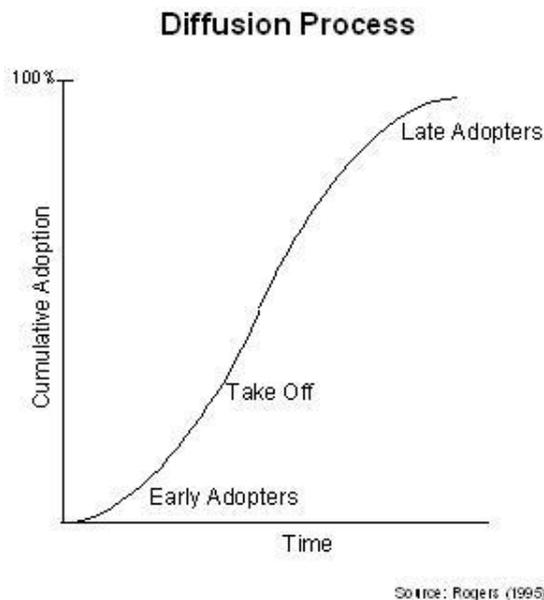


Figure 2.4 Diffusion of Innovations Approach: Rogers

Rogers also describes the diffusion process as consisting of four elements; an innovation or new technology, a social system, the communication channels of the social system, and time. In an internet service use and adoption context, evidence of the diffusion of innovations shows that those who are the first to use new technologies differ in their sociodemographics from those who join later. This has been shown to hold true in the adoption of the internet in general (Zhu and He, 2002) as well as for online news sites in particular (DeWaal and Schoenbach, 2010).

While the diffusion theory offers a simple model for visualizing the historical adoption patterns of established technologies, it only partially explains why a new media technology will suddenly diffuse into the general consumer market and attain a dominant position (Fidler, 1997). Rogers also accepts that the diffusion of innovation theory is at its best as a descriptive tool, less strong in its explanatory power, and less useful still in predicting outcomes, and providing guidance as to how to accelerate the rate of adoption. There is also doubt about the extent to which it can give rise to readily refutable hypotheses. Many of its elements may be culturally and historically specific (for example, the adoption of hybrid corn studies in North America in the 1950s and 60s as above), and hence less relevant in, for example, other territories in the world at other times, taking into consideration the social constructionist premises of cultural and historical specificity which will be detailed further in the discussion of technical and social determinism.

Hence, although the diffusion of innovations accepts that the social framework into which the innovation is introduced is accepted to play a decisive role in its acceptance, it may be less applicable due to its more descriptive focus. As the goal of this research is to explain why a technology may be adopted, not just describe its adoption, the diffusion of innovations theory could be considered too limited.

Adoption research

Van der Heijen (2004) supports that researchers here typically describe and explain the adoption decision of individual end users through the application of cognitive and social theories of decision making. Three models which are widely applied are the technology acceptance model (TAM), the theory of reasoned action (TRA), and the theory of planned behaviour (TPB). Additionally, the unified theory of acceptance and usage of technology (UTAUT) combines factors of the models above with other socially oriented variables. Several hundred studies can be found which apply one of these models to explain end users' adoption and acceptance of different kinds of ICT systems and applications (Venkatesh et al., 2003). In a mobile service usage context, user acceptance of personal mobile information services appears to be similar to user acceptance of office information systems (Van der Heijen, 2004), and consequently, existing theoretical models for user acceptance to study service adoption could be appropriate. The use of a mobile service, however, is distinct from the use of an office information system in several respects. Among these is the focus on entertainment value of many mobile services (Ogertschnig and van der Heijden, 2004), their ability to be exposed to shifting social contexts (Lyytinen and Yoo, 2002), and the increased reliance of people on mobile telephones as important parts of their lives (Carroll, et.al., 2002). These characteristics could be similarly important in the study of adoption of online news services in that the hedonic component and social components are also seen by the researcher to have an importance. The assumptions underlying such current technology acceptance models as the Technology Acceptance Model (TAM, Davis, 1989) and the Unified Theory of User Acceptance of Technology (UTUAT) (Venkatesh, et al. 2003) assume that efficiency and not entertainment is the prime purpose for using technology, the systems are used in one setting only (the office setting), and users do not have much to lose if they do not accept the technology. Thus it could be argued that they do not offer a broad enough scope for this research. Nevertheless, it is important to present a review of these theoretical applications and this follows.

2.5.2 Technology Acceptance Model

Pederson and Ling (2003) write that in adoption research, the technology acceptance model focuses on the attitudinal explanations of intention to use a specific technology or service and includes the five items: perceived user friendliness, perceived usefulness, attitudes towards use, intention to use and actual use. The technology acceptance model is shown in the following diagram.

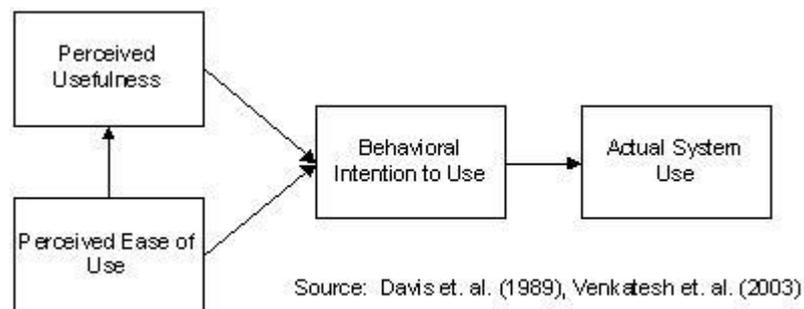


Figure 2.5 Technology Acceptance Model

Although the model is mainly applied to explaining the adoption of technology within organizations, the constructs of the model are fairly general (Doll et al., 1998). Davis et al. (1989) also originally noted that the variables of the model are universal to different types of computer systems and user populations rendering TAM useful in explaining users' intentions to use internet services (Lin and Lu, 2000).

The TAM model has subsequently been extended and modified to include antecedents and determinants of perceived user friendliness and perceived usefulness. While the determinants of perceived user friendliness are believed to be rather general and have been given much attention (Venkatesh and Davis, 1996), the determinants of perceived usefulness are service dependent and have been given less attention (Pederson and Ling, 2003). A second extension suggested the introduction of social determinants of use or intended use. Some have introduced these concepts as determinants of perceived usefulness (Venkatesh and Davis, 2000); while others have criticized that these social issues were not

considered in the first place (Battacherjee, 2000). A third extension suggests including behavioural control or user resources as explanatory concepts (Mathieson et al., 2001).

2.5.3 Theory of Reasoned Action

The theory of reasoned action is a more general theory than TAM. When applied to adoption behaviour, the model includes the four general concepts of behavioural attitudes, subjective norms, intention to use and actual use.

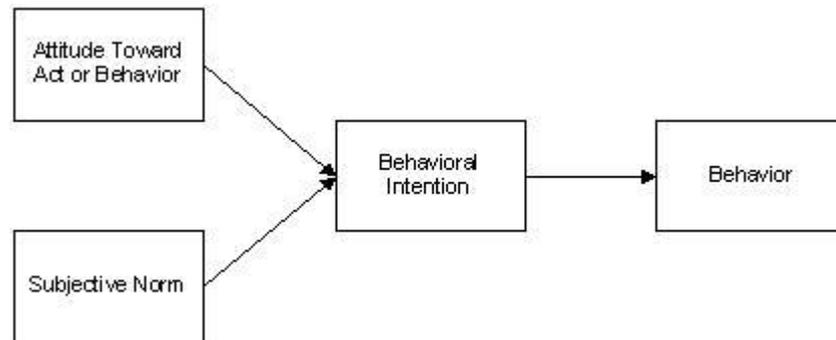


Figure 2.6 Theory of Reasoned Action

The inclusion of subjective norm represents an important addition when compared to the technology acceptance model. In TRA, subjective norm is composed of the user's perception of how others think he should behave, and his motivation to comply with the expectations of such important social figures (Fishbein and Ajzen, 1975). TRA has been applied in its original form to explain the adoption of ICT applications (Liker and Sindi, 1997), but typically TRA is used in modifying the TAM model to add subjective norm as shown above (Venkatesh and Davis, 2000; Venkatesh and Morris, 2000).

2.5.4 Theory of Planned Behaviour

The theory of planned behaviour was proposed as an extension of the theory of reasoned action to account for conditions where individuals do not have complete control over their behaviour (Ajzen, 1985). This theory also includes determinants of behavioural attitude and subjective norm. Models based upon TPB have been applied to the explanation of different types of behaviour, and when applied to the adoption of ICT systems or services, the model contains five concepts - behavioural attitudes, subjective norm, behavioural control, intention to use and actual use as illustrated in the model below.

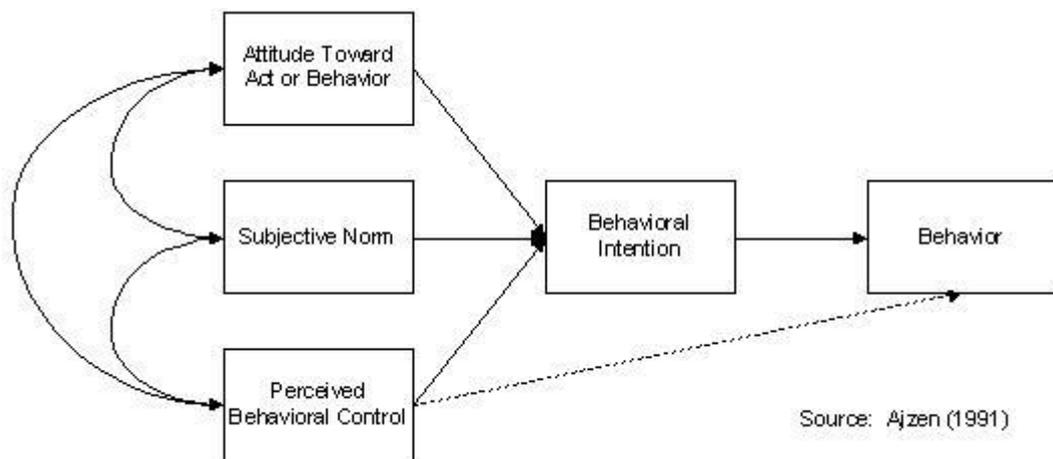


Figure 2.7 Theory of Planned Behaviour

The components of behavioural attitude and subjective norm are the same in the theory of planned behaviour as in the theory of reasoned action. The TRA model also includes a construct for perceived behavioural control, and this reflects the internal and external constraints on behaviour. Perceived behavioural control is in turn directly related to both intention to use and actual use. Actual use of a product or service is a function of intention to use and perceived behavioural control. Amongst other things, TPB has been applied to explain the adoption of technologies such as spreadsheets and electronic commerce services

(Mathieson, 1991; Battacherjee, 2000). Pederson and Ling (2003) write that the role of subjective norm in TPB when compared to TAM is somewhat unclear. Davis et al. (1989) and Mathieson (1991) found no support for a direct relationship between subjective norm and intention to use, but this has in turn been attributed to the fact that there was little social pressure to use the systems which were studied.

In contrast, more recent studies have shown a significant relationship between subjective norm and intention to use. These include studies in organizational and electronic commerce settings (Taylor and Harper, 2002; Battacherjee, 2000). Venkatesh and Davis (2000) also found strong support for a direct link between subjective norm and intention to use in a study which looked at the combined results of four different studies in different settings. As stated before, the inclusion of behavioural control in the TPB model represents a valuable addition to the explanatory power of TPB when compared to TAM (Pederson and Ling, 2000). Both Mathieson (1991) and Taylor and Todd (1995) found that the addition of behavioural control made their TPB model explain more of the variance in intention to use than TAM. In TPB, behavioural control encompasses two components. The first component is facilitating conditions representing the resources required to use a specific system (Pederson, 2000). Examples of such resources are financial resources or other ICT-related resources such as technical support. The second component is self efficacy; or the individual's confidence in his or her ability to perform a behaviour (Taylor and Todd, 1995). TPB and TRA have both been criticized for not suggesting operational components or determinants of behavioural attitudes, subjective norm, and to some extent, behavioural control (Pederson, 2000). To counter this criticism, specific components or determinants of the attitudinal concepts of TPB have been suggested, such as by Battacherjee (2000) who suggests incorporating the TAM model in TPB with perceived usefulness and user friendliness as the determinants of attitudes towards use. Battacherjee (2000) also posits that subjective norm may be determined by external and interpersonal influence, and that the two components of perceived behavioural control may also be treated as the determinants of behavioural control. Taylor and Todd (1995) also suggested a

“decomposed” TPB which also includes the TAM model in the attitudinal part of TBP. However, in this model they also include compatibility as a third determinant of attitude towards use, mainly inspired by Roger’s innovation of diffusion theory (Rogers, 1995). The determinants of subjective norm are believed to be context dependent, and in the case of Taylor and Todd (1995) peer influence and superior's influence are the suggested determinants. In mobile settings, Battacherjee's (2000) determinants are seen to be relevant and this may also spill over to the adoption in online settings (Pederson and Ling, 2003).

2.5.5 Unified Theory of Acceptance and Usage of Technology

Venkatesh et al. (2003) went on to develop the Unified Theory of Acceptance and Usage of Technology. The UTAUT aims to explain user intentions to use an IS and subsequent usage behaviour. The theory holds that four key constructs (performance expectancy, effort expectancy, social influence, and facilitating conditions) are direct determinants of usage intention and behaviour (Venkatesh et al., 2003). Gender, age, experience, and voluntariness of use are posited to mediate the impact of the four key constructs on usage intention and behaviour (Venkatesh et al., 2003). The theory was developed based on a review and consolidation of the constructs of eight models that earlier research had employed to explain IS usage behaviour: theory of reasoned action, technology acceptance model, motivational model, theory of planned behaviour, the combined theory of planned behaviour/technology acceptance model, model of PC utilization, innovation diffusion theory, and social cognitive theory. Subsequent validation of UTAUT in a longitudinal study found it to account for 70% of the variance in usage intention (Venkatesh et al. 2003).

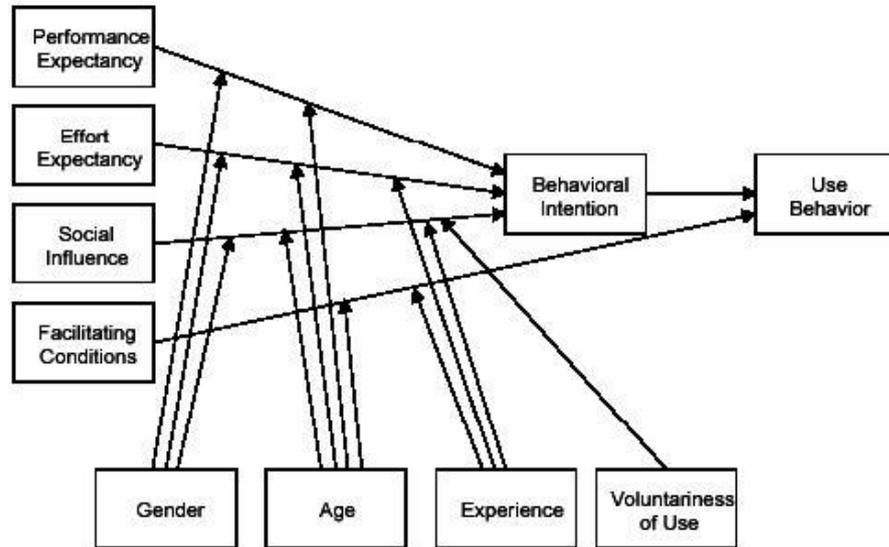


Figure 2.8 Unified Theory of Acceptance and Usage of Technology

While these acceptance and adoption models have been widely employed, the researcher strove to utilize a theory which supported the technical and social drivers within the study of loyalty and acceptance of services. In addition to offering a more unique research perspective, domestication theory was chosen as it seemed to provide the most comprehensive and pertinent theoretical approach.

Before presenting the conceptual model, the researcher continues by presenting a review of the literature for the model items, first examining the extant literature on the endogenous latent variable of loyalty. The next section looks at the aspects of customer loyalty and is necessary in defining the dimensions of loyalty which are included in this research.

2.6 Loyalty

The study of customer loyalty was one of the dominant research areas in the 1990s and continues to be further developed and scrutinised today. The result is that most companies are striving to gain loyal customers, and considerable efforts are invested to maintain a loyal customer base as this will help them increase profits and reduce acquisition costs. With an increasingly competitive business environment, the importance of customer loyalty becomes more important yet poses firms with a wide range of challenges.

While it has been broadly argued that lasting customer relationships are beneficial for the company (e.g. Reichheld and Sasser, 1990; Grönroos, 1994; Rust and Oliver, 1994; Anderson, Fornell and Lehmann, 1994; Berry, 1995; Reinartz and Kumar, 2000), it seems that two schools of thought have emerged. One of these supports an undisputable loyalty – profitability link and another which is less convinced. Practitioners such as Reichheld have defended the business argument for customer loyalty, indicating that a 5% increase in customer retention can lead to an increase of net present value of customers of between 25 and 85% (Reichheld, 1996).

However, the links between customer satisfaction, satisfaction and loyalty and loyalty and profitability have proven to be difficult to ascertain in some circumstances, thus contesting the general adage that customer loyalty is the most important factor a firm needs to focus on to ensure growth and profitability (Reinartz and Kumar, 2002; Keiningham et al., 2006). Trying to retain customers at any cost has also proven to be an inadequate and dangerous strategy as there is a relation between the perceived value of the offering from the firm from the customer's perspective and his intention to remain a customer and repurchase, regardless of the number of special offers or amount of marketing communication he receives from a competitive firm (Reinartz and Kumar, 2002).

On closer analysis, however, it seems that those who are not as convinced about the irrefutability of the loyalty argument have simply focussed on features which define the scope of loyalty as opposed to ascertaining the true factors which drive it. A review of loyalty literature sheds more light on exactly what loyalty comprises.

2.6.1 Brand Loyalty

Academic research into brand loyalty and/or consumer loyalty dates back more than 40 years (Shugan, 2005). According to Jacoby and Chestnut (1978), the study of brand loyalty extends back even further to Copeland's (1923) study of a phenomenon which he termed "brand insistence." Jacoby and Chestnut (1978) noted that two important aspects about brand loyalty measurement are generally considered. The first concerns the level at which brand loyalty is measured (micro or individual level vs. macro or aggregate level). The second assumption concerns the data used to measure brand loyalty. Jacoby and Chestnut (1978) additionally distinguished three approaches to data: behavioural data, attitudinal data, and composite, or a combination of both behavioural and attitudinal. Their review also suggested that a large number of approaches have been used in defining brand loyalty, as they determined different operational definitions of brand loyalty existed. This suggests some divergence in opinion of what constitutes brand loyalty, and how it should be measured.

2.6.1.1 Behavioural Elements

The earliest approaches to loyalty measurement were based on consumer behaviour, either actual purchasing behaviour or reported purchasing behaviour. Behavioural brand loyalty can be defined as a customer's covert behaviour toward a specific brand in terms of repeat purchasing patterns. A repeat purchasing pattern can be defined as actual purchase frequency, the proportion of occasions on which a specific brand is purchased as compared to the total number of purchased brands and/or the actual amount of purchase. Numerous brand loyalty researchers have used this approach by simply measuring these behavioural variables to predict the customer's purchasing behaviour in the future (Ehrenberg, 1991;

Lipstein, 1959; and Kuehn, 1962). Jacoby and Chestnut (1978) suggested that the behavioural approaches can be further subdivided into five types:

- Brand purchase sequence
- Brand purchase proportion
- Brand purchase probability
- Synthesis measures
- Miscellaneous measures

These aspects are examined below.

Brand purchase sequence

Brown (1952) classified loyalty into four categories based on purchase sequence:

- Undivided loyalty
- Divided loyalty
- Unstable loyalty
- No loyalty

Based on the purchase patterns of consumers, he proposed four purchase sequences for these categories, namely, undivided loyalty = purchase sequence: AAAAAA, divided loyalty = ABABAB, unstable loyalty = AAABBB, and irregular sequences =ABBACDB. Other authors (Tucker, 1964) suggested the three-in-a-row criterion, in which customers are classified as loyal when they have bought the same brand three times in a row. Southwest airlines uses this as a measure of customer loyalty, adding that “after flying with us three times a customer is unlikely to “defect” (Heskett et al., 1997) Another measure put forward has been the number of “brand runs” (Massy et al., 1968), brand run being defined as the consecutive sequence of purchase of the same brand. The average length of brand run has also been proposed by Massy as a way of measuring brand loyalty.

Brand purchase proportion

The proportion of purchases of a specific brand as compared to all purchases has been used by a number of authors (e.g. Brown, 1952; Copeland, 1923; and Lipstein, 1959) as a measure of brand loyalty. A number of different cut off points have been proposed to determine real loyalty, ranging from the exclusive purchase which means the consumer purchases the brand 100% of the time to about a 50% purchase share showing disparity in measurement using this method. Thus, as an extension to this measure, authors such as Cunningham (1956) extended the concept of one-brand loyalty to dual-brand or triple-brand loyalty, with loyalty defined as the percentage of total purchases devoted to the top two or three brands.

Brand purchase probability

A similar argument is reflected in work by those who used probability models to predict future purchase behaviour based on a series of previous purchases. Frank (1962), for example, showed correlations between both the number of previous purchases within a purchase sequence as well as the location of these purchases within the sequence and the probability of a future repeat purchase. Effectively, his study indicated that the more often a consumer had purchased the same brand within a purchase sequence as well as the more recent the purchase of that particular brand, the higher the probability he would repurchase that brand.

Finally, the loyalty indices involved a composite measure of several behavioural components, such as brand expenditure share, switching behaviour, and number of brands available.

Pritchard, Howard and Havitz (1992) hold that studies solely using behavioural brand loyalty do not exhibit an understanding of the factors underlying and leading up to brand loyal purchasing. Other arguments of behavioural studies include

- (1) “providing arbitrary cut off criteria;

- (2) failing to assess the complexity and richness of brand loyalty;
- (3) focusing on the outcome of behaviour and not developing definitions that reach at the underlying causative factors” (Jacoby and Chestnut, 1978).

Several researchers (Bowen and Chen, 2001; Jacoby and Chestnut, 1978; Stern, 1997) discussed the need to combine behavioural and attitudinal aspects of brand loyalty and develop measures of brand loyalty accordingly to introduce the psychological aspect of purchase behaviour. Such studies have described brand loyalty as not only an outcome of repeat purchase behaviour but also as a consequence of multidimensional cognitive attitudes toward a specific brand.

2.6.1.2 Attitudinal Elements of Loyalty

As previously noted, the inclusion of an attitudinal construct is necessary as some researchers (e.g., Day, 1969; Jacoby and Chestnut, 1978) have suggested that a behavioural definition alone does not distinguish between true loyalty and spurious loyalty. Spurious loyalty may result, for example, from a lack of available alternatives for the consumer. The latter type of buyers may lack any commitment to the brand but simply buy because of time convenience, monetary rewards, lack of substitutes or lack of information on substitutes, and psychological or monetary costs of discontinuation or switching to another brand. A recent white paper from Nokia on mobile loyalty defines the most loyal customer through purchase frequency alone, failing to consider a customer’s attitudinal aspect. The white paper shows that people who use services more frequently are more prone to changing providers, whereas 10% of customers who use services least often are classified as the most loyal. Thus, Nokia may be mistaken in their definitions in not distinguishing between true and spurious loyalty, in that the customers who use mobile services the least may be more likely to be loyal as they are not aware if the alternatives available. Taking into account such behavioural aspects alone still does not give a clear picture of what aspects affect customer loyalty. Attitudinal, as opposed to just behavioural components need examining as well.

Dick and Basu (1994) argued that a solely behavioural approach neglects the importance of the customer's decision-making process, and does not differentiate brand loyalty from simple repeat purchasing behaviour. In response to these criticisms, researchers have proposed measuring loyalty by means of an attitudinal dimension in addition to a behavioural dimension. One of the earliest uses of attitudinal measurement approaches was Guest's (1942) "brand preference," whereby consumers were judged to be loyal to the brand that they named. Later, Guest (1955) suggested that such a positive (preferential) attitude needs to persist over time. Further research supporting attitudinal aspects have described brand loyalty not only as the outcome of repeat purchase behaviour but also the consequence of multidimensional attitudes toward a specific brand (Peter and Olsen, 2001; Jacoby, 1971).

Attitudinal brand loyalty focuses not only on transactional strategies, such as frequent-user programs and gifts for repeat customers but also on attitudinal variables, such as commitment and trust. Muncy (1983) argued that most attitudinal measurement has been developed based on operational definitions rather than a theoretical conceptualization of brand loyalty; therefore, the attitudinal measurement lacks construct validity. Muncy (1983) continues that many attitudinal factors are derived from brand loyal consumers' attitudes or dispositions, such as commitment, involvement, motivation, and other cognitive and affective variables. However, the process of selecting those variables was operationally, not theoretically, based. Hence, the risk of low construct validity may be to a researcher's inability to assess all these person-specific features.

A number of different attitudinal loyalty measures have been proposed, but Pritchard, Howard, and Havitz (1992) suggested that psychometrically sound instruments to measure attitudinal loyalty were still missing. As Jacoby and Kyner (1973) stated, loyalty is a biased behaviour expressed over time by an individual with respect to one or more alternatives and is a function of psychological processes. Therefore, neither behavioural measures nor attitudinal/ cognitive measures alone are sufficient to assess brand loyalty. Like other types

of measurements, several risks exist within the measurement of these behavioural and attitudinal elements which may comprise loyalty, such as improper multiplication of attitudinal and behavioural attributes, selecting inadequate items, neglecting the impacts of significant intervening variables, and lack of underlying theoretical supports (Pritchard et al., 1992). Therefore, one of the major tasks of researchers has been to better understand the relationship between attitudinal and behavioural brand loyalty. Pritchard et al. (1992) hold that such improved understanding enables the development of an effective commitment brand loyalty measurement through the establishment of a strong conceptual and theoretical foundation and the construction of an effective research methodology to refine measurement.

2.6.2 Brand Loyalty and Customer Loyalty

Examining the evolution of brand loyalty definitions shows how these definitions are becoming more exact and consistent. Examples of such definitions are: the preferential, attitudinal and behavioural response toward one or more brands in a product category expressed over a period of time by a consumer (Engel and Blackwell, 1982), or a favourable attitude toward a brand resulting in consistent purchase of the brand over time (Assael, 1992). In a study of internet e-loyalty, Srinivasan et al (2002) defines loyalty as a customer's favourable attitude toward the e-retailer that results in repeat buying behaviour.

As the emphasis on behavioural traits became more pronounced in the study of loyalty research, the focus of loyalty moved from concentrating on the interaction with the brand to a focus on the customer's thoughts and beliefs and the resultant effect of these on the interaction with the brand. This started to evolve into a discussion in which the possibility of building a "relationship" with the customer was discussed. Liljander and Roos (2002) suggest that customer relationships range from spurious to true, based on the level of trust, affective commitment and perceived relationship benefits. This is similar to Jacoby and Chestnut's (1978) and Bloemer and Kasper's (1995) definitions of loyalty which showed that loyalty can range from "spurious" to "true". It could be argued that demonstrates a

similarity between of the concepts “relationship” and “loyalty”. Dick and Basu (1994) conceptualised customer loyalty as a combination of repeat patronage and relative attitude towards the target whether it be a brand, service, store or vendor. They determined 4 levels of loyalty which combine the behavioural and attitudinal factors. The categories they developed are no loyalty or low patronage, low attitude toward product or service, through to latent loyalty, spurious loyalty and finally high loyalty which reflects high patronage and positive attitude.

According to Oliver (1997) the basic elements in the loyalty research have remained constant since the book by Jacoby and Chestnut was published in 1978. Yet the trend in brand loyalty research has been toward a more detailed understanding of the subject, where both attitudes and behaviour are taken into account (e.g. Dick and Basu, 1994). Indeed examining the more recent literature to determine the current conceptualisation of loyalty and drivers reveals a greater amount of precision in definition and measurement – to be expected in the evolution of a topic. Reinartz and Kumar (2002) argued against a blindly accepted relationship between loyalty and profits, empirically refuting some of the basic tenets of loyalty such as how it costs less to serve loyal customers, that loyal customers pay higher prices in return for a relationship with a firm, and that loyal customers market the company through word of mouth means. They still support the loyalty – profitability link, yet indicate that through their studies they determined the relationship is weaker than expected and this may have more to do with “the crudeness of the methods most companies currently use to determine whether or not to maintain their customer relationships” (Reinartz and Kumar 2002:90). As discussed in the previous section on brand loyalty, Reinartz and Kumar assert that using exclusively behavioural measures of loyalty such as how often customers make purchases and how much they spend provides an incomplete picture of the customer loyalty tendency. Yet tools such as RFM – recency, frequency and monetary value are still commonly used to assess loyalty.

In order to complete the discussion of what constitutes loyalty, it is additionally important to include other terms which have been explored in the literature in order to form a complete picture. What other components have been discussed in relation to the definition of loyalty?

2.6.3 Value, satisfaction and loyalty

Value and satisfaction are terms which have been used in relation to loyalty, but have been purported to play different roles with and carry varying degrees of importance. For example, Jones and Sasser (1995) explore the relationship between satisfaction and loyalty, arguing that whereas former studies looked at the link between “generic” satisfaction and loyalty, much more precision needs to be used in ascertaining the level of satisfaction a customer experiences. They claim that merely satisfying customers is not enough; a firm must strive to achieve level of complete satisfaction to enhance the possibility of that customer becoming truly loyal.

In his seminal article, *Whence Customer Loyalty*, Oliver (1999) discusses the shift in managerial focus from studying customer satisfaction to studying loyalty. Loyalty was becoming a strategic business goal for many firms as it was determined that satisfaction did not necessarily lead to unconditional loyalty. Oliver raised the questions: “What aspect of the satisfaction response has implications for loyalty?”, and “What fraction of the loyalty response is due to this satisfaction component?” Additionally, loyalty was also supported to be affected by situational factors which might change the level of value a customer perceives from a product or service (Jones and Sasser, 1995). Oliver also discusses the different representations of loyalty which have been posited in literature ranging from satisfaction being one with loyalty, to satisfaction being a rung on a ladder which leads to loyalty (Oliver, 1999:34).

FIGURE 1
Six Representations of Satisfaction and Loyalty

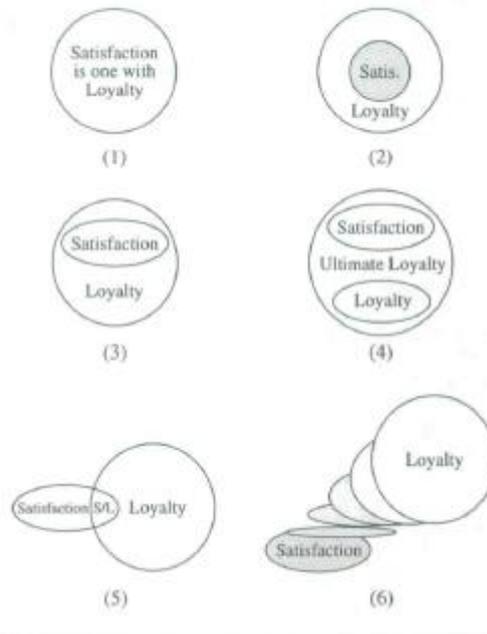


Figure 2.9 Representations of Satisfaction and Loyalty in Literature (Oliver, 1999:34)

Similar to Jacoby and Chestnut, Oliver breaks loyalty down into behavioural and attitudinal components. He further summarizes the definition by listing these components:

- Cognitive Loyalty to information such as price, features
- Affective Loyalty to the attitude (commitment or attitudinal loyalty)
- Conative Loyalty to the intention to buy (behavioural intention)
- Action The mechanism by which intentions are converted into actions

As a conclusion to the previous discussion, based on the fact that the above framework includes both attitudinal and behavioural aspects of loyalty, the researcher determined these components as appropriate to be used within this research.

Oliver furthers the discussion on loyalty with the additional potentially important component of “the community of loyalty”. He illustrates the aspects this using the questions:

- Can the consumer elect to be self isolated from competitive features so that competitive information is blocked or screened?
- Can the consumer effect a self identity that corresponds only to the selected brand and community (such as living like the Amish)
- **Can the consumer be integrated in a village that envelops and directs the consumer’s choices in a satisfying way?**

It is interesting to introduce social communities in the study of the building and maintenance of loyalty – as these could function to support many aspects of potential loyalty drivers. Thus, the researcher found theoretical support for the further component of community in this study. For example, a social community could provide such purchase reinforcement as post purchase affirmation and/or offer a reduction in uncertainty function – i.e. provide a forum for finding technical support in the case of a new product purchase. In an online news site context, factors such as citizen journalism and discussion of news items which an online community platform supports, could also be effective as loyalty drivers. Thus the inclusion of community as a potential affecter of loyalty in this research is supported by Oliver’s work. Additionally, and more recently, Srinivasan et al. (2002) found a significant link between community and customer loyalty in an e-commerce setting, again supporting the researcher’s inclusion of the community variable.

2.6.4 Loyalty research in the electronic services context

Research has looked into the link between perceived value and loyalty (Pura, 2005), and perceived value, satisfaction and loyalty (with the added variables of trust and habit) (Lin and Wang, 2006). Lin and Wang relied on Oliver's (1999) definition of brand loyalty:

“a deeply held commitment to re-buy or re-patronize a preferred product/service consistently in the future, thereby causing repetitive same brand or same brand-set purchasing despite situational influences and marketing efforts having the potential to cause switching behaviour.”

This definition takes into account both the behavioural and attitudinal aspects of the loyalty equation. Both studies found relatively strong correlations between value and loyalty, Lin and Wang finding that the relationship between perceived value and loyalty was mediated by satisfaction. Both studies indicate that their contribution lies in development of multidimensional or multivariate analytical approach – however both concede that their models may need to be extended to include additional variables which might affect customer loyalty in an electronic services context. Due to the recency of the models tested, both authors are reluctant to support generalisability of results before further empirical research is undertaken. However, they provide a good foundation for further research, and the inclusion of attitudinal and behavioural (through behavioural intention) components of loyalty in this research into online news site usage was supported by the literature.

A common thread through much of the customer loyalty research (as well as Yang and Peterson, 2004; Anderson and Srinivasan, 2003; and in service quality literature such as Heskett et al., 1997) is that they all contain references to the concept of *value* in discussing level of satisfaction, which in turn leads to differing degrees of loyalty. Jones and Sasser (1995:95) write that “it is essential to understand what portion of a customer's seeming loyalty is true loyalty based on a company's *delivery of superior value* and what part is artificial”. Oliver (1997) contends that customers who are ill positioned to ever perceive a

high level of benefit or value from a firm will probably never become loyal and enticing them to remain customers is a waste of a firm's resources. Thus, value is an important component in the loyalty equation and therefore a model including aspects of perceived value in the study of customer loyalty is supported.

The following review of perceived value literature stems from the extant marketing and services literature and brings into focus the components of value and how they relate to customer acceptance and adoption of services. Components of perceived value have been previously shown to help understand acceptance and adoption of technology (Pura, 2005) and can be used in the context of this research into online news services. The perceived value components identified in the next section function as the exogenous latent variables in the research model.

2.7 Perceived Value

Perceived value is a significant driver for consumer behaviour. However, there has been diversity and difficulty in conceptualising customer value (He and Li, 2011). Despite such diversity, there exist some areas of consensus. For example, He and Mukherjee (2007) support that definitions of perceived value include these commonalities:

- That customer value is somehow linked to the use of some product or services.
- It is something perceived by customers rather than objectively determined by a seller.
- These perceptions typically involve some form of trade-off between what the customer receives (e.g., quality, benefits, worth, utilities) and what is given up to acquire and use a product (e.g., time, price, sacrifices).

Perceived value refers to the net perceived utility of a product/service transaction or relationship with a company, and is also context sensitive. Oliver (1997) found that customers might perceive value differently at the time of purchase than they do during or after use. During purchase, thoughts about attributes may play more of a role, whereas

when consumers evaluate use, performance issues and consequences are more relevant (He and Mukherjee, 2007).

In order to understand the choice of perceived value as a driver of loyalty within this research, it is necessary to understand other common marketing constructs which have also been used in conjunction with customer loyalty. These terms are discussed in the following section.

2.7.1 Quality, Satisfaction and Perceived Value

Quality, satisfaction and perceived value are three familiar marketing constructs. Sweeney et al. (1999) write that the relationship of these three components with post purchase behaviour has been intensely researched as they are seen to be most relevant areas for firms to understand and concentrate on in order to increase profitability. Reicheld and Sasser (1990) support that quality has been recognised as a strategic tool which helps to strengthen a firm's competitive position and improve its profitability. However, as customers become more demanding and competition intensifies, Tam (2004), holds that quality might not be an adequate source of a competitive advantage and thus supports that it is not the sole attribute which needs examining. Reichheld (1993), and Heskett et al. (1997) hold that customer satisfaction is a necessary precondition for customer loyalty, which is in turn a key driver of profit growth and performance. Churchill and Surprenant (1982) define customer satisfaction as an outcome of purchase and use resulting from the buyers' comparison of the rewards and costs of the purchase in relation to the anticipated consequences of obtaining the product or service. This supports the foundation that satisfaction is determined by a cognitive process customers use to compare what is received against what they are required to give up in their purchase decision (Tam 2004).

Parasuraman and Grewal (2000) write that quality enhances perceived value, which in turn, contributes to customer loyalty. A quality, value, loyalty model is also supported by Heskett et al. (1997) in a service-profit chain which uses perceived value to link employee

satisfaction, loyalty, productivity and a firm's output quality to customer satisfaction, loyalty and profitability. According to this chain model, satisfied and loyal employees create output quality, which contributes to perceived value, and in turn directly influences customer satisfaction and loyalty, driving profit performance and growth. However, Jones and Sasser (1995), and Oliver (1999) hold that firms are also increasingly concerned with customers' post purchase behaviour as it has been widely contested that merely satisfying customers is not sufficient to secure customer loyalty.

Perceived value has been widely discussed at a generic level (defined as providing value), particularly in the practitioner literature and can easily be confused with satisfaction (which can be defined as meeting a customers' needs) (Sweeney and Soutar, 2001). Sweeney and Soutar (2001) in support of Woodruff (1997) continue that the two concepts perceived value and satisfaction are distinct and that perceived value occurs at various stages of the purchase process, including the pre-purchase stage. In contrast, satisfaction is generally agreed to be a post-purchase and post-use evaluation (e.g., Hunt, 1977; Oliver, 1981), conceptualized as a consequence, outcome or summary variable in contrast to value, which is seen as an antecedent (Parasuraman, 1997). Thus, value perceptions can be generated without the product or service being bought or used, while satisfaction depends on experience of having used the product or service (Sweeney and Soutar, 2001). Satisfaction has been also conceptualized as a one-dimensional construct, largely due to the assumption that it varies along a continuum from unfavourable to favourable (Westbrook and Oliver, 1991). Satisfaction has also been criticized by Gale (1994) as an inadequate measure as it only takes into account the present customers, failing to integrate potential customers, non customers, and competition, which would provide a more complete picture of the attributes and actors in a multifaceted marketplace.

Woodruff (1997) posits that customer value is of extreme importance in maintaining competitive advantage, while Weinstein and Johnson (1999) consider that customer value is the strategic driver that differentiates a firm's offering in the marketplace. Levy (1999)

writes that retail customers are “value-driven”, and firms need to understand what customer’s value and where they should focus their attention to achieve an advantage in the marketplace (Woodruff, 1997).

Eggert and Ulaga (2002), maintain that the value construct is not new and has always been the fundamental basis for all marketing activity. Sweeney and Soutar (2001) hold the broad recognition of value as an important aspect as that value creation is widely discussed in the practitioner literature and is often a part of organizations’ mission statements and objectives as well as being seen by many observers as the key to long-term success. Hartnett (1998) writes that from a retailing perspective, “when retailers satisfy people-based needs, they are delivering value, which puts them in a much stronger position in the long term.”

Albrecht (1992) contends that:

“the only thing that matters in the new world of quality is delivering customer value.”

Thus, the researcher found theoretical support for using the construct of value over satisfaction as a more comprehensive and multidimensional measure of the reasons for purchase or service adoption. But what are the important aspects of value which need consideration?

2.7.2 Cost aspects of Value

The definitions of perceived value generally involve a trade-off between what customers receive and what they give up to acquire a service (Zeithaml, 1988; Monroe, 1991). Zeithaml (1988) posits that perceived value can be regarded as a “consumer’s overall assessment of the utility of a product (or service) based on perceptions of what is received and what is given”, with the most common definition of value as the ratio between quality and price (Sweeney and Soutar, 2001).

According to Yang and Peterson (2004) value considers the ratio of the consumer's outcome/input to that of the service provider's outcome/input (Oliver and Desarbo, 1988). Sinha and DeSarbo (1998) wrote that subsequent marketing researchers have determined perceived value to be a more obscure and complex construct, in which notions such as perceived price, quality, benefits, and sacrifice all are embedded (Bolton and Drew, 1991; Holbrook, 1994) and whose dimensionality requires more systematic investigation. Heskett et al. (1997) define perceived value as the ratio of process quality and results delivered to customers relative to the price and the other costs incurred in acquiring the service. Bolton and Lemon (1999) posit that the equity concept on which customer value is based refers to the customer evaluation of what is fair, right, or deserved for the perceived cost of the offering. Tam (2004) supports that most studies have overlooked the contribution of customer perceived costs to perceived value, and Ravald and Grönroos (1996) consider that studies which have not explicitly included customers' perceived costs may be inadequate as this variable plays a significant role in determining satisfaction. Thus, in order to design effective strategies to enhance customer satisfaction and loyalty, it is imperative to understand the role of quality and costs in customer value assessment and their relationships with satisfaction and post-purchase behaviour (Tam, 2004).

Lovelock (2001) posited that perceived value can be enhanced by either adding benefits to the service or by reducing the outlays (costs) associated with the purchase and/or use of the service. While price had traditionally often been used as the key measure to represent what customers must sacrifice to obtain the service, it has also been noted that non-monetary costs such as time, physical and psychic effort are also important considerations in looking at the outlays necessary to obtain a product or service (Lovelock 2001). The importance of such types of cost varies across individual consumers and usage situations, and in accordance with the nature of the service. Perceived cost includes monetary and time aspects whereas perceived value is a result of customers' evaluation of the service received against their perceptions of the costs of obtaining the service. Sweeney and Soutor (2001)

support that research which has suggested that viewing value as a trade-off between only quality and price is too simplistic (e.g. Schechter, 1984). For example, Porter (1990) supported allowing for superior value to the buyer in terms of product quality, special features, or after-sale service as aspects of value.

These views suggest that it is important to evaluate value constructs to ensure their scope is not too narrow and that dimensions other than price and quality would increase the construct's usefulness. Ziethmal (1988) and Monroe (1990) define customer perceived value as a trade off between benefits and sacrifices perceived by the customer in a supplier's offering. Andersen et al. (1994), defined perceived value as sacrifices in monetary terms whereas newer definitions describe sacrifices more broadly (Eggert and Ulaga, 2002). Kortge and Okonkwo (1993) reiterate the importance of considering the subjectivity of perceived value, indicating that various members in the customer group can perceive different value within the same product. For example, Zeitmal (1988) argues that while some customers may perceive value when there is a low price, others perceive higher value when there is a balance between quality and price. Monroe (1991) adds that perceived benefits are a combination of physical attributes, service attributes, and technical support available in relation to a particular use situation, which incorporates the contextual significance of the value perception. The researcher found it therefore important to explore more fully the dimensions of value within the literature.

2.7.3 Experiential and Non-Utilitarian aspects of Value

The evolution of the study of perceived value has moved on from a focus on solely cognitive aspects of decision making to that which includes intrinsic aspects, so that the process or experience of acquisition of an object or service can be studied as a separate item (Sweeney and Soutar, 2001). Holbrook and Hirschman (1982) supported an experiential perspective that included the symbolic, hedonic and aesthetic aspects of the consumption process and suggested that the existing "information processing perspective" implied products were mostly judged through utilitarian criteria, based on how well a product or

service served its intended purpose (Sweeney and Soutar, 2001). In contrast, an experiential perspective views products or services through hedonic criteria, based on an appreciation of the good or service for its own sake. Perceived value has been viewed as an emotional state which occurs in response to the evaluation of a service, and as such can also be defined as an emotional feeling resulting from an evaluative process (emotional value) (Westbrook, 1981). Rust and Oliver (1994) also support this view that a customer's perceived value is an emotive response resulting from a cognitive process of evaluating the service received against the costs of obtaining the service. Such an approach has also been widely used in research into internet purchasing behaviour (Hoffmann et al., 1999) to try to explain the process in which potential buyers browse and eventually use or buy (or not) products or services. Other researchers such as Batra and Ahtola (1990) have also supported the presence of distinct utilitarian and hedonic components, referring to them as the 'thinking and feeling' dimensions. In particular, Babin, Darden and Griffin (1994) developed a specific measure of shopping value that includes utilitarian and hedonic components.

The multidimensionality and complexity of the concept of perceived value is demonstrated through the previous discussion. An analysis of what actually comprises the variable "perceived value" is imperative. Zeithaml (1988) found considerable heterogeneity among consumers in the integration of the underlying dimensions of perceived value, describing perceived value as a trade-off of "higher order abstractions." such as perceived benefits and sacrifice, which are formed from both intrinsic and extrinsic product attributes, including texture, quality, price, performance, service, and brand name. Treacy and Wiersema (1995, p. 165) note that the key questions that customer value analysis must address are "What are the dimensions of value that customers care about?" and "How do competing brands fare on these dimensions?" Sinha and Desarbo (2002) hold that perceived value is clearly a multidimensional construct whose dimensionality must be investigated and established for a given product category.

Clearly the previous discussion shows there are many facets to perceived value, but how can these be quantified?

2.7.4 Measuring Perceived Value

In support of the conceptualization of value, Sweeney and Soutar (2001) developed a mechanism for measuring perceived value for use in a retail purchase situation to determine which consumption values drive purchase attitude and behaviour. In this mechanism, they defined four distinct value dimensions which they termed emotional, social, quality/performance and price/value for money and looked at perceptions of value of consumer durable goods before as well as soon after purchase as an aid to understanding consumers' decision processes and choice behaviour. In addition to this, a broader theoretical framework of perceived value was developed by Sheth, Newman and Gross (1991), who regarded consumer choice as a function of multiple "consumption value" dimensions and that these dimensions make varying contributions in different choice situations. Sheth et al.'s approach suggests five important dimensions (social, emotional, functional, epistemic and conditional value), which relate specifically to the perceived value or utility of a choice throughout the purchase process from the decision to buy level, at the product level or at brand level. Sweeney and Soutar support that Sheth's theory of consumption values provides an excellent foundation for extending existing value constructs since it has been validated through intensive investigation in a variety of fields in which the concept of value is of interest. Additionally, while functional value may have formerly been seen to be the key influence on consumer choice, Sheth et al. (1991) found the other value dimensions were also influential in particular situations. As an example, Sweeney and Soutar (2001) provide that while functional and social value are influential in the decision to whether to use filtered or unfiltered cigarettes, emotional value was fundamental in the decision to smoke. Thus it is clear that different value dimensions may be important depending on the type of decision which is being made e.g., to buy or not buy, or which brand should be bought, as well as on the type of product or service being considered. Furthermore, Sheth et al. (1991) argued that value dimensions can be seen as independent factors which relate additively and contribute incrementally to choice. Gummerus and Pihlström (2011) offer a good overview of the perceived value components which are used in electronic (specifically mobile) services.

2.7.5 The Conceptualization of Perceived Value in this Research

Eggert and Ulaga (2002) argue that while there are a wide variety of definitions of customer perceived value, three elements common to the definitions can be discerned:

- that there are multiple components of value,
- that value perceptions are subjective and
- that competition is important to integrate into the concept of value.

In discussing service value perception, Pura (2005) writes that measuring customer perceived value is essential in assessing current services and for the development of further ones, because customer segments may have different motives to use services and thus perceive different value in them. Pura continues that the current measurement scales for perceived value in electronic environments need to be modified to depict the spontaneous use of self-services in specific situations and the convenience compared to other alternatives.

Thus, the question facing the researcher intending to use perceived value as a model construct is how to incorporate the aforementioned aspects in a scale of perceived value which accurately and sufficiently measures these multidimensions.

For the purposes of this research, a multi-item perceived value scale was adopted from previous studies which linked perceived value and loyalty, and incorporated perceived value components derived from the theory of consumption values as provided by Sheth et al. (1991) and supported by Pura (2005), Philstrom (2008), Philström and Brush, (2008) in an electronic services context. This framework was used as a foundation in this research and comprises the following five value dimensions. Monetary value, while defined here, was not incorporated within this study because there was no cost involved with the online news site reviewed, but is included due to the fact that many consumer products are associated with monetary outlay, and many online news services are looking at introducing

a subscription service for users. As such, and to ensure the model can be used in future research into online news sites, monetary value is detailed here along with the other perceived value components employed.

Convenience Value

Also derived from Sheth et al.'s functional value component is the convenience value construct used in this research. The use of convenience value is supported in the electronic services environment by Pura (2005), especially in interactive internet services such as news sites (Carroll et al., 2002). Convenience value is also known as "Comfort Value" by Kainth and Verma (2011).

Social Value

Social value was defined by Sheth (1991) as the perceived utility acquired from an alternative's association with one or more specific social groups (Sheth et al., 1991), or value which is perceived to enhance the social self concept (Kainth and Verma, 2011). Karjaluoto et al, (2012) support that social value associates users of a service with a social group and includes such aspects as social image, identification, social self-concept, expression of personality and pursuit of class membership. Adapted for this research, and based on Pura (2005) and Karjaluoto et al, (2012), social value in the context of perceived value is supported by researchers such as Holbrook (1992) and Sweeney and Soutar (2001). Pura (2005) refers to social value as the social approval and the enhancement of self image among other individuals, and can be interpreted as the importance of social reputation in the form of esteem.

Emotional Value

Sheth et al. (1991) define emotional value as the perceived utility acquired from an alternative's capacity to arouse feelings or affective states, as when associated with specific feelings or when precipitating or perpetuating those feelings and is measured on a scale of feelings associated with the alternative. Karjaluoto, et al, (2012) support that emotional

value is present when a product or service arouses feelings or produces an effect. Holbrook (1982) also supports the dimension of using an electronic service for its own sake or the hedonic aspects of services usage such as play or fun. Sheth, et al., support usage can be driven by non-cognitive and unconscious motives.

Epistemic Value

Within this perceived value framework, epistemic value, or experimental value (Kainth and Verma, 2011), is perceived utility acquired from an alternative's capacity to arouse curiosity, provide novelty and or satisfy a desire for knowledge. The usage of epistemic value as a valid construct in research into online news services is supported in that it pertains to exploratory, novelty seeking and variety seeking motives which have been proposed to activate product trial and switching behaviours. Additionally Sheth, et al. (1991) support that an alternative might be chosen if a consumer is bored or satiated with his current brand, is curious or has a desire to learn. In the context of online news service usage, Kaye and Johnson (2003) support that once the novelty of a new medium fades, users drawn to it out of curiosity may gradually return to their previous media usage habits.

Conditional Value

Within an electronic services context, previous research (Pura, 2005; Wang et al., 2004) has shown that conditional value has a strong influence on usage in task fulfilment orientated information based services. Conditional value concerns circumstantial influences of choice such as those due to seasonal conditions (holidays), or are valid in emergency situations (Sheth et al., 1991). Pura (2005) supports that shows that conditional value depends on the context in which the value judgment occurs and exists only within a specific situation (Holbrook 1994).

Monetary value

Based on the functional value dimension provided by Sheth et al. (1991) functional value has been defined as the perceived utility acquired from an alternative's capacity for

functional, utilitarian, or physical performance through the possession of salient functional utilitarian or physical attributes. Kainth and Verma, 2011 list monetary value as economic value as the price related value of an object or service. (adapted from Pura (2005), Chen and Dubinsky (2003), Dodds et al. (1991), Sweeney and Soutar (2001)). In this study, monetary value was not included as there was no cost associated with the site.

Whilst there may be other aspects of perceived value which capture additional aspects of online news site usage, these aspects are supported in the field of electronic services adoption research and as such have been adopted and adapted as necessary for this research project.

Returning to the discussion of customer loyalty and Oliver's (1999) conjecture of integrating a customer into a community of loyalty, the next component within this study which needs exploration is that of social community. A discussion of this component and the important facets which need assessing follows.

2.8 Online Communities

The Internet is the mainstream media for information exchange and social interaction. For the past 15 years, millions of people have turned to it daily to conduct very diverse information seeking and communication activities (Iriberry and Leroy, 2009) According to the Pew Internet and American Life Project (2007), a great number of users are information consumers who read world news, review weather forecasts, look for medical information or information on hobbies and interests, and search for maps and driving directions, while many have assumed an additional role and become information provider, contributing content on a wide range of topics using mechanisms such as blogs, wikis, podcasts and videos (Totty, 2007).

A Pew report from 2001 indicated that in previous years there has been concern about the social impact of the internet on several levels. One major worry was that use of the Internet would prompt people to withdraw from social engagement and become isolated, depressed, and alienated. A related fear was that internet users might abandon contact with their local communities as they discovered how easy it is to go online to communicate with those in other parts of the world and get information from every point on the planet (Pew, 2001). Time has shown that in contrast to isolation, people have found the online world is a vibrant social universe where many internet users enjoy serious and satisfying contact with online communities made up of those who share passions, beliefs, hobbies, lifestyles and local. In the meantime, online communities have become an integral part of modern society, with Facebook leading the pack at over 900 million users (Hachman, 2012). A recent television commercial depicted a young consumer group as “having more friends online than off”.

Already a widespread phenomenon, participation in online communities has increased in the past couple of years, most predominantly within sites such as YouTube, MySpace, and Facebook which have attracted billions of dollars of investment. Even back in 2007, Microsoft agreed to buy a \$240 million piece of Facebook in which put the value of Facebook at \$15 billion at that time. The IPO of Facebook is even more telling at \$1 billion. The enormity of sums being paid or raised for such sites attests to the importance which society (or at least the stockmarket) assigns social networking sites, mostly as a potential advertising medium. Interesting to understand, however, is why these sites are perceived to provide such great promise for revenue. Using the community aspects of such networks holds promise in increasing the reliability and pertinence of advertising messages, as once messages are sent from a user to an online acquaintance, as opposed to being sent from the firm itself, they take on a new level of value for the recipient. As a result, firms could have the possibility to increase the reach of and attention to their advertising messages.

Clearly online communities have achieved the opposite of social isolation. The popularity of online networking sites are increasing awareness of the existence of online communities as a whole, leading many firms to increase the focus of their internet sites from firm centric to customer centric. Armstrong and Hagel (1996) already realized the potential of online communities in stating “if used in a skillful way, such communities will help build new and deeper relationships with customers”. Such relationships can then form the basis for fruitful social and commercial interaction.

Rosales (2006) writes that in the Web 2.0 phase of the internet, the power of the individual users, networks and online communities is showcased. Especially prevalent in a news service context, online communities are increasingly gaining importance in the creation and dissemination of news items and are a double edged sword for online news service producers. On the one hand, online communities enhance the propensity for citizen journalism, but on the other hand, such journalism could be seen as eroding the credibility of news contained within a site. With the increase in importance of online communities supported by news establishments, it is important to determine what the motivations driving consumer participation in online sites are and what effects the communities have on participants of these communities in a news service context. This research looks at the influence of community participation on the link between perceived value and loyalty in such an online news service context.

What does the term community participation mean, though? This concept needs to be broken down into its respective components and those which are most relevant for this research need to be drawn out and supported by the extant literature. To this end, it is necessary to determine what is meant by online community, and what aspects of online communities would be necessary to measure in order to gain an understanding of their effect on loyalty in a news service context. A review of the literature which analyzes the various facets of online communities from both the provider side as well as the usage side is thus necessary and follows.

At the time of writing this thesis, research on the reasons for the explosive growth in online communities was becoming more prevalent. Previous literature identified lurking and low participation as persistent problems (Preece et al., 2002). However, with Facebook being estimated as the second busiest website in terms of global web traffic (alexa.com, 11/2010), low participation seems to be a problem of the past. In the online news services context, the New York Times, The Guardian, The Times, USA Today and the Washington Post can all be found under the top 500 websites in terms of global web traffic. Additionally, on four of these five online newspaper sites, the second most popular pages were the blog pages (alexa.com, 11/2010). So there is evidence that opinion is important and community functions found on news web sites might be a prevalent force in driving traffic to sites. Dwyer et al. (2008) hold that there is still a lack of understanding about what actually entices participation, and a lack of theory which describes and predicts successful adoption of social computing systems. Nevertheless, there is a large body of literature which examines online communities and it is important to identify topics in past research which will put the important attributes of community into focus, so relationships between these aspects and perceived value and loyalty can be explored.

First it is important to define what an online community is. As is to be expected in an emerging technology, definitions of these “group interactions supported by the internet” are diverse. Preece (2000) defines an online community as “a group of people who come together for a purpose online and who are governed by norms and policies”. DeSouza and Preece (2004) indicate that adopting this definition offers two key advantages, namely, that it takes into consideration a balanced view of both social and technical issues and it can be widely applied to a diversity of communities.

This definition covers the broad variety of online community types which exist. It is important to discern the differences and similarities of these communities in order to understand where online news sites sit and the impact their position in the online space might have on the way in which users are “obtained” and “maintained”.

2.8.1 Evolution of the Online Community

Cash and Konsynski (1985) were one of the primary researchers in defining community within a business context and considered the relationships that exist within connected business systems prevalent at the time. They define an organization to be either a ‘facilitator’ of network interaction such as an internet service provider or a ‘participant’ (Cash and Konsynski, 1985).

The context of the internet evolved and a variety of communities developed as a result of several factors. One was the deregulation of the internet in 1995 and the introduction of communication protocols and page description language for the internet which enabled a new form of community to become prevalent. Individuals were suddenly able to communicate and interrelate over a global network. This created a new channel of social interaction and already in 1992 it was estimated that there were over 400,000 communities resident in the world wide web.

With the proliferation of these communities came a research direction to try to classify the types of communities springing into existence. Jang et al., (2008) supported the differentiation between types of online communities as to whether the community is the purpose of the site (such as social networking sites like Facebook), whether it aids the goals of a site (supports purchases such as on Amazon), or whether it supports an entity as a whole (supports products such as Microsoft). Some communities which are product or service oriented are user initiated as opposed to being company initiated such as some brand communities (Harley Davidson).

Earlier, Hagel and Armstrong (1997) posited a method of partitioning the online community of space into four areas. These are shown in table 2.1.

Community Type	Examples
Communities of Relationship	Facebook MySpace YouTube Twitter
Communities of Fantasy	Second Life Mooveonline Dungeons and Dragons
Communities of Transaction	Business to consumer (B2C) sites Amazon Business to business sites (B2B) The Dialog Corporation InfoMap.com Consumer to consumer sites (C2C) Ebay Craigslist.org
Communities of Interest	Motley Fool Health Boards Patients Like Me Parents.com WELL

**Table 2.1 Taxonomy of online communities,
adapted from Hagel and Armstrong (1997)**

The distinction between the four community types is coming into question, however. An example of communities which overlap into two (or more) categories can be found on sites such as MyBarackObama.com. During the 2008 presidential campaign, this community existed to both drive user support for the campaign as well as drive commercial support in the form of campaign contributions. As such, it drives participation from users who have a common interest, and are just looking to participate in or support conversations, and users

who want to “purchase” or support the campaign monetarily. Thus the community supports both the common interest and the commercial aspect of the site.

Following this example, it can be seen that communities of interest and communities of transaction could be argued to be increasingly overlapping. Whereas the origin of the community of transaction on a site like Amazon.co.uk was solely for the purpose of enabling customers to review their purchases and read other’s opinions of purchases, Amazon.co.uk has now added a forum feature in which users can discuss for example, technical problems or questions about products. Additionally, whereas the previous communication between customers was unidirectional (users were either reading or writing but not communicating with each other aside from rating the usefulness of a user’s comments), Amazon has now enabled bi-directional communication. An example can be taken from a forum on the Amazon.co.uk website under the Kindle (electronic book reader) product pages in which one user is asking others for technical information about a Kindle application.

D. C. L. Ford says:
I've downloaded and installed the Kindle App for PC and i've downloaded some eBooks from Amazon.

Someone has sent me some eBooks in 'Mobi' format but i can't get them into the Kindle App.

Help!
Reply to this post
Permalink | Report abuse
Do you think this post adds to the discussion?

In reply to an earlier post on 10 Nov 2010 09:49 GMT
Damaskcat says:
Have they got DRM protection on them?
Reply to this post
Permalink | Report abuse
Do you think this post adds to the discussion?

Figure 2.10 Sample from Amazon.co.uk Community Forum section

This sample gives an illustration of how once transaction-only based communities are now starting to take on aspects of interest-based online communities. Thus it could be argued that the types of communities are not as clear cut as they are depicted in the above taxonomy and that an evolution is taking place. The evolution of communities in commercially orientated sites is such that they are starting to take on aspects of socially orientated communities. The boundaries between social communities and commercial communities are starting to overlap as commercial companies try to harness the power of these ever expanding social communities in drawing and retaining customers.

Commercial institutions are increasingly positioning themselves on social network sites in order to take advantage of the business opportunities which are developing. For example, Wauters (2009) indicated that the retailer 1-800-Flowers is increasingly finding social media an ideal place to connect with customers and launched a transactional application that lets customers shop directly from a Facebook app(lication). The company is also concurrently running two Facebook contests to reward existing customers and encourage them to share interest in the brand with friends.

Based on the above discussion, the evolution of online communities of these two types could be depicted as follows.



Figure 2.11 Evolution of transaction based and relationship based communities

Regardless of this overlap, it is important to develop an understanding of types of online communities, as user participation in different types, or the reasons to join different types of community may vary.

Plant (2004) more recently developed a taxonomy of the online community space which uses the three dimensions of

- Degree of community regulation
- Degree of for-profit community activity
- Degree to which the community is open

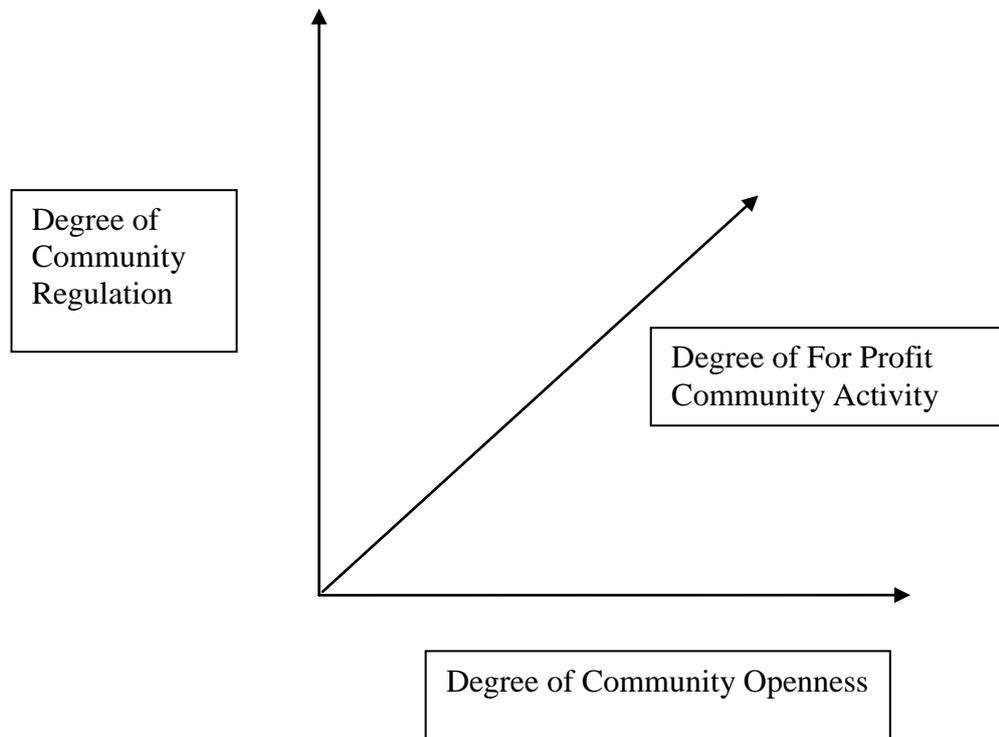


Figure 2.12 A three dimensional taxonomy of the online community space

This approach offers the advantage of being able to indicate the increasing overlap in online community origins and functions. The three dimensions are defined below.

Degree of community regulation

Unregulated communities: These are communities which are initiated by a set of participants who interact through a common site or location and often start out as not for profit groups with a common interest. Such groups are unregulated by a facilitator or through rules of conduct. Plant (2004) holds that regulated communities are either an evolution of unregulated communities where the facilitation of services can be transferred to a professional body such as IBM AOL or Yahoo, or more recently, to a platform such as Facebook: networks which have clear and stringent rules on interaction and presence. While this definition of unregulated communities may be somewhat dated as all communities tend to have an administrator and a set of community rules, this aspect of the framework is still valid in that it demonstrates the spectrum of communities available from less restrictive to more structured and restrictive. Movement to a professional service provider needn't mean that the community change from (for example) not for profit to commercial. Plant uses the example of a health related site which uses a professional community provider (for example AOL) yet remains independent of bias from health care providers or pharmaceutical companies. Regulated communities can then be further partitioned into either public or private.

Degree of Community Openness: is the site open to all who wish to access it or can one only become a member if invited? In current trends, a user typically has to register in a community site using some personal details, ranging from an email address to a full profile containing name and address. Some sites are only available to those who have been invited by someone who is already a member of the community. Public communities (Facebook, online news sites) are mostly open to anyone whereas private are invite only (for example: LinkedIn).

Degree of for profit activity: denotes the primary role of the site, if for profit or not for profit.

Plant (2004) cites the example of a for-profit, open and regulated community as one which is open to any individual or group that obeys the rules of the regulator of that community. eBay is such a site.

More recently, Stockdale and Hunter (2009) support that communities fall into the following four categories:

- A virtual community which integrates content and communication via computer mediated space (Hagel and Armstrong, 1997; Lee et al., 2003).
- A virtual settlement which includes virtual community, but adds concepts surrounding the idea of interactivity and sustained membership (Jones, 1997).
- An open source community for the development of shared software. (Kidane and Gloor, 2007).
- A community of practice or a group of people who share common concerns, problems, or passions for a topic, and who deepen their knowledge and expertise through interaction on an ongoing basis” (Lin and Lin, 2006, Zhang and Watts, 2008). These communities relate to highly specialized topics and shared expertise (Wenger and Snyder, 2000).

Thus when determining where an online news site community would fall, both Stockard and Hunter’s (2009) and Plant’s (2004) taxonomies can be integrated.

First of all, organizations such as online news sites are straddling the first two categories: the virtual community and the virtual settlement. In striving to utilize the power of online communities, a move from a simple virtual community to more of a virtual settlement would be advantageous. The evolution of the community on Amazon.co.uk from simply enabling users to read and write comments on products to providing forums in which users

can interact with each other to discuss product usage or other topics is an example of a move from a virtual community in the direction of a virtual settlement.

Secondly, within Plant's taxonomy, online news sites could be seen to lie as depicted in the figure 2.7.

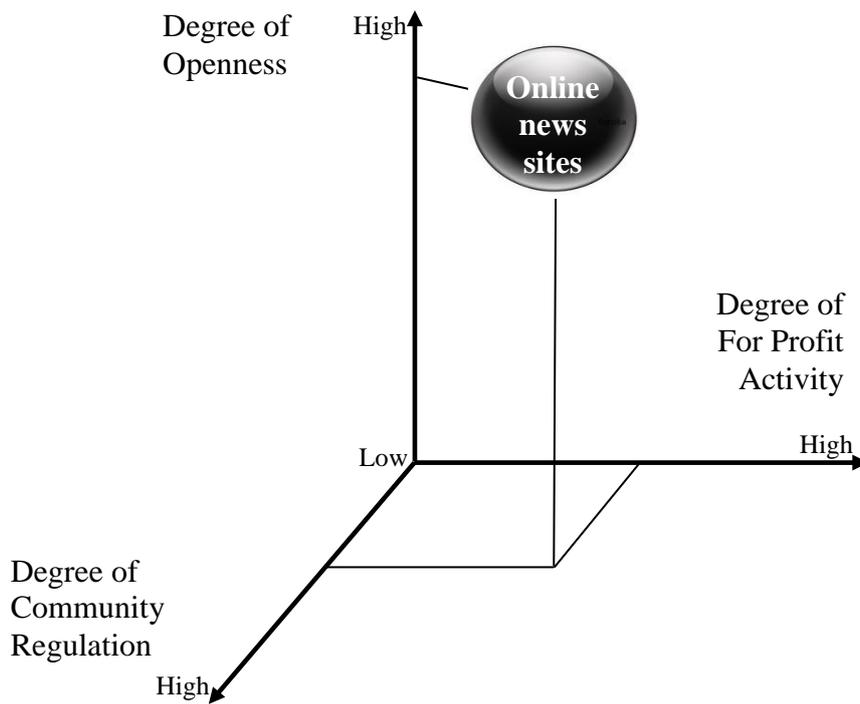


Figure 2.13 Position of news service online communities within Stockard and Hunter's (2009) Online Community Taxonomy

Whilst online news sites have a high degree of openness (no invitation is necessary to join, however, usually, one is required to register with a valid email address), the degree of community regulation can be seen as intermediate. As described in the literature on online news services, editors keep a watchful eye over content and comments generated by users, and users are able to report abuse or comments which they find unfit or not in coincidence

with community rules. The degree of for profit activity is still low in online news sites, but as previously discussed, this is changing as online news organizations struggle to find a working business model.

Two aspects of online community which are especially pertinent to the online news service industry were described by Hagel and Armstrong (1997). These are:

- The capacity to integrate content with communication
- The appreciation of member-generated content.

While Hagen notes that virtual communities provide a broad range of published content, within an online news site this content is generated both by the editors (through journalists) of the site and the users of the community and is usually consistent with the distinctive focus of the community. The content is integrated within a rich environment fostering communication which includes posting messages or comments which are accessible to all, chat areas and blogs which in turn allow members to maximize the value of the online content, enabling them to clarify their understanding of published or posted items by communicating with its publisher (whether a journalist or a citizen journalist) and to evaluate the credibility of the content by communicating with each other.

Appreciation of member-generated content: In addition to published content, virtual communities provide environments for the generation and dissemination of member-generated content. Hagel and Armstrong (2007) hold that this is perhaps the single most empowering element of a virtual community. It gives members the capability to compare and aggregate their experiences, which in turn creates for them a fuller range of information and a perspective independent of editors and journalists and advertisers on the items that are important to the members.

2.8.2 Social and Technical drivers of Online Communities

Harold Rheingold (2000) states that “social revolutions follow communications revolutions” and that that new social forums were certain to emerge with the many-to-many multimedia capabilities of the Web. Plant (2004) supports that since its earliest days, the development of network technologies has changed the nature of business, the role of the individual in the workplace and at a higher level how society functions as a whole. But is it the enabling technology which starts the revolution or is the technology only extending the abilities of the entity which was present anyway, in this case the social community, to interact. Plant (2004) continues that the ubiquity of the Internet and the human desire for connection, knowledge and information, has also created a new social phenomena: that of the online community, which in contrast to his former statement supports that there are both technical and social aspects to be examined in the creation of these communities. Virtual communities are certainly a newer phenomenon, but without the social drive to create the community, such a community would not exist, regardless of the technology available. This again illustrates the struggle between the social deterministic and the technical deterministic stances.

In a different quote, Reingold (2000:12) can be seen as supporting the fact that there are not only technical forces at work in driving the usage of virtual communities, but social drivers as well.

“The technology that makes virtual communities possible has the potential to bring enormous leverage to ordinary citizens at relatively little cost--intellectual leverage, social leverage, commercial leverage, and most important, political leverage. But the technology will not in itself fulfil that potential; this latent technical power must be used intelligently and deliberately by an informed population.”

Furthermore, Rheingold holds that while we know something about the ways previous generations of communications technologies changed the way people lived, we need to understand why and how social “experiments” are coevolving today with the prototypes of the newest communications technologies. Rheingold concludes that whenever CMC technology becomes available to people anywhere, they inevitably build virtual communities with it, just as micro-organisms inevitably create colonies (Rheingold, 1993) again illustrating how the technology may be deterministic to some extent, but that social drivers are present as well.

It is important to determine what types of communities are available and where online news sites may be located in this virtual space. In the previous discussion, the researcher strives to provide an overview of space in which online communities are present and how they interrelate as this may provide insight into how users perceive the communities and what aspects of the community are important to them.

Additionally how the news service provider community is set up in terms of the commercial (for profit-not for profit), regulation (highly regulated or low regulation) and openness (open to all or invitation only) aspects may also have an effect on the willingness for users to participate or the understanding of what keeps participants coming back and what might drive them away. While understanding the position of sites from the online news service provider’s perspective (the inside looking out), it is also essential to view the structure of communities from the user and potential user’s perspective (from the outside looking in). As such, it is important to understand from the participant’s side which factors might draw a user to a site and what might keep a participant coming back to that site and which community factors might have an influence in driving customer loyalty. To this end, it is important to review the literature which encompasses the study of online community participation and the drivers and facets have been uncovered previously. The following is a review of the extant literature and forms the basis for the three community components introduced in this research: *Participation, Motivation and Effect*.

2.8.3 Online Community Components Introduced in This Research

The literature on online communities supports a differentiation between motivations to participate in a community in contrast to the effects of a user's participation in the community. Extant literature explore the ways in which communities have been broken down into their components and enables consolidation of characteristics which are likely to have an effect on both attitude towards a community, as well as resulting beliefs and effects derived from the participation in the community .

Wiertz and de Ruyter (2007) indicate that online communities have an unparalleled ability to facilitate the collective action of knowledge contribution. Wasko et al. (2005) add that even though knowledge, the main resource exchanged in an online community, can be consumed by anyone, surprisingly few people tend to free ride, or consume information without contributing. (Moon and Sproull 2001) support that firms are increasingly hosting online communities as a means of building relationships with their customers, getting feedback, strengthening their brand and reducing customer service costs by enabling “user to user” technical support. The success of an online community depends entirely on its ability to offer users a forum through which to communicate, and is dependent on user contributions or on the willingness of customers to spend time and effort responding to each other's requests for help (Wiertz and de Ruyter, 2007). But what drives users to participate? What motivates users to join, participate and return to an online community? What are the effects of participation in the community?

Ren, Kraut and Kiesler (2007) used common identity theory and common bond theory in their study of online communities to determine what drives participation. Through these theories they identify a difference between whether users develop commitment to a site as a whole or to individual members. In bonding with individual members, each participant is personally important, whereas when a bonding with a site, members are seen as interchangeable. This would be valuable in determining whether perceptions of value are

more likely to be based on personal relationships within the site or with the site as a whole. This could, in turn, aid understanding the effect of the type of relationship a user has with a site on site participation.

Bagozzi and Dholakia (2006) studied the effect of online brand communities on purchase intention, defining such communities as specialized, non-geographically bound communities, based on a structured set of social relationships among admirers of a brand. They developed and empirically tested a model which combined the Theory of Planned Behaviour with social variables, suggesting that in addition to cognitive (e.g., evaluations of product performance), and motivational (e.g., commitment to the brand) variables, brand loyalty can also be influenced by firms through encouraging interactions with small groups of other enthusiastic customers in a setting that is controlled and managed more or less by the customers themselves. They state that in previous iterations of the theory of planned behaviour, the sole focus on social norms as a driver may be too limited and ask: “how can social reasons for acting be better formulated than found in subjective norms”, and continue that such questions “have considerable relevance not only for collective participation in small group brand communities, but also for other important marketing issues such as selling products which are consumed jointly with others, formulating community-based marketing programs, devising effective strategies to influence socially conscious consumers” (Bagozzi and Dholakia, 2006). Introducing the notions of “Desire” and “Social intention”, they strove to further define the social drivers of behaviour especially in an online community context. More recently, customer engagement has been cited as a new dimension of customer behaviour which has been facilitated by the consumer - firm interaction possibilities afforded by social networks such as Facebook (Gummerus et al, 2011).

New research on social networking sites has revealed privacy and trust issues in participation in online communities, as well as a lack of such issues. Boyd (2004) identified that a lack of control of what is posted on a networking site was a source of non-

participation, whereas newer research has shown that there is a difference between user's voiced level of concern over privacy in a social community and their actions (Awad and Krishnan, 2006) and that in online interaction, trust is not as necessary in building relationships as in face to face encounters. Online relationships can develop in sites where perceived trust and privacy safeguards are weak (Dwyer et al., 2007). For example, in a study comparing users of Facebook and MySpace, users were asked for their views of the privacy protections offered by the sites and their feelings about how much personal information they are willing to post on these sites. Most Facebook and MySpace users said that they're willing to develop online relationships even though they believe that trust and privacy safeguards are weak. Dwyer et al. (2007) also found that only less than 5 percent of MySpace users surveyed in the research and slightly more than 5 percent of Facebook users said they believe that the personal information they put on the sites is strongly protected. However, the respondents still indicated that were willing to share personal details with others on the sites. Over 85 percent of respondents in of the surveyed groups on Facebook and MySpace reported that they would share a photo of themselves on a social networking site, and 91 percent of Facebook users and 62 percent of MySpace users said they use their real name on such sites, with 87 percent of Facebook users and 41 percent of MySpace users indicating they posted their personal e-mail addresses on the sites. Thus, whereas users may not believe their details are protected, they are still willing to post information which could be used by others in ways which may not be acceptable to them. Thus trust is an important aspect of online social communities in some circumstances but apparently not others, and lack of trust may be an important deterrent to users in deciding whether to join or take part in the community. The motivation to join could be altered by trust or trust could be an after effect of participation in the community. More recent studies have also examined the effect of social communities on trust in the website and trust in the other members (Shu and Chuang, 2011). Dwyer et al. (2007) also noted that motivations for joining a site might have a mediating or moderating effect on privacy and trust concerns.

Not only motivations and effects are expected to help explain the influence of online communities on customer loyalty to news sites. The degree to which a user participates is expected to have a positive influence on his loyalty (real or projected). This could include the amount of time spent in the community reading or posting, the number of times this user has posted, the number of links to this person within the site. Additionally it could be provided by such social appraisal as the number of votes a person has received as being “helpful” such as on a public document repository (a site which contains reviews and information provided by users Peddibholta and Subramani, 2007).

An alternative view was developed by Äkkinen and Tuunainen (2004) of drivers of participation in communities. They enhanced a value-interest framework for classifying values and interest of consumers to join and belong to an online community. This framework was based upon Dholakia et al.’s (2004) social influence model. The value-interest framework divides consumer values of online communities into those derived from purposive values, self-discovery values, social enhancement values and entertainment values (Wasko and Faraj, 2000). Äkkinen and Tuunainen (2004) further this framework by introducing the components of self interest and community interest.

Type of Interest	Self - Interest	Community-interest
Value		
Purposive values	Receive and share information	Perform a collective task
Self-discovery values	Reflect own thoughts Learn	Need to belong to a group
Social enhancement values	Get appraisal and status Get online acquaintances	Peer-support each other Have reciprocity
Entertainment values	Spend free-time and relax	Spend free-time and relax (e.g. by playing multi-user online games)

**Table 2.2 Online Community Value Interest Framework
(Äkkinen and Tuunainen, 2004)**

In addition to the discussion of drivers and deterrents previously found to have an influence in online community participation, motivations to participate and effects of participation on users, additional literature was consulted and the components of **Motivation**, and **Effect** were derived from this literature by the researcher. The construct **Participation** was intended by the researcher to determine the amount of time a user spends on and level of activity a user has with an online community. While the participation construct was supported from literature on time spent online and whether a user could be represented, for example, as a “lurker” or an “elder” (Preece, 2000), the constructs of motivation and effect introduced in this research were more complex in their definition. The table which follows is a survey of the literature and support for the social community constructs adopted in this

research. The literature supporting these new constructs was subsequently used as the framework for the generation of survey questions administered to online community participants in the exploratory phase of this research. Thus, the validity of the constructs proposed by the researcher were subsequently triangulated through exploratory qualitative research and were then further adapted for use in an online news service context using expert opinion as described in the methodology chapter.

Community model construct supported	Research	Aspects covered in the research
MOTIVATION Motivation to contribute to the community (or deterrent to participating in the community)	Ren, Kraut and Kiesler (2007) Applying Common Identity and Bond Theory to Design of Online Communities	Information Entertainment Interaction with others Social support Bonds with community members
MOTIVATION	Brown, Broderick, Lee (2007) Extending Social Network Theory to Conceptualise On-Line Word-of-Mouth Communication	Purchase advice Affiliate with other like minded individuals Participate in complaint or compliment interactions
MOTIVATION	Peddibholta and Subramani (2007) Contributing to Public Document Repositories: A Critical Mass Theory Perspective	Social prestige, desire to help others
MOTIVATION	Jeppeson and Fredriksen (2006) Why do users contribute to firm-hosted user communities? The case of computer-controlled music instruments	“Hobbyists” willingness to share innovations, responsive to firm recognition, social prestige
MOTIVATION	Bagozzi and Dholakia (2006) Antecedents and purchase consequences of customer participation in small group brand communities	Reduction of uncertainty, Information sifting through user recommendations
MOTIVATION	Jang, et al. (2008) The influence of Online Brand Community Characteristics on Community Commitment and Brand Loyalty	Membership interaction, information quality, service quality

Community model construct supported	Research	Aspects covered in the research
MOTIVATION	Ling, et al. (2005) Using Social Psychology to Motivate Contributions to Online Communities	Information, social support, belief that effect is important for group performance, identifiable contributions, liking other group members
MOTIVATION	Ridings and Gefen (2004) Virtual Community Attraction: Why People Hang Out Online	Exchange information, social support, friendship,
MOTIVATION	Brown et al. (2007) Word of Mouth Communication Within Online Communities: Conceptualizing the Online Social Network.	Shared enthusiasm for and knowledge of a specific consumption activity or related group of activities
MOTIVATION	Bishop (2007) Increasing participation in online communities: a framework for human-computer interaction	Reluctance to participate: reluctance to post, need to find out more about the group; Motivation to participate: meeting basic needs, higher needs as depicted by Maslow, for example: meeting security and social needs
MOTIVATION	Ross (2007) Backstage with the Knowledge Boys and Girls: Goffman and Distributed Agency in an Organic Online Community	Reduced social context clues and use of “candour” in London Cabbie online community
MOTIVATION	Preece (2002) Supporting Community and Building Social Capital	Social support in traumatic events, social capital
MOTIVATION	Novak, Hoffman, Yung (2000) Measuring the Customer Experience in Online Environments: A Structural Modelling Approach	Importance of fun, recreation and experiential components in creating a compelling online customer experience

Community model construct supported	Research	Aspects covered in the research
MOTIVATION	Dwyer, Hiltz, Widmeyer (2007) Understanding Development and Usage of Social Networking Sites: The Social Software Performance Model	Time savings of all information on one site, Centralized information source, less effort needed in communication
MOTIVATION	deSouza and Preece (2004) A Framework for Analyzing and Understanding Online Communities	Sociability, Usability, Evolving as community matures, enabling technologies to show emotions (emoticons); operations and communications oriented actions
MOTIVATION	Firth and Clouse (2006) Predicting Internet-based Online Community Size and Time to Peak Membership using the bass model of new product growth	External (mass media) vs. internal (interpersonal contact with adoptors) forces as motivations to participate in online communities after buy-in (first message post)
MOTIVATION	Wang and Fesenmaier (2003) Assessing Motivation of Contribution in Online Communities: An Empirical Investigation of an Online Travel Community	Gift economy of online communities per Rheingold; Lower costs than face to face interaction; Amplification of the value of a contribution through use by many community members; Social identity; self presentations, and self efficacy theories
MOTIVATION	Nebus (2006) Building Collegial Information Networks: A Theory of Advice Network Generation	Tradeoffs of expected value of knowledge vs. cost of obtaining it. Behaviour of information seekers as tradeoffs between expertise and trustworthiness

Community model construct supported	Research	Aspects covered in the research
MOTIVATION	Dwyer, Hiltz and Passerini (2007) Trust and Privacy Concern within social networking sites: A comparison of Facebook and MySpace	Trust in large scale online networks. Relationship between trust and propensity to participate.
MOTIVATION	Oh, et al. (2004) Group Social Capital and Group Effectiveness: The Role of Informal Socializing Ties	Link between informal social ties and richness of advice and information network
MOTIVATION	González-Navarro, et al. (2010) Group interaction styles in a virtual context: The effects on group outcomes	Role of interaction styles in the relationship between interaction styles and group outcomes
MOTIVATION	Amichai-Hamburger and Vinitzky (2010) Social network use and personality	Extroversion, neuroticism need for cognition, need for closure, need for sensation seeking as drivers of online community participation.

Table 2.3 Community Literature supporting the motivation construct

Community model construct supported	Research	Aspects covered in research
EFFECT Effects of community participation	Algesheimer and Dholakia (2007) The Long-Term effects of Joining and Participating in Online communities	Participation is educational Leads to shared expertise Fosters trust Reduces members concerns regarding fraud Increases emotional attachment to the community Increases attachment to the brand
EFFECT	McAlexander, Schouten and Koenig (2002) Building Brand Community	High level of engagement with firms' products and brands
EFFECT	Muniz and Schau (2005) , Religiosity in the Abandoned Apple Newton Brand Community	Participants Motivated to help other customers
EFFECT	Algesheimer, Dholakia and Herrman (2005) The Social Influence of Brand Community	Loyalty Motivated to actively recruit others to the community
EFFECT	Bagozzi and Dholakia (2006) Antecedents and purchase consequences of customer participation in small group brand communities	Communities as important in fostering brand loyalty
EFFECT	Jang, et al. (2007) The influence of Online Brand Community Characteristics on Community Commitment and Brand Loyalty	Social prestige as an effect of participation in brand communities
EFFECT	Dholakia (2005) The Usefulness of bidders' reputation ratings to sellers in online auctions	Rating systems and their influence on repeat participation, increase in buyers loyalty

Community model construct supported	Research	Aspects covered in the research
EFFECT	Sitz (2006) Collective memory and distributed cognition in online brand communities	Novices become informed, reduction in cognitive efforts; Experts take on specialized domain Users become more loyal, relationship to brand is established.
EFFECT	Fan et al. (2005) Evaluation and Design of Online Cooperative Feedback Mechanisms for Reputation Management	Member trust through reputation systems
EFFECT	Wiertz and deRuyter (2007) Beyond the Call of Duty: Why Customers Contribute to Firm-hosted Commercial Online Communities	Attachment to community, loyalty to community as opposed to loyalty to the firm
EFFECT	Haythornthwaite (2007) Social Network and Internet Connectivity Effects	Effect of media disruption on weak ties. Effect of interaction.
EFFECT	Bagozzi, Dholakia and Pearo (2007) Antecedents and Consequences of Online Social Interactions	Increase of social influence identification with online group, emotional attachment to group, individual becomes identified support of community norms, values, conventions, and practices
EFFECT	Dwyer, Hiltz, Widmeyer (2008) Understanding Development and Usage of Social Networking Sites: The Social Software Performance Model	Lack of concerns about privacy, willingness to disclose

Community model construct supported	Research	Aspects covered in the research
EFFECT	Feng, Lazar and Preece (2004) Empathy and online interpersonal trust: A fragile relationship	Building of trust in an online environment. Frequency of interaction important in building trust
EFFECT	Dellarocas (2003) The Digitization of Word of Mouth: Promise and Challenges of Online Feedback Systems	Building of trust in large scale online environments, mechanism for fostering cooperation. Influence of exposure of the behaviour of a trader with every other participant in the community – influence on trader behaviour
EFFECT	Sun et al. (2006) Online Word of Mouth (or Mouse) An Exploration of Its Antecedents and Consequences	Effects of consumer generated comments affected by product knowledge, behavioural consequences of WOM
EFFECT	Brown, Broderick, Lee (2007) Extending Social Network Theory to Conceptualise On-Line Word-of-Mouth Communication	Increased trustworthiness of information Increased informational value over formal advertising messages
EFFECT	Chan and Li (2010) Understanding consumer-to-consumer interactions in virtual communities: The salience of reciprocity	How voluntary behaviours drive subsequent attitudes (commitment) and behavioural intentions (online co-shopping).
EFFECT	Reysen, et al. (2010) Intragroup status and social presence in online fan groups	Increase in feeling of social presence and group identity

Table 2.4 Community Literature Supporting the Effect Construct

Additional Practitioner Research used in development of model constructs	Mooney, Boston.com (2008) Technology Aids Obama's Outreach Drive	Importance of the use of Social Networks in the 2008 US Presidential Election
	Helge's Blog: An approach to Communities for Newspapers (3/2005)	Designing communities specifically for online newspapers
	Haven (2007) Marketing's New Key Metric: Engagement	Definition of customer engagement in an online and offline environment

Table 2.5 Additional Practitioner Community Literature

2.9 Summary of the Literature Review

The current business challenge facing the news industry has many facets. Deteriorating income and readership in the printed paper business and the new technological landscape has meant traditional news businesses are struggling to (re)find their customer base either online or off or in a combination of both spaces. Thus customer loyalty is an important asset which is being sought in order to regain an eroding customer base. Despite the claim that new technology makes it easy for customers to jump from vendor to vendor, or news source to news source, there is also evidence that customers actually want to remain loyal to a firm as this eases their lives considerably in eliminating the effort spent evaluating alternative offerings and making a decision on which will offer them higher utility or satisfaction (Robinson and Etherington, 2006). An excess of information which is available today through the plethora of news information sources could mean that users are tending to focus on their most important needs in order to avoid information overload (Godin, 1999). Using a trusted medium to sift through information and only communicate pertinent information is a time and effort saving activity, helping to decrease the number of choices available to only those which most likely meet a user's needs and would likely be seen as a positive step.

Online communities can function in the ensuring relevant news and opinion reaches users as well as giving users on online news sites their soap box from which to make their own opinions heard. Which factors are perceived to be valuable to online news site visitors and how these factors influence loyalty is examined using the perceived value scale adapted for this research. Overlaid upon this is the function which online communities have in the enhancement of these perceived value - loyalty relationships in the news service context.

Following a discussion about the theoretical background on which this thesis is based, domestication, along with a description of the two opposing views of technical determinism and social constructionism was presented. Additionally, an overview of the theoretical perspectives commonly used in ICT research was provided. In sum these sections described

the domestication theory incorporated in this research and provided a background of why the researcher chose this theory, as it provides a broader scope for looking at the understanding of technology acceptance by incorporating the social context into which the technology enters as well. This research project is designed to both examine the possible role of the domestication stages on customer loyalty as well as understand the influences of community participation on loyalty in an online news services context.

The following section (2.10) describes inadequacies in the literature and contributions of this research, after which the conceptual research model is presented.

2.10 Inadequacies in the Literature and Contributions of this Research

- Looking at the taxonomy of communities discussed earlier, it is apparent that the rapid evolution in the nature of communities has rendered the formerly clear boundaries to be less distinct. It could therefore be also argued that the drivers of participation and the effects of community participation are unclear. This research identifies a framework of facets in the community variable.
Online community constructs have been developed for this research and will add to the growing body of literature which examines aspects of online communities and users motivations to participate as well as the effects they gain from their participation in such communities.
- A gap in the loyalty literature in using social community as a loyalty influencer has been identified; thus this research could make an important contribution to the body of knowledge on loyalty drivers through including community.
- The research examines the use of domestication theory in understanding news service consumption and adds to the growing body of domestication literature as well as adding to the emerging literature on and increasing the understanding of acceptance and usage of online news services. As previously detailed, domestication theory explores both of these aspects in product adoption - the social influences as well as the technological, and which might have a greater influence on adoption, usage and loyalty.
- Finally, the research provides an indication of which aspects of online communities may have a stronger correlation to loyalty, and as such could provide insight into how organisations can develop communities which are likely to foster loyalty.

2.11 Conceptual Model

The research model is comprised of the independent latent variables which determine the perceived value components. The dependent latent variables are then displayed on the right hand side of the model and reflect the loyalty dimensions of online new site visitors or members. Moderating online community latent variables were developed, as discussed previously, specifically for this study. Greyed items are not included in this study.

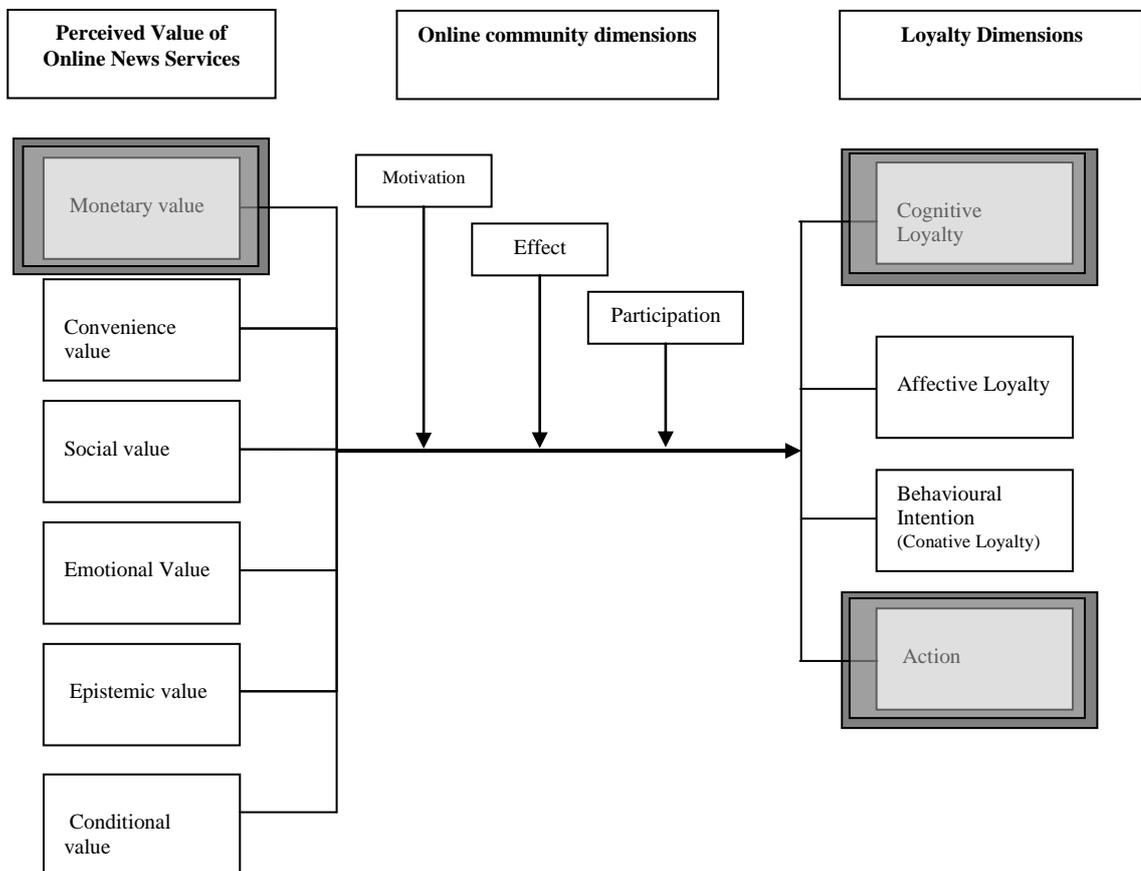


Figure 2.14 Conceptual Research Model

The theoretical approach offered by domestication will be overlaid upon this model through dichotomizing the sample into two categories; that which supports technical aspects as drivers of technology adoption and that which supports social aspects as drivers as ascertained by the domestication stages.

2.12 Summary of Chapter 2

In this chapter the researcher has first provided an overview of the fields of literature which are necessarily covered in a study of assessing loyalty to online news services. An overview of the business context and state of evolution of online news services was provided as well as the challenges facing the traditional printed news industry. The prevalence of user generated content and citizen journalism has become a key factor in the news industry, and online communities supported by news sites a technical facilitator for the communication and interaction of users. The inclusion of an online community component in the analysis of loyalty to online news services is supported by the current business context and social and technical circumstances faced in the news industry today.

The researcher then discussed theoretical approaches in ICT research, the domestication theory used in this study and the underlying concepts of social constructionism and technical determinism were detailed. Throughout the researcher referenced support for the choice of domestication as the underlying theoretical concept.

This discussion was followed by literature reviews in the fields of customer loyalty and perceived value, the components which form the basis for the model and which have been previously empirically tested. Subsequently, the literature on online communities was examined to define a taxonomy and space in which the different communities can be placed and online news sites were positioned by the researcher within this space. The online community literature was then examined from a consumer, user or participant perspective and elements which are designed to quantify “online communityness” of participants were developed. Quantification of these measures is subsequently carried out in exploratory

research which is discussed in detail in the methodology chapter (chapter 3) and in the chapter on exploratory results (chapter 4). A summary of this literature review was then provided. Finally, the fundamental contributions from this research were highlighted and a conceptual model presented.

Stemming from the literature review on customer loyalty, a gap in the literature was determined in assessing the importance of the community factor in building loyalty. Thus not only is there support for inclusion of community components in the study of loyalty from a theoretical perspective, the study of such components is also supported by the business context giving the possibility of highly timely and relevant practical implications from this research. Additionally, the literature on domestication as well as loyalty can be supplemented through this research, demonstrating a further theoretical contribution.

The next chapter will discuss the philosophy on which this research is based and detail the methodology employed within this study.

Chapter 3

Methodology

3.1 Introduction

At one level, this thesis examines customer loyalty to online news services. Based on loyalty literature and the conjecture from Oliver (1999) that customers can be enveloped in a community of loyalty which will aid and direct their (purchase) decisions, a model to test the moderating effect of online community participation on perceived value and loyalty to online news sites was created. The link between perceived value and customer loyalty in an electronic services context has been confirmed through previous research and research into the effect of community participation is one contribution of this thesis.

The meta-theoretical perspective underlying this research was developed from the debate between social constructionist and technical determinist stances and the role each may play on the acceptance of electronic services. The theory which supported this dichotomous perspective and is employed in the research is domestication theory, which breaks the adoption process into 4 stages, each of which supports either the technical determinist or social constructionist perspective.

The perceived value - loyalty link was adapted from a study from Pura (2005). It is based on perceived value literature and includes constructs which were shown to have an effect on customer loyalty in an electronic services context. The online community constructs were derived for this study using exploratory factor analysis from a study of online community participants and added to the model. Measures for domestication stages were derived from literature, discussions with news site users and expert opinion. Wording of all items was subsequently confirmed and/or adapted to the news industry under the guidance of members of an international organization supporting research in the news industry (WAN-IFRA).

The discussion of the methodology is split into three main sections. First, the philosophical position of the researcher and research is discussed and an outline of the research procedure is presented. Secondly, the elements of the exploratory research phase, during which the community constructs used in this study are developed through a review of the literature and confirmed through quantitative methods, and the domestication constructs developed through qualitative methods, are covered. Finally, a discussion of the explanatory research stage is presented including details of data acquisition and analysis method which were employed for the final data set. Data for the explanatory phase was analysed by means of structural equation modelling techniques using partial least squares methods and analysis was performed using SmartPLS software (www.smartpls.de). The chapter then concludes with a summary and follows the format depicted in figure 3.1 on the next page.

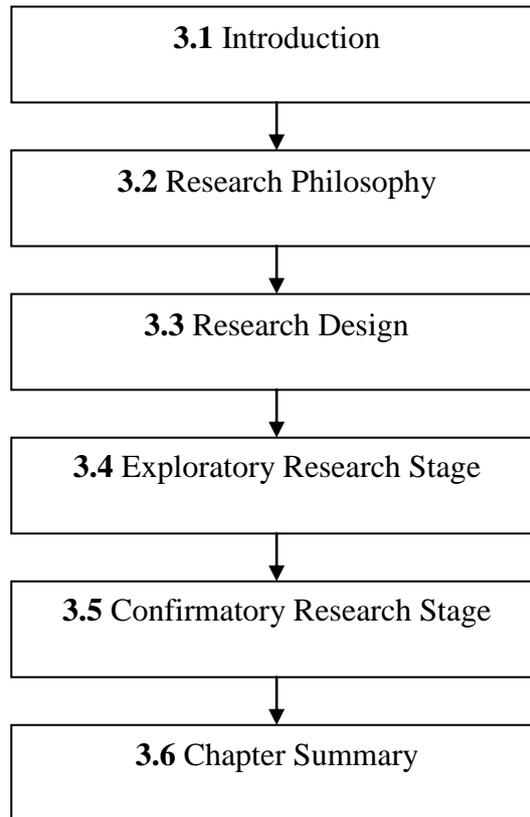


Figure 3.1 Structure of Chapter 3

3.2 Research Philosophy

Research in the social sciences can be based on different philosophical approaches. These different approaches influence the perspective of the research and it is recommended that researchers state the underlying assumptions or philosophical approaches to their research (Miles and Huberman, 1994). Following the Research Philosophy Section Summary (3.2.6), section 3.3 shows the Research Design used in this study and emphasizes the underlying philosophical assumptions adopted in this study for the reader.

Firstly, however, it is important to note that the research can take on different features depending on the form of theory one is utilizing as well as whether the data are collected to test existing theory or build new (Bryman and Bell, 2003). There are different forms of theory and the researcher strives next to clarify the types of theory being employed in this research.

Theory

Theory can be defined to mean an explanation of observed regularities (Bryman and Bell, 2003). A distinction can be drawn between theories of the middle range (as defined by Merton, 1967) which could be called operational theories, and the more abstract idea of the theoretical perspective encompassed in “grand” or “meta theories”. While these grand or meta-theories are sometimes too abstract to offer guidance on collection of empirical data, they can be used to define the perspective from which the researcher is attacking the research in question. The theoretical concepts present in the approach of the researcher thus become intrinsic to the research itself (Simon, 2003). Neumann (2000) confirms that theories exist at three different levels: micro-level, meso-level and macro-level, which vary in the breadth of their coverage. Micro-level theories can be used to explain small slices of time, space or numbers of people. At the next higher level, meso level theories link the micro and macro level, and as such comprise theories of organizations, social movement or communities. Macro-level theories explain larger aggregates, such as social institutions,

cultural systems and whole societies (Creswell, 2009). Kerlinger defined theory as “a set of interrelated constructs (variables), definitions, and propositions that presents a systematic view of phenomena by specifying relations among variables with the purpose of explaining natural phenomena” (Kerlinger, 1979:64).

Within this study, the researcher is looking to provide a contribution to theory at the meso-level in the study of socially and technically determined aspects of service adoption and usage, as supported through the use of domestication theory. As supported by Simon (2003), at this meso level, the researcher attempts to operationalize the two positions offered in the argument of socially and technically determined aspects of service adoption through the use of constructs developed for this study, thus offering a link between a grand or meta theory and the collection of empirical data. Additionally at the meso level, the study supports theory contribution as defined by Kerlinger, in the determination of the effects of community participation and its influence on loyalty to news sites, looking at a set of interrelated variables and through the specification of relationships between those variables.

Burrell, Gibson and Morgan (1979) posited that the philosophical assumptions which underwrite different approaches to social science can be divided into 4 categories:

- ontological
- epistemological
- those relating to human nature
- and methodological

Creswell (2009) describes ontological and epistemological positions as the “worldview” of the researcher, which others have also called paradigms (Lincoln and Guba, 2000; Mertens, 1998). Burrell et al. (1979) further expand the categorisation of concepts through relating these philosophical approaches to specific parts of the research process or concept as well

as through the addition of other approaches such as determinism (vs. voluntarism), and nomothetic approach (as opposed to the ideographic approach). The researcher used the framework put forth by Burrell, et al. (1979) in organizing the following discussion of these concepts.

3.2.1 Ontological Assumptions

Webster's dictionary defines ontology as a branch of metaphysics concerned with the nature and relations of beings, or a particular theory about the nature of being or the kinds of existents. Thus, assumptions of an ontological nature are those which seek to describe or posit the basic categories and relationships of being or existence in order to define entities and types of entities within a framework. Ontology can be said to study conceptions of reality, being concerned with the essence of the phenomena in question (Burrell et al., 1979). Bryman and Bell write that "questions of social ontology cannot be divorced from issues concerning the conduct of (business) research as ontological questions will feed into the ways in which research questions are formulated and the way in which the research is carried out" (Bryman and Bell, 2003: 21). An ontological question in the social sciences is one which considers whether the phenomena or "reality" being investigated is without – external to the individual, imposing itself on the individual, or within – a function of an individual's cognition. Encompassed within this differentiation is the controversy on how one can draw the line between subjective and objective research. Subjectivity refers to the property of perceptions as being based from a subject's point of view, and hence influenced in accordance with a particular bias – characteristic of, or belonging to reality as perceived, as opposed to independent of the mind. The opposite is objectivity, which refers to such perceptions as based on a separate, distant, and unbiased point of view, such that concepts discussed are treated as objects – perceptible to persons other than an affected individual - expressing the nature of reality as it is, apart from personal reflections or feelings.

Burrell et al. (1979) differentiate between realism and nominalism in the ontological approach. Realism supports the idea that facts exist independent of the observer and are out there waiting to be discovered. Realists believe that theories are successful because they have a correspondence to reality or because the theoretical explanations in question have some correspondence to what actually exists. Realists also hold that whatever we believe now is only an approximation of reality and that every new observation brings us closer to understanding true reality (Blackburn, 2005). Realists tend to embrace what they believe is actually real, despite how unattractive reality itself may be. This is in contrast to nominalism, which can be defined as "the doctrine holding that abstract concepts, general terms, or universals which have no independent existence but exist only as names." Nominalism (from the Latin *Nominalis* -belonging to a name) has also been categorized by the philosophical position that various objects labelled by the same term have nothing in common but their name. That is, there is no physical attribute which is really universally contained in objects. An example of this can be found in the way in which aboriginal residents on the Australian continent describe the position or location of items. In other parts of the world, to describe the location of an object relative to the observer, one uses the terms (for example) "in front of" or "next to". In contrast, aboriginal folk language does not include these terms, and location is described in terms of whether the item is positioned east, west, north or south of the observer. Thus in the nominalist view, it is only actual physical particulars that can be said to be real and universals exist only subsequent to particular things (Runes, 1962). While realism holds that when we use descriptive terms such as "fence" or "blue", the forms behind those concepts really exist, independently of the world in an abstract realm, nominalism holds that ideas represented by words have no real existence beyond our imagination (Weigand, 1958).

Nominalism arose in reaction to the discussion of universals which were posited to account for the fact that some things are the same or are of the same type. This position holds that certain properties are repeatable, when one speaks of a fence others generally know or have an idea what a fence is. One understands that the colour blue is a universal attribute

manifested in such things as the sky or the ocean. A realist states that a fence is a “thing” in itself because of the existence of a universal, or a single abstract thing. With respect to the blue of the ocean and sky, one of the parts that make up these entities is identical. The blue is repeatable because there is one thing that manifests itself wherever there are blue things. In contrast, nominalism denies the existence of universals. The motivation to deny universals flows from several concerns including the concern about where such universals exist (Wiegand, 1958). Plato held that there is a realm of abstract forms or universals apart from the physical world. In contrast to this, Aristotle contested the nominal view by positing that no universal nor external realm exists and that things are just given a name. Moderate realists hold that there is no realm in which universals exist, but rather universals are located in space and time wherever they are manifested whereas nominalists consider it unusual that there could be a single thing that exists in multiple places simultaneously. The realist maintains that all the instances of the manifestation of the colour blue, for example, are held together by an exemplification relation, but this relation cannot be explained (Weigand, 1958).

3.2.2 Epistemological Assumptions

Webster’s dictionary defines epistemology as the study or a theory of the nature and grounds of knowledge, especially with reference to its limits and validity. Burrell et al. (1979) discuss the epistemological assumptions made in research are defined as assumptions about the grounds of knowledge and how one might begin to understand the world and communicate this knowledge to fellow human beings. This concept encompasses the type of knowledge or reality which can be obtained and how it can be sorted out into truths or falsehoods. The distinction between truth as being hard and tangible or soft and objective also comes into the discussion here. The dichotomy is between whether a truth actually exists or whether it is something which is entirely based on personal experience or perception. Burrell et al. (1979) define the concepts of positivism and anti-positivism as being relevant at the epistemological stage.

Positivism was a philosophical concept pioneered by Comte and Henri in the mid 19th century which proposed that the only authentic knowledge is scientific knowledge, and that such knowledge can only come from positive affirmation of theories through strict scientific method. Enlightenment period philosophers such as Kant proposed that humans should not blindly accept institutions and teachings such as those put forward by the church and that humans should be investigate the world using observation, experimentation, and reason. This approach to the philosophy of science was also derived from views popularized through enlightenment players such as Pierre-Simon Laplace, the French mathematician and astronomer (Wiegand, 1958). Comte saw scientific method as replacing metaphysics in the history of thought, and observed the circular dependence of theory and observation in science. Locke and Hume posited that the world was a series of phenomenon – of sudden appearances and the knowledge gained from observation, and experimentation was simple a clarification of relationships between these phenomena (Wiegand, 1958).

In his book *Introduction to Scientific Revolutions*, Hacking (1981) characterizes positivism as the belief in the following nine points:

- Realism: Science is an attempt to find out about one real world. Truths about the world are true regardless of what people think, and there is a unique best description of any chosen aspect of the world.
- Demarcation: There is a sharp distinction between scientific theories and other kinds of belief.
- Science is cumulative: Although false starts may be quite common, science builds on what is already known.
- Observation-theory distinction: There is a fairly sharp contrast between reports of observations and statements of theory.
- Foundations: Observation and experiment provide the foundations for and justification of hypotheses and theories.

- Theories have a deductive structure and tests of theories proceed by deducing observation-reports from theoretical postulates.
- Scientific concepts are rather precise, and the terms used in science have fixed meanings.
- There is a context of justification and a context of discovery. We should distinguish (a) the psychological or social circumstances in which a discovery is made from (b) the logical basis for justifying belief in the facts that have been discovered.

Positivism is also depicted as "the view that all true knowledge is scientific," and that all things are ultimately measurable (Bullock and Trombley, 1999). Because of its close association with reductionism, positivism and reductionism involve the view that "entities of one kind are reducible to entities of another," such as societies to numbers, or mental events to chemical events. Positivism also involves the contention that "processes are reducible to physiological, physical or chemical events," and even that "social processes are reducible to relationships between and actions of individuals," or that "biological organisms are reducible to physical systems" (Bullock and Trombley, 1999).

In contrast to positivism is the philosophical approach of anti-positivism which supports that social sciences need to create and use different scientific methods than those used within the natural sciences. In the 19th century, positivism began to be questioned by philosophers like Wilhelm Dilthey (Dilthey, 1883) and in the 20th century by Heinrich Rickert (Rickert, 1962) who argued that the world of nature and society are different, as human societies have unique aspects like meanings, symbols, rules, norms, and values all of which make up the entity of culture. The German sociologist, Max Weber, introduced the term anti-positivism or humanistic sociology which again posits that sociological research must use specific tools and methods which differ from those used in the natural sciences and which concentrate on humans and their cultural values (Wiegand, 1958).

While most sociologists would agree that scientific method, or the techniques for investigating phenomena and acquiring new knowledge through gathering observable, measurable evidence, is an important part of sociology, extreme positivism is not found often. Many social scientists realize that it is hard to create a law that would hold true in all cases where human behaviour is concerned, and that while behaviour of groups may be able to be explained and predicted with some probability, it is much harder to explain the behaviour of each individual. Following this logic, however, could mean that observations at an individual level are not applicable at an aggregate level which refutes the generalizability of results from social research. Hence most sociologists today are placed somewhere between positivism and anti-positivism, arguing that human behaviour is more complex than animal behaviour or the movements of planets. Humans have free will, imagination and can be irrational which means that behaviour is difficult to order into rigid social laws, perhaps the reason the term social “norm” is widely used. As will be detailed in the Research Design section of this chapter (3.3) this is the position – between positivism and anti-positivism – taken by the researcher in this study.

3.2.3 Philosophical approach to the understanding of human nature

Burrell, et al. (1979) indicate that another important conceptualization within research concerns the approach to understanding human nature itself and the relationship between human beings and their environment. Under this topic the approaches of determinism and voluntarism are differentiated.

Determinism is the philosophical proposition that every event, including human cognition and action, is causally determined by an unbroken chain of prior occurrences. No wholly random, spontaneous, mysterious, or miraculous events occur, according to this philosophy (Burrell, et al., 1979). Critics of determinism hold that if people are assumed incapable of independent choice or have no free will, then there can not be a rational basis for morality. They argue, for example, that some aspects of criminal and civil justice and legislation

appear irrational and unjust since, one cannot be punished for an action performed as a result of some power outside an their control. In order to support such social institutions that rely in part upon holding people responsible for their actions, determinism cannot be adopted, at least as far as it applies to “voluntary” actions.

Determinists have countered this critique by distinguishing between normative and positive claims, arguing that statements of fact can and should be made independently of their consequences. Thus, even if determinism is inconsistent with the idea of a moral universe, this does not necessarily invalidate it. It could also be noted that determinism and morality are not necessarily mutually exclusive. The voluntary nature of an action would be irrelevant if the focus shifted to the punishment such behaviour in order to prevent future behaviour. Additionally, some determinists would also support that in observing determinism, the notion of “voluntary” actions would cease to exist, as these would be redefined as a combination of physiological and environmental influences. So while one may technically have no choice in performing an action, there would still be a moral responsibility for actions stemming from negative internal or external stimuli (MacKenzie and Wajcman, 1999).

Voluntarism, in contrast, is a descriptive term for the philosophical school of thought that regards a human’s will as superior to intellect and to emotion. Durant (1926) defines voluntarism as the doctrine that will is the basic factor, both in the universe and in human conduct. This contrasts with determinism as voluntarism attributes a much more creative role to human beings; that they are the creators of their own destiny and that man is completely autonomous and free-willed. Also prevalent in theoretical approaches to religion, there is a large amount of theological writing on intellectualism vs. voluntarism. In this context, voluntarism is the theory that God or the ultimate nature of reality should be conceived as a form of own will.

In the context of social and business research, however, within which this study takes place, the determinist view can be defined in that man and his activities are being completely determined by the situation of the environment in which he is located. At the other extreme is the voluntarist view that man is completely autonomous and free-willed (Burrell et al., 1979).

3.2.4 Methodological Approaches

Finally, Burrell et al. (1979) discuss the methodological debate of ideographic and nomothetic approaches. They hold that the three previous sets of assumptions: ontological, epistemological, and human nature oriented, have a great influence on the way in which the methodological approach is made as each one (of the strands) has important consequences for the way in which one attempts to investigate and obtain “knowledge” about the social world. They follow that it is possible to identify methodologies used in social science research which treat society the same as the natural world – as being hard, real and external to the individual. Such methodologies thus stress the concepts themselves, their definition and measurement as well as the identification of underlying themes. By contrast, taking the other view of social reality addresses the importance of individual subjective experiences in the creation of one’s own social world, which in turn influences what is actually researched. In this case, the understanding of the way in which the individual creates, modifies and interprets the world is of utmost importance (Burrell, 1979).

Nomothetic literally means "proposition of the law" (Greek derivation). Webster’s dictionary defines it as relating to, involving or dealing with abstract, general or universal statements or laws. In psychology, nomothetic measures are contrasted to ideographic measures, where nomothetic measures are those which can be taken directly by an outside observer, such as weight or how many times a particular behaviour occurs, and ideographic measures are self-reports such as a rank-ordered list of preferences. In the social sciences, the ideographic approach holds the view that the social world can only be understood by

getting close to one's subject – exploring its detailed background and life history. This is contrasted with the nomothetic view of the importance of basing research upon systematic protocol and technique. It is similar to natural science research with the focus on testing hypothesis with scientific rigour and preoccupation with the use of scientific tests and the use of mostly (but not solely) quantitative methods for data analysis (Burrell, et al. 1979).

The terms nomothetic and ideographic were first used by the German philosopher Wilhelm Windelband, a follower of Kant, to describe two distinct approaches to knowledge, each corresponding to a different intellectual tendency and each corresponding to different branches of academics. Nomothetic is based on what Kant described as a tendency to generalize, and is normally used in the natural sciences. It describes the effort to derive laws that explain objective phenomena. In contrast, ideographic is based on what Kant described as a tendency to specify, and is used in the humanities. It describes the effort to understand the meaning of contingent, accidental, and often subjective phenomena.

3.2.5 Inductive and Deductive Research Approaches

Within the 4 levels of social research described above lie also the facets of inductive or deductive research (Burrell, et al. 1979).

In a deductive research process, the conclusions tend to move from the more general to the more specific. In deductive research the researcher starts with a theory and moves “down” through the processes of creating hypotheses from the theory, then to making observations (typically, but not exclusively) by means of quantitative methods, which in turn leads to theory confirmation or disconfirmation. Inductive research processes generally tends to be the opposite, moving from the bottom up. The researcher starts at the observation phase and induces patterns from this stage. From these patterns a tentative hypothesis can be drawn and in turn a theory developed (Trochim, 2006). Inductive reasoning is thus more open-ended and exploratory whereas deductive research is more explanatory or confirmatory.

Trochim (2006) supports that most social research involves both inductive and deductive reasoning processes at some time within a project.

Creswell (2009) indicates the following procedures are relevant in inductive and deductive approaches.

Inductive approaches in a qualitative study

1. Researcher gathers information (e.g. interview, observations)
2. Researcher asks open ended questions of participants or records field notes
3. Researcher analyses data to form themes or categories
4. Researcher looks for broad patterns generalisations or theories from themes or categories
5. Researcher poses generalizations or theories from past experiences and literature

Deductive approaches used in quantitative research

1. Researcher tests or verifies a theory
2. Researcher tests hypotheses or research questions from the theory
3. Researcher defines and operationalizes variables derived from the theory
4. Researcher measures or observes variables using an instrument to obtain scores.

3.2.6 Research Philosophy Section Summary

The previous discussion covered the elements of a research philosophy which need to be considered by the researcher in understanding and creating a research design. These included:

- Ontological approach: The nature of being; polarized by Realism and Nominalism
- Epistemological approach: Theory of the nature and grounds of knowledge: polarized by Positivism and Anti-positivism.
- Philosophical approach on understanding human nature: polarized by Determinism or Voluntarism

- Methodological approach: polarized by ideothetic or nomothetic approaches
- Reasoning inference: Polarized by Deductive and Inductive reasoning

The researcher used the principles of research design outlined above determine the research design employed in this study, details of which are in the next section, 3.3.

3.3 Research design of this study

In this study, the researcher found accordance with Miles and Huberman (1994) who state that their ontological position towards research is that of “transcendental realism”, in which they are aiming to build theories which account for a real world which is bounded, as well as being “perceptually laden”. Transcendental realism thus aims to account for events as opposed to simply documenting what has happened, and look for an individual social process – or structure which lies at the core of events and can be ascertained to provide a causal description of the “forces at work”. As such, this research is not solely concerned with finding a hard core “law” which Miles and Huberman support is problematic due to the human factor of perception; it is more looking for tendencies – forces and causalities. “Transcendental realism” therefore most closely reflects the ontological approach taken in this research. The epistemological approach is similar in that it is supported by the notion of “transcendental positivism”. While, in this research, the philosophy falls into both categories as in “transcendental realism” neither a solely quantitative nor a solely qualitative approach applies. Trochim (2006) holds that quantitative and qualitative data are, at some level, virtually inseparable. Neither exists in a vacuum nor can either be considered totally devoid of the other. Trochim (2006) holds that to ask which is “better” or more “valid” ignores the intimate connection between them and supports that both qualitative and quantitative methods are needed to do good research.

This research is intended to explore both the topic of community participation in a news service context as well as a uncovering whether socially and technically deterministic stances can be used to better understand technology adoption within this context. Therefore, within this study, the researcher is supporting the philosophical approach of determinism in the understanding of human nature, as shown in the Research Philosophy Section Summary (3.2.6). Because measurement items for both of these sets of constructs and the sets of constructs themselves have to be developed for this research, it was deemed necessary for the researcher to use qualitative methods in the first instance. Trochim’s (2006) supports

that qualitative research excels at "telling the story" from the participant's viewpoint, providing the descriptive detail that sets quantitative results into their human context". Thus, for the first part of this research, an exploratory, qualitative approach is suited. However, in the second part of the study, the researcher is aiming to broaden the findings through using a larger sample. To this end, the use of quantitative methods is supported.

This research uses deductive research methods in this study. In the exploratory part of the research, questions were generated by the researcher based on previous findings for both the generation of the community and domestication items. The concepts which the researcher was interested in testing in the final stage of the research were developed from a review of the literature and then testing of these concepts through an online survey for community items and confirmation of domestication concepts using focus groups (quantitative and qualitative methods). In the explanatory part of the research, the researcher employs the deductive approach of measuring variables using an instrument to obtain scores as described in section 3.2.5. Using both approaches in a study represents a mixed methods design, a specific form of which is adopted for this study and is described in section 3.3.1 below.

3.3.1 Mixed Methods Approaches

The approach which has been chosen as most appropriated for this research is a sequential mixed method design (Onwuegbuzie and Teddlie, 2003). This is a design in which one type of data provides a basis for the collection of another type of data. Creswell (2009) indicates that sequential mixed methods procedures are those in which the researcher seeks to elaborate on or expand on the findings of one method with another method. Creswell (2009) supports that sequential mixed methods research can begin with a qualitative interview for exploratory purposes and follow up with a quantitative larger scale survey in order to generalize results. Sequential mixed methods can be used to answer one type of question by collecting and analyzing two types of data, and inferences are subsequently

based on the analysis of both types of data. A sequential mixed methodology was deemed most appropriate in this study as the research uses data from a first, dual part, qualitative study in order to refine questions for the second, qualitative part of the research.

Table 3.1, following, shows the aspects of the different approaches to research, and is used by the researcher to support the selection of a mixed methods approach in this study.

	<i>Philosophical Assumptions</i>	<i>Strategies of Inquiry</i>	<i>Methods Employed</i>
Qualitative Approaches	Constructivist advocacy participatory knowledge claims	Phenomenology, Grounded theory, ethnography, case study and narrative	Open-ended questions, emerging approaches, text or image data
Quantitative Approaches	Post-positivist knowledge claims	Surveys and experiments	Closed-ended questions, predetermined approaches, numeric data
<i>Mixed Methods Approaches (used in this research)</i>	<i>Pragmatic knowledge claims</i>	<i>Sequential, concurrent and transformative</i>	<i>Both open ended and closed ended questions, both emerging and predetermined approaches, both quantitative and qualitative data and analysis.</i>

Table 3.1 Comparison Qualitative, Quantitative and Mixed Methods Research Approaches (adapted from Creswell, 2009)

Following this mixed methodological approach supported by Creswell (2003) data acquisition took three forms. Two phases were performed in the exploratory research stages to determine measures for the online community model construct and for the domestication theory stages employed in this research. The following diagram adapted from Churchill (1979) shows the steps which were used in this research.

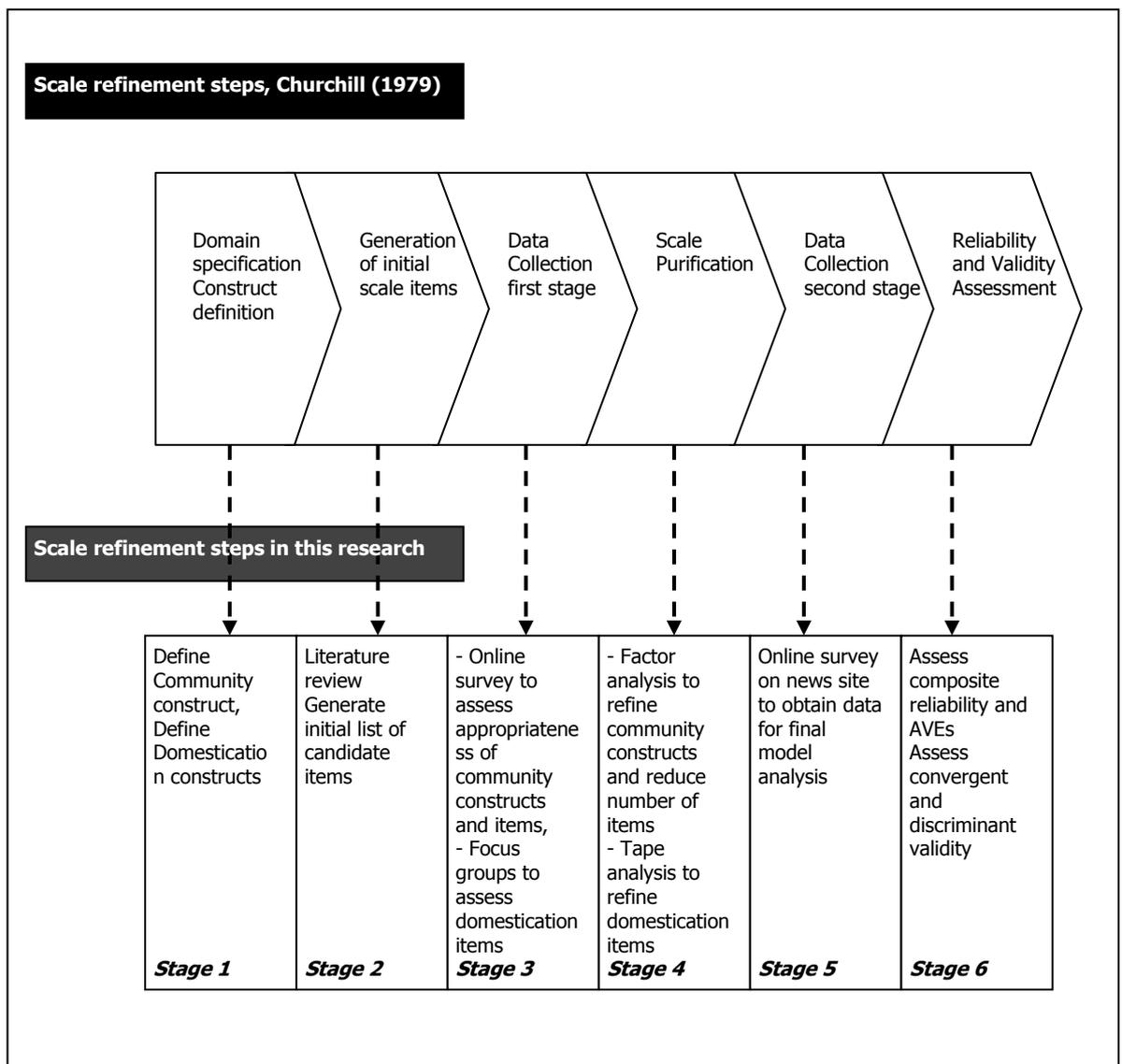


Figure 3.2 Scale Development Process in this Research

3.4 Exploratory Research Phase

During the preliminary, exploratory stage, two types of measures needed to be developed for the purposes of this research. Measures to determine the online community aspects of users as detailed previously were ascertained, and additionally items to be used to measure phases of the meta-theoretical domestication approach used in this research also needed to be developed.

3.4.1 Online Community Measures

First, based on the literature review of online communities, questions to ascertain differing aspects of a user's participation in online communities and the motivations to join or participate in the communities as well as the effects of participation in the community were developed by the researcher.

3.4.1.1 Survey Design

To provide the empirical basis for these measures, an online survey to refine and solidify community measures including qualitative open-ended questions was developed and administered by the researcher. Initial survey items were taken from the literature review provided by the researcher in the previous chapter. Based on guidelines put forward by Andrews, Nonneke and Preece (2003), a web based survey was determined to be most suitable in this research as it provided access to a wide range of respondents, all of whom have access to the Internet as they are using it to participate in or visit an online community. As the target group is online community users, use of web based survey was deemed appropriate. The web-based software chosen by the researcher also enabled the necessary design principles according to Andrews, et al. (2003) to be implemented. While, at the time of this research, the university didn't have an online survey facility for student's

use, a subscription to a commercially available software survey facility was acquired by the researcher. These facilities were procured from the hosting company SurveyMonkey.com.

Online survey sites can be used to develop and disseminate surveys. O'Connor et al, (2008) support that the online approach to interviewing remains a new and innovative research method. Vehovar and Lozar (2008) write that although the use of the Internet has proliferated in recent years, the use of it for conducting online questionnaire surveys in the social sciences still remains relatively limited. Vehovar and Lozar (2008) also support that the Internet offers great methodological potential and versatility and this has added much to the potential of survey research in general. Dillman et al. (1998) maintain that online questionnaires can offer the following distinct advantages over paper based surveys.

- Enabling the researcher to contact a geographically dispersed population and so can be useful in internationalising research.
- Being used to contact groups often difficult to reach.
- Providing savings in costs to the researcher (for example, the costs associated with travel, venue, data entry).
- Supplying data quickly, providing fast alternatives to postal, face-to-face and telephone surveys.
- Enhancing the effectiveness of research and increase response rates where used as part of a mixed-mode methodology.

Especially for specific populations that regularly use the Internet, the Web has been found to be a useful means of conducting research (Couper et al., 2001; Sills and Song, 2002). Dillman (1998) supports that in some instances a mixed-mode strategy has been suggested as a means for exploiting the advantages of Web surveys and minimizing non-response. However, because the sample group sought in this study was online community users, paper based surveys were not an efficient means of reaching this group and therefore not used by the researcher.

Greenlaw and Brown-Welty (2009) support that when conducting a survey, response rate is not the only consideration and that researchers must function within the constraints of budgets and must consider which survey mode will meet the needs of the study while not depleting too many resources. The costs associated with each survey mode become an important variable, and whether those costs consist of an overall total or are a part of an evaluation plan, the survey administration cost need to be taken into account. The introduction of multiple commercial survey web sites has facilitated the design, dissemination, data storage, and data analysis of web-based surveys and this practice has become an increasingly more user-friendly method of survey administration.

The SurveyMonkey.com software provides different templates for layouts, question categories, and skip logic which made it an appropriate survey mechanism. Especially pertinent at this stage of the research was the ability for the researcher to incorporate open ended questions to ascertain from community users if any specific aspects or themes relating to their community participation had been left out by the researcher. The survey tool offered an expedient and moderately cost effective method of creating a survey instrument to analyse online community users for this research. After creating the survey, the researcher can choose a specific URL which is generated by the hosting site and which can be placed in an email or integrated into a site post. This URL then directs the user directly to the survey which opens in a separate browser window. The survey design facilitates that, upon completion, the survey window be closed so the user returns to the Internet page from which the survey was called, decreasing the level of obtrusiveness of the survey for the user.

From the SurveyMonkey site, survey results can be subsequently downloaded for analysis in packages such as SPSS or imported into Excel and cleaned for further evaluation in such structural equation modelling packages as the one used in this research, SmartPLS. The results of this preliminary survey were analysed by the researcher for reliability and for the

purpose of question reduction in SPSS using Cronbach's alpha and principal component analysis, based on the guidelines by Cortina, 1993; Cronbach, 1951; Grayson, 2004; Field, 2005; Guadagnoli and Velicer, 1988. Additionally, comments left by the survey respondents were evaluated by the researcher to determine if any important themes had been left out.

3.4.1.2 Sample selection

Distribution of the survey link for this preliminary community survey was completed utilizing a snowball sampling process. Trochim (2006) writes that while the researcher should define the target population as clearly as possible, there are no exact rules and the researcher should rely on logic and judgement. The population is thus defined in accordance with the objectives of the study.

Bancroft and O'Sullivan (2000) differentiate between a census which is a survey which examines every member of the population and a sample which is a relatively small set of the population. While a census will give the researcher a completely accurate view of the population, a sample is a more practical approach offering the advantages of being less time consuming, less costly, and the information obtained above a certain sample size will not increase the accuracy of information and as such is ineffective. Within sampling techniques, a differentiation is made between probability and non probability sampling. Probability sampling is where every member of the population has a known chance of inclusion in the sample, and methods include random sampling, systematic sampling, and stratified sampling. Non probability sampling is when the researcher decides in advance on the factors which will determine whether or not a member of the population will be included in the sample (Bancroft and O'Sullivan, 2000:108). Sue and Ritter (2007) support that the use of non-probability sampling is reserved for exploratory research, but also hold that non probability strategies are practical for online surveys. Sue and Ritter (2007) follow that appropriate types of non probability sampling in an online survey context are

convenience sampling, volunteer opt-in panels, and snowball sampling. In snowball sampling, the sample begins by identifying the participant who meets the inclusion criteria (in this case, an active member of an online community). Sue and Ritter (2007) follow that snowball sampling is commonly used when dealing with hard to reach populations, such as citizens who might be reluctant to take part in surveys. The researcher initially found that attempts to contact online community administrators and ask if the exploratory survey could be posted led to little acceptance. The researcher then sent the survey link to associates who were members themselves of online communities and asked for the associate to either post the link in the community in which they were a member, and to forward the link on to additional potential survey respondents via email.

The usage of non random sampling procedures can be supported in the following cases: when the population is infinite or near it and the cases can not be specified to create a list for making a random selection, and when the researcher cannot reach some members in the population. In this case a random selection would not be meaningful, because it would be possible to execute just a part of it, and this would bias the selection. Thus, the method of snowball sampling is supported in the literature and this sampling method was found to be, as Sue and Ritter (2007) maintain, a good way to select members of a specifically defined, highly targeted population. The results of this stage: determination of question reliability and use of principle component analysis for reduction of the number of questions for the community constructs are discussed in more detail in chapter 4 on the exploratory research phase findings.

3.4.2 Domestication Stage Measures

The second part of the qualitative analysis was used to create and refine domestication measures. This stage comprised of refining the measures which were derived from domestication literature through interviews with news service users and triangulation of these measures through expert opinion. In addition to a review of literature, measures which

ascertain domestication stage were developed quantitatively, through two focus groups consisting of people who have used an online news site to ascertain their process of obtaining (first visiting) and using the site and the place which it has in their daily habits. Partly used to confirm the questions for establishing and differentiating between domestication stages, data was further triangulated by consulting Haddon (industry expert) who added that potential questions to ascertain domestication stages are also dependent to some degree on the technology, thus the questions asked to ascertain the place a certain technology such as (for example) mobile phone usage has in a user's lifestyle may be different than those which would be asked for the usage of an online news site (Haddon, 2007, personal communication). This supported the researcher's method of interviewing news service users to ascertain domestication stage questions which were pertinent in the news service context. The sample used in this stage of the exploratory research was news service users and comprised of twelve members who were active users of online news sites in two focus group settings. The questions posed to the users were to refine the domestication stage items to be integrated into the final survey. These questions were developed by the researcher and the purpose of the meetings was to refine these measures to be pertinent and relevant in an online news site setting.

3.4.2.1 Focus Groups

Morgan (1996) defines focus groups as a research technique that collects data through group interaction on a topic determined by the researcher. This definition has three essential components.

- First, it clearly states that focus groups are a research method devoted to data collection.
- Second, it locates the interaction in a group discussion as the source of the data.
- Third, it acknowledges the researcher's active role in creating the group discussion for data collection purposes.

Rabiee (2004) supports that qualitative research and, in particular, focus-group interviews generate large amounts of data, which tend to overwhelm novice as well as experienced researchers, and an hour long interview can easily take many hours of transcription. Thus, a central aim of data analysis, according to Robson (1993) is to reduce data. Yin (1992) points out that data analysis consists of a number of stages: examining, categorising and tabulating or otherwise recombining the evidence, in order to address the initial goal of a study. Krueger and Casey (2000) suggest that the purpose of the focus group should drive the analysis and believe that analysis begins by going back to the intention of the study and requires a clear fix on the purpose of the study. Following this concept is extremely helpful for managing the data, making sense of what is going on, getting rid of extra and irrelevant information. Beyea and Nicoll (2007) support that during a focus group session, data are collected simultaneously using several different methods. Generally, the session is taped, and this is the primary source of data. The researcher in this study recorded the session using a digital dictation machine.

Krueger and Casey (2000) support that depending on the purpose of the study and the timeline, different methods are used for capturing the data from focus groups for the purposes of data analysis. The analysis method used in this research as proposed by Krueger and Casey (2000) was tape based analysis, which is slightly less time consuming than a complete transcription. Tape based analysis results in an abridged transcription and requires the researcher “listen to the tape and develop a transcript of the relevant and useful portions of the session” (Kruger and Casey, 2000:131). A note based analysis was also integrated by the researcher as a backup to the audio. The findings of this portion of the research are discussed in the exploratory research results chapter.

3.5 Confirmatory Research Phase

3.5.1 Method

In this second phase of the study, the researcher created an electronic online survey (using the same methods described for the exploratory stage in this chapter) which was to be administered to online news site visitors. The survey combined the first stage of the sequential mixed methodology approach and integrated the consolidated and confirmed online community constructs and items. Additionally, the domestication stage measures which were created in the exploratory stage were integrated into the final survey. Finally, the survey also integrated the questions which would identify the perceived value components identified by the researcher and confirmed by industry experts to be pertinent to the online news industry, as well as the dependent loyalty constructs as identified previously. Again, as the sample of respondents must be Internet users in order to be eligible to answer the survey, a web based survey was the most efficient and appropriate choice in this research.

3.5.2 Survey Design

Survey design followed using the same procedure and source as for the survey conducted to generate community constructs. The SurveyMonkey.com site was used and data collected as described before in section 3.4.1.1.

3.5.3 Sample Selection

With the aid of the WAN-IFRA news industry research organization, a suitable news site in English language was found. The researcher was advised that due to the economic situation in the news industry, it would be difficult to find any English language news sites which would be willing to run the survey. Nevertheless, a site covering the South Devon area of the UK which was recognized by the researchers' industry contacts as being particularly innovative was identified. The editor and webmaster were contacted by the researcher to

gain access to the users of the site, and the link to the survey was posted directly on the front page of the site by the webmaster for a period of six weeks.

The screenshot shows the homepage of 'this is south devon.co.uk'. At the top, there's a navigation bar with links like 'Home', 'News', 'Video', 'Sport', etc. Below that, there are search boxes for 'jobsite', 'motors', and 'Find a Property'. The main content area features a large article titled 'Man found dead after seven-hour search' with a photo of a diver. To the right, there's a video player. At the bottom, there are several promotional banners. One banner, titled 'Take our online reader survey', is circled in red. It contains the following text: 'Welcome to thisissouthdevon, the website of the Herald Express. To help us make this site even better for you, we would like you to take part in a quick survey to find out what brings you here, what keeps you here, and what we can do to make the site work for you. Click here to start the survey'.

Figure 3.3 Opening page of the *This is South Devon* online news site

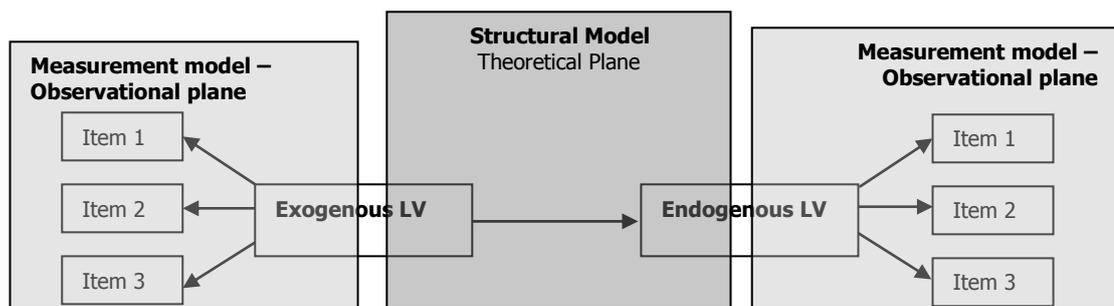
3.5.4 Explanatory Stage Data Preparation and Analysis

Data was procured over this six week period and prepared by the researcher to enable further analysis in the SmartPLS structural equation modelling software. The following discussion details the use of second generation Structural Equation Modelling techniques and supports the researcher's choice of SEM using the partial least squares methods, and the SmartPLS analysis tool.

3.5.4.1 Structural Equation Modelling

Lomax and Schumacker (2004) describe structural equation modelling as a technique which uses various types of models to depict relationships among observed variables with the same basic goal or providing a quantitative test of a theoretical model hypothesized by a researcher.

Hubona (2010) describes a two level concept of empirical research in which the researcher provides an observational plane (or measurement model; the items which were measured) and the theoretical plane which comprises the structural model, as depicted in figure 3.4.



Simplified model for illustration purposes

Figure 3.4 Two level concept of empirical research as it relates to a structural model

The two level concept of empirical research (Hubona, 2010) well illustrates the form of a structural equation model. The measured latent variables are within the observational plane

whereas the relationships within the model are on the theoretical plane. That is, the items measuring the latent variables (either exogenous or endogenous) are observed, or measured, whereas the relationships within the model are those proposed or theorized by the researcher, through mapping hypotheses to these relationships. While there may be relationships between the measured items, the relationship between the latent variables is what the researcher is striving to quantify. The researcher thus tries to draw conclusions about relationships within the plane of theory, based on observations which are made or seen in the plane of observation. This relates to PLS path modelling in that the observed items and corresponding latent variables for both endogenous and exogenous variables make up the outer model portions, whereas the inner model comprises the relationships between the latent variables (Hubona, 2010). The outer model relates the latent variables to the measurement items (those on the observation plane), whereas the inner model represents the theoretical plane. The measurement items associated to a latent variable are termed a block of items.

A differentiation is drawn between first and second generation structural equation modelling techniques. Bagozzi and Fornell (1982) describe LISREL and Partial Least Squares (or PLS) as second generation analysis techniques which can be used to test the extent to which research meets standards for high quality statistical analysis, or statistical conclusion validity (Cook and Campbell, 1979). In contrast to first generation statistical analysis tools such as regression, Gefen et al. (2000) and Gerbing and Anderson (1988) write that SEM enables researchers to answer a set of interrelated research questions in a single, systematic and comprehensive analysis through modelling relationships among multiple independent and dependent constructs simultaneously. This provides a differentiation between SEM and first generation regression techniques such as linear regression, Anova and Manova which enable the analysis of only a single level of linkages between independent and dependent variables at one time. Gefen et al. (2000) continue that SEM, in contrast to first generation regression analysis methods, assesses both the structural model as well as the measurement model, and that this combined analysis permits the researcher to analyze measurement errors of observed variables as an integral part of the

model, and further enables factor analysis to be combined with hypothesis testing in the same operation. Gefen et al. (2000) thus support that SEM techniques are more able to provide information about how well the research model is supported by the data than by using regression techniques. As such, the use of SmartPLS as a second generation SEM analysis tool seemed to offer a better analysis method and was chosen by the researcher.

Already during the 1980s, Kenny and Judd (1984) wrote that the use of structural models with latent or unmeasured variables was increasing in the social sciences, as the modelling it enables allow researchers to estimate coefficients of linear models whilst controlling for measurement error. More recently, Lomax and Schumacher (2004) indicate that there are four major reasons for the popularity of SEM. First, the complexity of models is increasing as modelling phenomena with multiple observed variables enables researchers to better understand their area of inquiry. Secondly, structural equation modelling takes into account measurement error, which had previously been treated separately than the statistical analysis of data. Additionally, using advanced SEM techniques, interaction terms can be included which enables moderating effects to be more accurately measured. Lomax and Schumacher (2004) note also that SEM software programs have become more user friendly in recent years, eliminating the need for researchers to understand complex programming techniques. The researcher took these points into consideration in the choice of SmartPLS as an analysis tool.

A comparison of structural equation modelling techniques as discussed by Gefen et al. (2000) is shown in the following table 3.2:

<i>Issue</i>	<i>LISREL</i>	<i>PLS</i>	<i>Linear Regression</i>
Objective of overall analysis	Show that the null hypothesis of the entire proposed model is plausible, while rejecting path-specific null hypothesis of no effect	Reject a set of path specific null hypotheses of no effect	Reject a set of path specific null hypotheses of no effect.
Objective of Variance Analysis	Overall model fit such as insignificant χ^2	Explanation of Variance (high R square)	Explanation of Variance (high R square)
Required theory base	Requires sound theory base. Supports confirmatory research.	Does not necessarily require sound theory base. Supports exploratory and confirmatory research.	Does not necessarily require sound theory base. Supports exploratory and confirmatory research.
Assumed Distribution	Multivariate normal, if estimation is through ML. Other procedures available for non normal distributions	Robust to deviations from a multivariate distribution	Robust to deviations from a multivariate distribution with established methods of supporting non multivariate distributions
Required Minimum Sample Size	At least 100 to 150 cases	At least 10 times the number of items in the most complex construct	Supports a smaller sample sizes, although a minimum of 30 is required.

Table 3.2 Comparison of Structural Equation Modelling Techniques

Hubona (2010) summarizes the comparison of approaches between PLS and covariance based equation modelling in the following table:

<i>Basis of Comparison</i>	<i>PLS Based SEM</i>	<i>Covariance based SEM</i>
Objective	Prediction Orientated	Theory oriented: Parameter Oriented
Approach	Variance Based	Covariance Based
Assumptions	Predictor specific (non parametric).	Multivariate normal distribution and independent observations (parametric).
Relationship between latent variable and its measures	Can be formative or reflective	Normally reflective
Implications	Optimal for prediction accuracy	Optimal for parameter accuracy
Model Complexity	Large complexity (e.g. 100 constructs, 1000 indicators)	Small to moderate complexity (e.g. fewer than 100 indicators)
Sample Size	Power analysis based on the portion of the model with the highest number of predictors Recommendations for the minimum number of cases range from 30 to 100.	Ideally based on power analysis of the specific model. Recommendations for the minimum number of observations from 200 to 800.

Table 3.3 Summary of difference between PLS Modelling and Covariance Based approaches

Henseler et al. (2009) state that PLS modelling, specifically, provides four genuine advantages: it can be applied when distributions are highly skewed (Bagozzi and Yi, 1994) which differentiates it from covariance based techniques which carry more stringent distribution requirements. Secondly, PLS can be used to estimate relationships between latent variables when the number of observations is small, as PLS uses separate ordinary least square (OLS) regressions for each subpart of the research model, and as a result the complexity of the model hardly influences sample sizes. In addition to the ease of use of modern PLS software, Henseler finally cites that PLS holds advantages in model analysis when improper or non convergent results may occur, such as in more complex models, or where the number of latent variables is high in relation to the number of observations, and the number of indicators per latent variable is low. Tenenhaus and Hanafi (2005) reiterate these advantages, stating that PLS has also some advantages over covariance-based SEM namely, systematic convergence of the algorithm due to its simplicity, possibility of managing data with a small number of individuals and a large number of variables, and offering a general framework for multi-block analysis. These aspects, especially the ability to analyse more complex models, or where the number of latent variables is high in relation to the number of variables were important in the researcher's choice of SmartPLS as an analysis tool. As the researcher had been forewarned that it would be difficult to gain access to a large number of potential data sources, a tool with lower sample size requirements was deemed important. Additionally, the lack of parametric requirements was important.

In summary, and supported by other published applications of PLS as summarized by Ringle et al (2012) the researcher primarily chose PLS as the preferred analysis method because:

- a tool with lower sample size requirements was important
- the lack of parametric requirements - important due to potential smaller sample size

- SEM can be applied when distributions are highly skewed (Bagozzi and Yi, 1994) which differentiates it from covariance based techniques which carry more stringent distribution requirements
- the complexity of the model hardly influences sample sizes
- simplicity of software implementation (SmartPLS program)

3.5.4.2 Assumptions in PLS Path Modelling

Before examining the findings, it is important to provide an overview of the PLS technique used and the underlying assumptions, as well as the particulars of the SmartPLS program which was used for analysis. As mentioned before, literature has cited that the distinctions of PLS path modelling as an analysis technique include less stringent distribution assumptions (Fornell and Bookstein, 1982) and sample size requirements (Chin and Newsted, 1999) that it is more robust in working with complex models using many latent variables and measurement items (Henseler, 2009), and the ability to work with formative latent variables. These considerations and factors particular to the SmartPLS program which is being used for data analysis and interpretation are discussed in the following.

Complex models

PLS path modelling is a predictive process which can handle many independent variables (Hubona, 2010) and thus was an appropriate choice for the analysis of this model. Hubona states what with very complex models, PLS has an advantage because it breaks the model down into its individual components (a succession of partial models) and scores the specific relationship between a pair of variables before going on to assess the next relationship. Covariance based techniques are not as flexible when analyzing complex models, with PLS being able to retain power and reliability possibly over that resulting from covariance based analysis.

Predictive capacity of PLS

Whilst PLS has strong predictive capacity and can be used in theory development, it has been widely applied to research as a theory confirmation technique (Hubona, 2010). Henseler and Fassot (2010) write that as PLS path modelling does not rely on distributional assumptions, direct inference statistical tests of the model fit are not available. Vinzi, Tincher and Amato (2010) write that whereas there is no overall fit index in PLS path modelling, a global criterion of goodness of fit has been proposed by Tenenhaus et al, (2004), the GoF index. However, usage of this index is not common practice yet. PLS maximizes the variance explained of the endogenous variables, and as such PLS is designed to explain variance, or to examine the significance of the relationships and their resulting R², as in linear regression (Gefen et al., 2000).

Multicollinearity

Hubona (2010) also states that because of the orthogonal analysis structure of PLS, multicollinearity amongst items is less of a problem, but this should be assessed and avoided at the beginning of the analysis procedure (the predictive latent variables should share less than 50 per cent of the variance explained). Ideally predictor variables should not be correlated at all but this is not an uncommon occurrence. As discussed previously, using exploratory analysis techniques, factor analysis was performed on the moderating community dimensions in order to refine the scale and prevent problems of multicollinearity within these constructs. Whilst it is desirable to have collinearity within a block of items measuring one construct, it is not desirable to have measurement items with a high correlation to other latent constructs (Hubona 2010), as this clouds results and interpretation a clear cause and effect relationship is difficult. Thus cross correlations between unrelated latent variables should be to a minimum.

Distribution Assumptions

Additionally, as opposed to covariance based SEM techniques which use maximum likelihood estimation, and require a sample which is normally distributed, PLS is a

“distribution free” approach, in that it does not make assumptions of the presence of normally distributed data. As the distribution of data is not known (or assumed), typical inferential techniques, such as conventional significance tests (e.g. confidence intervals) which require a normal distribution are not available. However, in order to provide t-values and levels of significance, the program SmartPLS uses a bootstrapping method of resampling within the data set. This will tell if the item is statistically significantly different than zero.

Standardized values

SmartPLS additionally standardizes all values so they have a mean of zero and a standard deviation and variance of 1. This has the advantage that if items were measured on different scales, these would all be standardized and thus path coefficients within the model can be compared which makes model interpretation easier (Hubona, 2010). SmartPLS however, also provides the capability to show unstandardized coefficients, as these may be important when comparing variables from different samples. The PLS method also provides better path estimates when using interval data such as a Likert scale (Hubona, 2010), as there is more information about variance than, for example, with a categorical scale containing fewer groupings. Hence, the use of PLS for Likert data such as used in this study is supported in the literature.

Sample Size and Power

An additional advantage of the PLS technique is its ability to work with smaller sample sizes. Chin (1998) indicates that an appropriate sample size can be determined by multiplying the maximum number of measurement items for a latent construct by ten (e.g. if within a model the highest number of items used to measure a latent construct is 3; the minimum sample size is 30). This has been more recently criticized as the reliability of the estimates will be lower. It is important to take into consideration the power of the effect trying to be measured and determine the appropriate sample size based on this (Hubona, 2010). In general, the smaller the sample size, the less reliable the path estimates will be.

Power is the measure of whether a detected effect within a model is reproducible within the general population. A power of 80 percent is generally accepted as it shows that if an effect is seen within the data set, it occurs in at least 80 percent of the instances within the data set. In this research, the software program GPower was used to determine the necessary sample size in order to assess a medium effect and the appropriate size was determined to be 96.

The objective of PLS is, overall, the same as that of linear regression: to show high R^2 and significant t-values and to reject the null hypothesis of no effect (Thompson et al., 1995). The objective of covariance based SEM, on the other hand, is to show that the null hypotheses the assumed research model with all its paths is insignificant, meaning that the complete set of paths as specified in the model that is being analyzed is plausible, given the sample data (Gefen et al., 2000) Additionally, the goodness of fit tests, such as chi square are not available with PLS so alternative methods must be used. Good model fit is established with significant path coefficients, acceptably high R^2 and internal (construct reliability) being above .70 for each construct (Thompson et al., 1995; Gefen, et al., 2000). Gefen continues that convergent and discriminant validity are ensured by checking that the AVE of each construct is larger than its correlation with the other constructs, and that each item has a higher loading (calculated as the correlation between the factor scores and the standardized measures) on its assigned construct than on the other constructs (Gefen et al., 2000).

The following tables 3.4 and 3.5 (adapted from Gefen et al., 2000) illustrate guidelines to assess the statistical validity of the model and constructs using PLS. Guidelines used for this research are highlighted in bold within the tables.

Validity	Technique	Heuristic
Construct Validity		
Convergent Validity	CFA used in covariance based SEM	GFI > .90, NFI > .90, AGFI > .80 (or >.90) and an insignificant c2, to show unidimensionality. Item loadings should be above .707, to show that over half the variance is captured by the latent construct. (Chin, 1998, Hair et al., 1998, Segars, 1997, Thompson et al., 1995).
Discriminant Validity	CFA used in covariance based SEM	Comparing the c2 of the original model with an alternative model where the constructs in question are united as one construct. If the c2 is significantly smaller in the original model, discriminant validity has been shown (Segars, 1997).
Convergent and Discriminant Validity	PCA used in PLS can assess factor analysis	Each construct AVE should be larger than its correlation with other constructs, and each item should load more highly on its assigned construct than on the other constructs.
Reliability		
Internal Consistency	Cronbach's alpha	Cronbach's alphas should be above .60 for exploratory research and above .70 for confirmatory research (Nunnally, 1967, Nunnally, 1978, Nunnally and Bernstein, 1994, Peter, 1979).
	SEM	The internal consistency coefficient should be above .70 (Hair et al., 1998, Thompson et al., 1995).
Unidimensional Reliability	Covariance-based SEM only.	Model comparisons favor unidimensionality with a significantly smaller c2 in the proposed measurement model in comparison with alternative measurement models (Segars, 1997).

Table 3.4 Comparison of Construct Validity and Reliability Guidelines

<i>Validity</i>	<i>Technique</i>	<i>Heuristic</i>
Model Validity		
AGFI	LISREL	AGFI > .80 (Segars and Grover, 1993)
Squared Multiple Correlations	LISREL, PLS	No official guidelines exist, but the larger these values, the better
χ^2	LISREL	Insignificant and χ^2 to degrees of freedom ratio of less than 3:1 (Chin and Todd, 1995, Hair et al., 1998)
Residuals	LISREL	RMR <.05 (Hair et al., 1998)
NFI	LISREL	NFI > .90 (Hair et al., 1998)
Path Validity Coefficients	LISREL	The β and γ coefficients must be significant; standardized values should be reported for comparison purposes (Bollen, 1989, Hair et al., 1998, Jöreskog and Sörbom, 1989)
	PLS	Significant t-values (Thompson et al., 1995).
	Linear Regression	Significant t-values (Thompson et al., 1995).

Table 3.5 Comparison of Model Validity Guidelines

3.5.4.3 Structural Equation Modelling and Interaction Effects

As one phase of this research is looking into the interaction effect of community participation on the relationship between perceived value and loyalty, it was important that the analysis tool enabled this function, and provided more accurate results than in first generation tools. In SEM, and the SmartPLS program, interactive effects of the moderating variables are tested within one model using product term approach. The researcher used the

following background and guidelines for creating and interpreting the research model within the SmartPLS program.

Cortina (1993) writes that during the development of scientific disciplines such as the social sciences, the complexity of hypothesized relationships and models has increased steadily. Jaccard and Turissi (2003) demonstrated that there are basically 6 types of models which describe the relationship between dependent and independent variables, including those which measure moderating (or interaction) effects when a moderator variable influences the strength of the direct effect between the independent and dependent variables (Henseler and Fassott, 2008). Baron and Kenny (1986) write that in general terms, a moderator is a qualitative (e.g. sex, race, class) or quantitative (e.g. level of reward) variable that affects an independent or predictor variable and a dependent or criterion variable.

Chin, et al. (2003) support that previously, interaction effects might have been dismissed as the analytical methods used to describe these were insufficient. Measurement error, which SEM takes into account, has been proposed to result in diminished detection of interaction effects as well as underestimating the strength of such effects (Chin et al., 2003; Busemeyer and Jones, 1983). First generation SEM techniques lacked the integration of measurement error in the analysis and thus might have led to these phenomena (non-detection of interaction effects or underestimation of effect strength). Henseler and Fassott (2008) state that although in the majority of structural equation models interaction effects are not taken into account, the literature supports the importance of understanding moderating effects in order to better understand complex relationships. For example, a researcher would not be surprised when customer satisfaction is correlated positively with customer loyalty, but understanding better the circumstances under which this relationship is either very strong or very weak would provide a significant progression in scientific knowledge. In this study, the moderating community variables are included in the model to understand better the circumstances under which perceived value and loyalty relate to each other in the news site

context, and the analysis of this interaction effect can be determined using SEM techniques and the SmartPLS program.

In PLS path modelling, there is a distinction made between two types of interaction effect calculation methods. The first is the product multiplier effect, where the product of the independent variable and the moderator variable is taken into consideration in the model. Thus the simplified model above, with the addition of a moderator variable would be depicted as follows:

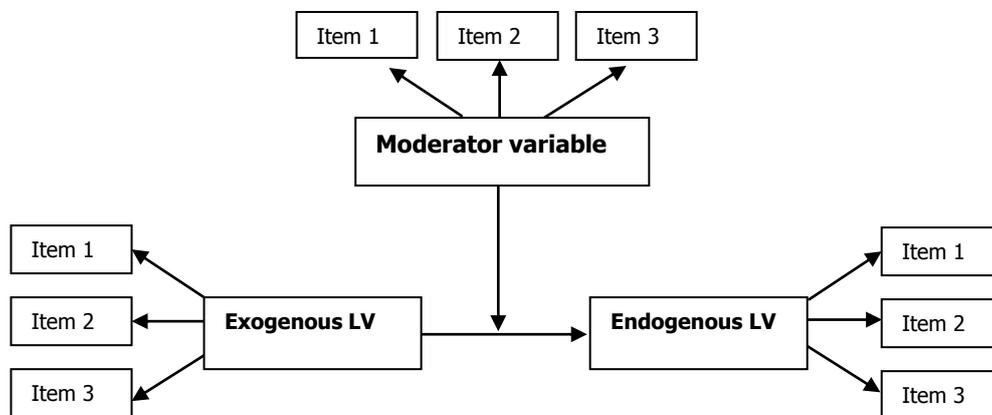


Figure 3.5 Interaction effects

The PLS product term calculation is then calculated as (Henseler and Fassot, 2008; Baron and Kenny, 1986):

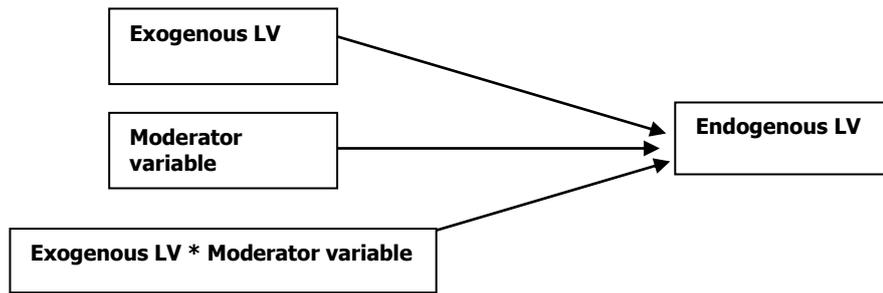


Figure 3.6 Product Multiplier method for PLS Path Model interaction effects

This calculation therefore separates the effects of each the moderator, exogenous as well as the product term (moderator * exogenous) which describes the single effect of each of these variables on the endogenous variable. Only when the direct effects of all the components of the product term are taken into consideration, can the product term represent the interaction effect, otherwise, overestimation of the interaction effect could result (Carte and Russell, 2003; Henseler and Fassott 2008). The moderating variable should be represented by an interval scale (Henseler and Fassot, 2008), as the community variables are this research.

In analysing moderation effects, the level of effect of the independent variable on the dependent variable changes in strength and or direction depending on the level of the moderator variable. Typical problems with assessing interaction effects have been accurately assessing the effects and correctly interpreting main effects in the presence of interaction effects. Following Chin, Marcolin and Newsted (1996, 2003), Hubona suggests a three step approach to analysing interaction effects in PLS, and was adopted in this research:

- Standardize the indicators for the main and moderating constructs
- Create all pair wise product indicators where each indicator from the main construct is multiplied with each indicator from the moderating construct
- Use the new product indicators to reflect the interaction construct

The two ways to determine the significance of the moderating effect are to bootstrap the model and look at the significance of the path coefficient, as well as determining the difference in the R^2 of the model with and without the moderating effect, and using Cohen's formula to determine the power of that effect, which will test the predictive quality of that moderating effect. This procedure was followed in the research and results are presented in chapter 5.

Baron and Kenny (1986) write that the presence of measurement error in either the moderator or the independent variable complicates the analysis of moderator variables. Whereas there are methods for making adjustments for measurement error as proposed by Kenny and Judd, these assume a normal distribution of data. However, as the PLS method takes measurement error into account, and does not require normally distributed data, the method provides the researcher with a more flexible calculation of moderating effects. This was also an important consideration in the researcher's selection of SmartPLS as an analysis tool.

3.5.4.4 Assessment of the Research Model

Grimm (1999) writes that the main critique for complex simulation models is that their results are so incomprehensible that theoreticians cannot learn much from them. Scheffer and Beets (1994) argue that if one is not able to understand the reasons of the behaviour of complex models, predictions produced with these models are of limited use.

Parameterization of models is one of the weakest points of modelling, as per Jørgensen (1994), and the problem is larger for models with many parameters. Many parameters are usually unknown, and on top of uncertainty in parameters, the model formulation in ecological models is usually uncertain (Schaefer and Van Nes, 2005). A related problem is that complex models are difficult to communicate and therefore the scientific soundness is hard to judge by other researchers. Results of a complex model may not be able to be reproduced by others; they can only be believed (Lorek and Sonnenschein, 1999). Hence,

Rykiel (1996) holds that if one does not understand why the model produces its results, it is hard to tell whether it is for the correct reasons. One reason why complex models are hard to understand is merely the large number of parameters and variables (Schaefer and Van Nes, 2005). However, perhaps the most important problem is that the number of relations between state variables gives rise to feedback. A powerful way to find out why the model shows its current behaviour is to repeat the analyses with simplified versions of the model. The purpose of these simplifications is not primarily to create a simpler and therefore a better model, but to gain better understanding about the causes of the patterns in the model (Schaefer and Van Nes, 2005).

Thus, due to the complexity of the model, the researcher will break the analysis down in to sub-models which examine each perceived value variable and its effect on the two loyalty constructs with the moderating community variables. In addition, the R^2 values of the full model will be compared in three iterations: perceived value → loyalty alone, perceived value and community constructs (as direct effects) → loyalty constructs, and the full model with the perceived value components, community moderators and loyalty constructs. The breakdown of the complete model into sub-models which were analysed in the research can be found in chapter 5, starting at section 5.5.

3.5.4.5 Group Comparison in PLS Path Modelling

In this study, the group comparison approach is being taken through applying the same model to two different sample groups which represent the socially and technically deterministic stances of domestication theory.

The second type of interaction calculation in PLS path modelling is by group comparison. Rigdon, et al. (1998) writes that if one or both of the interacting variables is discrete or can be formulated as such, researchers can apply a multisample approach where the moderating effects can be determined through the differences in path coefficients when the same model

is applied to two different data sets. This was the procedure followed in this study, the results of which are presented in chapter 5. Henseler and Fassot (2008) continue that if the moderator variable is categorical in nature, it can be applied in a group comparison without further refinement. However, if metric data is used in a grouping variable, such as in this study, it first has to be changed into a categorical variable. The most common technique is dichotomization where the moderating variable is divided into two value categories of high and low. If indicators have an interpretable mean, the grouping value is high for all indicators above the mean and low for all indicators below the mean. In the case the variables have no interpretable mean, the high grouping can be from the upper third, middle for the medium third, and low for the bottom third. A median split method can also be used. The indicators must be reflective in these cases (Hubona, 2010). The following method can be applied for reflective constructs (Henseler and Fassot, 2008), and was applied in this research in determining into which domestication group respondents fell.

- If all indicator values are above the mean, the grouping value is high
- If all indicator values are below the mean, the grouping value is low
- Otherwise observations should not be applied to any group

The diagram below pictorially describes this method:

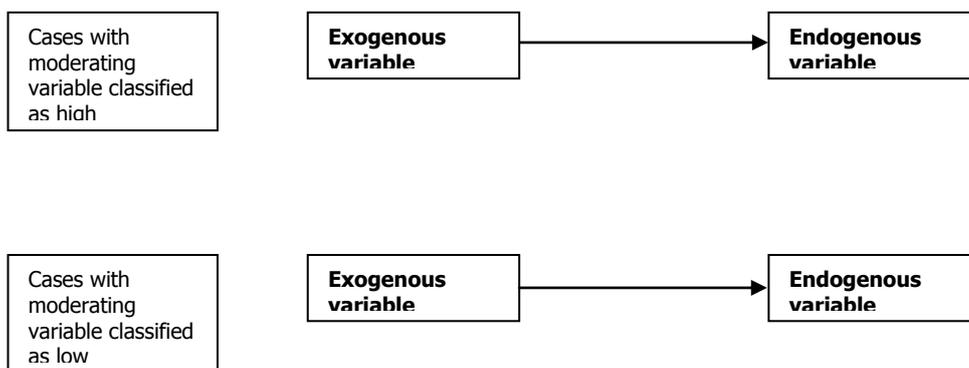


Figure 3.7 PLS Group Comparison approach for assessing interaction effects

The effect would thus be the difference between the two path coefficients.

3.6 Chapter Summary

In this chapter, the researcher described the background to the research design and described and provided justification for the analysis methods which were chosen and used within this research. Starting with a discussion of the research philosophy and supporting the choice of a sequential mixed methods approach, the two exploratory and explanatory phases of the research were described.

First, in the exploratory phase of the study, the researcher used qualitative and quantitative methods to determine and support two sets of measures to be used in the research. The first set of measures was to support the community construct used in the model. Based on a literature review, questions were generated and an online survey created which included open ended questions to determine if the researcher had been able to establish a set of questions which would be comprehensive enough to describe a user's participation in an online community, the motivation to join in the community as well as the effects which participation in the community might have on the user. This survey was administered to participants of online communities based on a snowball sampling approach. The community constructs resulting from this preliminary analysis was later used to test the effects of community participation on a user's loyalty to an online news website.

The second set of measures to be developed were to support the meta-theoretical approach in this research which looks at technology adoption from the perspectives of a social constructionist stance as opposed to a technically deterministic stance. Measures for domestication stages were developed by the researcher and refined through the use of qualitative interviews with two groups of online news site users in a focus group setting and supported by discussions with an industry expert with an extensive background on using domestication theory.

The results of these two data acquisition and analysis stages was a comprehensive quantitative survey which integrated the concepts of perceived value, community

participation, loyalty and domestication stage differentiation and was administered to users in an online news services context. The results of this final survey are explored in chapter 5 which details the findings of this stage, and chapter 6 in which these findings are discussed and implications drawn. The following chapter 4, *Exploratory Research Findings*, details the results and data analysis of the preliminary, two pronged, exploratory research phase.

Chapter 4

Exploratory Research Findings

4.1 Introduction

This chapter elaborates on the results of the first, exploratory stage of the research. As described in chapter 3 on Methodology, this exploratory stage was designed to further develop and confirm the community constructs discovered within the literature.

Additionally, the quantitative measures for the domestication stages needed to be developed for the final survey. This chapter first begins with this introduction and then describes the procedures and results for these two phases of exploratory research. The chapter concludes with a summary and follows the format depicted in figure 4.1 below.

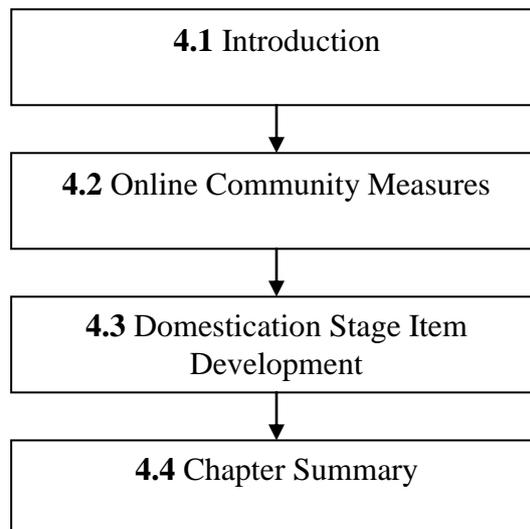


Figure 4.1 Structure of Chapter 4

Following the example set forth by Creswell (2009), the intent of this phase of the sequential mixed methods study is to solidify the community measures used in the research model using quantitative methods (an online survey including open ended questions) and the domestication stage measures using qualitative methods (focus group discussions). The resultant, refined measures are incorporated in the final, confirmatory stage of the research; the results of which are covered in chapter 5. These exploratory findings can be seen as *stages 2 through 4* in the scale development process:

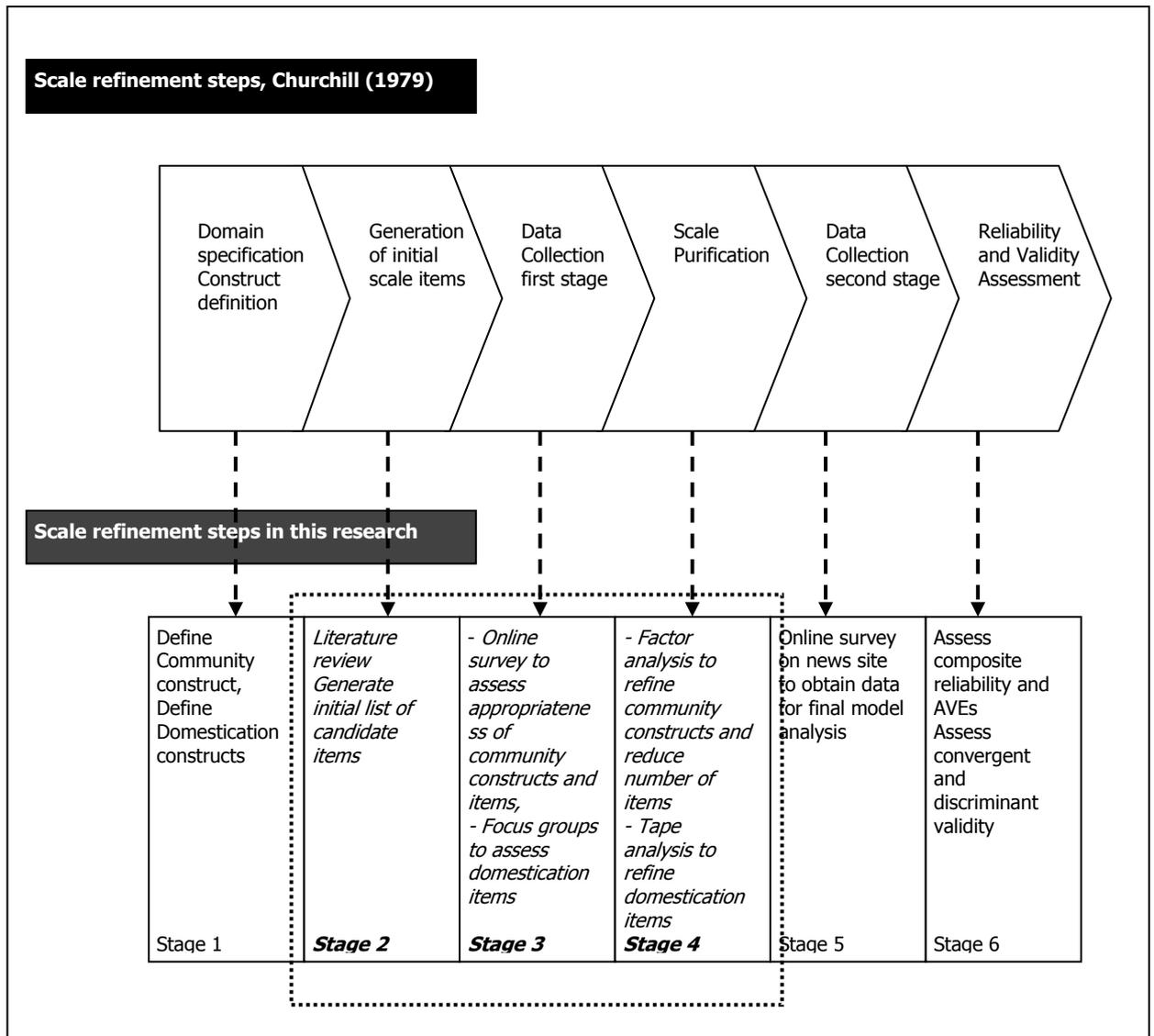


Figure 4.2 Scale development phases covered in this chapter

4.2 Online Community Measures

The basic premise of this research is that social communities influence the relationship between perceived value and loyalty in the context of online news services. This broad statement needs in turn to be broken down into its components. First, the social community construct will be defined and to this end, it is necessary to determine what is meant by social community, and what aspects of social community would be necessary to measure to gain an understanding of their effect on the relationship between perceived value and loyalty. The social community adopted in this research is an online community. This definition thus reduces the scope of focus to online communities, as opposed to looking at other types of social community (family members, friends, etc.). It is meant to focus the research and develop the understanding of how online communities and their unique attributes affect the link between perceived value and loyalty. The constructs, which were found in the literature and are detailed in the literature review in Chapter 2 in section 2.8 and tables 2.3 and 2.4, fell into the three basic categories defined by the researcher:

- Participation
- Motivation
- Effect

As the purpose of this stage of the research was to explore the possible underlying structure within the data, exploratory factor analysis was chosen by the researcher as an appropriate method of data analysis. With exploratory factor analysis, the number of constructs and the underlying factor structure can be identified (Child, 1990). Traditionally, factor analysis has been used to explore the underlying structure in a set of interrelated variables without imposing any preconceived structure on the outcome (Child, 2006). However, seldom is such an analysis carried out without some preconceived notion or “hunch” and that is also true within this study. The researcher based the selection of topics to be explored in the community construct from a review of the literature as detailed in Chapter 2 and chose to perform exploratory factor analysis in order to discover structure in the variables at hand

(Child, 2006) and to confirm the researcher's initial categorization of items into the three assumed constructs: participation, motivation and effect.

As discussed in the Chapter 3, which details the methodology employed in this thesis, a questionnaire to assess the validity of community components revealed in the literature review was developed by the researcher. The purpose of this data collection and analysis stage was to solidify online community measures and ensure question validity as well as to confirm the validity of the underlying constructs developed by the researcher using factor analysis.

4.2.1 Community Survey Findings

An online survey was developed as described previously in the methodology chapter (chapter 3) and administered to a sample of respondents who were participants in online communities. The survey text can be found in appendix A. The electronic link to the survey was posted either by the researcher or by a member of the community. Posting of the survey link was accomplished over a period of 8 weeks starting in September 2009 and all surveys were closed to responses in December 2009. Data was collected from users of several online communities in order to achieve a wide array of responses. Potential respondents were emailed a link to the survey and asked if they would both complete it as well as post it on communities in which they took part or visited. A total of 6 links were posted which resulted in 155 responses, out of which 98 were usable, that is, in which the missing data was less than 20%. Excel data files were procured from the Survey Monkey.com website and cleaned by the researcher to a format suitable for importing into SPSS. Data was screened for outliers and the analysis data functions in SPSS were subsequently used. Results are detailed in the following sections.

4.2.1.1 Participation Construct Correlation matrices and Cronbach's alpha.

First, correlation matrices were built for the question group which pertained to Participation. As there was no presence of hypothesis, a two tailed test was carried out. Cronbach's alpha scores were used to assess question group reliability.

The high level of correlation between some factors means that these are probably redundant questions which needed to be excluded. The original survey can be found in the appendices; the questions correlate to the numbers as seen in the original survey. The questions which were included in the initial analysis in SPSS can be found in the survey in appendix A and were:

Question 5A Only read questions and comments from other members without posting

Question 5B Post Questions

Question 5C Post Comments

Question 5D Post Answers to questions from other community members

Question 6A Rate the usefulness of other people's reviews or comments

Question 6A was removed due to low response rate due to inapplicability, as several of the sites on which the survey was posted did not have the capability for users to rate other's comments. While this feature has become more prevalent, at the time this survey was administered it was still in its infancy.

The researcher followed the guidelines of Fields (2005) in applying the Analyse => Scale Reliability analysis to determine the reliability of the scale. The results showed that through removing item 5A, the Cronbach Alpha score could be increased, and whilst there were three items still measuring the participation scale, this was carried out by the researcher.

Additionally, a factor analysis investigation extracted one component indicating that the three remaining items were in fact measuring the same underlying construct. Table 4.1 details the participation construct findings.

	<i>Scale Variance if Item Deleted</i>	<i>Corrected Item-Total Correlation</i>	<i>Squared Multiple Correlation</i>	<i>Cronbach's Alpha if Item Deleted</i>
Q5B Post Questions	13.431	0.801	0.631	0.819
Q5C Post Comments	12.014	0.764	0.590	0.846
Q5D Post Answers	12.250	0.767	0.595	0.842
<i>Cronbach's Alpha</i>	<i>Cronbach's Alpha Based on Standardized Items</i>			<i>N of Items</i>
0.884	0.886			3

Table 4.1 Final Participation Item Statistics And Cronbach’s Alpha

It is important to note that this step was carried out by the researcher to ensure a concise and reliable scale could be ascertained when these measures were incorporated into the final survey. The final survey, which was administered to the final sample of news website users, can be found in appendix B and contains all of the original participation items. The items used in the final model analysis in the confirmatory stage of the research can be found in Chapter 5 which includes the confirmatory stage results. Here, Table 5.6 shows the composite reliability of the items used in the final scale, and Table 5.7 demonstrates the T-values and loading of the items resultant from the survey of online news site users.

The purpose of this stage of the research was to develop measures which would capture online “communityness”. The following section continues to describe the process of

developing a scale for the less distinct “Motivation” and “Effect” measures which were proposed by the researcher to be pertinent dimensions in online community participation.

4.2.1.2 Motivation and Effect Constructs

While participation was relatively straightforward as it was conceptually different from the other constructs, the items deemed necessary by the researcher to measure the less distinct concepts of motivation to participate in a community (the preconditions which exist to entice a user to visit or participation in the community) and the effect of participation in the community (or the post visit consequences) were less distinct. In the initial exploratory survey, measurement of motivation and effect were assessed using a multiple item scale. Following Fields (2005) a correlation matrix was created and examined.

Again, the generally high level of correlation between some items means that there were probably redundant questions which could be eliminated. Due to the high number of items, the Cronbach’s alpha score was also high at .932. Cortina (1993) states that the value of this alpha depends on the number of items on the scale, and therefore it is easier to get a high alpha because of the large number of items. Additionally, Grayson (2004) demonstrated that data sets which have the same alpha can have very different structure; that an alpha may pertain to a data set which comprises several underlying factors. Grayson (2004) demonstrated that an alpha of .8 can be achieved in a scale with one underlying factor, with two moderately correlated factors or with two uncorrelated factors. Cronbach (1951) also recognized this and indicated that if several factors exist then the formula should be applied separately to each factor. Thus the researcher found support for the fact that Cronbach’s alpha values would need to be determined for individual factor item sets.

The next step was therefore to perform a factor analysis on the full set of items measuring the constructs of motivation and effect. Field (2005) writes that the maximum likelihood method and Kaiser’s alpha factoring can be used when we wish to generalize findings to a

larger population and as such alpha factoring was used in this analysis. Since in factor analysis the researcher is interested in finding common underlying dimensions, common variance as opposed to unique variance (variance which is attributed to one measure) or random variance (variance which is attributed to one measure, but not reliably so) is important and was considered. Communality is the measure of the proportion of variance explained by the extracted factors. Literature exists which concludes that solutions derived from principal component analysis differ little from factor analysis techniques (Guadagnoli and Velicer, 1988), but Stevens (1992) holds that for 30 or more variables, and communalities greater than .7 for all variables, solutions are not likely to be different, but for fewer than 20 variables with low communalities, differences can occur (Field, 2005). Eigenvalues greater than one were retained, following Kaiser (1960), as the number of variables was less than 30, and the sample size was less than 200, meaning that determining the proper eigenvalue from the inflection point of a curve on a scree plot would not be accurate (Stevens, 1992 in Field, 2005). Field also indicates that the closer the communalities are to one, the better the factors are at explaining the data and therefore communalities are a good indicator of whether too few factors have been retained.

Of the two types of rotation, orthogonal or oblique, the researcher chose varimax, while even though it is very unlikely that the factors are completely independent of one another (unlikely when measuring psychological attributes), many researchers in the social sciences, do use orthogonal rotation (e.g. Pura, 2005). Stevens (1992) indicated that a factor loading of .512 should be used as the lowest in sample sizes of around 100, so this is the value which was used in this analysis. Missing values were replaced with the mean.

Field (2005) indicates that before running a factor analysis, a data screening process should be undertaken. If there are variables which do not correlate with any other variable, these should be removed before running factor analysis. In addition Field suggests that if after running a determinant test the determinant of the R-matrix is less than .00001, the data should again be screened to look for variables which correlate very highly ($R > .8$), and

subsequently finding multicollinearity in the data should raise questions about the questionnaire.

The researcher followed these guidelines in the analysis and removal of items. The resultant factor analysis determined 5 factors accounting for 71.7 % of the variance. The Kaiser-Meyer-Olkin measure of sampling adequacy was very good at .821 (values above .8 are very good: Fields, 2009). Bartlett's test of sphericity was also significant. Following the principle component analysis, the researcher performed Cronbach's alpha analysis to retain three items for each construct which showed the highest reliability. These are detailed next.

4.2.1.3 Resulting Items for Motivation and Effect Constructs

Within the original community survey, the question groups determined from the literature for measurement of the motivation construct were found in groups 7, 8, 11, and 12 of the original community survey which can be found in Appendix A. For the effect construct, the researcher formulated the questions in groups 9, 10, 13, 14 and 15 in the community survey. The following shows the resultant final question groups after unidimensionality testing (factor analysis) and reliability tests.

Factor 1 Effect: Post visit sentiment (Cronbach's Alpha = .831)

Q14A: I feel well informed

Q14C: I feel I trust the community members

Q14D: I feel informed about what is new

Factor 2 Motivation: Personal attachment to members (Cronbach's Alpha = .851)

Q7A: Conversing with others is an important activity in this community

Q12A: People who are important to me participate in this community

Q12B: I value information on this community from people who are important to me

Factor 3 Effect: Sentiment of Community Attachment (Cronbach's Alpha = .915)

Q9D: Other community members and I hold the same common values

Q9A: I feel very attached to the community

Q9B: I see myself as part of the community

Factor 4 Motivation: Advice/information drivers (Cronbach's Alpha = .873)

Q8B: I visit this community because I can find the information I need on it

Q7C: Finding advice is an important activity for me in this community

Q7B: Finding information is an important activity for me on this community

Factor 5 Motivation: Interaction with members, (Cronbach's Alpha = .714)

Q7E: Finding out what people are talking about is an important activity for me on this community

Q7F: Reading other peoples opinions is an important activity for me on this community

Q8E: I visit this community because I enjoy interacting with members

This table shows the results of the original factor analysis from SPSS, which formed the basis for the question groups on the previous page.

	Component				
	1	2	3	4	5
Effect Question Group 1					
Q14A Feel informed	0.798				
Q14C Feeltrustmembers	0.796				
Q14D Feelinformed	0.790				
Q7D Whatsnew	0.726				
Q14B Feelknowwhatimp	0.630				
Q13D Memtrustworthy	0.611				
Motivation Question Group 1					
Q12B Valueinfohere		0.797			
Q12A Peopimptomehere		0.772			
Q7A Converse		0.769			
Q11B Imptobelinked		0.757			
Q8C Socialsupport		0.576			
Effect Question Group 2					
Q8G Enjoyhelping			0.815		
Q10A Feelgoodtohelpothers			0.795		
Q8F Meetnew			0.635		
Q9B Seemeaspart			0.629		
Q9D Commonvalues	0.527		0.583		
Q9C Sameobjectives			0.543		
Q9A Attached			0.535		
Motivation Question Group 2					
Q8B FindInfo				0.771	
Q7C Getadvice				0.696	
Q8D PersIssuehelp				0.670	
Q7B Findinfo				0.516	
Motivation Question Group 3					
Q8E Enjoyinteract					0.551
Q7F Opinions					0.741
Q7E Peopletalk					0.733
Q8A Entertain					0.689

Table 4.2 Factor Analysis Results

The result of this phase of the research was a consolidated and validated set of items measuring community participation, motivation to join and take part in as well as the post visit effect of the community on the participant. This item set was then integrated into the final survey. The exploratory and final questionnaires used 7-point Likert scales following Nunnally (1978). Question wording was subsequently confirmed with members of the news industry research group, IFRA. Thus, the basis for this phase of the research was first developed by the researcher through a review of the literature, results of which were triangulated to ensure appropriateness and validity of items through the community questionnaire exploratory analysis detailed above. Additionally, validity and appropriateness of items were further triangulated through expert opinion to ensure wording and topics were of importance for use within the online news site context. The next phase of this exploratory part of the research was to develop the constructs for domestication which will be used to dichotomize the sample.

4.3 Domestication Stage Item Development

In this part of the exploratory phase of the research, the researcher strove to operationalise the concepts within the underlying domestication theory in order to be able to integrate these in the final survey to be administered to online news service users. As discussed in chapter 3, the researcher chose a focus group and tape based content analysis method for this stage of the research.

Williams and Katz (2001) indicate that a focus group is defined as a small gathering of individuals assembled by a moderator who have a common interest and through which the researcher uses the group and its interactions as a way to gain information about a particular issue. Glitz (1998) suggests that a premise to the acquisition of useful and pertinent data from focus groups is that the individuals can provide a rich source of information on a topic. As such, the researcher sought out individuals who were well versed and knowledgeable about the news industry as well as using online news sites. This was carried out in conjunction with the IFRA organization and users within the organization who were familiar with online news sites and who represented a diversity of experience with news sites as well as demographics; particularly age and sex were sought. Characteristics of the focus group members can be seen in the table in appendix c. Following Kidd and Marshall (2000) data were analyzed on an individual level as input from each participant individually was deemed more important. Thus, each participant was asked specifically their response to the themes posed. Following Krueger and Casey (2000) and Langford et al., (2002), the researcher chose 12 participants, 6 in each group. The results of these group discussion was used in addition to current domestication research, and was further informed through expert opinion.

4.3.1 Focus Group Description and Results

Preceding the focus groups, the researcher attempted to define measures which ascertained domestication stages through a review of the literature. This basis was further enriched by Haddon (expert opinion) in personal correspondence with the researcher on the stages of domestication, in particular that questions which could be used to ascertain these stages are also dependent to some degree on the technology, and thus the questions asked to ascertain the place a mobile phone (for example) has in a user's life and lifestyle are different than those which would be asked for a online news site. As such, there are no clearly defined measures for the context of this research (an online news site) so these must be generated not only from previous research, but specifically for this context. Creswell (2003) supports this practice in his description of the sequential approach to instrument development, writing that in a sequential approach the researcher should obtain themes and specific statements from participants in an initial qualitative data collection and in the next phase these statements can be used as specific items and themes for scales to create a survey instrument that is grounded in the views of the participants. Profiles of focus group participants can be found in appendix C.

4.3.1.1 Sequence of Focus Group Discussions

As an introduction to the focus group discussions, the researcher provided a description of the research and the purpose of the focus group. A summary of this text follows.

This research uses domestication theory in assessing differences in the relationship between perceived value and loyalty in the context of news services when looking at different socially orientated and technically orientated groups. Domestication theory is integrated in the research as a means of dividing the participant sample. Participants will therefore be classified within the study as to the stage in the domestication cycle at which they are based on the responses to the domestication stage questions. The stages of domestication are described as follows and are to be used to ascertain where users are along the adoption

cycle. One of the main advantages of the domestication concept is that it also provides an insight into the social, symbolic meanings of technologies, and doesn't only look at the purely functional aspects.

The purpose of the focus group is to confirm the descriptions of themes which have been developed in the online news context for these domestication stages and to develop questions sets which will capture these stages and are appropriate for online news site users. I will describe each domestication stage in turn.

4.3.1.2 Appropriation stage

Appropriation describes the portion of the consumption process in which the particular object leaves the commercial world and enters our sphere of objects. It represents functional value. This stage in the cycle includes the sense that we know of the particular object or service and understand that it could somehow fit into our lives (Ling, 2004). Appropriation is the point at which the object “leaves the world of the commodity and the generalised system of equivalence and exchange and is taken possession of by an individual or household and owned” (Silverstone, 1992). Silverstone also points out that appropriation is not restricted to physical artefacts, but also applies to media content such as the selection of television programs to watch, what computer software to buy or which telecoms services to subscribe to. Silverstone also writes that the meanings ascribed to objects and services within the household are not necessarily the same as the meanings which are ascribed to them in the public sphere (a specific automobile may be advertised as a luxury item, but a household may ascribe the meaning of safe means of transport to it). As described in previous research (Lee, 2007) the appropriation stage has two dimensions: motivation for acquisition and information gathering process (which leads to acquisition). These themes from Lee’s research were used as a basis for the discussion. The themes for the appropriation construct were as follows:

Dimension	Themes	Descriptions
Appropriation	Reasons for acquisition Reasons for using the site	Has the user actually used the site? What motivation did he have for visiting the site? Reasons for visiting the site, barriers to usage

Table 4.3 Themes for the Appropriation Construct

QA1 *“To me, just asking how many times I visit the site per week or something would give you the information about if the site is used and how much” A5*

QA2 *“I think it is important also to understand why he goes to the site, or what made him visit it. Things important to me are things like, well, first of all to understand what’s new everywhere in the world like who bombed who(m). Then I look at the local news, and if I have time I read the comics.” B1*

QA3 *“I never look at the ads, I hate the ads, especially when they use up the whole screen and take forever to load, but I know how important advertising is to the sites so you probably want to include this...it would be important.” A1*

QA4 *“I guess it depends on the site. If you visit a local news site then probably things like community news, what the mayor did yesterday and what they’re going to build on the empty plot is probably important.” B2*

Final Appropriation measurement items:

- How often do you visit this news site?
- Why do you visit the site?
 - To read about general news
 - To read about the local news
 - To find local information
 - For the advertisements
 - To find up to date information
 - As a supplement to the printed version of this paper

4.3.1.3 Objectification stage

This stage represents the way in which a service or technology is displayed and represents symbolic value. Silverstone (1992) supports that if appropriation is the process of taking possession and assuming ownership; objectification “reveals itself in display and in turn demonstrates the classificatory principles that inform a household’s (or user’s) sense of itself and its place in the world” (1992:22). Ling (2004) phrases objectification as the description of how a particular object or service comes to play out our values or sense of aesthetic. Ward (2005) supports objectification is the active shaping of the object to merge with physicality of the household. This stage of the domestication process describes how we think through the way in which an object will fit into our world – what its placement, use, accessibility, time consumption, etc. say about us. Objectification is the way in which we work out our identity through the ownership of a particular artefact. Silverstone (1992) writes that all technologies have the potential to be integrated into an aesthetic environment, and many are purchased as much for their appearance and compatibility with the aesthetic environment as for their functional significance. Silverstone also points out that objectification of technologies or artefacts does not take place, nor can it be understood in isolation. It must be evaluated both within the social context as well as in context with other artefacts in the environment whether coherent or contradictory. Lee (2007) in using domestication theory in the study of mobile phones describes objectification as the carrying behaviour and the meaning of the mobile phone.

Additionally based on this description, questions designed to measure the objectification stage were as listed in table 4.4.

Dimension	Themes	Descriptions
Objectification	Meaning of product in lives	Does the user communicate to others his usage of the site?
	Usage behaviour as seen by others	Have others noticed or commented on a user's site usage? What using the site says about the user.

Table 4.4 Themes for the Objectification Construct

QO1 *“So when thinking about using a news site, or any site, I would say that if someone knows I use the site, like because he says “did you see that article or blog or something”, then he knows if I go to that site. Sometimes it’s important.” B4*

QO2 *“Sometimes I like to talk to people about what I see somewhere, like on the Huffington Post when I see an article I kind of like to tell people because it means I’m on the right sites, if you know what I mean.” A4*

QO3 *“I think the site or the paper you read says a lot about you...like you see someone reading the financial times and you think he must work in finance even though it’s got a lot of business reporting.” A5*

QO4 *“If I understand correctly, the meaning ascribed to the site is what using the site means to me and why I would use it. For me I like to go and find out what’s going on in the world. I always go to one site usually because after I feel I know enough about what’s going on in the world. I guess maybe that shows other people that I am informed” A2*

Final Objectification stage measurement items:

- Others have commented that I use this new site
- I talk to others about how I use this news site
- Using this site means I am well informed about the news

4.3.1.4 Incorporation stage

This represents how the object or service is used and can be seen as functional value. Ling (2004) writes that while objectification focuses on the aesthetic side of the domestication of an artefact, incorporation directs itself more toward the functional. In effect, they are two sides of the same coin. While objectification aids in the definition of the sense of self, incorporation describes the functions of the artefacts, not just how they are described in the owner's manual, but all those functions which are applied by the user. Incorporation also describes the process by which objects or services are included into the temporal structures and routines of the household or user. This point in the domestication cycle also examines how a particular device is incorporated into an existing array or artefacts. Ward (2005) describes incorporation as the stage at which the process of ascribing meaning to an artefact takes place. Lee (2007) describes two facets of the incorporation phase: User Interface Usability and Learning process.

Based on this description, questions designed to measure the objectification stage were based on the statements in table 4.5.

Dimension	Themes	Descriptions
Incorporation	Finding information	How well the user can find information on the news site.
	Being able to find their way around Self-efficacy	How well the user can find what he is looking for on the news site.
	Basic knowledge of the site	Whether the user could help others find their way on the site

Table 4.5 Themes for the Incorporation Construct

Q11 *“I have a friend who is always on YouTube and he can use it like nobody else I know. But I don’t know how relevant that is. I think on a news site it would be important for people to just be able to find the articles they want to read. That would show they knew how to use the site, I think.”* **A3**

Q12 *“Another thing is... like your YouTube friend... I know some people who really know how to use some sites and I ask them how to find something, or upload something. Things like that would help to figure out if the guy knows what he’s doing or if he’s just stumbling around there.”* **A5**

Q13 *“When you’re good at finding your way around a website you think it’s really easy. You can always find what you’re looking for because it’s easy to get around (the site).”* **B1**

Final Incorporation stage measurement items

- I can find what I am looking for on this site.
- The structure of this website is clear and easy to navigate.
- I could describe to others how to find what they are looking for on this site.

The fact that a user can describe to others how to navigate around the site shows that he has used it and has become comfortable with using it to the point he could describe how to use it to others. If the user finds it easy to navigate and if he can find what he needs, and in turn describe to others how to find what they need, he's been able to incorporate from a user interface usability perspective (following also Lee, 2007).

From the amount of time spent on the site (appropriation stage), in combination with the responses to these incorporation questions, the researcher can ascertain how much a user has incorporated the technology temporally into his daily life. For example, if the user spends more time and scores high on the incorporation questions (he's able to find what he wants), this indicates that he is probably not spending time searching around the site but actually using it.

4.3.1.5 Conversion Stage

This is when the service becomes a part of the person and represents both functional and symbolic value. Ward (2005) supports that throughout the processes above, the artefact is given meaning so that it not only reaches taken for granted status, but is also used to carry symbolic values about the home to the outside world. This final stage is called conversion. Silverstone (1992) describes conversion as the phase of the cycle in which others incorporate their understanding of the artefacts in their broader understanding of the person consuming the artefact. Ling (2004) posits that it is at this point when the person who purchased and is using the item hopes to realize its social effect. Lee (2007) focuses on the

two dimensions of individual adaptation of the technology and the ability of the user to know enough about the technology to be able to generate wish lists of desired features. Thus, at this stage, the user has adopted the technology to such an extent that it has become fully integrated and lack of usage would cause a void.

Dimension	Themes	Descriptions
Conversion	<p>Individual adaptation or transformation of technology</p> <p>Fully integrated in his life and it becomes a part of his personality</p>	<p>Has the new site become an integral part of the user's routine?</p> <p>Would removal of the service create a sense of void in the user?</p> <p>Does the user understand the service to the extent that he is able to find desired features which are missing?</p>

Table 4.6 Themes for the Conversion Construct

QC1 *“Back to my YouTube friend, he knows everything about the site, he’s constantly on it and he’s like known as “Mr YouTube”. He’s always talking about what’s missing and what they need to add to make it better. But I don’t think he’d like to be called Mr YouTube to his face. He might think people think he’s weird.” A3*

QC2 *“It’s the people who walk and talk something and you just know that if they couldn’t use it, they would really miss it. I have some things like that... I would be lost without my Blackberry...and everyone knows that.” B3*

QC3 “I think if someone is converted, to a news service in this case...and I know people like this, he is consistently on the site... at least several times a day and would really miss it if it went down.” AI

Final Conversion stage measurement items:

- I consider myself a consistent user of this service.
- I feel I would miss this service if I was not able to use it.
- I would like to see some additional features on this site.

These domestication items, developed through the focus groups were subsequently integrated in the final news site survey. The results of the survey and the subsequent results of the domestication research are shown in chapter 5 and discussed further in chapter 6.

4.4 Chapter Summary

In this chapter, the researcher described the findings of the two exploratory phases: one which was designed to confirm the community measures and the other which was designed to develop the domestication measures which will be used to stratify the sample. A quantitative survey based method (containing open ended questions) was used to confirm the researcher’s initial questions to ascertain the community constructs: Participation, Motivation and Effect. Indeed, the data demonstrated empirical support for these constructs, and the researcher was able to create sets of items showing good reliability values which could be integrated into the final quantitative stage of the research. Qualitative data from groups of news site users was also used to develop domestication stage measures. These measures were also informed by expert opinion and previous research. In the following chapter, the results of the final, confirmatory stage of the research are detailed.

Chapter 5

Confirmatory Research Results

5.1 Introduction

As discussed in the previous chapter, constructs in the research model were augmented and confirmed in order to be appropriate for administration in a news service context. This was based on consultation with experts in the news industry in order to ensure the wording of latent variable questions was appropriate, as well as ensuring aspects of perceived value were relevant to this industry. Relativity of community variables introduced from the researcher in this study was also confirmed through the exploratory research results as detailed in the chapter 4. Based on these exploratory findings, the model constructs and items were confirmed, eliminated and/or altered as necessary. The final survey was then placed on an online news site in order to gain results for statistical analysis.

In addition to the main model findings which are presented in this chapter, the researcher first ran tests to determine if there was a difference in the explanatory power of the model when including and excluding the community constructs. It was found that the addition of the community constructs to the model did provide a better explanatory model than one with out these constructs. Details of this discovery start the analysis discussion in section 5.5, *Full Model Analysis*.

This chapter follows the format illustrated in Figure 5.1.

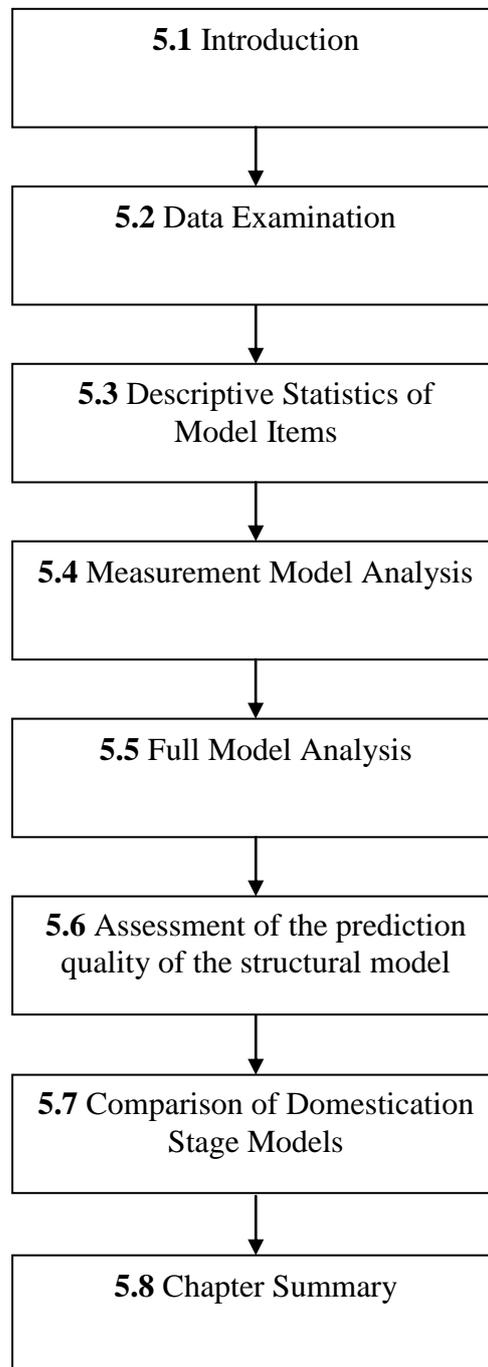


Figure 5.1 Structure of Chapter 5

5.2 Data examination

This section comprises an examination of the data. The study was conducted using a questionnaire posted on an online news site which has an offline presence; a printed version of the newspaper which is associated with the online news web site. Additionally, integrated within the online site was an active online community which was necessary to assess the online community aspects proposed in this study and their interaction with loyalty. Data analysis was performed with SPSS initially in order to obtain descriptive statistics for the sample and the responses.

5.2.1 Response rate

In total, 150 people started the survey. Of these, 8 invalid responses were deleted leading to a data set comprised of 142 responses. The data analysis was performed using PLS-based structural equation modelling which has an impact on the sample size necessary. Using the suggestions for appropriate sample size for PLS based analysis (also discussed in chapter 3), a sample size of 80 was deemed to be necessary as this was ten times the number of structural paths directed at a particular construct (Chin et al., 1996). Following these guidelines, a sample size of 142 was deemed to be suitable enough.

5.2.2 Respondent Profiles

Demographic information on the respondents was gathered within the survey and included gender, age education level, amount of time spent on the Internet as well as the amount of time spent on the site. Reasons for visiting the site were also assessed. A description of these items follows. Tables 5.2a and 5.2b show the sample characteristics in tabular form.

5.2.2.1 Gender

Respondents were asked in which category, male or female, they fall. Of those who filled out the survey, 62 (43.7%) were male and 38 (27.5 %) were female. A total of 41 respondents (28.9%) refused to answer the question.

5.2.2.2 Age

The age categories were also asked to be specified. No respondents were under 18, two (1.4%) were between 18 and 29 years of age, eight (5.6 %) respondents were between 30 and 39 years, 24 (16.9%) were between 40 and 49, 27 (19%) were between 50 and 59, 43 (30.3%) were between 60 and 69, 16 (11.2%) were between 70 and 79, and 8 (5.6%) were 80 or older. A total of 14 respondents refused to answer the question.

5.2.2.3 Education Level

Level of education was asked and respondents fell into the following categories: nine (6.3%) held a grade school education, 12 (8.5%) had received some high school, 12 (8.5%) had graduated high school, 14 (9.9%) had some vocational or technical school, 26 (18.3%) had completed some college or university, (up to 2 years), whereas 14 (9.9%) had completed more than 2 years of college. A total of 15 (10.6%) had graduated college and 14 (9.9%) held a post graduate degree and 26 respondents refused to answer the question.

5.2.2.4 Internet usage

Amount of time spent on the Internet per week was asked and respondents fell into the following categories: no respondents spend less than one hour on the Internet weekly, one indicated they spent between 1 and up to 2 hours, 13 (9.2%) spent more than 2 and up to 3 hours, 16 (11.3%) spend more than 3 and up to 4 hours, whereas 97 (68.3%) spent more than 4 hours weekly on the Internet. A total of 15 respondents refused to answer the question.

5.2.2.5 Reason for visiting the site

Respondents were asked to indicate their main reason for visiting the site. Possible responses were valued on a 7-point Likert scale from “Strongly disagree” to “Strongly agree” and comprised the following.

Reason	Strongly Disagree	Strongly Agree
to read about general news	19 (13.4%)	23 (16.2%)
to read about local news	4 (2.8%)	100 (70.4%)
to find local information	13 (9.2%)	44 (31%)
to read the advertisements	46 (32.4%)	3 (2.1%)
to find up to date information	20 (14.1%)	31 (21.8%)
as a supplement to the printed paper	48 (33.8%)	13 (9.2%)

Table 5.1 Reasons for visiting the online news site

Thus, the strongest driver of the items asked was that respondents were interested in reading about local news, with advertising being the weakest driver.

5.2.2.6 Time spent on the online new site’s community

Respondents were asked to indicate if they ever visited the online community on the news site and if so, how much time they spent there. A total of 25 respondents (17.6%) indicated they never visited the community, 16 (11.3%) indicated that they visited it for less than an hour per week, 48 (33.2%) indicated they visited it for 1 hour to less than 2 hours. 25 (17.6%) indicated they visited it 2 hours to less than three hours, 11 (7.7%) indicated they visited the community for 3 hours to less than 4 hours, and four (2.8%) indicated they visited the community for over 4 hours per week. A total of 13 did not answer the question.

5.2.2.7 Hard copy purchase

Additionally, respondents were asked how often they purchased a hard copy of the newspaper with which the site was associated. A total of 64 (45.1%) indicated they never purchased a copy, 22 (15.5%) indicated they purchased one copy a week, 11 (7.7%) indicated they purchased twice a week, five (3.5%) purchased 3 times a week; four (2.8%) and three (2.1%) purchased in each of the categories 5 and 6 times a week, and 14 (9.9%) indicated they purchased a hard copy every day. This could be an indication of the general trend in the news industry of the decrease in hard copy purchase.

Tables 5.2a and 5.2b consolidate the sample characteristics.

Sample Characteristics	N Total 142	% 100
Gender		
Male	62	43.7
Female	38	27.5
Refused to Answer	41	28.9
Age		
Under 18	0	0
18 - 29 years	2	1.4
30 - 39 years	8	5.6
40 - 49 years	24	16.9
50 - 59 years	27	19
60 - 69 years	43	30.3
79 - 79 years	16	11.2
80 years or older	8	5.6
Refused to Answer	14	9.9
Education Level		
Grade school	9	6.3
Some high school	12	8.5
Graduated high school	12	8.5
Vocation or technical school	14	9.9
Some college or university	26	18.3
More than 2 years of college	14	9.9
Graduated college	15	10.6
Post graduate degree	14	9.9
Refused to Answer	26	18

Table 5.2a Sample Characteristics

Sample Characteristics	N	%
	142	100
Internet Usage		
Less than 1 hour per week	0	0
from 1 up to 2 hours	1	0.7
more than 2 up to 3 hours	13	9.2
more than 3 up to 4 hours	16	11.3
more than 4 hours	97	68.3
Refused to Answer	15	10.6
Time spent on Community		
Never visited	25	17.6
visited less than one hour per week	16	11.3
from 1 up to 2 hours	48	33.2
from 2 up to 3 hours	25	17.6
from 3 up to 4 hours	11	7.7
over 4 hours	4	2.8
Refused to answer	13	9.2
Hard Copy Purchase		
Never purchase	64	45.1
one copy a week	22	15.5
twice a week	11	7.7
3 times a week	5	3.5
5 times a week	4	2.8
6 times a week	3	2.1
every day	14	9.9

Table 5.2b Sample Characteristics

5.3 Descriptive Statistics of Model Items

Respondents were asked to rate their level of agreement for additional items as follows. A total of 18 questions were asked to determine levels of perceived value for the exogenous latent variables. The three questions pertaining to the perceived value component of monetary value were removed in the analysis as there was no cost associated with using the site. This question had been integrated by the researcher so the same questionnaire could be employed when analysing news sites in the future which were starting to adapt to a subscription business model. An additional 11 questions were asked to ascertain the domestication stage at which the user might find him/herself. The results of these questions would be then later used in the analysis in the form of sample segmentation. If the respondent indicated they had previously visited or participated in the community, they were directed to a subsequent part of the questionnaire which assessed the three components of community introduced in this research. Respondents indicating they didn't participate in the community were directed to the end questionnaire, and skipped this batch of questions as they were not applicable.

Of the subsequent part of the questionnaire, seven questions pertained to a respondent's level of community participation, and a further nine questions were asked to measure the online community model dimensions of motivation and effect which were developed by the researcher for this study, as discussed previously. Finally, all respondents, whether they were community users or not were asked a set of six questions designed to ascertain levels of affective and behavioural intention components of loyalty. Respondents therefore were asked to rate their agreement on a 7-point Likert scale for each of 57 additional questions if they participated in a community and 34 questions if they indicated they never visited the community on the news site. The following section shows the means and standard errors for each latent variable measured. The responses were measured on a 7-point Likert scale which ranged from 1 = "strongly disagree" to 7 = "strongly agree". The electronic survey software used prevented the user from selecting two choices for the same item. Due to the

volume of questions, the researcher chose not to adopt the utility which necessitated an answer before the respondent was allowed to continue with the survey. Details of the constructs, items and questions as well as their descriptive statistics are found in Tables 5.3 to 5.6.

5.3.1 Exogenous Latent Variables

5.3.1.1 Convenience Value

Derived from Sheth et al's (1991) functional value component, the convenience value construct adapted from Pura (2005) is used in this research. Respondents were asked to indicate their level of agreement on three statements adapted for this study on level of perceived convenience value. These measured the perceived value derived from the ease, instantaneousness and convenience of using the site. As detailed previously, these measures were deemed to be pertinent especially in interactive Internet services such as online news sites. Convenience value was measured with four items, Convval 1, 2, 3 and 4. These items were additionally qualified through expert opinion as being pertinent in the news service industry. Convval3, formerly part of Convval4 was suggested to be measured as a separate item.

5.3.1.2 Social Value

Social value was defined by Sheth et al. (1991) as the perceived utility acquired from an alternative's association with one or more specific social groups and adapted for this research based on expert opinion. The social value components, social approval and the enhancement of self image among other individuals, were measured through three items, Socval1, Socval2 and Socval3.

5.3.1.3 Emotional Value

Emotional value was measured through two items, EmoVal1 and EmoVal2. These items examined the perceived utility acquired from an alternative's capacity to arouse feelings or affective states. Holbrook (1994) also supports the dimension of using an electronic service for its own sake or the hedonic aspects of services usage such as play or fun. Sheth et al. (1991) support usage can be driven by non-cognitive and unconscious motives.

5.3.1.4 Epistemic Value

Epistemic value was measured through 3 components Epival1, Epival2 and Epival3. Epistemic value refers to the perceived utility acquired from an alternative's capacity to arouse curiosity, provide novelty and or satisfy a desire for knowledge. The usage of epistemic value as a valid construct in research into online news services is supported in that it pertains to exploratory, novelty seeking and variety seeking motives which have been proposed to activate product trial and switching behaviours. Kaye and Johnson (2003) also support that once the novelty of a new medium fades, users drawn to it out of curiosity may gradually return to their previous media usage habits.

5.3.1.5 Conditional Value

Adapted from Pura (2005) and based on Holbrook (1994), conditional value is related to the concept of context based on time, location, technological environment and is defined as value existing in a specific context where information that characterises a situation related to the interaction between human applications and the surrounding environment results in customised information (interactivity). Conditional value is measured through the three items: Condval1, Condval2, and Condval3.

5.3.2 Endogenous Latent Variables

5.3.2.1 Affective Loyalty

Affective loyalty is a deeper sense of loyalty that is not as easily abandoned (Oliver, 1997, 1999). At this stage, loyalty relates to a customer's pleasurable fulfilment from and favourable attitude toward a product/brand, and their overall evaluation of it (Oliver, 1997, 1999). Measures for affective loyalty were adapted for this study from Pura (2005), supported by Han et al (2011) and are based on Oliver's (1997) four phases of loyalty. Affective loyalty is measured through items Affloy1, Affloy2, and Affloy3.

5.3.2.2 Behavioural Intention

Behavioural Intention is adapted from Oliver (1997) and entails a strong specific product/brand commitment and intention to repurchase. At this stage, customers build a deeper level of loyalty than in the affective stage. Adapted from Pura (2005) and supported by Han et al, (2011) measures used to assess behavioural intention were BIloy1, BIloy2 and BIloy3.

5.3.3 Community Latent Variables

Based on the community literature discussed in chapter 2 as well as the exploratory data analysis as detailed in chapters 3 and 4, three components were developed in order to determine particular aspects of a user's participation in an online community as well as the aspects which motivate the user to join or participate and the additional consequences or effects of a user's participation.

5.3.3.1 Participation

Participation was measured with 6 items which were designed to determine the length of time a user participates in a community (Partic1), and the level of that participation in terms of how much the user interacts with other users on the site and in which way. Items Partic 2 to 6 were based on previous research indicating, for example, which level a user represents

in a community from Novice to Elder (Preece, 2000; De Souza and Preece, 2004). Novices or lurkers typically do not interact or only interact minimally, whereas those in the advanced stages of community participation (up to elder) interact more consistently and intensely. Thus respondents were posed questions which ascertained what types of posts they made and how often.

5.3.3.2 Motivation

Again, based on previous literature and exploratory data analysis as detailed in chapter 2, components to measure what drives a user to visit or participate in an online community were developed by the researcher for this study. These comprise the motivation construct. The items Motiv1a to 1e were developed to determine what the user found important on the community whereas Motiv2 through 5 were used to determine what additional aspects might motivate a user to join and participate.

5.3.3.3 Effect

The effect measures developed for this study through previous research and additional exploratory data analysis were used to ascertain the consequences of online community participation. These are cognitive aspects of a user's participation which he feels after visiting the online community. Thus, items Effect 1 to 6 were developed to examine possible outcomes of visiting and/or participating in the community.

5.3.4 Domestication items

These domestication items were not developed to enter directly into the research model, but as a means of dichotomizing the sample into *high social* or *low social* or *high scientific* or *low scientific* stages in order to test the meta-theoretical hypothesis of this research that there exists a measurable difference between the positions of social determinism and technical determinism in technology adoption.

5.3.4.1 Appropriation

At this stage in the domestication process, an object or product, once purchased or acquired, goes through a process of appropriation, whereby the individual or group takes possession of it. This is classified as a “scientific stage”. Measures were developed for this stage based on previous research (Silverstone et al., 1992; Miller, 1987) to determine the level of consumption of a product. Item DApprop1 determines the level of “purchase” or usage of the online news site, by ascertaining the amount of time a user visited the site. Items DApprop1a to 1f were then developed to show the reasons for acquisition as supported by Lee (2007) as applicable at this stage of domestication and additionally confirmed in a practical context as pertinent by industry experts.

5.3.4.2 Objectification

Classified as a “social stage”, objectification represents the way in which a service or technology is displayed and represents symbolic value, aiding in the definition of the sense of self. Silverstone (1992) supports that objectification reveals itself in display and in turn demonstrates the classificatory principles that inform a user’s sense of self and place in the world. The objectification stage describes how a particular object or service comes to play out our values or sense of aesthetic and how the user thinks through the way in which an object will fit into his world (Ling, 2004) and that a user sees he is working out his own identity through the ownership and consumption of the product or service. These aspects were measured with items DObject1 through DObject3.

5.3.4.3 Incorporation

Incorporation describes the stage at which a user concerns himself with the functional aspects of the artefact. Whereas objectification focuses on the aesthetic, incorporation focuses more on the functional aspects of product or service usage and is classified as a scientific stage. Items DIncopr1 through DIncorp3 were developed to ascertain whether a user has achieved this status in his adoption cycle. This is a “scientific stage”.

5.3.4.4 Conversion

Conversion is the phase of the cycle in which others incorporate their understanding of the artefacts in their broader understanding of the person consuming the artefact Silverstone (1992). Ling (2004) posits that it is at this point when the person who purchased and is using the item hopes to realize fully its social effect. This may entail displaying the object either physically (as with parabolic antennas and mobile telephones or white iPod earphones) or symbolically – by making it the topic of discussion, hinting at it more or less casually in conversation or by exhibiting new knowledge and competence to friends and colleagues. Conversion is classified as a “social stage”. Measures developed for this research used to determine conversion were DConver1 through DConver4.

Details of the constructs, items and questions as well as their descriptive statistics follow in Tables 5.3 to 5.6.

Exogenous Perceived Value Constructs	Item	Questions	Mean	Standard Error
Convenience Value	Convval1	I value the ease of using this online news site	5.36	0.148
	Convval2	I value the ability to use this site instantly from my computer	5.81	0.135
	Convval3	I value the ability to use this site instantly from my mobile device	2.05	0.166
	Convval4	I value the convenience of using this online news site	5.38	0.148
Social Value	Socval1	Using this site helps me to feel accepted by others	1.66	0.128
	Socval2	Using this site makes a good impression on other people	1.75	0.136
	Socval3	Using this site gives me social approval	1.77	0.144
Emotional Value	Emval1	Using this site gives me pleasure	4.16	0.199
	Emval2	Using this site makes me feel good	3.04	0.205
Epistemic Value	Epival1	I visit this site to experiment with new ways of doing things	2.20	0.173
	Epival2	I visit this site to test new technologies	1.93	0.145
	Epival3	I visit this site out of curiosity	3.12	0.207
Conditional Value	Condval1	I value the information about local events on this site	5.22	0.154
	Condval2	I value the information this site offers because it helps me in certain situations	4.21	0.176
	Condval3	I value the localized information I get from this site	5.38	0.148

Table 5.3 Constructs and measurement items –Exogenous variables

Endogenous Loyalty Constructs	Item	Questions	Mean	Standard Error
Affective Loyalty	Affloy1	I feel loyal to this online news site	4.82	0.197
	Affloy2	I consider this online news site my first choice for this type of service	4.82	0.194
	Affloy3	This online news site has a great deal of personal meaning to me	3.84	0.220
Behavioural Intention	BIloy1	I intend to continue visiting this online news site in the future	6.05	0.121
	BIloy2	I will use similar news services more frequently in the future	4.47	0.172
	BIloy3	The probability that I will visit this online news site again is high	6.07	0.126

Table 5.4 Constructs and measurement items – Endogenous Variables

Community Constructs	Item	Questions	Mean	Standard Error
Motivation	Motiv1a	I consider the following things important to me in this community: Finding advice	2.68	0.197
	Motiv1b	Finding information	3.80	0.227
	Motiv1c	Reading other people's opinions	3.78	0.211
	Motiv1d	Finding out what people are talking about	3.62	0.222
	Motiv1e	Conversing with others	1.95	0.168
	Motiv2	I visit this community because I find the information I need on it	3.15	0.218
	Motiv3	I visit this community because I enjoy interacting with others	2.24	0.200
	Motiv4	People who are important to me participate in this community	2.18	0.196
	Motiv5	I value information on this community from people who are important to me	2.67	0.198
	Effect	Effect1	I feel well informed	3.47
Effect2		I feel I trust the community members	2.59	0.182
Effect3		I feel informed about what is new	3.31	0.214
Effect4		Other community members and I hold the same common values	2.29	0.154
Effect5		I feel very attached to the community	2.45	0.186
Effect6		I see myself as part of the community	3.10	0.220
Participation	Partic1	How much time do you spend in this community per week	2.50	0.194
	Partic2	How often do you only read questions and comments from others without posting	4.01	0.228
	Partic3	How often do you post questions	1.27	0.116
	Partic4	How often do you post comments	2.05	0.180
	Partic5	How often do you post answers to questions from others	1.41	0.143
	Partic6	How often do you rate the usefulness of other's comments	2.61	0.195

Table 5.5 Constructs and measurement items – Community Variables

Domestication Stage Items	Item	Questions	Mean	Standard Error
Appropriation	DAppr1	How much time do you spend per week on this news site?	2.31	0.147
	DAppr1a	What is the main reason for visiting this site? To read about general news	3.97	0.201
	DAppr1b	To read about local news	6.30	0.118
	DAppr1c	To find local information	4.98	0.187
	DAppr1d	For the advertisements	2.24	0.156
	DAppr1e	To find up-to-date information	4.50	0.199
	DAppr1f	As a supplement to the printed version of this paper	2.84	0.219
Objectification	DObject1	Using this site means I am well informed about the news	4.87	0.155
	DObject2	Others have commented that I use this site	2.83	0.196
	DObject3	I could describe to others how to find what they are looking for on this site	3.26	0.206
Incorporation	DIncorp1	The structure of this news site is clear and easy to navigate	5.06	0.148
	DIncorp2	I can find what I am looking for on this site	4.94	0.144
	DIncorp3	I could describe to others how to find what they are looking for on this site	4.24	0.187
Conversion	DConver1	Visiting this site is part of my routine	5.20	0.171
	DConver2	I would miss this site if I was not able to use it	5.51	0.156
	DConver3	I consider myself a consistent user of this site	5.26	0.175
	DConver4	I would like to see other features on this site	3.76	0.229

Table 5.6 Constructs and measurement items – Domestication Items

5.4 Measurement Model Analysis

5.4.1 Procedure for Analysis Using SmartPLS

The procedure for data analysis using the SmartPLS SEM software is to first specify the model based on theoretical input. This includes deciding which variables are to be included in the model and what relationship they have with other latent variables, such as linear, non-linear, mediating or moderating. Secondly, measures must be selected (which indicators or items will be used to describe which latent variables). An appropriate observation instrument must be developed and administered, and data collected and prepared. Thirdly, identification of the model needs to be performed. Finally SEM techniques are used to evaluate or estimate the model (Hubona, 2010). Each measured latent variable needs to have some relationship with another variable in the model, and each latent variable must have at least one indicator (item) associated with it.

Using a web based survey, and following Pura (2005), the independent predictor (exogenous) perceived value constructs were each assessed with two to three reflective items. The predicted (endogenous) loyalty constructs were similarly assessed with two or three items each. These items were discussed in sections 5.3.1 and 5.3.2.

For basic modelling and analysis in the SmartPLS program, the researcher uses two main components of the program: bootstrapping and the PLS algorithm. The main contribution of bootstrapping is that it provides the user with the t values of the weights, loadings and path coefficients to determine the statistical significance of those estimates. A t-table is then used to assess significance. In this research, 500 bootstrap samples were taken and the table of t-values and loadings can be found in table 5.8. The following explains the bootstrapping process used in SmartPLS, the program used within this research, in more detail.

The two procedures: running the PLS algorithm and bootstrapping are separate even though the bootstrapping algorithm runs its own PLS algorithm. In SmartPLS, the bootstrapping

procedure runs the PLS algorithm repeatedly (dependent on the number of iterations or subsamples selected), and will estimate the t-values of the outer model factor (or item) loadings, and the inner model path coefficients. The bootstrapping procedure calculates the means of the weights, loadings and path estimates as well as the standard error by resampling the original data, and running the PLS algorithm the number of times specified by the user. The data is randomly sampled with replacement and cases are thus drawn with a probability of 1/sample size from the original data set so any one case has the probability of being selected a number of times between zero and the number in the sample size. If the number of cases is 100 and the user selects that the bootstrapping algorithm should run 500 times, the program makes a random sampling of 100 cases and creates 500 different subsamples. Every different subsample will thus be a different mix of the original data since cases are resampled with replacement. The program thus selects its first group of 100 cases, runs the PLS algorithm, obtains an estimate, then records that estimate, and repeats the process. Each time the model is run the parameter estimates will vary slightly. Bootstrapping enables therefore the observation of the variance in the parameter estimates.

Through the bootstrapping procedure, SmartPLS can determine the mean of each estimate as well as the standard error and thus determine the t-values. The t-values are the mean of the weight, loading or coefficient divided by the standard error. The number of degrees of freedom is dependent on the number of iterations the bootstrapping procedure is performed (subsamples) which the user specifies. Bootstrapping is a non-parametric method (when the data doesn't necessarily follow rules of normal distribution) which SmartPLS uses in order to determine the variance and the standard error. The bootstrapping process delivers t values for both the inner or structural model path coefficients, as well as for the outer (measurement) model loadings, and mean values for the weights in the structural and measurement models, and the measurement model item loadings. The number of subsamples taken should be between 200 and 500 (Hubona, 2010). T-values for the path coefficients within the structural model of 1.645 or more indicate significance at the 5% level (in a one-tailed test) or a value above 2.33 indicates significance above the 1% level.

T-values and loadings for constructs in this research can be found in Table 5.8. Hubona (2010) indicates that an insignificant path coefficient can remain in the structural model without affecting results.

As opposed to covariance based techniques, there are no widely used goodness of fit tests in PLS yet (Hubona, 2010). Indices for GoF for PLS path modelling have been suggested, but these are not widely used at this point (e.g. Tenenhaus et al 2004). Two accepted approaches to determining quality are:

- For the measurement model: reliability and validity.
- For the structural model: assessment of effects and prediction quality.

Effects relate to the magnitude of the path coefficients and the effect size of particular variables using Cohen's coefficient. Prediction quality refers to the level of explained variance, or how high the R-squared values are.

Reporting the results of the model analysis therefore breaks down into two subsections:

- Evaluation of the reliability and validity of the measurement model.
- Evaluation of the effects and the prediction quality of the structural model.

5.4.2 Evaluation of the reliability and validity of the measurement model

Hubona (2010) indicates that error is a function of a number of factors. Measurement error is assessed as a function of random and systematic error. Random error reflects reliability, or the consistency of the measurements, whereas systematic error reflects validity, or if the responses or measurements are consistently biased one way or another. Therefore low systematic and low random error would mean results are reliable and valid. Low systematic error but high random error would mean results are valid, but not reliable. In contrast, high

systematic error but low random error would yield reliable but not valid results, and high systematic and random error would mean results are neither valid, nor reliable.

In equation form, error can be depicted as follows:

$$\mathbf{X \text{ (observed)} = X \text{ (true value)} + \text{random error} + \text{systematic error.}}$$

5.4.3 Reliability

The reliability of items can be examined through internal consistency reliability tests such as Cronbach's alpha or composite reliability scores. Nunnally (1978) indicates a Cronbach alpha score of .65 or over for early research is adequate. For more mature constructs (more widely tested), alpha values of .7 (Nunnally, 1978) or .8 (Straub, 1989) or higher should be prevalent. However, alpha measurements also assume a tau equivalent measurement model for reflective constructs, meaning that each item is contributing consistently or at the same level to the construct, thus Cronbach's alpha weighs all indicators equally. In PLS path modelling, the summated scale is not used and the latent variable score is computed as a weighted sum of their indicators. Thus the composite reliability is recommended to be used as an indicator of convergent validity in PLS. The composite reliability can vary between 0 and 1. Values larger than 0.6 are frequently judged as acceptable (Götz et al. 2010). This is the number which is indicated in the PLS model screen output between the latent variable and each of its items.

5.4.4 Validity of latent constructs

Measurement validity refers to the accuracy with which the measurement items are measuring the constructs. There are two types of measurement validity: convergent validity which measures the degree to which the measurement items correlate with the construct and discriminant validity, or the strength of the relationships between the items and other constructs which the items are not being used to measure. Convergent validity checks that the items are related to the construct they are supposed to be measuring and discriminant validity checks whether items are distinct. Measurement of the validity of the latent

constructs is shown through convergent validity or AVE, and discriminant validity, as determined through Fornell and Larcker (1981) criteria and cross loadings. These items are available in report form from within the SmartPLS program.

The acceptance criteria for factorial validity are that each measurement item correlates strongly (or converges) with the one construct it is related to, and that each measurement item correlates weakly with all other constructs. Measurement items in one block should correspond highly with the latent variable with which they are associated and each measurement item should load with a significant t-value on its latent construct.

5.4.5 Convergent Validity

The average variance extracted measures the amount of variance captured by a latent construct in relation to the variance due to random measurement error and is comparable to the proportion of explained variance in factor analysis. Fornell and Larcker (1981) state that a latent variable should better explain the variance of its own indicators than the variance of other latent variables. A common measure to examine convergent validity is the average variance extracted (AVE) (Götz et al., 2010). AVE includes the variance of its indicators captured by the construct relative to the total amount of variance, including the variance due to measurement error. An AVE of more than 0.5 is considered sufficient, as less variance is due to error variance than to indicator variance (Götz et al., 2010).

In addition to the AVE, the researcher should examine whether the measurement items load on their respective constructs with a high significance (t value). These values are provided by the SmartPLS screen and report output and are examined for the measurement constructs for the overall model. All exogenous, interaction and endogenous latent variables were determined to be significant at the 1% level or above (all values were over 2.33). Additionally, all latent constructs demonstrated good composite reliability score values of above .7 or above, and the average variance extracted by each variable was at .66 or above.

Tables 5.7 and 5.8 demonstrate the results of these tests and indicate that the reliability and convergent validity requirements for measurement items and constructs are fulfilled within this research.

	<i>AVE</i>	<i>Composite Reliability</i>
Behavioural Intention	0.855	0.922
Affective Loyalty	0.802	0.924
Conditional Value	0.693	0.871
Convenience Value	0.862	0.950
Effect	0.804	0.961
Emotional Value	0.850	0.919
Epistemic Value	0.904	0.950
Motivation	0.837	0.939
Participation	0.790	0.919
Social Value	0.910	0.951

**Table 5.7 Convergent Validity and Composite Reliability Measurements:
Average variance extracted and composite reliability for variables**

Construct and Items	Loading	T Value
Blloy1 <- Behavioural Intention	0.953	56.433
Blloy3 <- Behavioural Intention	0.896	22.059
Condval1 <- Conditional Value	0.895	44.438
Condval2 <- Conditional Value	0.748	13.126
Condval3 <- Conditional Value	0.849	27.704
Affloy1 <- Affective Loyalty	0.916	41.996
Affloy2 <- Affective Loyalty	0.867	27.812
Affloy3 <- Affective Loyalty	0.904	46.783
Convval1 <- Convenience Value	0.919	57.186
Convval2 <- Convenience Value	0.933	49.311
Convval4 <- Convenience Value	0.935	61.777
Effect1 <- Effect	0.898	50.797
Effect2 <- Effect	0.913	45.036
Effect3 <- Effect	0.927	68.905
Effect4 <- Effect	0.852	32.570
Effect5 <- Effect	0.905	49.596
Effect6 <- Effect	0.883	36.262
Emval1 <- Emotional Value	0.931	81.360
Emval2 <- Emotional Value	0.913	47.288
Epival1 <- Epistemic Value	0.919	7.495
Epival2 <- Epistemic Value	0.982	10.620
Motiv3 <- Motivation	0.906	31.994
Motiv4 <- Motivation	0.927	40.470
Motiv5 <- Motivation	0.910	43.416
Partic3 <- Participation	0.848	5.854
Partic4 <- Participation	0.922	5.469
Partic5 <- Participation	0.896	5.069
Socval1 <- Social Value	0.971	13.094
Socval2 <- Social Value	0.945	10.987
Socval3 <- Social Value	0.946	10.665

Table 5.8: T-values and loadings of items

5.4.6 Discriminant Validity

Besides considering the indicator and construct reliability, a thorough validation procedure also requires the evaluation of a measurement (or structural) model's discriminant validity. Discriminant validity is defined as the dissimilarity in a measurement tool's measurement of different constructs. A necessary condition for discriminant validity is that the shared variance between the latent variable and its indicators should be larger than the variance shared with other latent variables (Götz et al., 2010). According to Fornell and Larcker (1981) discriminant validity is proven if a latent variable's AVE is larger than the common variances (squared correlations) of this latent variable with any other of the model's constructs. The discriminant validity criteria is that the factor analysis shows an appropriate pattern of loading of items to their respective construct which is much larger than the correlation of that specific construct with any of the other constructs in the model. Discriminant validity is tested by taking the square-root of the average variance extracted. This value should then be higher for each factor than the correlations between it and the other constructs. Table 5.8 shows that the square-roots of the AVE (in bold, on the diagonal) are higher than the correlation between a specific construct and other constructs. This indicates that the construct is distinct from the other constructs and ensures discriminant validity (Fornell and Larcker, 1981).

An additional test for discriminant validity proposed by Churchill (1979) is to examine the cross-loading between items and constructs. In order for constructs to be seen as discriminant, the cross-loadings between the items measuring the construct and those items with other constructs should be distinct. Tables 5.9 and 5.10 below shows the correlations between constructs and the cross-loadings of measurement items.

	<i>BI</i> Loy	<i>Aff</i> <i>Loy</i>	<i>Cond</i> <i>Val</i>	<i>Conv</i> <i>Val</i>	<i>Effect</i>	<i>Emo</i> <i>Val</i>	<i>Epis</i> <i>Val</i>	<i>Motiv</i>	<i>Partic</i>	<i>Soc</i> <i>Val</i>
<i>Behavioural Intention</i>	0.9247									
<i>Affective Loyalty</i>	0.6626	0.8957								
<i>Conditional Value</i>	0.5395	0.6281	0.8328							
<i>Convenience Value</i>	0.4944	0.4580	0.6829	0.9289						
<i>Effect</i>	0.3118	0.4690	0.3702	0.2764	0.8966					
<i>Emotional Value</i>	0.3460	0.6398	0.5300	0.5103	0.4384	0.9216				
<i>Epistemic Value</i>	- 0.0694	0.0926	0.0850	0.0715	0.1106	0.2705	0.9509			
<i>Motivation</i>	0.1709	0.3483	0.2027	0.0019	0.7565	0.3654	0.1153	0.9147		
<i>Participation</i>	0.0682	0.0702	- 0.0380	- 0.1556	0.4399	0.0543	0.0418	0.5780	0.8889	
<i>Social Value</i>	- 0.1268	0.0747	0.0242	0.0104	0.1276	0.1939	0.6701	0.1727	0.0994	0.9542

Table 5.9 Correlations between constructs

	<i>BI</i> Loy	<i>Aff</i> Loy	<i>Cond</i> Val	<i>Conv</i> Val	<i>Effect</i>	<i>Emo</i> Val	<i>Epis</i> Val	<i>Motiv</i>	<i>Partic</i>	<i>Soc</i> Val
<i>Bll</i> ov1	0.9526	0.5242	0.6227	0.5049	0.3286	0.3381	-0.1266	0.1767	0.0854	-0.1718
<i>Bll</i> ov3	0.896	0.4683	0.6061	0.3935	0.2334	0.2976	0.026	0.1328	0.0312	-0.039
<i>Cond</i> val1	0.4996	0.8946	0.5217	0.5898	0.3671	0.4422	-0.0107	0.2079	-0.0561	-0.0323
<i>Cond</i> val2	0.3668	0.7482	0.4861	0.4356	0.287	0.3862	0.1388	0.2465	0.0706	0.0638
<i>Cond</i> val3	0.4717	0.8489	0.5598	0.663	0.2706	0.4901	0.0959	0.0675	-0.0922	0.0362
<i>Aff</i> lov1	0.643	0.5938	0.9155	0.4722	0.407	0.5695	0.0856	0.2708	0.0214	0.0276
<i>Aff</i> lov2	0.6512	0.5329	0.8665	0.3702	0.3274	0.4618	0.0455	0.2505	0.0974	0.0156
<i>Aff</i> lov3	0.5126	0.5628	0.9044	0.3953	0.5019	0.6622	0.1099	0.3906	0.0673	0.136
<i>Conv</i> val1	0.4343	0.6374	0.4637	0.9191	0.2676	0.4886	0.0409	0.037	-0.1267	0.0112
<i>Conv</i> val2	0.4391	0.6305	0.3911	0.9325	0.248	0.4334	0.0472	-0.0456	-0.1988	0.0046
<i>Conv</i> val4	0.5016	0.6347	0.419	0.935	0.2541	0.4961	0.1086	0.01	-0.1128	0.0126
<i>Effect</i> 1	0.3137	0.3486	0.3759	0.3441	0.8977	0.4229	0.0328	0.6287	0.4165	0.0637
<i>Effect</i> 2	0.2532	0.3129	0.393	0.2664	0.9129	0.4028	0.1339	0.6399	0.3206	0.116
<i>Effect</i> 3	0.3372	0.4236	0.4302	0.4014	0.9273	0.4302	0.0472	0.5997	0.3495	0.0722
<i>Effect</i> 4	0.2166	0.2337	0.3688	0.1118	0.8516	0.354	0.2052	0.6896	0.3753	0.1691
<i>Effect</i> 5	0.2702	0.308	0.4918	0.1619	0.9052	0.4136	0.1484	0.7941	0.4421	0.1969
<i>Effect</i> 6	0.2726	0.3435	0.4478	0.179	0.8831	0.3297	0.0497	0.718	0.4557	0.0756
<i>Em</i> val1	0.3633	0.4924	0.5934	0.5184	0.4528	0.9307	0.2724	0.3505	0.0598	0.1516
<i>Em</i> val2	0.2695	0.4846	0.5862	0.4169	0.3501	0.9125	0.2236	0.3218	0.0392	0.2092
<i>Ep</i> ival1	0.0086	0.0118	0.0988	0.0021	0.0771	0.2271	0.919	0.1631	0.0684	0.558
<i>Ep</i> ival2	-0.103	0.1154	0.0843	0.1008	0.1205	0.2759	0.9818	0.0857	0.0266	0.6857
<i>Motiv</i> 3	0.1167	0.1073	0.2341	-0.1203	0.6307	0.2121	0.1142	0.9066	0.633	0.1845
<i>Motiv</i> 4	0.1417	0.144	0.3144	-0.074	0.6403	0.268	0.1176	0.9273	0.5111	0.1625
<i>Motiv</i> 5	0.1927	0.2672	0.3745	0.1381	0.7719	0.4633	0.0905	0.9099	0.4787	0.1379
<i>Partic</i> 3	0.0214	-0.0481	0.0307	-0.1993	0.3587	0.027	0.0309	0.4963	0.8475	0.0942
<i>Partic</i> 4	0.1126	-0.0785	0.0373	-0.1554	0.4048	0.0375	0.0355	0.5264	0.922	0.0689
<i>Partic</i> 5	0.0163	0.0251	0.108	-0.0966	0.4009	0.0718	0.043	0.5229	0.8955	0.1124
<i>Soc</i> val1	-0.1334	0.0401	0.0454	0.0254	0.1314	0.2003	0.6924	0.1607	0.0649	0.9714
<i>Soc</i> val2	-0.1569	-0.0061	0.0192	-0.0378	0.1275	0.2065	0.6638	0.2101	0.1691	0.9452
<i>Soc</i> val3	-0.0812	0.0328	0.1351	0.0359	0.1089	0.1547	0.5746	0.1309	0.0591	0.9458

Table 5.10 Cross loadings of measurement items

5.4.7 Missing Data

Denk and Weber (2011) write that missing data techniques commonly used in official statistics focus on filling gaps in survey data. Temme, Kreis and Hildebrandt (2006) also support that data sets where at least some values of their variables are missing are ubiquitous in empirical research. In order to deal with missing data, several alternative approaches have been proposed e.g., Little and Rubin (2002). Survey data are micro data and, thus, consist of multiple variables observed or measured for a sample of observation units from a population at one point in time. The gaps in the data can be classified as item non-response, unit non-response, or variables not included in the survey. Item non-response refers to the situation of one or multiple variables missing for one or multiple observations. The variables or items missing may vary between observations. Item non-response can be dealt with by traditional or multiple imputation and statistical matching.

Imputation is a statistical technique to estimate missing or implausible values in a dataset based on collected values from the dataset or comparable data sources. The focus of this methodology lies on partially missing data due to item non-response. In common practice, list-wise deletion is a procedure that simply excludes all observation units with missing values from further analysis, or similar approaches are used instead of proper imputation techniques. However, with these procedures, a large share of information gets lost and biased estimates are a frequent consequence. Researchers have recurrently demonstrated that estimates based on imputed datasets outperform estimates based on reduced datasets that ignore observation units and/or variables with missing values irrespective of the underlying imputation method (e.g. Colledge et al., 1978; Little and Rubin, 2002).

An important aspect to be considered when choosing a missing data technique is the underlying missing data mechanism (Rubin, 1987; Schafer, 1999; Little and Rubin, 2002). Random (ignorable) and non-random (systematic, informative) missing values can be distinguished. In case of data missing completely at random (MCAR), the missing data process is ignorable in imputation. MCAR means that the missingness of a variable neither

depends on the true (but missing) value of that variable nor on other (observed or non-observed) characteristics. A weaker assumption that many imputation techniques rely on is data being missing at random (MAR). In that case the missingness of a variable is independent of the true (but missing) value of that variable after controlling for other variables.

The details of the data set were outlined previously, and missing values were always under the 20% threshold. Following Festge and Schwaiger (2007) the researcher substituted the missing values using the procedure implemented in SmartPLS, in which missing data on the item level are replaced by the mean of all indicators belonging to the same factor.

5.5 Full Model Analyses

First, the researcher presents an analysis of the difference between the explanatory power of models with and without the community constructs, and shows that the inclusion of these community constructs increases the explanatory power over a more simple perceived value to loyalty model.

Path coefficients and R^2 values for the model are determined by the SmartPLS program through running the PLS algorithm procedure. The model evaluation shows that the endogenous loyalty constructs are significantly explained by the exogenous constructs of perceived value and online community.

Tests of model validity have been supported through previous research (Hubona, 2010) as reporting overall goodness of fit measure for PLS models is still not common practice yet. The first test of model validity is to examine the magnitude of the R^2 values as this shows the amount of variance explained by the corresponding latent variables in the model. Chin (1998) indicates that R^2 values of .67 indicate a substantial amount of variance explained, .33 a moderate amount, and .19 as weak (a small amount). Additionally, the f^2 or effect size (from Cohen, 1988) should be evaluated in a model comparison. Effect sizes of between .02 and .15 are weak, .15 and .35 are moderate and over .35 are strong. Effect size is calculated as:

R^2 squared of the full model – R^2 squared of the partial model: (1- R^2 squared of the full model)

The amount of variance explained in the model when introducing a third variable to assess the incremental change in variance explained. Cohen's formula can indicate whether an incremental increase is routine, weak, moderate or strong.

The following figures show the research model with and without the community constructs. The R2 value is shown for the endogenous loyalty constructs in each model. The first model depicts the full research model with all perceived value and community constructs in their moderating capacity, whereas the second model shows the direct effects of all exogenous latent variables. In the third model depiction, the community constructs are eliminated in order to determine what the effects of these constructs are on the two loyalty variables.

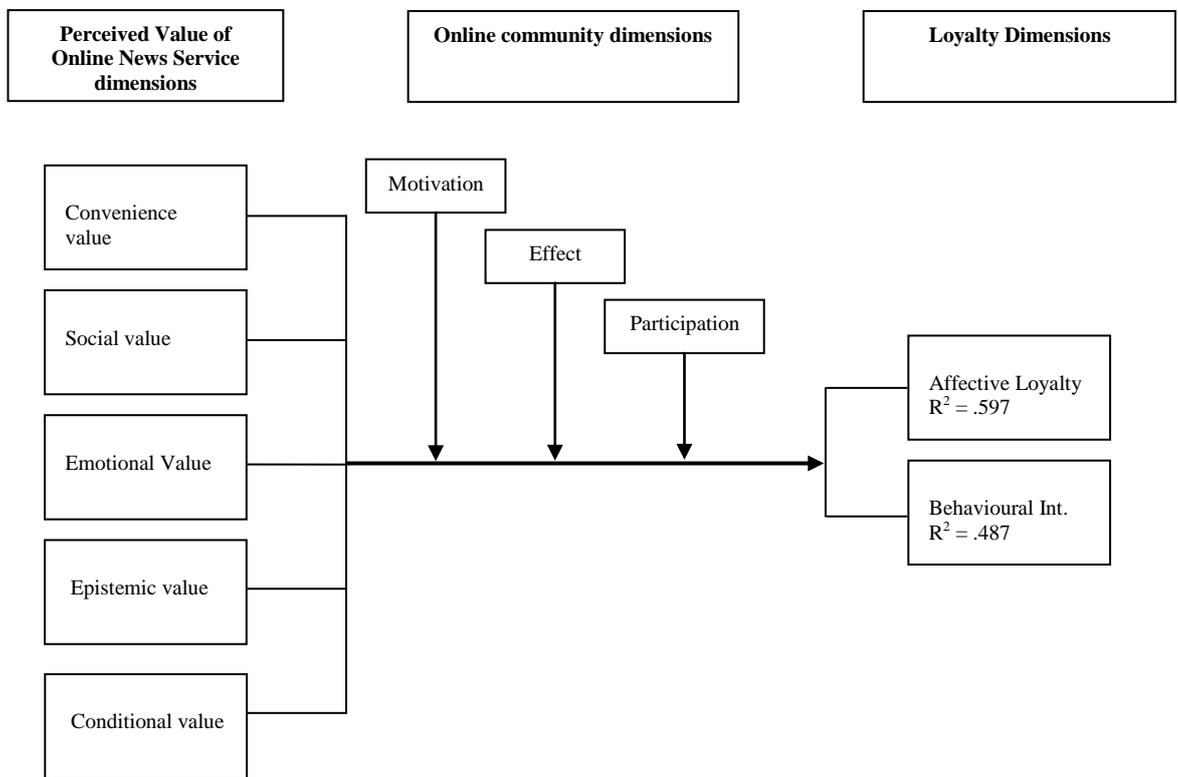


Figure 5.2 Research Model with Interaction Effects

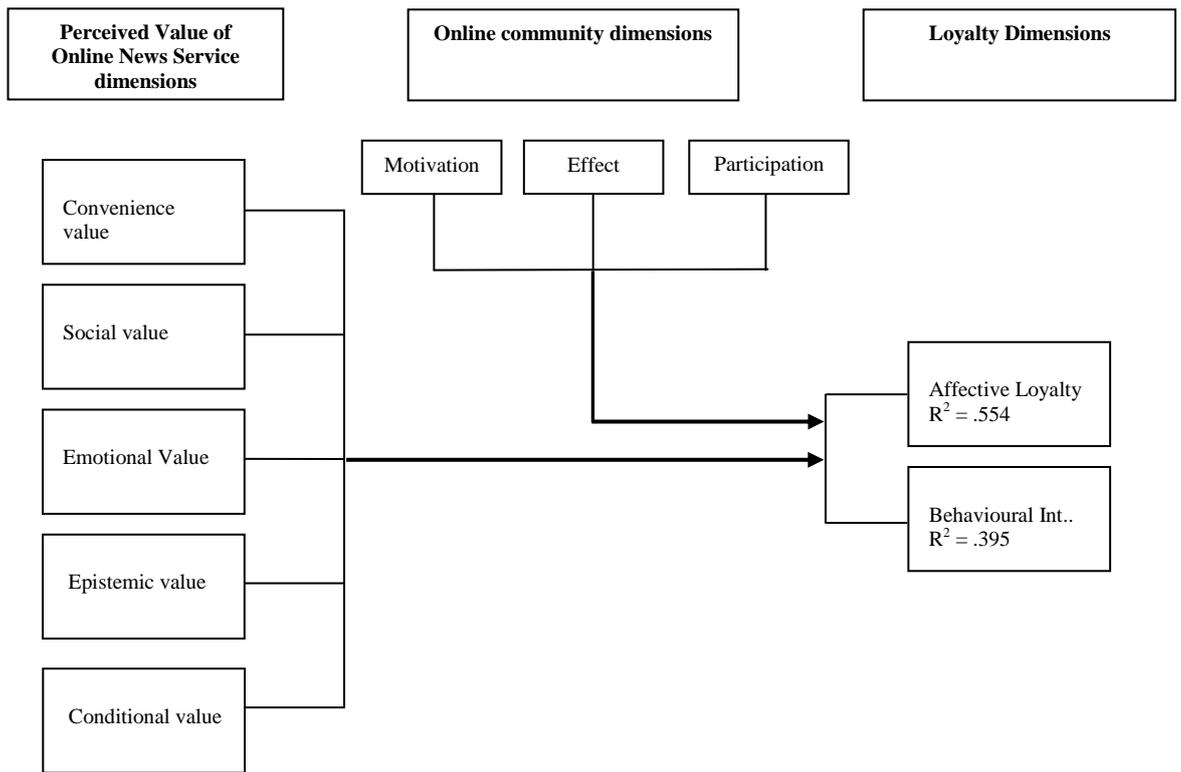


Figure 5.3 Research Model with Direct Effects

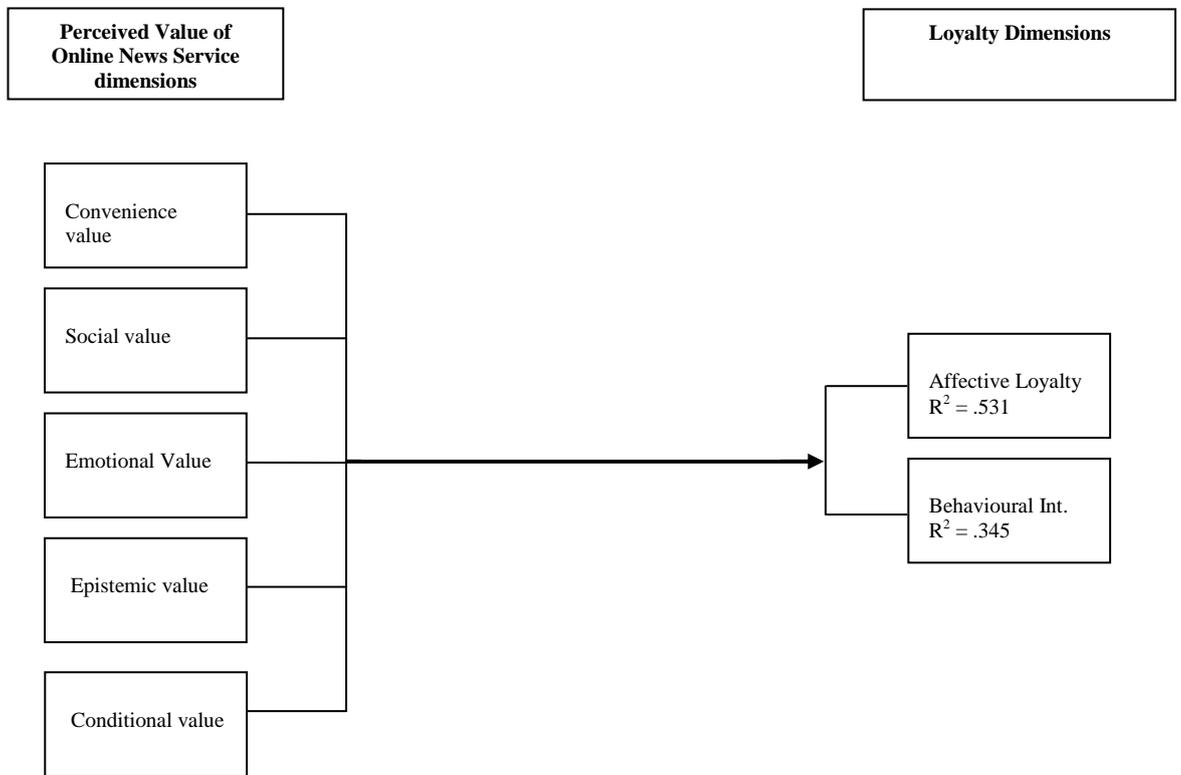


Figure 5.4 Perceived value → Loyalty Model without Community Constructs

The model depictions show that the constructs and interaction effects in the full model are clearly explaining a substantial amount of variance in the loyalty constructs. In the full model 59.7 % of user's affective loyalty is being explained by the model, and 48.7% of the variance in behavioural intention is being explained. The direct effects model also shows a high R^2 for both loyalty constructs with 55.4 % of the affective loyalty being explained and 39.4% of the behavioural intention being explained.

However, the model with the community constructs omitted is only explaining 53.1% of the affective loyalty and 34.5 % of the behavioural intention. Thus the addition of the community constructs and the direct effects models are having a significant impact on the loyalty endogenous values than in the simple perceived value → loyalty model. As such, the researcher concludes that Oliver's, (1999) conjecture that a user can be incorporated into a village or community which will direct his purchase or adoption decisions can be confirmed in an online news site context.

Using Chin's (1998) benchmarks for determining level of variance explained, the research therefore shows while all models are explaining a moderate amount of variance in the site user's loyalty, the simple perceived value → loyalty model is explaining affective and behavioural intention to a lesser degree. The researcher continued by interpreting the amount of change being explained by the models by determining the f^2 or effect size according to Cohen's formula as previously discussed.

Comparing the complete and direct effects models to the simple model with community constructs omitted, the f^2 values are shown in the tables following. The explanatory power of the full research model exceeds that of the simple model, and importantly, the inclusion of the community constructs is even shown to have a moderate effect in the path between the value constructs and behavioural intention.

	Loyalty Construct	R ²	f ²
The full direct effects model with community constructs	Affective Loyalty	.554	.049
The perceived value → loyalty model without community constructs	Affective Loyalty	.531	Weak effect

The full direct effects model with community constructs	Behavioural Intention	.395	.076
The perceived value → loyalty model without community constructs	Behavioural Intention	.345	Weak effect

Table 5.11 Competing models: Direct Effects model and Simple model without community constructs

	Loyalty Construct	R ²	f ²
The full model with community constructs and interaction effects	Affective Loyalty	.597	.14
The perceived value → loyalty model without community constructs	Affective Loyalty	.531	Weak effect

The full model with community constructs and interaction effects	Behavioural Intention	.487	.216
The perceived value → loyalty model without community constructs	Behavioural Intention	.345	Moderate effect

Table 5.12: Competing models: Full research model and Simple model without community constructs

5.6 Assessment of the prediction quality of the structural model

At the primary level, this research is designed to examine the relationships between perceived value and loyalty in a news site context, and indicate whether online community participation at the news site influences these relationships to loyalty. To this end a model was developed and instruments and measures created or adapted which would assess these relationships. Data was acquired using the methods described in chapter 3. Using PLS path modelling methods, also as detailed previously in this chapter, the data obtained was then analysed to determine whether relationships exist and the strength of these relationships.

As detailed in chapter 3 (section 3.5.4.4), the model was broken down to sub-models as shown in the following sections to glean more understandable and clearer relationships. These sub- models are shown starting in section 5.6.1.1.

5.6.1 Assessment of relationships within the research model

As the primary research model was adapted from a study in electronic services, the perceived value → loyalty relationships of social, emotional, and convenience value were expected to be positive and significant, whereas epistemic value was proposed to have little or no effect on loyalty. Pura (2005) hypothesized that the perceived value items of social, emotional and conditional value would have a positive influence on affective loyalty, whereas conditional, monetary, convenience value constructs would positively influence behavioural intention. Additionally, Pura's research proposed that epistemic value would have a negative effect on affective loyalty. The hypothesized paths in this research are described in the model depiction in this section.

To assess the meta-theory used in this research, domestication theory, the perceived value → loyalty models were subsequently examined for separate groups which were determined through the domestication stage conceptualisation. These results can be found starting in section 5.6.

The researcher calculated the t-statistics for the model paths using the bootstrapping method in SmartPLS. The significance values were calculated using 500 resamples and values for a one-tailed test as in the following table were used in the model discussion.

Significance level		T Value	Symbol used
p < 0.1	10%	1.282	+
p < 0.05	5%	1.645	*
p < 0.01	1%	2.326	**
p < 0.001	0.1%	3.091	***

Table 5.13 Significance levels for a one tailed test

5.6.1.1 Convenience value → Loyalty

Derived from Sheth et al. (1991), the perceived value construct of convenience used in this research was supported in the electronic services context by Pura (2005), and in interactive Internet services by Carroll et al. (2002). Also termed comfort value by Kainth and Verma (2011) convenience value is described as being based on time, location and the technological environment. Heinonen (2004) holds that in previous research, although time and location were acknowledged as important factors in service acceptance, the value of these aspects were excluded, and as such the researcher found support for their inclusion in a model assessing loyalty to online news sites. Dabholkar (1994) also suggests that technology service delivery is based on consideration of whom, where and how a service is delivered and includes temporal access. Heinonen (2004) writes that the service environment is often included in the concept of service delivery, such as the distance between the service provider and the customer (Lovelock, 1983), accessibility (Groenroos, 1982) and the availability of service outlets (Lovelock, 1983), and affect the level of convenience perceived by a customer. The components of the service environment can affect the level of convenience perceived by a customer and as such convenience value is also pertinent and was included in the research model.

Preece et al. (2002) indicated that interaction via existing technologies such as chat rooms and instant messaging entices millions of people online and is a good starting point for extending a community. Such applications provide a user with a way of reviewing correspondence at their own convenience, in an asynchronous text environment. Additionally, Preece et al. (2002) holds that universal usability of technologies are dissolving the boundaries between online and offline worlds and these new technologies are extending the range for citizens to communicate and participate in a community. Haythornwaite (2005) suggests that the community technology can create communities based on interest rather than by geography, social position or prior acquaintance, offering a convenient way of discussing issues with others. Plant (2004) supports that the ubiquity of

the Internet and the human desire for connection, knowledge and information is instrumental in the creation of the online community, and thus supports these aspects of ubiquity of convenience value. Hagel and Armstrong (1997) hold that one of the community aspects which is especially pertinent to the online news service industry is the appreciation of member generated content and the capacity to integrate content with communication, as this provides users with a convenient, local and temporally independent method of interacting.

The hypothesized relationships were as follows for this sub model:

H1 Convenience Value has a positive and significant effect on Affective Loyalty.

H1.1 The relationship between Convenience Value and Affective Loyalty is moderated by Participation.

H1.2 The relationship between Convenience Value and Affective Loyalty is moderated by Motivation.

H1.3 The relationship between Convenience Value and Affective Loyalty is moderated by Effect.

H2 Convenience Value has a positive and significant effect on Behavioural Intention.

H2.1 The relationship between Convenience Value and Behavioural Intention is moderated by Participation.

H2.2 The relationship between Convenience Value and Behavioural Intention is moderated by Motivation.

H3.3 The relationship between Convenience Value and Behavioural Intention is moderated by Effect.

As expected, the paths between convenience value and both affective and behavioural intention were strongly supported at the .1% ($p < .001$) significance level. Convenience value positively influenced affective loyalty with a path coefficient of 0.372 which is in line with previous research (Pura, 2005; Wang, et al., 2004) showing that convenience value has

a strong influence on usage in task fulfilment orientated information based services. Again, as supported previously, with a path coefficient of 0.462 this research shows that in a news context service, convenience value also significantly affects behavioural intention. The community construct participation had only a slight effect on the path between convenience value and affective loyalty, whilst it had a more pronounced effect between convenience value and behavioural intention. Both motivation and effect had little seeming effect on both constructs. The path coefficients for the hypothesized paths are shown in figure 5.5.

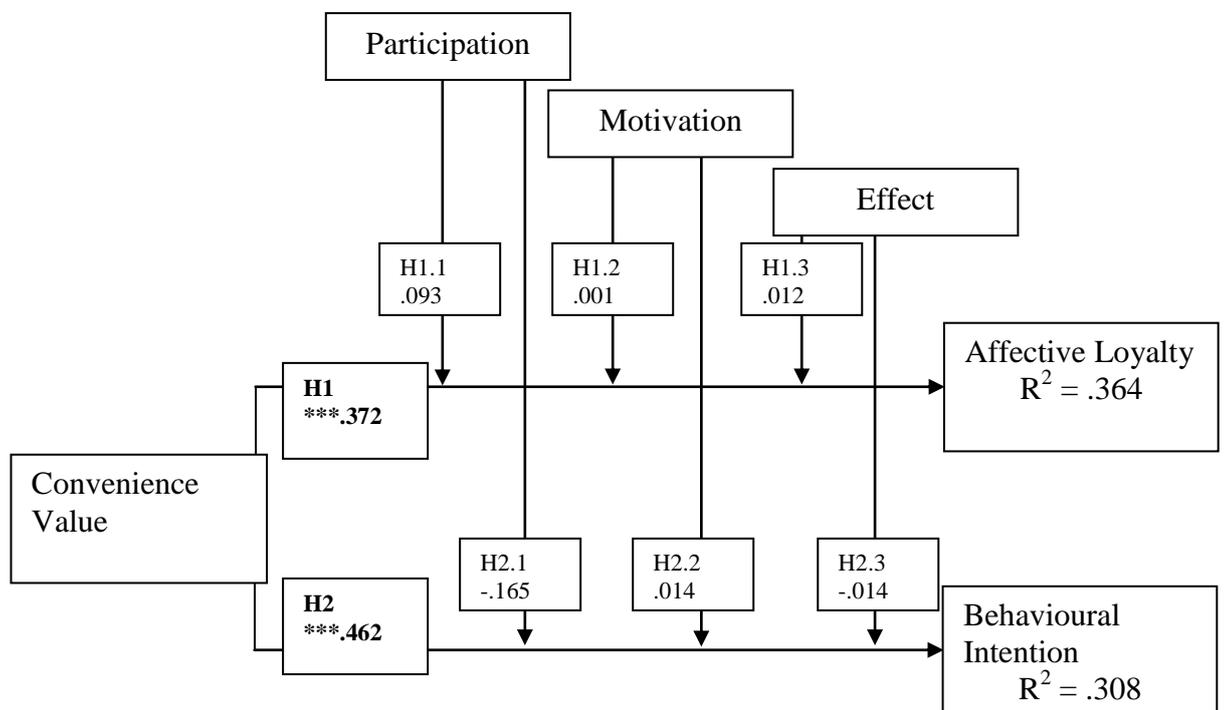


Figure 5.5 Convenience Value → Loyalty

5.6.1.2 Social value → Loyalty

Previous research indicates that social value has been positively related to a relationship with a company, and that social value enhances commitment in an online context (Hsieh et al., 2005). Bagozzi and Dholakia (2006) introduced the notions of “desire” and “social intention” as definitions of the social drivers of behaviour in an online community context and thus both social value as a driver and the social value of a community as an enhancer was included in this research. Bagozzi and Dholakia (2006) proposed a model which added social variables to the theory of planned behaviour because they deemed community participation would be an additional loyalty driver to cognitive (e.g. product performance evaluation) and motivational (e.g. brand commitment) variables. Bagozzi and Dholakia (2006) studied the effect of online brand communities on purchase intention, defining such communities as “specialized, non-geographically bound communities, based on a structured set of social relationships among admirers of a brand”. They hold that brand loyalty can also be influenced by firms through encouraging interactions with small groups of other enthusiastic customers in a setting that is controlled and managed more or less by the customers themselves (Bagozzi and Dholakia, 2006). Vaast (2007) holds that online communities provide arenas for people to talk about their offline situations and get reactions from compassionate and understanding others, also supporting the social value of the community, and Haythornwaite (2007) holds that when a new medium is introduced to connect disparate others, it has the potential to create weak ties by initiating social contact between otherwise unconnected others. Additionally, Turkle (1995) holds that the supportive aspect of online practices can help people deal with difficult offline situations and as such community participation was expected to have an enhancing effect on loyalty.

The hypothesized relationships were as therefore as follows for this sub model:

H3 Social Value has a positive and significant effect on Affective Loyalty.

H3.1 The relationship between Social Value and Affective Loyalty is moderated by Participation.

H3.2 The relationship between Social Value and Affective Loyalty is moderated by Motivation.

H3.3 The relationship between Social Value and Affective Loyalty is moderated by Effect.

H4 Social Value has a positive and significant effect on Behavioural Intention.

H4.1 The relationship between Social Value and Behavioural Intention is moderated by Participation.

H4.2 The relationship between Social Value and Behavioural Intention is moderated by Motivation.

H4.3 The relationship between Social Value and Behavioural Intention is moderated by Effect.

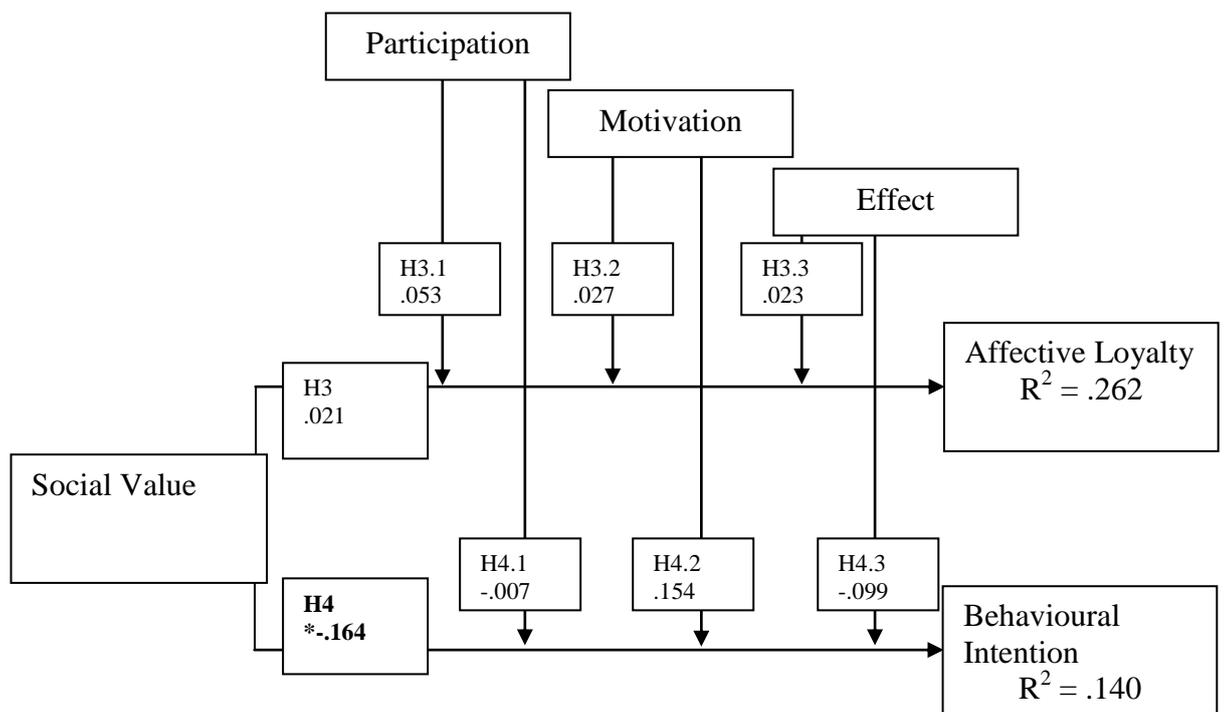


Figure 5.6 Social Value → Loyalty

In this research, the paths from social value to affective loyalty were not significant, but that from social value to behavioural intention was significant at the 0.05 level, with a negative path coefficient. This is an interesting finding which indicates that social value is not an important factor in loyalty building in an online news service context, and is in accordance with the findings in a mobile services context where Pura (2005) found that social value did not significantly influence commitment, but a negative path was not hypothesized in this research. The moderating effects of the community variables participation and effect were not significant and had only a slight impact on the path between social value and both loyalty constructs. Motivation had a slightly higher effect on the relationship between social value and behavioural intention, but this effect was not significant.

5.6.1.3 Emotional value → Loyalty

In this research emotional value was proposed to have a positive influence on both affective as well as behavioural intention. As Pura (2005) writes, previous research determined a direct relationship between emotion and satisfaction, and emotion and attitude towards using services in an electronic service environment, such as Dabholkar and Bagozzi, 2002. Holbrook (1994) supports the dimension of emotional value in an electronic services context as the service could be used for its own sake or for the hedonic aspects of services usage such as play or fun. Sheth et al. (1991) also support emotional value as a perceived value component, indicating that users can be driven by non-cognitive and unconscious motives. Semejin et al. (2005) hold that emotions of joy and value were important factors in the use of online services had an indirect influence on loyalty. In loyalty research in other contexts, Butz and Goodstein (1996) also found emotional value to be an important factor in customer loyalty.

In an online community context, Ridings and Gefen (2004) support that one of the reasons people participate in virtual communities is because of the recreation they provide. Preece

(2002) writes that community involvement raises awareness of threats, encourages protective vigilance and generates caring responses which would tap into a user's emotional state. Chung and Nah (2009) hold that in an online news site context, interactivity, such as that afforded by an online community allows users to feel like active participants who are engaged in the communication process and less as passive recipients of messages. Sundar (2008) calls this the degree to which the self feels that he is a relevant actor in the CMC situation. It is the extent of manipulability afforded by the interface to assert one's influence over the nature and course of the interaction.

The hypothesized relationships were as follows for this sub model:

H5 Emotional Value has a positive and significant effect on Affective Loyalty.

H5.1 The relationship between Emotional Value and Affective Loyalty is moderated by Participation.

H5.2 The relationship between Emotional Value and Affective Loyalty is moderated by Motivation.

H5.3 The relationship between Emotional Value and Affective Loyalty is moderated by Effect.

H6 Emotional Value has a positive and significant effect on Behavioural Intention.

H6.1 The relationship between Emotional Value and Behavioural Intention is moderated by Participation.

H6.2 The relationship between Emotional Value and Behavioural Intention is moderated by Motivation.

H6.3 The relationship between Emotional Value and Behavioural Intention is moderated by Effect.

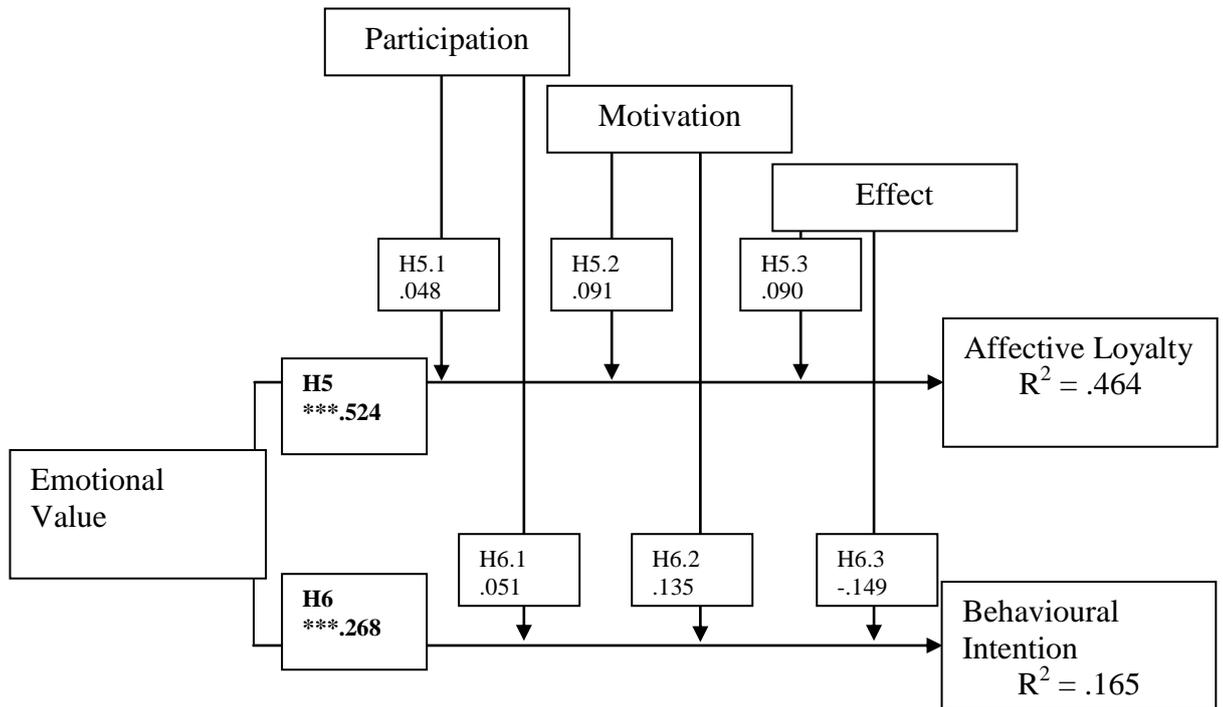


Figure 5.7 Emotional Value → Loyalty

These hypotheses were confirmed by the empirical data in that there was a strong and significant (at the 0.1% level) relationship between emotional value and both loyalty constructs, supporting the finding in a news service context that emotional value is relevant in loyalty, more so (path coefficient: .524) for affective loyalty than for behavioural intention (path coefficient: .268). Whilst the community moderators did not show significance, motivation had a positive effect on the relationship between emotional value and behavioural intention whereas the effect construct had a negative effect on this relationship.

5.6.1.4 Epistemic value → Loyalty

Epistemic value, or experiential value (Kainth and Verma, 2011), describes the perceived utility of an alternative's capacity to arouse curiosity, provide novelty and or satisfy a desire for knowledge. In support of previous research, this research posits that epistemic value will not have a positive and significant effect on affective loyalty. Pura (2005) posited that the effect of epistemic value on loyalty would be negative.

The hypothesized relationships were as follows for this sub model:

H7 Epistemic Value does not have a positive and significant effect on Affective Loyalty.

H7.1 The relationship between Epistemic Value and Affective Loyalty is not significantly moderated by Participation.

H7.2 The relationship between Epistemic Value and Affective Loyalty is not significantly moderated by Motivation.

H7.3 The relationship between Epistemic Value and Affective Loyalty is not significantly moderated by Effect.

H8 Epistemic Value does not have a positive and significant effect on Behavioural Intention.

H8.1 The relationship between Epistemic Value and Behavioural Intention is not significantly moderated by Participation.

H8.2 The relationship between Epistemic Value and Behavioural Intention is not significantly moderated by Motivation.

H8.3 The relationship between Epistemic Value and Behavioural Intention is not significantly moderated by Effect.

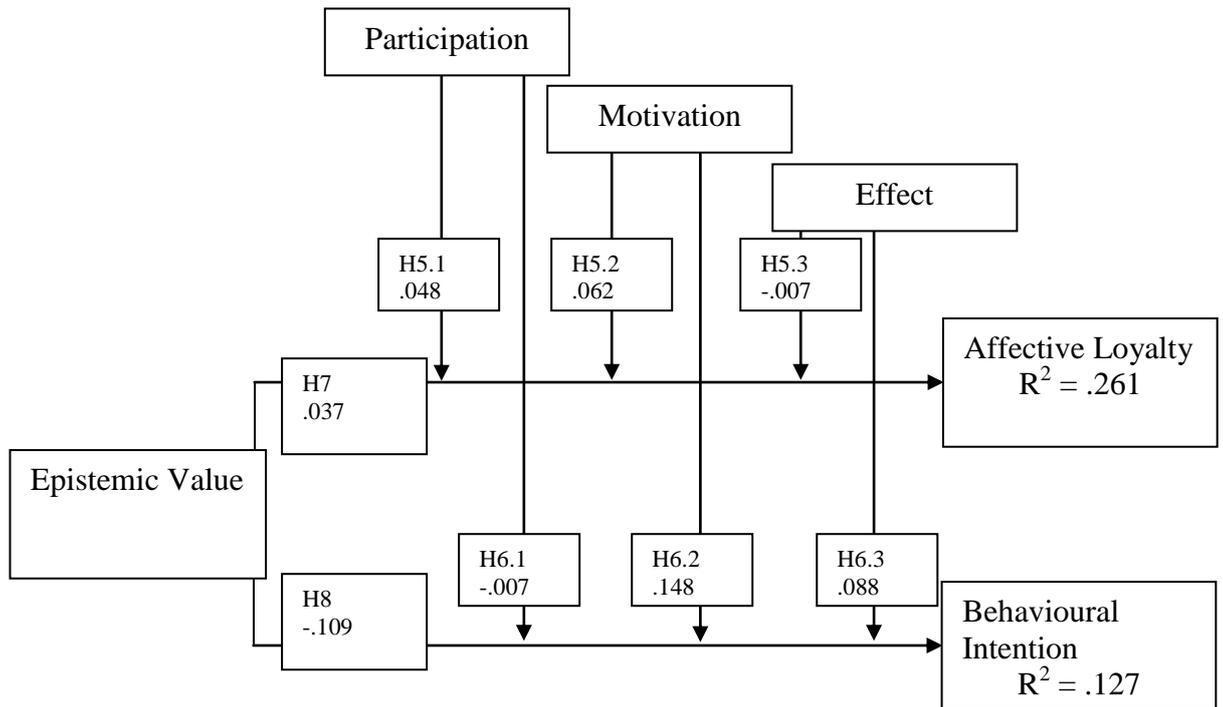


Figure 5.8 Epistemic Value → Loyalty

This research confirms that the relationships between epistemic value and the two loyalty constructs are not significant (t-value=0.530 and t-value=0.054 respectively) for the paths between epistemic value and affective loyalty, and epistemic value and behavioural intention. The path coefficient in this research between epistemic value and behavioural intention is also slightly negative (-0.109 for epistemic value to behavioural intention) but the paths were not significant. The moderating community variables were not significant, but again the motivation variable did enhance the relationship between epistemic value and behavioural intention.

5.6.1.5 Conditional value → Loyalty

Conditional value can be described as a specific case of other types of value (Sweeney and Soutar, 2001). Smith and Swinyard (1983) hold that there may be situational factors of loyalty which might increase the salience of a competing brand over one normally preferred by the consumer. Pura (2005) supports that conditional value has a direct positive effect on both affective and behavioural intention in an electronic services environment.

Ridings and Gefen (2004) hold that in online communities, site content is integrated within a rich environment which fosters communication, a concept which is also applicable in an online news site community, includes posting messages or comments which are accessible to all, which in turn allow members to maximize the value of the online content, enabling users to clarify their understanding of published or posted items by communicating with its publisher (whether a journalist or a citizen journalist) and to evaluate the credibility of the content by communicating with each other. Thus a moderating effect of the community components which was proposed in this research.

Holbrook (1994) support the assertion that conditional value occurs in situations related to the interaction between human applications and the surrounding environment which results in customised information (interactivity). Virtual communities can provide an indication of the importance of a subset of information and as such enhance the value a user perceives in a particular instance. An example is the rate at which users are commenting on, “liking” or forwarding a news item on an online site as this can have an influence on other users’ level of readership. These topics were covered in the community items encompassing the motivations to use the site “I visit this site because I can find the information I need on it” and the effect item “I feel well informed after visiting the community.” Thus, in certain circumstances, some news items might be more important than others (e.g. holiday-orientated information around holiday time) and the commenting on or readership of such items could have an influence on a user’s perceived conditional value of the news site.

The hypothesized relationships were as follows for this sub model:

H9 Conditional Value has a positive and significant effect on Affective Loyalty.

H9.1 The relationship between Conditional Value and Affective Loyalty is moderated by Participation.

H9.2 The relationship between Conditional Value and Affective Loyalty is moderated by Motivation.

H9.3 The relationship between Conditional Value and Affective Loyalty is moderated by Effect.

H10 Conditional Value has a positive and significant effect on Behavioural Intention.

H10.1 The relationship between Conditional Value and Behavioural Intention is moderated by Participation.

H10.2 The relationship between Conditional Value and Behavioural Intention is moderated by Motivation.

H10.3 The relationship between Conditional Value and Behavioural Intention is moderated by Effect.

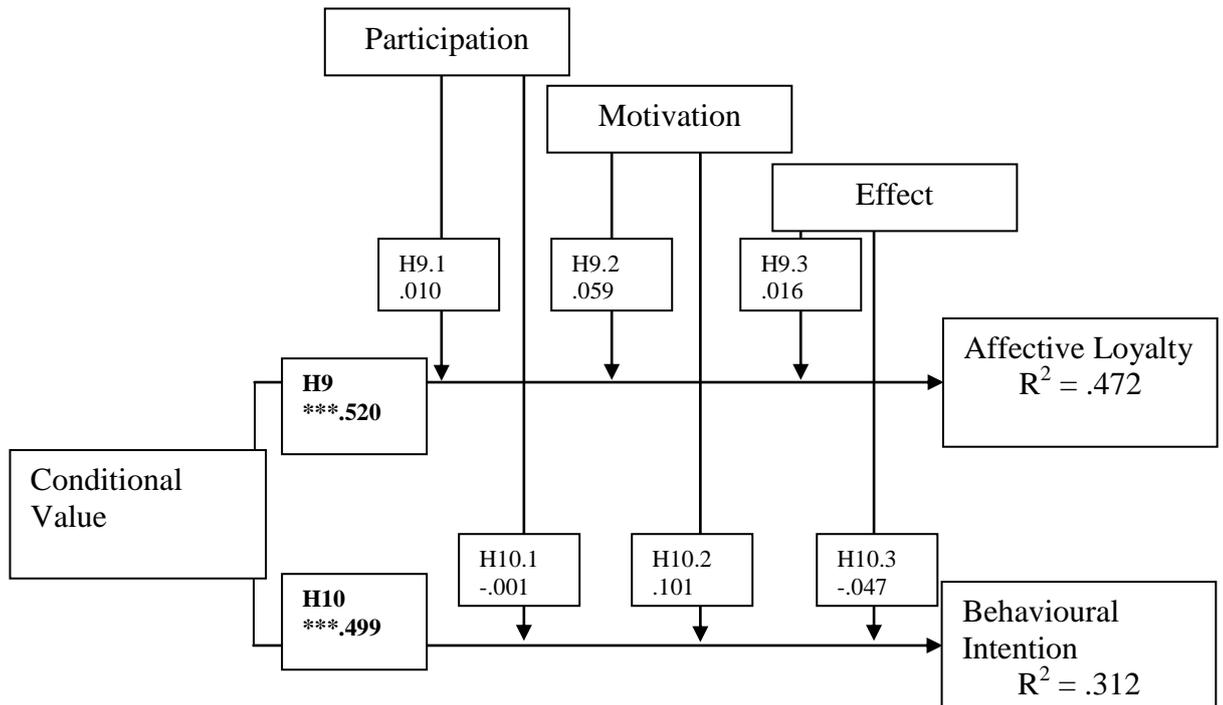


Figure 5.9 Conditional Value → Loyalty

These positive relationships were also supported in this research as both paths were significant at the 0.1% level. The path coefficient between conditional value and affective loyalty was very high at 0.529 with a t-value of 7.89, and between conditional value and behavioural intention, the path coefficient was 0.499 with a t-value of 7.26.

Interesting to note is that the path coefficients between conditional value and both loyalty constructs were higher with the community constructs than a model without as determined by the R^2 values. This indicates that the community factors are indeed having an effect on the loyalty components. The researcher thus went beyond the initial model results to investigate the effect that the community components were having outside of simply a moderating one. Indeed, the community constructs were found to have a significant impact on the explanatory power of the model and impact on the loyalty constructs. These interesting findings were detailed in section 5.5. Whilst the moderating community variables did not demonstrate significance, the motivation variable did have the highest

effect on the path between conditional value and behavioural intention. In general, the largest moderating factor can be seen to the motivation variable. Although significance was not obtained in this sample, it would be interesting to see whether a sample comprising a larger community would increase the significance of these relationships.

5.7 Comparison of Domestication Stage Models

At the higher level theoretical approach of this research, the position was taken that social determinism and technical determinism are facets which affect user's adoption and usage of electronic services and could be empirically tested. This theoretical approach and underlying philosophical position was discussed fully in previous chapters. The researcher holds that a user's adoption of services can differ depending on which category he falls into. To determine these categories, the researcher used the domestication stage constructs which supported these two approaches to adoption in order to dichotomize the sample of respondents into those which represented stronger technically deterministic characteristics or strong socially deterministic characteristics.

Thus the sample was divided into users which responded strongly or weakly in the domestication stages supporting *socially* deterministic perspectives (*objectification* and *conversion*). These were classified "*high soc*" and "*low soc*" in the table which follows. Those scoring highly in the technically deterministic perspective (Appropriation and Incorporation) were categorized "*high sci*" and those who scored low here were grouped as "*low sci*". Group comparisons of the path coefficients were then carried out using the XLStat program, which offers the capability of performing both multi-group comparisons as well as permutation tests.

For this comparison, the researcher chose the permutation test as these tests are increasingly applied even in the context of traditional statistical tests (Chin and Dibbern, 2010). Indeed, covariance based SEM can be used to provide group comparisons, but Chin and Dibbern hold that such tests can be problematic if normal population distribution or similar sample sizes are not present. The sample in this study was divided into two different sets of groups – one which represented the high and low scientific and another which represented the high and low social domestication groups. Because in one case these groups were uneven in size

(n=42 for the *low soc* group and n=100 for the *high soc* group) as supported in the study reported by Chin and Dibbern, the author selected the permutation method as a more accurate method of determining group heterogeneity.

Additionally, Chin and Dibbern (2010) support that the permutation or randomization procedure are considered distribution free approaches, which can be an important consideration in smaller sample sizes. Edgington (1987) also supported that in terms of sample selection, the permutation test provides accurate results regardless of how the sample is selected; that is, even if the sample was non-random, as is commonly in the case in surveys.

In order to facilitate a clear picture of the differences, and as described in section 3.5.4.4, partial models which did not contain the moderating community constructs were utilized in this analysis. A significant difference was, in fact, determined in the path coefficients of the groups and these results are presented in the tables which were created in accordance with the group comparison guidelines from Chin and Dibbern (2010). A comparison of path coefficients and p values was carried out for each of the hypothesized paths and is shown in Tables 5.14 and 5.15. A short discussion of the individual intergroup path coefficient differences then follows these tables. A more comprehensive discussion can be found in chapter 6.

Independent Variable	Dependent Variable	Hypothesis	Domestication Group				Path Difference	
			Hi Soc n=100	P value	Lo Soc n=42	P Value		P Value
Convenience Value	Affective Loyalty	H1 (+)	0.384***	0.000	0.298+	0.055	0.087	0.513
Convenience Value	Behavioural Intention	H2 (+)	0.322**	0.001	0.447**	0.003	0.125	0.479
Social Value	Affective Loyalty	H3 (+)	0.208+	0.068	0.219	0.236	0.012	0.960
Social Value	Behavioural Intention	H4 (+)	-0.425***	0.000	0.167	0.369	0.592	0.056+
Emotional Value	Affective Loyalty	H5 (+)	0.662***	0.000	0.808***	0.000	0.147	0.140
Emotional Value	Behavioural Intention	H6 (+)	0.256*	0.014	0.492***	0.000	0.236	0.09+
Epistemic Value	Affective Loyalty	H7 (-)	-0.073	0.469	-0.202	0.200	0.128	0.591
Epistemic Value	Behavioural Intention	H8 (-)	-0.334**	0.001	-0.320+	0.039	0.015	0.974
Conditional Value	Affective Loyalty	H9 (+)	0.581***	0.000	0.480**	0.001	0.101	0.333
Conditional Value	Behavioural Intention	H10 (+)	0.444***	0.000	0.459**	0.002	0.015	0.896
Significance		T Value	Symbol used					
p< 0.1		10%	1.282	+				
p< 0.05		5%	1.645	*				
p< 0.01		1%	2.326	**				
p< 0.001		0.10%	3.091	***				

Table 5.14 Model Path Coefficients for the Socially Deterministic Domestication Stages

Independent Variable	Dependent Variable	Hypothesis	Domestication Group				Path Difference	
			Hi Sci n=77	P value	Lo Sci n=65	P Value		P Value
Convenience Value	Affective Loyalty	H1 (+)	0.421***	0.000	0.257*	0.038	0.164	0.178
Convenience Value	Behavioural Intention	H2 (+)	0.443***	0.000	0.312*	0.012	0.131	0.387
Social Value	Affective Loyalty	H3 (+)	-0.192+	0.095	0.244+	0.050	0.436	0.114
Social Value	Behavioural Intention	H4 (+)	-0.418***	0.000	-0.144	0.251	0.273	0.257
Emotional Value	Affective Loyalty	H5 (+)	0.590***	0.000	0.585***	0.000	0.005	0.976
Emotional Value	Behavioural Intention	H6 (+)	0.327**	0.004	0.177	0.158	0.150	0.481
Epistemic Value	Affective Loyalty	H7 (-)	-0.193	0.130	0.346*	0.016	0.538	0.006**
Epistemic Value	Behavioural Intention	H8 (-)	-0.334**	0.008	0.162	0.271	0.496	0.08+
Conditional Value	Affective Loyalty	H9 (+)	0.498***	0.000	0.641***	0.000	0.143	0.148
Conditional Value	Behavioural Intention	H10 (+)	0.487***	0.000	0.369*	0.012	0.119	0.391
Significance		T Value	Symbol used					
p< 0.1		10%	1.282		+			
p< 0.05		5%	1.645		*			
p< 0.01		1%	2.326		**			
p< 0.001		0.10%	3.091		***			

Table 5.15 Model Path Coefficients for the Scientifically Deterministic Domestication Stages

It is clear that the model analysis for the different groups is yielding some different results. Thus, there is some evidence that the categorisation of domestication is uncovering some differences within the respective sample groups. Following is a comparison of the paths within the model, first of all for the two socially deterministic groups (Table 5.14). The groups will be referred to as “*high soc*” and “*low soc*” in the ensuing discussion.

5.7.1 Domestication Group Comparison: High Soc vs. Low Soc

5.7.1.1 Convenience value → Affective Loyalty

5.7.1.2 Convenience value → Behavioural Intention

Within the *high soc* group, the relationship between convenience value and affective loyalty is positive and highly significant ($p < .001$) level with a path coefficient of 0.384. This contrasts to the *low soc* group with a lower path coefficient and significance only at the 10% ($p < .1$) level. Within the *high soc* group, the relationship between convenience value and behavioural intention was also significant ($p < .01$) with a path coefficient of 0.322. This is again different in the *low soc* group where the path coefficient is higher at 0.447 at a significance level of 1% ($p < .01$). All paths between convenience value and loyalty for both the *high soc* and *low soc* groups were, as hypothesized, positive. The difference between the groups was not significant.

5.7.1.3 Social Value → Affective Loyalty

5.7.1.4 Social Value → Behavioural Intention

Similarly, the social value to loyalty paths contains strikingly different path coefficients for the two groups. The *high soc* group showed a significant relationship between social value and affective loyalty, whereas for the *low soc* group, this path was not significant. For the *high soc* group, there was a strong negative relationship between social value and behavioural intention, significant at the 0.1% level. For the *low soc* group, this relationship

was also not significant. The difference in path coefficients between the *high* and *low soc* groups was significant for the relationship between social value and behavioural intention.

5.7.1.5 Emotional Value → Affective Loyalty

5.7.1.6 Emotional Value → Behavioural Intention

Both the *high soc* and the *low soc* groups performed similarly in the comparison for emotional value to the loyalty constructs. Both the *high soc* and *low soc* groups had high and highly significant path coefficients for the path between emotional value and affective loyalty, although this was stronger for the *low soc* group. For the path between emotional value and behavioural intention, a difference in the path coefficients could be seen between the *high soc* group (0.256; $p < .05$) as opposed to the *low soc* group (0.492, $p < .001$). Additionally, the difference in path coefficients between emotional value and behavioural intention was significant between the *high* and *low soc* groups. All path coefficients were, as hypothesized, positive for both groups.

5.7.1.7 Epistemic Value → Affective Loyalty

5.7.1.8 Epistemic Value → Behavioural Intention

As hypothesized, all paths between epistemic value and both loyalty constructs were negative in both groups. For the *high soc* group, the relationship between epistemic value and behavioural intention resulted in a path coefficient of -0.334, significant at the 99% level, and a similar negative path was also found to be significant in the *low soc* group. However, the differences between the path coefficients between the *high* and *low soc* groups did not show significance.

5.7.1.9 Conditional Value → Affective Loyalty

5.7.1.10 Conditional Value → Behavioural Intention

The path coefficients between conditional value and affective loyalty were significant for both groups. Both relationships were positive, with the *high soc* group demonstrating a high (0.581) and highly significant path ($p < .001$), while the *low soc* group's path coefficient lower at 0.480 ($p < .01$). Path coefficients were more similar for the relationship between conditional value and behavioural intention: 0.444 (significance $p < .001$) for the *high soc* group and 0.459 (significance, $p < .01$) for the *low soc* group. The differences in the path coefficients were not significant between the groups.

The following section continues the comparison discussion within the *high* and *low sci* groups.

5.7.2 Domestication Group Comparison: High Sci vs. Low Sci

This discussion follows the results presented in table 5.15 for the domestication groups representing those respondents who rated high and low in the scientific category.

5.7.2.1 Convenience value → Affective Loyalty

5.7.2.2 Convenience value → Behavioural Intention

Similar to the *high soc* group, the relationship between convenience value and affective loyalty in the *high sci* group is positive and highly significant at the 0.1% ($p < .001$) level with a path coefficient of 0.421. For the *low sci* group, in contrast, this path was lower at 0.257 at a significance of 5% ($p < .05$). The paths between convenience value and behavioural intention for both the *high sci* and *low sci* groups were slightly different at 0.443, highly significant at the 0.1% level ($p < .001$) for the *high sci* group and 0.312, significant at the 5% level ($p < .05$). As with the *high* and *low soc* groups, all paths between convenience value and loyalty for both the *high sci* and *low sci* groups were, as hypothesized, positive. The differences in path coefficients between groups did not, however, show significance.

5.7.2.3 Social Value → Affective Loyalty

5.7.2.4 Social Value → Behavioural Intention

The paths between social value to affective loyalty both for the *high sci* and *low sci* groups were significant. Social value negatively influenced affective loyalty for the *high sci* group, but this path was positive for the *low sci* group. The path between social value and behavioural intention was negative -0.418 and significant at the .1% level ($p < .001$) for the *high sci* group, and negative but not significant for the *low sci* group.

5.7.2.5 Emotional Value → Affective Loyalty

5.7.2.6 Emotional Value → Behavioural Intention

Both paths between emotional value and affective loyalty were significant and positive for both sci groups. A high path coefficient of 0.590 ($p < .001$) was found for the *high sci* group, and a similar path coefficient for the *low sci* group at 0.585 ($p < .001$) was found. The relationship between emotional value and behavioural intention was stronger for the *high sci* group with a path coefficient of 0.327 at a significance of 1% ($p < .01$) and 0.177 and insignificant for the *low sci* group. The intergroup difference between emotional value and loyalty was stronger for behavioural intention, but the differences in the path coefficients were not significant. All path coefficients were, as hypothesized, positive for both groups.

5.7.2.7 Epistemic Value → Affective Loyalty

5.7.2.8 Epistemic Value → Behavioural Intention

For the *high sci* group, the relationship between epistemic value and affective loyalty was negative with a path coefficient of -0.193 but not significant. Between epistemic value and affective loyalty, the path coefficient was much higher for the *low sci* group, and the difference in the path coefficients for both groups was significant. The path between epistemic value and behavioural intention for the *high sci* group was significant and negative (-.334, $p < .05$) whereas this path was positive but not significant for the *low sci* group. Here, the differences in the path coefficients between both groups was significant.

5.7.2.9 Conditional Value → Affective Loyalty

5.7.2.10 Conditional Value → Behavioural Intention

In the *high sci* and *low sci* groups, the path coefficients were 0.498 significance: .1% ($p < .001$) and 0.641 significance 1% ($p < .001$) respectively. The paths between conditional

value and behavioural intention were also positive and significant for both groups, with this path being larger for the *high sci* group than the *low sci* group. For the *high sci* group, the path coefficient between conditional value and behavioural intention was 0.487 significance .1% ($p < .001$) and for the *low sci* group, 0.369, significance 5% ($p < .05$). All relationships were, as hypothesized, positive, but the difference between paths did not show significance between groups.

Most interestingly, the empirical data is supporting the conjecture that there exist intergroup differences between those who rate high or low in the socially deterministic categories, and those who rate high or low in the scientifically orientated domestication groups. Even more interesting, however, is to note that these intergroup differences are not identical between socially and scientifically deterministic domestication stage analyses. Thus, the data is indicating that there is a difference between the respondents in the individual domestication groups as hypothesized in this research.

5.8 Summary of Chapter 5

In this chapter, the researcher presented the findings of the explanatory data stage. The data was examined and demographics and descriptive statistics of model variables offered. Research was cited which supported the inclusion of both the latent variables and path hypotheses. The discriminant and convergent validity of all model variables was confirmed and the measurement model validated, indicating that the community constructs introduced in this research are valid and robust. The methods for PLS path analysis were described and the results of the model runs were presented in this chapter. Hypotheses were tested and the results discussed.

At the meta-theoretical level of this research, a model comparison was carried out between groups which represented different aspects of the socially deterministic and scientifically deterministic stances as discussed previously in this thesis. Results were found to show support for the research proposition that socially and technically deterministic stances can be measured, and that there exist some differences between those who scored highly vs. lower in the respective groups. These differences were shown to have some effect on how separate groups view aspects of perceived value in a different way and that this does indeed influence the relationships between perceived value and loyalty.

Additionally, results and significance for the paths within the model were discussed and a full model with community constructs was compared with a partial model which omitted these constructs. A moderate effect was found in the model comparisons indicating moreover that the research provides a relevant finding in the understanding of the influence of online community participation on loyalty.

In the following chapter, the researcher strives to enhance the understanding of the findings presented in this chapter and bring these to a level which enables practical interpretation and implementation within the practitioner community.

Chapter 6 Discussion

6.1 Introduction

This chapter comprises a discussion of the findings of this research. First, the theoretical position taken in the thesis is reiterated and the research questions are presented again. The results of the individual path analyses of the model as presented in chapter 5 are discussed. The results of the underpinning domestication theory findings are detailed and interpreted by the researcher. Finally, a chapter summary is presented. The structure of chapter 6 is presented in Figure 6.1.

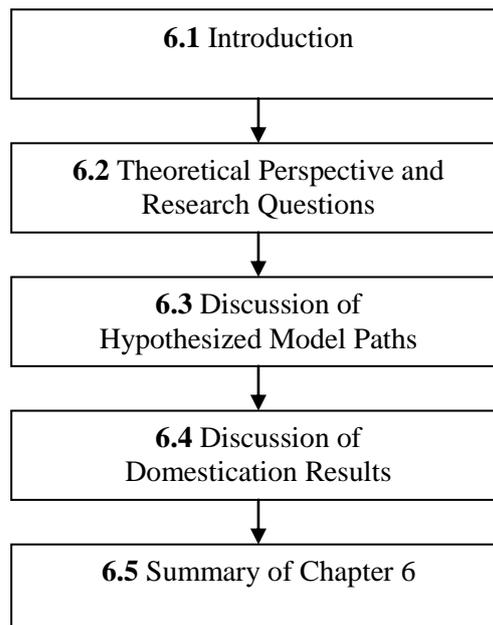


Figure 6.1 Structure of Chapter 6

6.2 Theoretical Perspective and Research Questions

The thesis explores the research question inspired by Oliver's (1999) conjecture that a customer's involvement within a "community" can direct his choices in an advantageous way, or in this research, can enhance loyalty. As stated in the introduction, the research question pertaining to this topic is as follows:

- **R1: What are the drivers of customer loyalty to online news sites and can customer loyalty be enhanced by a news site's online community?**

The underlying theoretical concept within this thesis reflects the arguments of technical determinism and social constructionism and the role each aspect plays in the acceptance and usage of electronic services, in this thesis, online news services. This is reflected in the research question:

- **R2: Are there differences between the social perspectives and technological perspectives which drive loyalty in the online news services context and can these be measured and used to better understand customer loyalty?**

The following section comprises a discussion of the primary model path analyses. The subsequent section then discusses the results of the domestication stage analysis in support of the higher order theoretical perspective employed in this research. After these discussions, a summary is provided.

6.3 Hypothesized Model Path Discussion

Uлага and Eggert (2006) hold that customer perceived value plays an important role in predicting purchase behaviour (Chen and Dubinsky, 2003), in achieving sustainable competitive advantages (Lindgreen and Wynstra, 2005), and affects relationship management (Payne et al., 1995), and hence using perceived value in a model testing loyalty to online news services is supported. Pura (2005) writes that measuring customer perceived value is essential in assessing current services and for the development of further ones, because customer segments may have different motives to use services and thus perceive different value in them. In this research, a multi-item perceived value scale was adapted for the online news market in order to take into consideration the facets of value which might be important within the acceptance of online news services and the degree of their importance. As discussed in the literature review, the five perceived value components: *convenience value*, *social value*, *emotional value*, *epistemic value*, and *conditional value* were used within the model as they have been previously empirically validated as measures of value within an electronic services context.

Two components of loyalty were included to assess a new site visitor's level of loyalty to the site. As detailed in the literature review, the stage *affective loyalty* is a deeply held commitment to buy or a good intention and *behavioural intention* is, as a general rule found to be a good predictor of behaviour when the behaviours pose no serious problems of control (Ajzen, 1991).

Moderating this perceived value to loyalty relationship were the items developed by the researcher which measure aspects of a user's participation in a community, *participation*, the reasons he visits the community, *motivation*, and the post visit effects of visiting the community on the users, *effect*. The results of the model analysis were shown in chapter 5 and a discussion of these results now follows.

6.3.1 Hypothesized Path 1: Convenience value → Loyalty

Convenience value will have a positive and significant effect on loyalty, and this relationship will be moderated by community participation, motivation and effect.

In this study, the researcher proposed that the convenience value seen by users within a news site would be positively moderated by the community components introduced within the research. Thus convenience value would be a driver of loyalty and this relationship would be enhanced by participation in the community. In support of the research detailed previously, this study did find that convenience value was significantly related to both types of loyalty. Thus the instant and convenient access to services as a driver of loyalty is also supported within the online news context. Confirming Pura's (2005) research that showed convenience value has a positive and significant relationship on behavioural intentions, this research also tested the relationship between convenience value and behavioural intention, finding a high effect on this loyalty component (.462). This research has shown that convenience value is second only to conditional value in explaining behavioural intention and that convenience value is more likely to lead to behavioural intention than to affective loyalty.

Convenience value supports the contextual environment of the service usage in terms of time, location and the technology available which are, as previously discussed, important components of the service environment which encompasses the use of online news services (Heinonen, 2004, Dabholkar, 1994). Such components of the service environment have developed in today's Internet-based society in that the "distance" between service provider and customer is almost non-existent (only as far as the next computer or Internet-ready device), and there is immediate accessibility of information at any time within the constraints of the user's available technology. Convenience value in the case of online news services is the ability to access the news on a computer or mobile platform, when the user requires, without temporal restrictions, and with technology currently available. The

findings in this research support that these factors are especially pertinent in a news consumption context which could be due to the temporal relevance of news.

The convenience of being able to obtain news without temporal or spatial constrictions is indeed seen as important to users as is to be expected. The convenience value of immediate access to news is logically a driver of loyalty. Clearly users perceive value from an online news site over an offline counterpart or over their offline offerings, which should confirm news producers' endeavours to maintain and enhance their online offerings. In an online news services context, it makes sense that convenience value would be important as the ability to access the service using the existing equipment and independent of time is important for users. The temporal nature of news is also an important factor in its consumption as users are eager to read news items as they become available and not have to wait for other sources to become available such as the evening or morning newspaper, or the evening news program. Therefore it seems that the components of convenience value are especially pertinent in getting users not only to feel loyal to a site, but get them to revisit a site and as such practitioners need to pay special attention to factors which affect a user's ability to accessibility, ease of use, and be able to use the technological environment they possess in order to access the online news service. The community influence on convenience value can be seen in the literature on online communities such as Preece (2002), Haythornwaite (2007) and in an online news site context such as Plant (2004) and Hagel and Armstrong (1997) as discussed in the previous chapter. While the researcher hypothesized that the social and environmental aspects of convenience value would be enhanced by the online news site's community and a user's participation therein, this was not supported in the empirical findings.

Running the sub model with and without community constructs, however, did provide additional findings. The R^2 value of affective loyalty reduced from 0.354 for the model with community moderators to a R^2 value 0.215 for the model without community constructs. The R^2 value of behavioural intention reduced from 0.308 for the model with

community moderators to a R^2 value 0.242 for the model without community constructs. This shows again that the explanatory power of the model including the community constructs is better than without.

6.3.2 Hypothesized Path 2: Social value → Loyalty

Social value will have a positive and significant effect on loyalty, and this relationship will be moderated by community participation, motivation and effect.

As detailed before, social value was defined as the perceived utility acquired from an alternative's association with one or more specific social groups (Sheth et al., 1991), or value which is perceived to enhance the social self concept (Kainth and Verma, 2011). Pura (2005) refers to social value as the social approval and the enhancement of self image among other individuals, and could be interpreted as the importance of social reputation in the form of esteem. In this research, it is proposed that social value in an online news context refers to the interaction of the users with other users on the site and the resultant esteem from these interactions.

In support of this previous research, it was proposed in this study that not only would social value be a driver of loyalty in an online news site context, but that this relationship would be positively enhanced by participation in the community. Based on research from Vaast (2007), Haythornwaite (2007), and Turkle (1995), discussed previously, in which it was determined that online communities provide social and supportive function, it was proposed that social value would be a driver of loyalty and this would be enhanced by a user's community participation because of the social function communities provide.

The findings from the model analysis in this research show that the path from social value to affective loyalty was not significant, but that from social value to behavioural intention

was significant at the 5% ($p < .05$) level, but, surprisingly, with a negative path coefficient. This indicates that the site users were not seeing the site as a way in which to gain social approval or feel accepted. This is partly in accordance with the findings in a mobile services context where Pura (2005) found that social value did not significantly influence commitment, however, with a positive path coefficient. In this study, the empirical results indicate that social value is not an important factor in either affective loyalty or behavioural intention. This result may mean that the social value component of perceived value is not important as online news sites are perceived by users to be a functionally important entity, used for more utilitarian functions of obtaining news. A social value is not ascribed to the site when considering the complete sample of the users surveyed. Fitzgerald (2002) supports that in self service electronic environments, social pressure from peers or family is not prevalent and this is supported in the findings of this research in an online news site context. Also, previous research has proposed that social aspects have a higher influence in experiential electronic services and a lower effect on functional, goal oriented services – thus online news sites could also be seen as functional as opposed to experiential in nature and as such social value is not an important driver of loyalty. As with the previous hypothesized path, the community variables did not present a significant moderating force, which is in contrast to the conjecture from Bagozzi and Dholkia (2006) that loyalty can be enhanced by encouraging interactions within small groups within an online community. In an online news site context, this does not seem to hold true.

However, again interestingly, running the submodel of social value to loyalty without the community moderators provided an R^2 value of only 0.014, down from an R^2 of 0.262 for social value and Affective loyalty with the community moderators, and an R^2 value of 0.021 down from 0.140 for social value and behavioural intention with community moderators. This means that social value was explaining only 1.4% of Affective loyalty and 2.4% of behavioural intention when taking only the social value variable into consideration, yet adding the community constructs gave the model a much better explanatory power with 26.2 % of affective loyalty being explained and 14% of behavioural intention being

explained. Thus the model calculations are showing that while social value is not a significant positive driver, the addition of the community variables is increasing the overall explanatory power of the model appreciably.

6.3.3 Hypothesized Path 3: Emotional value → Loyalty

Emotional value will have a positive and significant effect on loyalty, and this relationship will be moderated by community participation, motivation and effect.

Emotional value is defined as the perceived utility acquired from an alternative's capacity to arouse feelings or affective states associated with specific feelings or when precipitating or perpetuating those feelings (Sheth et al., 1991). Supported by Holbrook (1994), and Sheth et al. (1991), the hedonic and non cognitive aspects of perceived value were included in the research model and hypothesized to have a positive effect.

Emotional value was proposed to have a positive influence on both affective as well as behavioural intention and this was supported by the empirical data in that there was a strong and significant relationship (at the 0.1% level) between emotional value and both loyalty constructs. Pura (2005) writes that previous research has revealed a relationship between emotion and satisfaction, between emotion and attitude towards using services in an electronic service environment and between emotion and loyalty (Dabholkar and Bagozzi, 2002; Semejin et al., 2005; Butz and Goodstein, 1996) Thus, this research supports the results of other studies and extends these results in a news service context that emotional value is a relevant driver of loyalty, with the relationship between emotional value and affective loyalty being even stronger than the relationship between emotional value and behavioural intention.

Supported in the online community literature detailed before, (for example: Ridings and Gefen 2004; Preece, 2002), especially in a new site context, it was proposed by the researcher that due to the fact that users are sometimes confronted with horrific news items (such as after the September 11 terrorist attack), any perceived emotional value of news sites would be enhanced through community participation. Other online community literature describes additional emotional aspects of community participation such as a user's identification with the community as a driver of sharing and participating within the community (Dabholkar and Bagozzi, 2002). Feeling attachment to the community would be an emotional effect of participation and thus it was expected that the emotional value of the site would be enhanced by a user's participation in the community. As emotional value is encompassing hedonic aspects of site usage as well as the capacity for the site to arouse feelings or affective states, the researcher proposed also that the emotional value component of the hedonic aspects of news site usage would be enhanced by participation within the community. The results show, however, that although users apparently have feelings when using the site, interestingly, these were not enhanced significantly but the community components.

These results are interesting in that they represent that emotional value is a driver of both types of loyalty. News sites could be seen as a seemingly functional object, yet there is a significant relationship between emotional value and loyalty within an online news site context. Thus, the usage of the service for its own sake, or for the affective state it arouses is a driver in loyalty, in contrast to a news site being seen simply as a functional tool as one might interpret due to the fact that perceived social value is not a driver at all of loyalty in this context. Thus, as Pura (2005) supports, loyalty can be enhanced through emphasizing the fun and positive feelings. Again, this is in contrast to the notion that users are only interested in the functional aspects of news site usage, and supports that users could be enticed to return to the site when it offers hedonic as opposed to solely functional attributes.

Thus while social value is not a driver of loyalty, there are hedonic or emotional aspects which are drivers, and as such it would be interesting in a further research project to more fully explore which emotional state is being tapped. Additionally, as mentioned previously, as the model shows stronger support for affective loyalty, how to translate this affective loyalty to behavioural intention is an important factor for news site owners. This research shows that loyalty also has an impact on behavioural intention, although to a much lesser extent. This could be important as further research which assesses the relationship and possible “conversion drivers” from affective loyalty to behavioural intention could mean that emotional value is a powerful first step in acquiring a returning user base. Pura’s research found that in an electronic services context commitment significantly and positively affected behavioural intention, and this is a question which could be further explored in an online news site context. This research provides an additional finding in defining this outstanding question and research direction.

Again, comparing the submodel of emotional value to both loyalty constructs without including the community variables, there was a less poignant difference. The model without the community constructs was explaining 41.2% of affective loyalty as opposed to a model with community constructs in which the R^2 value was 0.464 or where the model was explaining 46.4% of affective loyalty. 11.8% of behavioural intention was explained by the model without community constructs and slightly more, 16.5% with the community variables. So while emotional value was a significant driver of loyalty, it seems that the community variable was lending a relatively small difference in the explanatory power of the model.

6.3.4 Hypothesized Path 4: Epistemic value → Loyalty

Epistemic value will not have a significant positive effect on loyalty, and this relationship will not be significantly moderated by community participation, motivation and effect.

The usage of epistemic value as a valid construct in this research into online news services is supported in that it pertains to exploratory, novelty seeking and variety seeking motives which have been proposed to activate product trial and switching behaviours. Sheth et al. (1991) support that an alternative might be chosen if a consumer is bored or satiated with his current brand, is curious or has a desire to learn.

In the context of online news service usage, Kaye and Johnson (2003) assert that once the novelty of a new medium fades, users drawn to it out of curiosity may gradually return to their previous media usage habits. Thus, as online news sites have become more commonplace, users are more likely to have either incorporated them into their current habits, and as such do not perceive a benefit from the curiosity about the site or the novelty of the site. As online news sites and their associated communities have become quite common place both the epistemic value of an online news site as well as the influence of the community on this relationship was not expected to be significant. If a user repeatedly visits a site, as would be the case in a loyal or returning customer, it follows that he would be better acquainted with the site, and as such, the epistemic value he appreciates would logically be minimal.

Pura (2005) found that epistemic value did not have an influence on loyalty in a mobile services context, and thus supports that consumers who try a service mainly out of curiosity, or if the main reason for visiting a site is to try something new or learn new ways of doing things does not create value for the customer. This research also confirms that the relationships between epistemic value and the two loyalty constructs are not significant. Previous research holds that consumers may try a service mainly out of curiosity, and that

their main reason for visiting a site is to try something new or learn new ways of doing things (Duman and Mattila, 2005). So while epistemic value may be positive for a user's initial visit to the site, it seems logical that it would not increase a user's loyalty. This research supports that in an online news service context, epistemic reasons for visiting a site do not create value for the customer, and the relationship between epistemic value and behavioural intention is even slightly negative, a result which was also shown in other electronic services contexts such as Pura (2005). However, extending Pura's research, this study tested the relationship between epistemic value and both loyalty constructs, finding that epistemic value affects neither affective loyalty nor behavioural intention. The explanatory power of the model was also not strong: the R^2 value for affective loyalty was 0.261 and that for behavioural intention was only 0.127.

However, when the model was run without the community constructs, interesting results were again apparent. The R^2 value of affective loyalty reduced from 0.261 for the model with community moderators to a R^2 value 0.010 for the model without community constructs. Accordingly, the R^2 value for behavioural intention fell from 0.127 for the model with community variables down to a value of 0.026 for the model without community constructs. This shows that the community variables are enhancing explanatory power of the overall model.

6.3.5 Hypothesized Path 5: Conditional value → Loyalty

Conditional value will have a positive and significant effect on loyalty, and this relationship will be moderated by community participation, motivation and effect.

The results of this research show that conditional value has a positive and significant effect on both affective loyalty and behavioural intention, supporting Pura's (2005) findings that conditional value has a direct positive effect on both types of loyalty in an electronic services context. Pura's results found that conditional value had a higher effect on

behavioural intention than commitment, a finding which was slightly different than in this research and as such could indicate that in different electronic service usage contexts, conditional value is having a slightly different influence on users' loyalty, and that users of different technologies are seeing a high level of perceived conditional value and this is leading to loyalty. This research found that conditional value had a higher level of influence on affective loyalty, or commitment than on behavioural intention, indicating that while users feel that conditional value is important in their feelings of loyalty to the site, it is less strong in supporting behavioural intention (with path coefficients of 0.529 and 0.499 for affective and behavioural intention respectively). Thus conditional value is less likely to influence behavioural intention, which is pertinent for practitioners as behavioural intention can be a good indicator of actual behaviour.

Within an electronic services context, previous research has shown that conditional value has a strong influence on usage in task fulfilment-orientated information based services (Pura, 2005; Wang et al., 2004). In support of this literature, this research has also found that conditional value or circumstances impacting choice that may be seasonal or dependent on the context in which the value judgment occurs (Sheth et al., 1991, Holbrook, 1994) are important in an online news service context. This may be because of the localized nature of the information which can be found on the site. As the sample was that of a regional newspaper, these aspects may be more pertinent than on a national news site. Because the users of a local news site are probably looking for localized information (events, news items from the regional area), such information can be logically seen as an important driver of traffic to the site, but how much of a difference would be seen in a non-local news site is still an open question.

In online community research, one of the functions of the community has been determined to be assessing what information is important to its members (Ridings and Gefen, 2004), or what information could be important in certain circumstances, and as such could provide an enhancement of conditional value. As online communities can function to foster

communication and maximize the value of online content Ridings and Gefen (2004), the researcher proposed that these factors of community supported in the literature would have a positive moderating effect on a user's perceived value, but this could not be assessed within the results of this research. It would be interesting to look at different online news sites and test whether this moderating effect can be seen on a different, perhaps nationwide news site.

Again, interestingly, when running this sub model without the community constructs, the R^2 of the conditional value to affective loyalty reduced from .472 to .395 and the R^2 for conditional value to behavioural intention reduced from .312 to .288. This indicates that while the community moderators were not showing significance, they were having an enhancing effect on the explanatory model as a whole.

6.3.6 Summary of Hypothesized Path Discussions

The path discussions above indicate several trends and provide some interesting findings. Firstly, the explanatory power of the model in determining affective loyalty within this sample of news site users were highest when considering conditional value, followed closely by emotional value, and convenience value. Epistemic value and lastly social value did not provide significant results and thus it can be concluded that epistemic and social value are not important drivers of affective loyalty in an online news service context. For behavioural intention, the results were slightly different in that the strongest loyalty drivers were conditional value and convenience value, followed by emotional value. Again, for behavioural intention, epistemic value was not a significant driver, and social value even proved to be a somewhat significant (at the 5% level) negative driver. These results also indicate that the perceived value components tested are providing similar results which suggests that these value items are important (or not) generally in an electronic services context. Still, there may be other perceived value components which might be specifically pertinent in an online news site setting, and as discussed in the next chapter, this could be an adjunct research project to add to the findings from this study. The following table summarises these results or the hypothesized paths of the research.

Value Component	Loyalty Component	Path Coefficient	Significance level	Hypothesis Supported?
Epistemic	Affective	0.037	Not significant	Yes
	Behavioural Intention	-0.109	Not significant	Yes
Emotional	Affective	0.524	*** (0.1%)	Yes
	Behavioural Intention	0.268	*** (0.1%)	Yes
Social	Affective	0.021	Not significant	No
	Behavioural Intention	-0.164	* (5%)	No
Conditional	Affective	0.520	*** (0.1%)	Yes
	Behavioural Intention	0.499	*** (0.1%)	Yes
Convenience	Affective	0.372	*** (0.1%)	Yes
	Behavioural Intention	0.462	*** (0.1%)	Yes

Table 6.1 Summary of Hypothesised Path Results

As the moderating community relationships were not significant, these are not included in the table. However, the researcher compared the explanatory power of the submodels when including and excluding the community variables in the model run. The models including the community variables provide better explanatory power than those without. Particularly, this is can be seen in the difference between the social value and the epistemic value models. These results can be seen in table 6.2.

Value component	Loyalty component	R square With community	R square Excluding community
Epistemic	Affective	0.261	0.010
	Behavioural Intention	0.127	0.026
Emotional	Affective	0.464	0.412
	Behavioural Intention	0.165	0.118
Social	Affective	0.262	0.014
	Behavioural Intention	0.140	0.024
Conditional	Affective	0.472	0.395
	Behavioural Intention	0.312	0.288
Convenience	Affective	0.364	0.215
	Behavioural Intention	0.308	0.242

Table 6.2 Summary of Differences in Explanatory Power of Sub-Models

Thus, the researcher concludes that while the path coefficients of the moderating role of community participation, motivation and effect were not significant, the explanatory power of the models in general increased when including these community constructs.

In the following section, the researcher discusses the results found in applying the domestication groupings to the sample and the ensuing differences in model results.

6.4 Discussion of Domestication Results

In the book *The Routledge Companion to News and Journalism*, Fenton, (2009:557) writes on the changing landscape of news in the digital age:

“Though technology may frequently be the target of derision or delight, the nature of change (on the nature and state of journalism) is not attributable to technology alone. This particular technological wave of change is deeply embedded in and part of a complex convergence of economic, regulatory and cultural forces that are contingent upon local circumstance at any one time.”

This statement supports that the challenges facing the news industry are based both on technical innovations, as mentioned before, such as the printing press, the telegraph, the Internet and the interactivity the Internet offers as well as cultural forces which are at work. This also has an impact on news consumers as these changes have an affect on the way in which news is created, delivered and consumed. The combination of these factors, the technology, or the technically deterministic approach, and the social factors, or socially deterministic approach and their effect on service adoption in an online news context underlies this research and the domestication theory employed.

As discussed throughout the thesis, domestication theory supports the two opposing views of technical determinism and social constructionism in the acceptance and use of media technology. Domestication researchers Hynes and Richardson (2009) write that while much of the IS research examines the interaction between people and the technological artefact and the systems running on it, little attention is often paid to the social constructs in which computer use actually takes place, and how, if at all, this influences how technologies are acquired, used and made sense of. These concepts are summed up by Ling (2004) who writes that there are those who suggest that technology shapes society and others who say

the opposite, that society shapes technology, and that the domestication approach seeks a nuanced, middle ground approach by considering both sides. Thus, domestication considers adoption to be a co-production of the social and the technical (Sørensen, 2005: 46).

Domestication is about describing the place of technology in everyday life and catches not only the practical, temporal and spatial aspects, but also importantly how these things are combined with the cultural, as an expression of lifestyles and values. Taking this into account, the researcher strove to find constructs which would measure the level of domestication at which a user found himself, as detailed in the methodology section and apply these to the study of perceived value and loyalty.

In this research, the four stages of domestication were quantified and differences between users who found themselves at different domestication stages were explored. Based on and supported by the body of domestication literature, the following domestication group distinction was used in the analysis and the discussion which follows.

Domestication Stage	Stage description	Scientific or Social Orientation
Appropriation	Appropriation describes the portion of the consumption process in which the particular object leaves the commercial world and enters our sphere of objects. This functional stage in the cycle includes the sense that we know of the particular object or service and understand that it could somehow fit into our lives (Ling, 2004). Appropriation is the point at which the object “leaves the world of the commodity and the generalised system of equivalence and exchange and is taken possession of by an individual or household and owned”	Scientific (Technically Deterministic)
Incorporation	Incorporation represents how the object or service is used and can be seen as functional in nature. While objectification focuses on the aesthetic side of the domestication of an artefact, incorporation directs itself more toward the functional (Ling, 2004). Incorporation describes the functions of the artefacts, not just how they are described in the owner’s manual, but all those functions which are applied by the user.	Scientific (Technically Deterministic)
Objectification	Objectification represents the way in which a service or technology is displayed and represents symbolic value, aiding in the definition of the sense of self. Silverstone (1992) supports that objectification “reveals itself in display and in turn demonstrates the classificatory principles that inform user’s sense of itself and its place in the world”	Social (Socially Deterministic)
Conversion	Conversion is the phase of the cycle in which others incorporate their understanding of the artefacts in their broader understanding of the person consuming the artefact Silverstone (1992). Ling (2004) posits that it is at this point when the person who purchased and is using the item hopes to realize its full social effect.	Social (Socially Deterministic)

Table 6.3 Domestication Stage Differentiation

As detailed before, the meta-theoretical approach taken was that social determinism and technical determinism are facets which affect a user's adoption and usage of electronic services and can be empirically tested. The researcher holds that a user's adoption of services or loyalty tendencies may differ depending on which category he falls into.

To determine these categories, the researcher used the domestication stage constructs which supported these two approaches to adoption in order to dichotomise the sample of respondents into those which represented stronger technically deterministic characteristics or stronger socially deterministic characteristics. Interestingly, the sample of respondents did not fall neatly into mutually exclusive groups of scientifically or socially deterministic clusters and as such a comparison of strictly social to technical stages was not possible. However, the researcher did find that the respondents could be separated into those which rated high or low in the social categories (objectification and conversion) and high or low in the scientific categories of domestication represented by the appropriation and incorporation stages. That a clear distinction between socially orientated and technically orientated individuals could not be determined is interesting, but somewhat intuitive, in that it would be difficult to find an individual who is *solely* technically driven or *solely* socially driven. This is, in itself, is an interesting finding and could be interpreted to demonstrate how the boundaries between technical and social aspects of technology acceptance are not completely clear-cut, or, in other words, that each of us may have either more social than technical tendencies (or vice versa) which drive our actions. The researcher is not aware of another study which has attempted to dichotomize a sample into these groupings and as such this research offers a starting point from which future research into using domestication stages to analyse a customer base can be continued. Importantly, it also supports the inclusion of technically deterministic and socially deterministic factors in service or technology adoption research as individuals seem to be influenced by both. Notably, this research found that there are tendencies to be seen in high and low categories of the scientific and social groupings and that there are differences in the model results

when taking these groupings into consideration. These differences will be discussed in the following sections.

In the sample, users who responded strongly in the domestication stages supporting socially deterministic perspectives (objectification and conversion) were classified as “*high soc*” and those which responded lower in these categories were classified “*low soc*”.

Accordingly, those scoring highly in the technically deterministic categories (appropriation and incorporation) were categorized “*high sci*” and those who scored lower here were grouped as “*low sci*”. As detailed in chapter 5, path comparisons of the models were carried out and results shown in tables 5.14 and 5.15. Here the researcher attempts to supplement these results with an interpretation. Summary tables of the path coefficients are provided for each sub-model path to improve the clarity of the results.

6.4.1 Convenience Value

Convenience value → Affective Loyalty

Convenience value → Behavioural Intention

Independent Variable	Dependent Variable	Hypothesis	Domestication Group				Path Difference	
			Hi Soc n=100	P value	Lo Soc n=42	P Value		P Value
Convenience Value	Affective Loyalty	H1 (+)	0.384***	0.000	0.298+	0.055	0.087	0.513
Convenience Value	Behavioural Intention	H2 (+)	0.322**	0.001	0.447**	0.003	0.125	0.479
			Hi Sci n=77	P value	Lo Sci n=65	P Value		P Value
Convenience Value	Affective Loyalty	H1 (+)	0.421***	0.000	0.257*	0.038	0.164	0.178
Convenience Value	Behavioural Intention	H2 (+)	0.443***	0.000	0.312*	0.012	0.131	0.387
Significance		T Value	Symbol used					
p< 0.1		10%	1.282		+			
p< 0.05		5%	1.645		*			
p< 0.01		1%	2.326		**			
p< 0.001		0.10%	3.091		***			

Table 6.4 Social vs. technical domestication group path coefficients for convenience value

The research results show that convenience value is a more important driver of affective loyalty for the *high soc* group than for the *low soc* group, yet convenience value is a more important driver of behavioural intention for the *low soc* group, and a less significant driver of affective loyalty for this group. This could mean that the *low soc* group is more action-orientated, or that there is a higher level of correspondence between the functional aspects

encompassed in convenience value and a user's taking action. This could also mean that those in the *low soc* group represent individuals less concerned about the social conditions surrounding their technology use and who are more likely to be driven to action by the functional convenience of a technology. Convenience factors, it seems, are converted more efficiently into behavioural intention by the *low soc* group than by the *high soc* group. Additionally, the relationship between convenience value and behavioural intention is reversed within the soc group when compared with the sci group. Interesting also is that the translation efficiency from convenience value to **affective** loyalty is better for the *high soc* group and the translation efficiency from convenience value to **behavioural intention** is better for the *high sci* group, representing yet another difference.

Due to fact that convenience value is a higher driver of both types of loyalty in the *hi sci* group, it could be argued perhaps that the functional capabilities of news sites, such as those represented within convenience value concept, are more likely to translate into commitment and behavioural intention for all individuals who have "appropriated" and "incorporated" the technology within their habits, regardless of the intensity of this incorporation.

The fact that the path from convenience value to affective loyalty is higher for the *high soc* group than the *low soc* group could be explained by the fact that the *high soc* group is looking more for a convenient way of using a site – this group tends to be more interested in the social consequences of the site usage and as such are not as interested in one or more of the aspects of convenience value measured (such as whether the site is easy to use, for example). Perhaps these *low soc* users are more technically apt, or have used the site more often and as such are more familiar with the site in which case the convenience value is not as strong a driver in affective loyalty. However, the fact that the path from convenience value to behavioural intention is lower, or that convenience value is a stronger driver of affective loyalty could be showing that the *low soc* group is less concerned about how committed they feel about the site and more interested in using the site. This could be

showing a tendency that, in the case of convenience value, of the scientific group to be more action orientated, or that the functional aspects of the website, such as the ability to be able to use the site without temporal constraints and with the technology available, may be important to those who are more technically, functionally orientated. Thus the functional aspects which are covered in the convenience value construct could be seen as having a higher effect on scientifically orientated users. The differences between the path coefficients for the groups were, however, not significant.

6.4.2 Social Value

Independent Variable	Dependent Variable	Hypothesis	Domestication Group				Path Difference	
			Hi Soc n=100	P value	Lo Soc n=42	P Value		P Value
Social Value	Affective Loyalty	H3 (+)	0.208+	0.068	0.219	0.236	0.012	0.960
Social Value	Behavioural Intention	H4 (+)	-0.425***	0.000	0.167	0.369	0.592	0.056+
			Hi Sci n=77	P value	Lo Sci n=65	P Value		P Value
Social Value	Affective Loyalty	H3 (+)	-0.192+	0.095	0.244+	0.050	0.436	0.114
Social Value	Behavioural Intention	H4 (+)	-0.418***	0.000	-0.144	0.251	0.273	0.257
Significance			T Value		Symbol used			
p< 0.1			10%		1.282 +			
p< 0.05			5%		1.645 *			
p< 0.01			1%		2.326 **			
p< 0.001			0.10%		3.091 ***			

Table 6.5 Social vs. technical domestication group path coefficients for social value

Social Value → Affective Loyalty

Social Value → Behavioural Intention

It is very interesting to note that in the full sample, the smaller negative path coefficient between social value and behavioural intention (at -0.164 and a significance level of 10%) indicates that there are actually fine differences within the sample which are being muted when the complete sample is taken into account. The difference in the paths between social value and behavioural intention show a more marked difference (from -0.425 to 0.167) in the *high soc* to *low soc* group comparison than between *high sci* and *low sci* (from -0.418 to -0.144), indicating that social value is having more of a distinctive effect within the different *soc* groups than within the different *sci* groups. When comparing these results from the different domestication groups with the one result from the full sample in the full model run it is clear that breaking the sample down into domestication groups is giving more detail to this number in that one can see a much higher negative path coefficient in, for example, the *high soc* group.

In looking at the large, significant ($p < .001$) difference in the path from social value to behavioural intention for the *high soc* group vs. that for the *low social* group, could it be that since the *high soc* group has the tendency to value more highly the way they present themselves to others, that this result could be showing they want to present themselves in a positive sense to the researcher. As an example, when a doctor asks how much alcohol you consume, he usually doubles this value, knowing this is truer to the actual amount. Here it might be beneficial to ask additional questions to further investigate whether the users are answering this question honestly. The difference between the values of the two scientific groups does not show such a dichotomy, so perhaps this is showing that for the scientific groups, the way in which they are presenting themselves is not important; the “image” factor is not as important. It could be that the question, although used in previous research and empirically tested, needs to be reconsidered, or at least the structure of a survey which

uses this question needs to be redesigned to include subsequent questions. Perhaps social value is actually somewhat important to visitors, especially those who in the *high soc* group for whom, for example the objectification stage of domestication with the emphasis on a user's display of technology use is important in their usage of the site, but they are reluctant to admit this.

6.4.3 Emotional Value

Independent Variable	Dependent Variable	Hypothesis	Domestication Group				Path Difference	
			Hi Soc n=100	P value	Lo Soc n=42	P Value		P Value
Emotional Value	Affective Loyalty	H5 (+)	0.662***	0.000	0.808***	0.000	0.147	0.140
Emotional Value	Behavioural Intention	H6 (+)	0.256*	0.014	0.492***	0.000	0.236	0.09+
			Hi Sci n=77	P value	Lo Sci n=65	P Value		P Value
Emotional Value	Affective Loyalty	H5 (+)	0.590***	0.000	0.585***	0.000	0.005	0.976
Emotional Value	Behavioural Intention	H6 (+)	0.327**	0.004	0.177	0.158	0.150	0.481
Significance		T Value	Symbol used					
p< 0.1		10%	1.282	+				
p< 0.05		5%	1.645	*				
p< 0.01		1%	2.326	**				
p< 0.001		0.10%	3.091	***				

Table 6.6 Social vs. technical domestication group path coefficients for emotional value

Emotional Value → Affective Loyalty

Emotional Value → Behavioural Intention

For both *soc* groups, coefficients were high at over .5 and significant for the paths between emotional value and affective loyalty, indicating little difference within this group. The path between emotional value and behavioural intention were significantly different for the *high* and *low soc* groups ($p < .10$) and therefore it can be concluded that emotional value did seem to be affected by the domestication stage differentiation. As with the *high* and *low soc* groups, both *sci* groups showed high and significant paths between emotional value and affective loyalty. Therefore, at any level where the user had appropriated and incorporated the technology, emotional value provided virtually the same level of commitment effect.

The relationship between emotional value and behavioural intention was not as strong for both groups and thus it could be deduced from the results that emotional value is a driver of affective loyalty regardless of domestication stage grouping. Nevertheless, a trend can be seen for example, with the *soc* group that the higher he finds himself in this group, the less effect emotional value has on behavioural intention, and this trend is reversed in the *sci* group in that the higher he is in the *sci* group, the more effect emotional value has on behavioural intention.

Thus the researcher proposes that there are certain perceived value constructs which are less sensitive to domestication grouping, emotional value, or this implementation of emotional value being one of these. In assessing the items used to measure emotional value, one can see that these questions seem to have little social or technical bias, especially in an online news site usage context. In other words, “using the site gives me pleasure” and “using this site makes me feel good” could be interpreted to be “neutral” in both technical aspects as well as social aspects. It could be interpreted that there are no clear social aspects in using a *news site* for pleasure, as this is an individualistic activity, where social influences play little or no role. This is as opposed to a group activity such as a sport game where social influences from other team members and the interaction between team members might

prove to have a greater influence and as such there might be a difference to be seen in the groupings. This might also be the case in online gaming, in that the emotional value could be perceived by users to be more dependent on social interactions, or where social interactions could be seen as a reason why users “feel good” after visiting a site. Again this seems to support that an online news site is seen as a more functional tool by members, with neither technical nor social aspects being rated as more important than the other. This means that whether the users are technically orientated or socially oriented, the emotional value of the site is the same. Both groups are looking for some fun or finding an emotional aspect of using an online news site as important.

6.4.4 Epistemic Value

Independent Variable	Dependent Variable	Hypothesis	Domestication Group				Path Difference		
			Hi Soc n=100	P value	Lo Soc n=42	P Value		P Value	
Epistemic Value	Affective Loyalty	H7 (-)	-0.073	0.469	-0.202	0.200	0.128	0.591	
Epistemic Value	Behavioural Intention	H8 (-)	-0.334**	0.001	-0.320+	0.039	0.015	0.974	
			Hi Sci n=77	P value	Lo Sci n=65	P Value		P Value	
Epistemic Value	Affective Loyalty	H7 (-)	-0.193	0.130	0.346*	0.016	0.538	0.006**	
Epistemic Value	Behavioural Intention	H8 (-)	-0.334**	0.008	0.162	0.271	0.496	0.08+	
Significance			T Value		Symbol used				
p< 0.1			10%		1.282				+
p< 0.05			5%		1.645				*
p< 0.01			1%		2.326				**
p< 0.001			0.10%		3.091				***

Table 6.7 Social vs. technical domestication group path coefficients for epistemic value

Epistemic Value → Affective Loyalty

Epistemic Value → Behavioural Intention

Again within this table, one can detect that the different domestication groupings are providing different results. For example, in looking at the path from epistemic value to behavioural intention, the *high soc* group shows a path coefficient of -0.334, and the *low soc* group shows a slightly higher path coefficient at -0.320. In contrast, the *high sci* group is showing a -0.334 path coefficient, with yet a lower path coefficient for the *low sci* group. The difference in the path coefficients between the *high* and *low sci* groups is significant for both loyalty constructs ($p < .006$; $p < .08$). That epistemic value is a significant and negative driver for the *high soc* group could be because this group is not as curious to use new technology nor do they use the site because they like to test new technologies, something which a participant in the *low soc* group might be more apt to do. The value for the path between epistemic value and affective loyalty is higher for the *high sci* group which could indicate that although the epistemic value is a more of a negative driver for scientifically orientated users, it is less so than for socially orientated users. In other words, for socially orientated users epistemic value is less likely to affect commitment. For the *low sci* group, the path for epistemic value to behavioural intention is higher than for the *high sci* group. These results are interesting because one would expect those in the *high sci* group to have a higher value for the path between epistemic to behavioural intention as they might be more interested in the functional value which is offered through exploring a new technology.

In general, because these findings are somewhat counterintuitive, it might again be important to examine the construct to determine whether the items used to measure epistemic value, although empirically tested and used in previous research, are actually assessing the feelings of users as opposed to assessing the features of the website itself. For example, if the website continually offered a new interface and or integrated new technologies in order to enhance the user experience, it might be found that the epistemic value of the site was higher, and this might also have an influence on loyalty.

6.4.5 Conditional Value

Independent Variable	Dependent Variable	Hypothesis	Domestication Group				Path Difference	
			Hi Soc n=100	P value	Lo Soc n=42	P Value		P Value
Conditional Value	Affective Loyalty	H9 (+)	0.581***	0.000	0.480**	0.001	0.101	0.333
Conditional Value	Behavioural Intention	H10 (+)	0.444***	0.000	0.459**	0.002	0.015	0.896
			Hi Sci n=77	P value	Lo Sci n=65	P Value		P Value
Conditional Value	Affective Loyalty	H9 (+)	0.498***	0.000	0.641***	0.000	0.143	0.148
Conditional Value	Behavioural Intention	H10 (+)	0.487***	0.000	0.369*	0.012	0.119	0.391
Significance			T Value			Symbol used		
p< 0.1			10%			1.282 +		
p< 0.05			5%			1.645 *		
p< 0.01			1%			2.326 **		
p< 0.001			0.10%			3.091 ***		

Table 6.8 Social vs. technical domestication group path coefficients for conditional value

Conditional Value → Affective Loyalty

Conditional Value → Behavioural Intention

Both the *high soc* and *low soc* groups demonstrated a high and highly significant path between conditional value and both loyalty constructs. The effect of conditional value on affective loyalty is lower for those in the *low soc* group than the *high soc* group, and this

difference is reversed in the *high sci* and *low sci* groups. In the *low soc* group, conditional value has a lower effect on behavioural intention, which is also reflected in the *high sci* group. While conditional loyalty is having a larger effect on affective loyalty for the *high soc* group, it is having a lower effect on the *high sci* group. Although the path differences are not significant, some difference can be seen within the groupings and thus the domestication stage differentiation is giving the researcher more information about the perceived value – loyalty relationships within the sample and variations contained therein.

When examining the questions assessing the construct for conditional value, a possible reason for these results becomes clearer. Conditional value could be more important for those who are more socially orientated, because they are looking for information about social events, such as local events, and localized information, as this group may be more likely to visit such events. The *low soc* group shows a lower tendency to view conditional value as important in affective loyalty and this could be interpreted in that they are not as likely to value this type of information as they are less likely to use it. Perhaps for the *high sci* group, conditional value is more likely to affect behavioural intention for the functional benefits which promotes this group to act. Thus, again there are tendencies to be seen within the sample in terms of which groups interpret a greater amount of conditional value. The user base could be explored to determine if they are more socially or technically orientated and a web design could be implemented to lead these two groups to different parts of the site, or to promote different aspects of the site differently.

6.4.6 Summary of Domestication Results

Orlikowski (2007) supports that there is an oversight in approaches exploring technology acceptance in organizations, and this could also be extended to non-organisational situations. Orlikowski holds that an alternative view to analysing acceptance should be utilised which asserts that the social and the material are constitutively entangled in everyday life and in which a position of constitutive entanglement does not privilege either humans or technology. Instead, the social and the material are considered to be inextricably related, that there is no social that is not also material, and no material that is not also social (Orlikowski, 2007). Within this study, the researcher found indeed that breaking down the sample into two mutually exclusive “solely socially” or “solely technically” influenced groups was difficult. However, differences in tendencies of the sample groups were apparent and as such the research has shown that there are some differences between the socially orientated domestication groups and the technically orientated groups to be seen, and that overlaying this structure on a full sample can lend insight into differences in the model results.

To summarise the discussion, there are those who make a decision to buy something based more on functional or technical attributes, for instance, a computer where the deciding factor is the newest, fastest chip generation which will help them to run the newest and most complex software. Such an example of application might be a gaming computer, where the user wants to incorporate the best technology to enable smooth running of the ever more complex games. There are others who chose to buy or use products more due to the social influences which act upon them and the social prestige which they obtain in the demonstration of using the product or service. They want to possess a product because of their desire (for example) to show that they are on top of technology, or have the finances to do so. When the iPhone was introduced it clearly had technical deficiencies over competing mobile phones (e.g. in mobile reception and battery life). Although these deficiencies were well known, the iPhone was an immediate hit. Some consumers were

buying the phone less for its function than for the social prestige of owning one, and others were buying it because it had technical features which were not found elsewhere (such as the new user interface).

The researcher imagines that there is a continuum of influences, between socially determined and technically determined, and people lie somewhere along this continuum and this drives their acceptance and usage of a particular technology, such as online news services (see Figure 6.2). While consumers may not fall neatly into mutually exclusive groups, the author hopes that the work in this thesis can be expanded by future research which examines such differentiations through using the domestication framework, and hopes that the results presented in this thesis offer some insight into a new way in which technology acceptance and usage can be more exactly analysed.

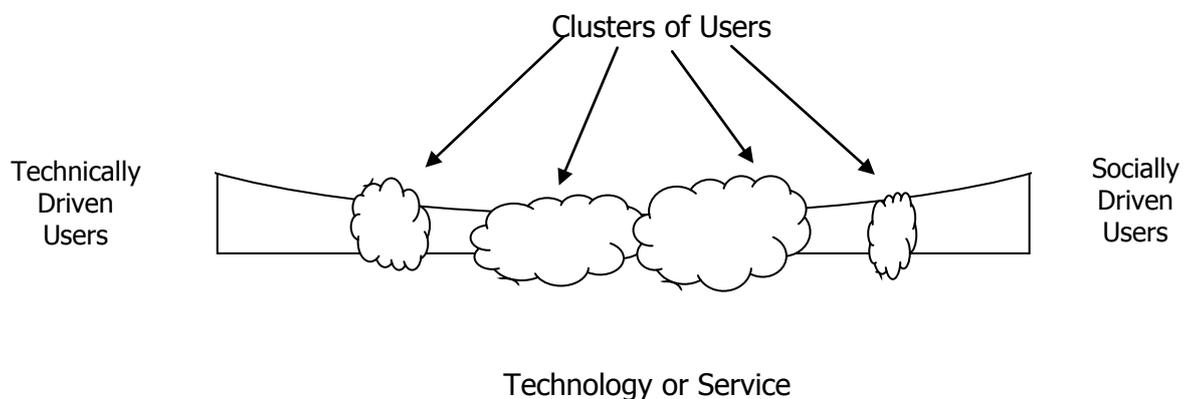


Figure 6.2 The Domestication Continuum

The researcher holds that the domestication conceptualization introduced in this research can have a great potential to be further developed and expanded. Examples of further research which carries on from this thesis can be found in the section in chapter 7 on proposals for further research.

6.5 Summary of Chapter 6

This chapter comprised a discussion of the results. Following a reiteration of the research questions and objectives, the researcher presented a discussion of the model path analyses. The complete sample was used within the model analysis and the results were described and discussed in section 6.3 of this chapter.

Support of the second research question, which underlies the theoretical conceptualisation of the research, was then discussed and practical implications of the research were interpreted and presented by the researcher. The sample group was dichotomized depending on the domestication stage at which the user found himself, based on the domestication items. The results of the research show that the sample could be separated into those which rated high or low in the socially deterministic domestication groups, and those who rated high or low in the technically deterministic groups. The researcher then presented a path comparison for the different groups and discussed the proposed meaning of these differences.

In the next chapter, the thesis will be summarised, implications for practitioners drawn and limitations of the research as well as topics for further research will be discussed to conclude the thesis.

Chapter 7 Conclusion

7.1 Introduction

This final chapter of the thesis provides an overview of the research and findings in summary. The researcher provides the practical implications of the study and then discusses the limitations of the research. Furthermore, proposals for future research projects and directions are discussed. The chapter is organized as depicted in Figure 7.1

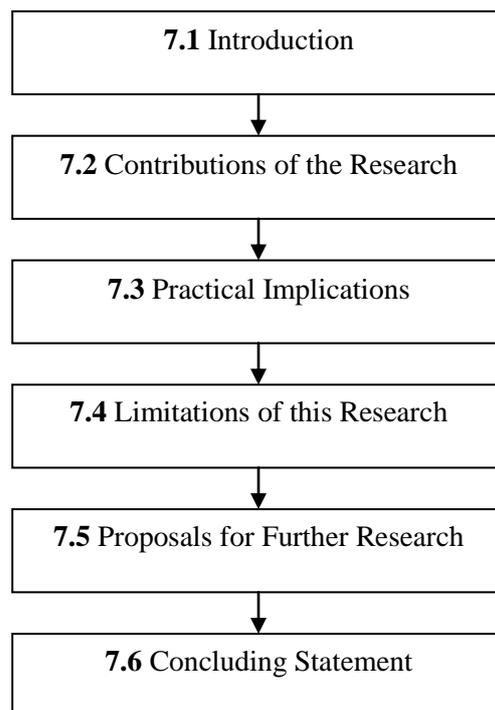


Figure 7.1 Structure of Chapter 7

7.2 Contributions of the research

The contributions from this research can be broken down into practitioner-orientated and theoretically-orientated. The researcher first summarises the practical contributions.

7.2.1 Practitioner Contributions

7.2.1.1 A perceived value – community – loyalty model for online news sites.

Even though more than a decade has passed since most newspapers have set up their online editions, little research has actually systematically evaluated online newspaper's performance (Chyi and Lewis, 2009). Chen and Corkindale, (2008) state that research into the use and adoption of online news services is still in its infancy and a comprehensive theoretical framework for understanding or predicting consumer's online adoption behaviour does not yet exist. This research helps to close that gap in employing a perceived value – community – loyalty model to help understand which perceived value components have an influence on loyalty of users to online news services. The creation of this model and testing it in an online news site context has not been done before and is a unique contribution of this research.

7.2.1.2 The effect of online community participation

A gap in the loyalty literature in using social community as a loyalty influencer has been identified; thus this research could make an important contribution to the body of knowledge on loyalty drivers through including the influences of community. Chung and Nah (2009) hold that still very little is known about the effects of news presentation on user perceptions of news consumption experience, and that future studies should assess whether different interactive online news presentation styles enhance the processing of information as studies have shown that interactivity could lead to cognitive overload. Future studies should examine antecedents (what drives/motivates people to use interactive features) and

outcome (what are the results from using interactive features). This research has tested online community participation in an online news site context and had supported the loyalty enhancing value of an online news site community, in a direct, as opposed to moderating role. Inclusion of community aspects in a research model in an online news site context is new and is another unique contribution of this thesis.

This research shows that participation in a new site's online community does have an effect on loyalty, and that a perceived value – loyalty model which includes community variables actually has better explanatory power than a model without these community constructs. The increased interactivity afforded by a community and its positive effects is supported in the literature and those who do participate in the community exhibit a tendency to want to return to the site, and this is an important implication for news site managers. The main drivers of participation and motivation to participate were to read comments posted by others and find out what others were talking about, as opposed to interacting with other members and posting comments and thus, an asynchronous communication seems to be taking place. Practitioners need to understand that participants in an online news site's community are not looking to foster relationships with others but simply understand how others are commenting on the news items, supporting Chung (2009) that for now, it appears that the ability to express or read other's views rather than engaging in two-way conversation has more intrinsic value to local online community residents.

7.2.2 Theoretical contributions

7.2.2.1 Measures for “online communityism”

Based on the literature on online communities, this research also introduces three components for the measurement of “communityness”. Previous research has provided an insight into what type of community participation affects online news service usage (Larsson, 2011), but this research goes beyond just examining participation and evaluates the motivations of users to participate as well as the post-visit sentiment in explaining

loyalty. The introduction of these community components is new and another unique contribution of this thesis.

The online community constructs introduced in this research will add to the growing body of literature which examines aspects of online communities and users motivations to participate as well as the effects they gain from their participation in such communities. Finally, the research provides an indication of which aspects of online communities may have a stronger correlation to loyalty, and as such could provide insight into how organisations can develop communities which are likely to foster loyalty.

Looking at the taxonomy of communities discussed in the literature review, it is apparent that the rapid evolution in the nature of communities has rendered the formerly clear boundaries to be less distinct. It could therefore be also argued that the drivers of participation and the effects of community participation are unclear. This research identifies a framework of facets for measuring users' community participation in the community construct which can be further developed and employed in future research.

7.2.2.2 Domestication theory

The research examines the use of domestication theory in understanding news service consumption and adds to the growing body of domestication literature as well as adding to the emerging literature on and increasing the understanding of acceptance and usage of news services. Using domestication theory which supports the dichotomous positions of social and technical determinism in the acceptance and usage of service, this research adds to the body of literature which looks into the socio-technical nature of technology and service adoption and usage. In creating items for the domestication constructs, this research also introduces a new perspective in using domestication theory and in the quantification of domestication stages which could be adopted and used in future research. Within the discussion in chapter 6, the researcher also detailed the farther reaching effects which

employing the domestication conceptualization in understanding a consumer base could have for firms, as it could help explain adoption of technologies in both a commercial and consumer context. To the researcher's knowledge, employing domestication theory in a study as in this research has not been done before and is another unique contribution of this research.

7.3 Implications for the Practitioner Community

After discussing the results of the research, it is necessary for the researcher to take a step back and analyse what these results mean from the practitioner's perspective. It is important to understand from the point of view of the online news site providers how this research can help them to perhaps better understand their customer base, and shed new light on the way in which they should view and interact with their readers or users. It is intended that the results of the research help online news sites to understand how to tailor their offerings in order to enhance the possibility of developing and maintaining a more loyal customer or reader base. To this end, the researcher now discusses the implications of the research, first of all from the aspect of the perceived value aspects covered within this research.

7.3.1 Importance of Specific Perceived Value Components

Looking at an analysis of the components of perceived value first of all, as presented in section 6.3, this research concludes that there are three aspects of perceived value which are the most important drivers of loyalty in an online news site context: *convenience value*, *emotional value*, and *conditional value*. The results of this study show that convenience value and conditional value explained the highest amount of loyalty, but emotional value was also a significant driver of loyalty.

These results have several implications for practitioners. First of all, and as expected, the convenience value of a site cannot be refuted and as such, news producers would do well to

maintain and further develop their online offerings, especially aspects of their offerings which provide immediate access, without temporal restrictions, and with the ability for users to be able to access the site with their current technology, so on a range of popular platforms. This result confirms that a news producer's efforts in the online environment are well placed and emphasis in further site developments should keep the convenience aspects of the online news site experience in the users' eyes at the forefront. This can also mean taking into account the fact that users want to be able to access news sites with a minimum of hassle, so making the site laden with complex advertising which increases download time and detracts from the overall accessibility of a site should be kept to a minimum. It is still surprising how many websites seemingly put profit over usability by requiring the reader to load copious amounts of advertising, which inevitably contains the newest, most complex and computationally intensive graphics. These detract from the convenience of simply using the site for obtaining the news (in this study, to read the local news was the cited by 70% of respondents as the main reason they visited the site). Indeed, 30% of users strongly disagreed that they mainly visited the site to read the advertisements.

This also has implications when considering the business model evolution of news sites. A solely advertising based model should take into consideration the impact for the users, in other words, news sites need to maximize the relationship between advertising income and site accessibility from the user's perspective. Thus, site managers should keep ease and instantaneousness in mind in the design of the site and ensure the user does not require the newest chip generation in their computer to simply see the headlines.

Aside from the logical conclusion that convenience value is a strong driver of both types of loyalty, the results from the research show that conditional value was actually the strongest driver. For practitioners this means that aspects of conditional value such as information about local events and happenings, especially important in the context of a news site which supports a local community, should be fostered and be placed prominently. For local news producers, it affirms that readers are turning to the site in order to understand what is

happening locally and this is the most important factor which makes them return to the site. Indeed, the site could be a user's sole or main source of local news as 64% of the sample indicated that they never bought a hard copy of the newspaper.

Thus, the logical conclusion here is that users are looking for a convenient, easy, instantaneous way of accessing news, and that presenting local events and news items, at least for a news site with a smaller geographic reach, are the most important actions which can be taken to ensure readers return to the site. In addition to this, the research also found interestingly, that emotional value was driver in getting people to actually intend to return to the site. Thus, there is also a 'feel good' or fun factor about using news site which is making users want to return, and is also explaining the behavioural intention to return.

The purpose of the research was not a usability study for a news website. Nevertheless, the results show it would be important for practitioners to focus on the usability of their site in terms of ease of use, quick and easy access to news items and a minimum of intrusion both from advertising from a download time perspective as well as from a distraction perspective. This could be important factors to take into account for online news site managers in order to increase the return rate of readers. Additionally within a usability study, such non-utilitarian aspects of site usage as encompassed in emotional value would be important to take into account (especially which aspects of site usage results in a pleasurable experience for users), as this has been shown in this study as a driver of loyalty.

Three components - convenience, conditional and emotional value - were the most important drivers of loyalty. Epistemic value was not significant in the model, and this has implications in that users may visit a site out of curiosity the first time around, but visiting the site to try something new will not encourage repeat usage and loyalty. However, the community aspect of an online news site could be providing a curiosity "satiator" or novel way of looking at the news which brings users back.

7.3.2 Foster your community, but in what way?

Chung and Nah (2009) write that despite the continued interest toward online news and various styles of interactive news presentation, little is understood about the outcomes of the uses of interactive features and their contribution toward a user's satisfaction with their news consumption experiences, which is important as this may be related to their intention to revisit a news website. Christians et al. (1993) wrote that, until that time, the traditional press had acted as a vehicle of expert transmission rather than a network for community discussion, and contended that the public would reawaken when they are encouraged to fully join the talk and are addressed as a conversational partner.

More recently, Larsson (2011) found that online news site users were not appreciative of the interactive features of a news site, defined as human-to-human interaction, or human-to-media interaction. Yet this research shows that actually the community constructs have an effect on loyalty, and that a perceived value – loyalty model which includes community variables actually has better explanatory power than a model without these community constructs. Larsson's study looked at characteristics of users and how likely they were to participate in the online news site with variables such as those employed in this study to examine the participation construct – how often a users comments on stories, or how often they post their own news items. This research extends Larsson's findings by including the two constructs of effect and motivation in addition to participation in helping to understand user loyalty. These constructs tap into the reasons why users visit the community, what motivates them to visit as well as the post visit sentiment which follows a community experience.

As detailed in the findings chapter, and within the discussion of results in this chapter in section 6.3, the research results show that the inclusion of community constructs provides a more robust model for explaining loyalty to news web sites than one in which perceived value components alone are analysed as drivers of loyalty. The increased interactivity afforded by a community and its positive effects is supported in the literature in which

Rafaeli (1988) writes that the consequences of interactivity are satisfaction, motivation, sense of fun, cognition and learning. Rafaeli and Ariel (2007) write that there is evidence pointing to the positive outcomes of interactivity and Sundar et al. (2003) found that level of website interactivity influenced individuals' perceptions of and levels of agreement with political candidates and their policy positions.

Looking at the results of this research, the overall effect of taking part in the community does help promote loyalty over and above the perceived value attributes alone. Therefore, those who do participate exhibit a tendency to want to return to the site, and this is an important implication for news site managers, especially for those covering a smaller geographical region such as the sample in this study. Chung (2009) also supports that online news community participation in smaller community-based newspapers deserve more attention as they can offer increased audience-journalist connectivity and result in positive outcomes in engaging the community.

Chung's (2009) research into interactivity in online news sites demonstrates the significance of customization features that allow individuals to express their views and voice personal opinions. In this study, however, the main drivers of participation and motivation to participate were to read comments posted by others and find out what others were talking about, as opposed to interacting with other members and posting comments. Thus, an asynchronous communication could be taking place, and the dilemma it seems may be to get someone to make comments in the first place. A means of facilitating the first comments, and increasing the level of commenting would seem to be a useful activity for online news site managers.

Also, while much of the literature indicates the critical need for a dialogic journalism, interacting with others was also not found to be important in Chung's study as interpersonal communication possibilities of a news site did not increase satisfaction in online news site users. In a study of Swedish newspapers, Larsson also found that the kinds of features

associated with these visitor types are mostly of the less demanding lower variants, and most visitors seem content with keeping more active participation to a minimum, using the ‘bells and whistles’ (Deuze, 2003) but rarely contributing self-authored news texts, blog posts or pictures from news events.

Practitioners thus need to understand that it appears that participants in an online news site’s community are not looking to foster relationships with others but simply understand what others are commenting on the news items. This represents a bond with the site as opposed to a bond with the members of the community. Thus, this research supports Chung (2009) in that for now, it appears that the ability to express views or understand other’s comments rather than engage in two-way conversation has more intrinsic value to local online news site community users.

In summary, practitioners should:

- Focus on their convenience value components-

 - Make sure the site is updated frequently to offer the latest news

 - Loads quickly (avoid complex content)

 - Is accessible on a variety of platforms

- Focus on the conditional value components

 - Users want local information – present it prominently

- Explore the emotional value component

 - Emotion is a driver in loyalty to the site. Find ways of making the site fun and tapping into a user’s emotional rather than functional side.

- Foster your community

 - Community users are more loyal.

 - Experiment with ways of getting more users involved and actively using the community.

 - Think about that your customers may not a relationship with you or other users but may interested in just reviewing what others are commenting on.

7.4 Limitations of this research

At the primary level, this research takes into account the effect of online communities on the link between perceived value and loyalty. Whereas the perceived value components were taken from previous studies, including within the context of electronic services, the researcher proposes that there are perhaps other perceived value components which are more pertinent in the consumption of news. An additional research project could be a qualitative study of news consumers to assess if additional facets of perceived value might have more pertinence in driving loyalty. The model employed in this research describes 59.7% of affective loyalty and 48.7% of behavioural intention, so there is some room for improvement and clearly there must be other factors which were not measured using this model which have an effect on loyalty. A project to determine additional perceived value components would be advantageous in understanding loyalty drivers better. Credibility of the site might be an additional perceived value component as a result of the rise in citizen journalism.

Aspects of online community could be explored in a manner more related to online news sites. While this study used “generic” exploratory results in the generation of the online community constructs, those more specific to online news sites might prove to have more impact on the moderating relationship between value and loyalty. Such components may help to explain the difference in user participation in different news sites, what drives people to post news items as opposed to just reading comments, and finding out what others were talking about as is the case in this study.

The sample used in this study comprised a local news site. The researcher believes it would be advantageous to widen the sample to contain national and international sites. The results of the model might then give more detailed insight into which value functions are more or less important in the different sites. An online news site with a high level of credibility may be more likely to foster a community which in turn might aid loyalty. Perceptions of cost have been shown to have a negative impact on community participation, so selecting a

site with which there is an associated cost might also provide differing results as users might not be as willing to participate in the community and loyalty might be lower.

The way in which the domestication measures were employed to create the two groups might be providing unique results which may not be applicable on a broader scale. Therefore, using each individual domestication construct to form a separate group could be a way of creating groupings in a different way. In addition, there are ways in PLS for creating different groupings which were not used by the researcher. This could be a better way to determine differences in the empirical findings due to these groupings.

In previous domestication studies, the intricacies of users as well as non users (adopters of technology as well as non adopters) are sometimes examined. This study only looks at users of the web site, and does not examine other potential users who may be potential customers of the website but are not yet using it, or have chosen not to use it for some reason. Including such non participants could offer a clearer picture of reasons for adoption or non adoption.

7.5 Proposals for further research

This thesis has made several contributions to the understanding of loyalty to online news sites, and drivers of consumer loyalty in this context. However, during the research process, it became apparent to the researcher that further investigation to online news consumption could be informed through the use of the underlying theoretical perspectives and domestication theory, as well as further developed through the community findings. The discussion of these future research directions follows.

7.5.1 Decomposing Perceived Value

This research has shown that in a news site context, the perceived value components of convenience value, conditional value and emotional value were the most important drivers of loyalty. It would be interesting to probe into these three variables, and perhaps to more exactly explore which aspects of these components have an effect on loyalty. For example, as detailed before, conditional value was shown to have a high influence on loyalty. Whilst this study showed that the localized information, event and news aspects of conditional value were important drivers in loyalty, are there other aspects of conditional value which are important? Also, what is the importance of conditional value for users of sites which cover a larger geographical reach? Emotional value is also a somewhat hazy driver of loyalty. What aspects of news sites actually give users “pleasure” or make them feel good, and how do these aspects relate to loyalty? A further research direction could be to understand better exactly what emotional aspect is being perceived as valuable by the user.

It was also shown that convenience value was a highly significant driver of loyalty. What are the exact implications of this when taking into account aspects of usability of the site such as the amount of advertising and the design of a site? For example, how much and what type of advertising is acceptable to the user and where is the “threshold”? This would aid news site producers in creating a site which both yields the optimal amount of

advertising revenue whilst still maintaining an ease of use and quick access to information which is desired by users and one of the most important drivers of loyalty.

Whereas the researcher sought to employ a previously tested perceived value scale, this may not be comprehensive enough in its current form for an online news site context. For example, as the perceived value to loyalty model alone was only describing 53.1% of a users' affective loyalty, and 34.5% of behavioural intention, there are certainly other perceived value components which should be integrated within a new research model. One such is monetary value for the subscription sites, or information value within different contexts (entertainment, local, international for example). Entertainment value could also be a driver and could be implemented in a future model. Other possible constructs could be site credibility as previous research has shown that contribution on a site is driven also by the organizational principles on which the site is based. A future research project could also assess the importance of conditional value on alternative types of news sites which cover a larger geographical area, and if this relationship can be enhanced by the community constructs introduced here.

7.5.2 Using the conceptual framework of domestication

In their review of the existent literature exploring online news site usage, Mitchelstein and Boczkowski, (2010) noted that in future research it should not be assumed that news consumption is *divided* across media types and research should inquire into when, where, how and under what conditions consumption or non-consumption takes place. This could be examined using the domestication framework in order to understand the circumstances under which a user passes through each of the domestication stages within each of the media types: online news, offline newspapers, etc. and through a comparison of these results. Also, the resulting consequences for use issues such as displacement or complementarity (when one type of media over another is used and is integrated into the daily procedures of a user – and how it is incorporated) and civic participation could be examined, for example, through the lens of domestication theory.

Whether the differences as in the domestication findings of this thesis can also be ascertained when examining the use of other technologies (e.g. mobile phones, the Internet, media adoption, etc.) on other settings (e.g. in-home, within an organization, etc.) would be another interesting adjunct to this research.

A recent advertisement for the Frankfurter Allgemeine (FAZ, June, 2012) subscription announced that for a minimal additional charge over the daily subscription price, users could access the next day's version of the newspaper from 9.30 pm on the day before publication. Domestication theory could be used to describe the adoption of this service in its four stages:

1. Appropriation: the acquisition of the service;
2. Objectification: such as the social consequences of reading the news earlier than one's peer group, for example, and what that would mean to the individual;
3. Incorporation: fitting or embedding of the configured solution within existing practices and the development of routines and organisation of time, which could have a large impact on service take up as readers might be able to more easily integrate reading the paper at night into their schedules and finally,
4. Conversion: the taken for granted status of the service and its influence on the how the reader becomes dependent on the service and the way in which the personality of the user is adapted to display this within his social circles could be examined.

Presumably, each of these stages might weigh differently on the acceptance or uptake of the service by the target reader group (e.g. being able to read the paper at night could be a

strong driver for a busy executive) whereas others might be more interested in the conversion stage, being the one who is always best informed, and the one for whom the “evening edition” would be impossible to miss. Thus, it would be interesting to examine the take-up of such a service using the conceptual framework of domestication. Examining users within these domestication framework aspects might shed light on business and marketing practices which would move consumers along their way to “conversion”.

7.5.3 Further development of domestication quantitative settings

There have been a wide variety of qualitative studies which involve domestication (e.g. Lie, and Sørensen 1996; Sørensen 2005; Ward, 2006, Hynes, 2009), but few which have attempted to use domestication in a quantitative setting (Lee, 2007; Punie, 1997; Pierson, 2006), this thesis included. This necessarily means that domestication stage measurement items are in their infancy and as such more research is needed to develop the constructs so they can be used more extensively in quantitative studies. For example, the temporal aspect of how a technology fits into a user’s lifestyle and routine is an important aspect of domestication which probably needs stronger emphasis in the constructs, especially as this can be important in assessing non use of technologies (users can’t find the time and as such adoption or usage doesn’t take place). Thus, while this research examines the pure social and technical aspects of domestication, further work needs to be done to make the constructs more inclusive.

For example, cultural differences are almost sure to play a role in the placement of users upon the domestication continuum and this could be investigated. Marcus and Gould (2000) found that are differences for the medium through which web visitors of various cultures prefer communication. The United States has greater presence of e-mail support (written form of support) than in Japan, which Cyr and Trevor-Smith (2003) hold could be explained in that Japan is considered a high-context culture, where additional information beyond a written format is preferred. Typically a high context culture will be relational,

collectivist, intuitive, and contemplative and place a high value on interpersonal relationships and group members and displays a very close knit community (Guffay, 2009). Such attributes could be mirrored in the domestication groupings which different cultures hold important and could help researchers and practitioners better understand consumers. For example, members of a high context culture could be seen putting more importance on socially orientated attributes (for example), and such attributes could play a more important role in explaining user adoption. In contrast, in a low context culture such as Germany, users may be more technically orientated (lower on the social side of the domestication continuum and higher on the technical side) and as such interpersonal relationships may make less of a difference in their acceptance of and usage of websites.

Another example can be found in a study comparing webs sites from multiple cultures by Cyr and Trevor-Smith (2003) in which they contend that navigation is impacted by culture. Users from cultures who feel anxiety about uncertain or unknown matters prefer navigation schemes which are intended to prevent users from becoming lost. In another study examining various web design attributes, Simon (2001) discovered that Europeans and North Americans similarly desire changes to navigation on the sites to enhance movement while making the site simpler to use, perhaps being more functionally or technically orientated within the domestication continuum and as such seeing more value in convenience features. Alternately, Asian, Latin, and South Americans desire navigation aids to change the appearance of the site without particular concern for movement: perhaps being higher on the social side of the domestication continuum, and wanting a higher epistemic value on a site. In another example, Sun (2001), examined website design preferences of Americans, Germans, Chinese, and Brazilians and found differences in navigation choice, for example, German users expect links in the navigation bar to be arranged in alphabetical order, which could be seen as a technical orientated feature– and provide a higher convenience value. In a high-context culture, information is part of a contextual understanding and is implicit, while in low-context cultures information is conveyed explicitly. While a culture may not rank in an absolute sense it can be presented

on a continuum from high to low. Similarly, a culture such as French Canadian may be of a higher context than one such as English Canadian, but lower context than another such as Spanish or French. Thus, overlaying the domestication framework to better understand usage of websites – including news websites in different cultures could also uncover such differences and aid web designers to develop and tailor interfaces which enhance perceived value depending on which tendency – socially or technically orientated – their users appear to exhibit. Web designs could be developed which lead or emphasize different parts of the site depending on the type of user.

As discussed previously, the type of technology also has an influence on the domestication continuum. For example, certain technologies may appeal to more technologically orientated users and others to certain socially orientated users. This could also pertain to different features of the same technology, such as discussed earlier with the iPhone. Certain features of the phone appeal to more socially orientated users (the color of the item, the price) and others might appeal to the more technically orientated users (the user interface, the multitude of apps available). Using the domestication framework to better understand the differences in the user base, and providing the image marketing to entice the socially orientated users, and the functional marketing to entice the technically orientated users is a business competency which the researcher believes firms could use more efficiently and which could increase the adoption of products and services. This research has shown that there are differences in the influence of perceived value components on loyalty for the different domestication groupings and understanding these differences within the user base could aid in enhancing loyalty in a news site context and beyond.

While such differentiation in marketing is already more prevalent in the consumer market (to various degrees and with different levels of success), it could also apply in the case of acceptance of services in an industrial context in that the socially orientated users could be trained in a different way than the technically orientated and as such provide more impetus for the complete spectrum of users to adopt a system. As Orlikowski (2007) states, there is

no material that is not social and no social that is not material, and using domestication to understand the potential user base better could aid firms. In fact, it seems extraordinary that the TAM model is so popular in the study of technology adoption, as it leaves out social side of the picture almost altogether, and thus, the researcher holds, only explains half of the story. The constructs perceived ease of use and perceived usefulness do not really tap into the social side of usage which has been shown in previous domestication research to explain adoption in much more detail.

While this research makes some advances in using domestication theory on a wider scale, as opposed to solely in a qualitative context, there are still many outstanding questions and more research needs to be done to broaden the usage potential of domestication on this wider scale.

7.5.4 Further examination of community in the online news context

Chung (2009) writes that community newspapers play a significant role in defining and reflecting the perspectives of community members. Local community newspapers can build community ties, community identity and mobilize community members to engage in community activities through various information and news regarding the communities that the newspapers serve (Friedland and McLeod, 1999). There is also greater opportunity for audience-journalist interactivity, which can lead to critical relationships in smaller, less pluralistic communities (Lowrey, 2003). However, research has shown, this study included, that users are more apt to read comments than participate and generate their own items. Thus there is an outstanding question as to how to start the inertia to get a community going and encourage more participation.

Fenton (2009) supports that online news merges traditional ways of producing the news with the web's new potentials in an on-going process in which different local conditions have led to different outcomes. Keeping this in mind, a future research direction could be what the effect of community participation is on a wider scale - that is, when the sample

consists of several news sites. Does the effect of community participation differ over different types of news sites, e.g. those stemming from traditional print media over those which have their origin on the internet to those which stemmed from traditional television media?

As mentioned in the literature review, Rosen (2003) indicated that part of journalism's purpose is to encourage civic participation, improve public debate, and enhance public life - a function which he called "community connectedness". Rosales supports this in saying that people in local communities usually have a "nose for news" and that as they know what is going on in their neighbourhood and are therefore well suited as reporters. However, there are still open questions as to the role of citizen journalism - the reader's role in creating news items, the editor's role in ensuring integrity of these news items, and the credibility of the site and how aspects might affect loyalty. The researcher proposes that there must be an indication as to how far the online news site users can be left alone in generating items without the site losing credibility and, on the other hand, how much editorial intervention would be seen as, and prove to be stifling to the community. This is most likely a fine line but should be able to be assessed, and would probably be dependent on whether the online news site represented a local, national or international user base. While this thesis examines the community aspect of online news consumption, other constructs which are more specific to citizen journalism could be integrated into the community variable introduced in this research to ascertain how these might affect customer loyalty. This is also supported as an outstanding topic within Mitchelstein and Boczkowski's (2010) online news consumption research agenda.

A general outstanding question for the researcher is whether the strong drivers of affective loyalty discovered in this research, such as conditional value could in turn be used to strengthen behavioural intention. In other words, can the perceived value components which promote affective loyalty be used as a stepping stone in the creation of behavioural intention? As in other theoretical models such as TAM which see behavioural intentions as

a driver of actual system use, as well as in other marketing and consumer behaviour studies which suggest that affective loyalty is vital in determining behavioural/intentional intention (Back and Parks, 2003) in such a future model, affective loyalty could be an antecedent of behavioural intention and this might be able to show which perceived value components might be most important as a “first step” in getting users to actually return to a site (to increase behavioural intention). As discussed in the next chapter, there may be additional perceived value components which are drivers of loyalty in an online news site context, how these drive affective loyalty, and if this step can in turn lead to behavioural intention would help practitioners understand which aspects of perceived value they should concentrate on in order to increase behavioural intention. Such a model might provide additional explanatory power, beyond the results of this research of the relationships between perceived value and loyalty in an online news site context as well as in other technology adoption contexts. Thus, when perceived value components such as conditional value show a higher relationship to affective loyalty, can this affective loyalty tendency be somehow fostered in order for it to lead to behavioural intention. Perhaps a future model could also look into the moderating effect of the community components introduced in this research on the relationship between conative and behavioural intention.

The researcher believes that these research directions would further enhance domestication theory usage, as well as help in a fuller examination of online community influences and perceived value components in both an online news site setting as well as in technology adoption studies in other context

7.6 Concluding Statement

Clearly the business of news is changing rapidly and many news providers are struggling to embrace the current challenges and changes. From a business perspective, news providers are still searching for a working business model. This research project has shown that an online community affiliated with a site can be an asset in driving loyalty and making

readers and users return to an online site. Perhaps there is a shifting emphasis in the role of news sites to that of news aggregator and news validation, providing a hosting and credibility enhancing function. This research has also provided an insight into the use of technical and social determinist approaches as represented in domestication theory in understanding user loyalty in an online news context. Using this approach to understand reader loyalty also provides a foundation on which further empirical work can be based. The researcher believes that the domestication approach holds a great deal of promise for future academic work and can be employed to understand more concisely the multitude of influences on news consumption.

The researcher hopes this study will help news sites to understand how to increase their readership and understand better the value factors important to news consumers. Increasing the level of user loyalty could create a large, returning, loyal reader and user base can have a positive effect on a news sites' profitability, even perhaps through the advertising and subscription-based business models of traditional media. Given the new news world, the contemporary delivery mechanisms and interactivity facets, perhaps the traditional business model will become modern again, but customer loyalty will be a defining factor if this is to happen.

Mitchelstein and Boczkowski (2010) indicated that in literature to date, the dominant modes of inquiry into online news consumption have been characterized by stability rather than change in that research has usually drawn on traditional theoretical and methodological approaches. Using a new theoretical perspective in the study of online news consumption, the researcher offers this study as an addition to the existent body of literature. Additionally, the findings and implications presented in this thesis are offered to news producers as a practical guide to help enhance customer loyalty and help to (re)gain and maintain a thriving customer base in the challenging world of news production.

Appendix A

Exploratory Community Survey

Online community Final

Thank you for your interest in this survey.

I am a student researching online communities/forums/groups (like the one you found this survey on), and am looking to better understand the reasons people join and participate (or choose not to participate) in such communities. If you received this link through an email or came across it some other way, think about the online community, forum or group you visit most often.

The survey should only take a couple of minutes (it has 18 questions and most are really easy!) and all responses will be kept strictly anonymous - you do not need to enter any personal information unless you wish.

A comment box follows each question..do feel free to add any further comments you wish. You can stop the survey at any time, but it would be really helpful if you could complete all questions. Your input is greatly appreciated.

1. OK, I'll take part in the survey. (Check "Yes" or "No" and scroll down if you don't see the "Next" button).

- Yes
- No, thanks

2. Which online community were/are you visiting (or thinking of)?

3. How much time do you typically spend per week in this community?

- Up to 1 hour
- Between 1 and 2 hours
- Between 2 and 3 hours
- Between 3 and 4 hours
- more than 4 hours

4. Which best describes the reason you first visited this online community? (Click all that apply)

- I was looking for information
- I was looking for friends
- I was looking for advice
- I was looking for news
- I was just browsing and came upon it
- Some other reason which is not listed here? (enter below)

Online community Final

5. Thinking of your visits to this online community, how often do you do the following: (1 means very often, 7 means never)

	1 Very often	2	3	4	5	6	7 Never
Only read questions and comments from other members without posting	<input type="radio"/>						
Post questions	<input type="radio"/>						
Post comments	<input type="radio"/>						
Post answers to questions from other community members	<input type="radio"/>						

6. How often do you...(please select N/A if this community doesn't have such a feature)

	1 Very often	2	3	4	5	6	7 Never	N/A
Rate the usefulness of other people's reviews or comments?	<input type="radio"/>							

Any comments?

7. I consider the following activities important to me in this community: (1 is very important, and 7 is not at all important)

	1 Very important	2	3	4	5	6	7 Not at all important
Conversing with others	<input type="radio"/>						
Finding information	<input type="radio"/>						
Finding advice	<input type="radio"/>						
Finding out what's new	<input type="radio"/>						
Finding out what people are talking about	<input type="radio"/>						
Reading other people's opinions	<input type="radio"/>						

Is there another activity you find important which is not listed here?

Online community Final

8. How well do these statements describe the reasons you visit this community? (1 means strongly agree and 7 means strongly disagree)

	1 Strongly agree	2	3	4	5	6	7 Strongly disagree
...because I find it entertaining	<input type="radio"/>						
...because I can find the information I need on it	<input type="radio"/>						
...because it provides me with social support	<input type="radio"/>						
...because I can find people to help me with personal issues	<input type="radio"/>						
...because I enjoy interacting with others	<input type="radio"/>						
...to meet new people	<input type="radio"/>						
...because I enjoy helping other people	<input type="radio"/>						

Are there other reasons you visit the community?

9. After visiting the community, how much do you agree with the following? (1 means strongly agree, 7 means strongly disagree)

	1 Strongly agree	2	3	4	5	6	7 Strongly disagree
I feel very attached to the community	<input type="radio"/>						
I see myself as part of the community	<input type="radio"/>						
Other community members and I hold the same objectives	<input type="radio"/>						
Other community members and I hold the same common values	<input type="radio"/>						

Other comments?

Online community Final

10. How well do these statements describe how you feel about this community?

	1 Strongly agree	2	3	4	5	6	7 Strongly disagree
I feel good when I can help others in the community	<input type="radio"/>						
Helping others in the community makes me feel important	<input type="radio"/>						

Any comments?

11. How important are the following to you?

Not all of these items are available in every community, so if something is not available choose N/A, or if you don't know what the item is, choose Don't Know.

	1 Very important	2	3	4	5	6	7 Not at all important	Don't know	N/A
It is important to me how people rate my reviews or comments in this community	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>						
It is important to me that I am linked to many people	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>						
It is important to me that many people link to me	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>						
It is important to me that many people link to my comments	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>						
It is important to me to link to other people's comments	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>						

Anything else you want to add?

Online community Final

12. How much do you agree with the following statements?

	1 Strongly Agree	2	3	4	5	6	7 Strongly Disagree
People who are important to me participate in this community	<input type="radio"/>						
I value information on this community from people who are important to me	<input type="radio"/>						
I value being linked to people who are important to me	<input type="radio"/>						
I value linking to people who are important to me	<input type="radio"/>						

Any other comments?

13. How well do these statements reflect the way you feel?

	1 Strongly agree	2	3	4	5	6	7 Strongly disagree
I am worried about putting my personal information on the community website	<input type="radio"/>						
I feel others might misuse my personal information	<input type="radio"/>						
I think it is important to be honest to other community members	<input type="radio"/>						
I think members of the community are trustworthy	<input type="radio"/>						

Any comments?

Online community Final

14. How well do these statements reflect how you feel after you've visited or participated in the community ?

	1 Strongly agree	2	3	4	5	6	7 Strongly disagree
I feel well informed	<input type="radio"/>						
I feel I know what is important to the community members	<input type="radio"/>						
I feel I trust the community members	<input type="radio"/>						
I feel informed about what is new	<input type="radio"/>						

Any other comments?

15. If applicable to this community, how do you feel about the following?

	1 Strongly agree	2	3	4	5	6	7 Strongly disagree	N/A
The company which sponsors this community is a reliable one	<input type="radio"/>							
I feel safe when purchasing from this company	<input type="radio"/>							
The company's brand says a lot about the kind of person I am	<input type="radio"/>							

Any other comments?

16. Finally, just to help the research, can you select the following:

Are you

Male?

Female?

17. Which age group are you in? (Select from the list below).

18. Would you be willing to be contacted by me if I would like to follow up on your comments? If so, you can enter your email address below.

Thank you!

Appendix B

Explanatory Stage News Community Survey

News Service Community Survey Final

Thank you for your interest in this survey.

We are researching the reasons people visit and may take part in this online news site. The survey should only take a few minutes of your time and all responses will be kept strictly confidential.

Please start the survey by clicking on the "Next" button below. By clicking on the button you certify that you are over 18 years of age.

***How much time do you typically spend on this news site per week? (Click on the box below to see the choices)**

What is the main reason you visit this site?

	Strongly disagree	2	3	4	5	6	Strongly agree
To read about general news	<input type="radio"/>						
To read about local news	<input type="radio"/>						
To find local information	<input type="radio"/>						
For the advertisements	<input type="radio"/>						
To find up-to-date information	<input type="radio"/>						
As a supplement to the printed version of this paper	<input type="radio"/>						

Other (please specify)

Thinking of this online news site, how would you rate the following?

	Strongly disagree	2	3	4	5	6	Strongly agree
The structure of this news site is clear and easy to navigate	<input type="radio"/>						
I can find what I am looking for on this site	<input type="radio"/>						
Using this site means I am well informed about the news	<input type="radio"/>						
Others have commented that I use this site	<input type="radio"/>						
Visiting this site is part of my routine	<input type="radio"/>						
I could describe to others how to find what they are looking for on this site	<input type="radio"/>						
I talk to others about how I use this site	<input type="radio"/>						
I would miss this site if I was not able to use it	<input type="radio"/>						
I consider myself a consistent user of this site	<input type="radio"/>						
I would like to see other features on this site	<input type="radio"/>						

What additional features would you like to see, if any?

News Service Community Survey Final

Thinking of this online news site, how would you rate the following?

	Strongly disagree	2	3	4	5	6	Strongly agree
I value the information about local events on this site	<input type="radio"/>						
I value the information this site offers because it helps me in certain situations	<input type="radio"/>						
I value the ease of using this online news site	<input type="radio"/>						
I value the ability to use this site instantly from my computer	<input type="radio"/>						
I value the ability to use this site instantly from my mobile device	<input type="radio"/>						
I value the convenience of using this online news site	<input type="radio"/>						
I value the localized information I get from this site	<input type="radio"/>						
I visit this site to experiment with new ways of doing things	<input type="radio"/>						
I visit this site to test new technologies	<input type="radio"/>						
I visit this site out of curiosity	<input type="radio"/>						
Using this site helps me to feel accepted by others	<input type="radio"/>						
Using this site makes a good impression on other people	<input type="radio"/>						
Using this site gives me social approval	<input type="radio"/>						
Using this site gives me pleasure	<input type="radio"/>						
Using this site makes me feel good	<input type="radio"/>						

How would you rate the following aspects of this online news site? (If there is no cost associated, check N/A)

	Strongly disagree	2	3	4	5	6	Strongly agree	N/A
The price of this online news site is acceptable	<input type="radio"/>							
This online news site is a good value for the money	<input type="radio"/>							
This online news site offers better value than the printed newspaper	<input type="radio"/>							

These questions are about the community associated with this news site. Here readers can post comments, converse about the news or post their own stories. Please answer the following questions based on your participation in this news site's community (even if you just read comments from others without ever posting).

How much time do you typically spend on this community per week

News Service Community Survey Final

Thinking of your visits to this community, how often do you:

	Never	2	3	4	5	6	Very often
Only read questions and comments from others without posting	<input type="radio"/>						
Post questions	<input type="radio"/>						
Post comments	<input type="radio"/>						
Post answers to questions from others	<input type="radio"/>						
Rate the usefulness of other's comments	<input type="radio"/>						
Post your own news items	<input type="radio"/>						
Other (please specify)	<input type="text"/>						

I consider the following activities important to me in this community

	Strongly disagree	2	3	4	5	6	Strongly agree
Finding advice	<input type="radio"/>						
Finding information	<input type="radio"/>						
Reading other people's opinions	<input type="radio"/>						
Finding out what people are talking about	<input type="radio"/>						
Conversing with others	<input type="radio"/>						

How much would you agree with the following?

	Strongly disagree	2	3	4	5	6	Strongly agree
I value information on this community from people who are important to me	<input type="radio"/>						
I visit this community because I enjoy interacting with others	<input type="radio"/>						
I visit this community because I find the information I need on it	<input type="radio"/>						
People who are important to me participate in this community	<input type="radio"/>						

After visiting the community, how much do you agree with the following?

	Strongly disagree	2	3	4	5	6	Strongly agree
I feel well informed	<input type="radio"/>						
I feel I trust the community members	<input type="radio"/>						
I feel informed about what is new	<input type="radio"/>						
Other community members and I hold the same common values	<input type="radio"/>						
I feel very attached to the community	<input type="radio"/>						
I see myself as part of the community	<input type="radio"/>						

News Service Community Survey Final

Thinking again about the news site in general, how much do you agree with the following?

	Strongly disagree	2	3	4	5	6	Strongly agree
I intend to continue visiting this online news site in the future	<input type="radio"/>						
I will use similar news services more frequently in the future	<input type="radio"/>						
The probability that I will visit this online news site again is high	<input type="radio"/>						
I feel loyal to this online news site	<input type="radio"/>						
I consider this online news site my first choice for this type of service	<input type="radio"/>						
This online news site has a great deal of personal meaning to me	<input type="radio"/>						

Finally, are you

- Male?
 Female?

In which age group are you?

What is your highest level of education?

How much time do you spend on the internet per week?

Within one week, how often do you buy the printed version of this newspaper?

Do you have any other comments about the news site or the community associated with it?

Thank you very much!

Appendix C
Focus Group Member Profiles

Focus group participant profiles				Newssite visit frequency (approx. hours per day)
	Gender	Age	Profession	
Group A				
Participant 1	M	46	Development Chief	1.5
Participant 2	M	58	CEO	1
Participant 3	M	34	Research Assistant	2
Participant 4	F	32	Administrator	1
Participant 5	F	47	Journalist	1.5
Participant 6	M	53	News Editor	3
Group B				
Participant 1	F	28	Administrator	1
Participant 2	F	70	Retiree	3
Participant 3	M	57	Business Development Manager	1
Participant 4	M	36	Website manager	2
Participant 5	F	43	Business Manager	1
Participant 6	M	32	Journalist	2

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