



Institutionalizing portfolio entrepreneurship: the Venture Studio model

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ABSTRACT

Venture Studios (VSs) are organizations that create start-ups by acting as founders or co-founders and operating through standardized venture creation processes conducted in parallel. To examine this organizational model and delineate its distinctiveness from others, we developed a global database, conducted multiple case studies with twelve European VSs and two international networks, and administered a worldwide survey. Drawing on human capital and organizational learning perspectives, this study identifies the architectural characteristics and mechanisms through which VSs institutionalize portfolio entrepreneurship. Our findings reveal how VSs convert individual entrepreneurial expertise into organizationally codified human capital. In doing so, VSs extend entrepreneurial agency and cognition from individuals to organizations, offering an organizational model for parallel venture creation. Finally, we clarify how VSs complement other entrepreneurial actors by reducing early-stage uncertainty and generating validated, investment-ready ventures.

1. Introduction

Over the past decade, Venture Studios (VSs) - organizations that create start-ups by acting as founders or co-founders and operating through standardized venture creation processes conducted in parallel¹ - have emerged as a distinctive model of entrepreneurial organization. Once limited to a few pioneering cases in Europe and the United States, such as Djäkne in Sweden and Colab in California, VSs have now become a global phenomenon: our mapping (see [Appendix A](#)) identifies 1,006 VSs currently operating worldwide, with an estimated annual growth rate of 18%. The proliferation of VSs points to an evolution in how entrepreneurship is organized. Rather than relying on individual

founders or independent start-up teams, VSs create and develop multiple ventures through a shared infrastructure of human capital, routines, and knowledge, operating as organizational architectures for continuous venture building. Despite their increasing diffusion, research has only begun to unpack how VSs create value and differentiate themselves from Entrepreneurial Support Organizations (ESOs) such as incubators and accelerators ([Bruneel et al., 2012](#); [Cohen et al., 2019](#)), Venture Capital firms (VCs - [Lerner et al., 2012](#)), and business angel organizations² ([Mason et al., 2019](#); [Tenca et al., 2018](#)). Prior studies have conceptualized VSs as forms of entrepreneurship that internalize the founding process within a single organizational entity ([Baumann et al., 2018](#); [Patel and Chan, 2024](#)). However, we still know little about the

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¹ Various synonyms can be found for the organizational form known as a Venture Studio, such as Company Builder, Company Creator, Operational VC, Start-up Creation Venture, Start-up Factory, Start-up Foundry, Start-up Nursery, Start-up Studio, Venture Builder, Venture Building, Venture Incubator, and Venture Lab. We adopt the label "Venture Studio" because it is increasingly dominant in recent practitioner communities and industry benchmarks (e.g., [Miller and Bound, 2011](#); [Zasowski, 2022](#)) and was consistently recognized as such by the experts consulted during our fieldwork. This definition is further supported by our database validation involving 105 VSs from 52 countries.

² Over time, business angels have increasingly organized into collective forms ([Botelho and Mason, 2024](#); [Butticè et al., 2021](#); [Viglialoro et al., 2026](#)). These collective forms are referred to by different names depending on how they are structured ([Mason et al., 2013](#); [Viglialoro et al., 2026](#)). In this study, we use the term "business angel organizations" as an inclusive label, encompassing business angel groups ([Croce et al., 2017](#)) and business angel networks ([Aernoudt, 2004](#); [Block et al., 2018](#)).

mechanisms through which VSs standardize venture creation processes and make them repeatable, and how these mechanisms differ from those in ESOs. Understanding these mechanisms is essential to explain the organizational distinctiveness and scalability of the VS model. Accordingly, our study seeks to answer the following research question: how do VSs achieve standardized and repeatable venture creation processes? To answer this question and examine how the VS model operates, we combine insights from a worldwide survey with a comparative multiple-case study of 12 VSs and 2 international VS networks. Our qualitative analysis draws on 34 interviews and 11 follow-ups, complemented by secondary data.

Our results indicate that the institutionalization of entrepreneurial human capital and learning constitutes a central mechanism underlying VSs' capability to achieve standardized and repeatable venture creation processes. Codified knowledge embedded in shared routines and tools creates a transferable baseline that can be consistently redeployed across ventures. Specifically, we draw on human capital theory (e.g., Becker, 1964; Gimmon and Levie, 2010; Unger et al., 2011) and the organizational learning perspective (Argote and Miron-Spektor, 2011; Nonaka et al., 1996, 2000) to conceptualize how VSs consolidate and redeploy entrepreneurial knowledge. This framing also allows us to specify how these mechanisms, when embedded within the VS model, differ from those characterizing ESOs. From a human capital view (Becker, 1964; Sevilir, 2010; Unger et al., 2011), our results show that venture creation in VSs depends on the accumulation of entrepreneurial experience, skills, and cognitive capabilities. Yet these resources are typically embodied in individuals and difficult to transfer at the organizational level (Marvel et al., 2016). Drawing on the organizational learning perspective (Crossan et al., 1999; Nonaka et al., 1996, 2000), we explain how in VSs knowledge becomes embedded in routines and practices that transcend individual actors. By combining these two perspectives, we conceptualize VSs as institutionalized learning systems: organizations that transform entrepreneurial human capital from a personal asset into an organizational capability, codified through shared routines, playbooks, guidelines, and standard operating procedures. Such codification, however, does not eliminate the role of experienced entrepreneurs and specialized internal teams in VSs; rather, it provides a shared basis through which their tacit judgment, credibility, and direct engagement in key venture-building activities can be redeployed across ventures. This integration allows us to interpret process standardization as a key mechanism of institutionalized learning. Indeed, in VSs, standardization enables each new venture to start from a higher knowledge baseline. In this sense, VSs embody the organizational codification of entrepreneurial know-how, merging the experimental logic of start-ups with the disciplined structures typical of established organizations.

The study makes several contributions to the literature. First, it advances the literature on entrepreneurial processes (e.g., Baron, 2008; Leyden and Link, 2015) by showing how venture creation can be organized as a deliberately structured, repeatable, and organization-driven process. Second, it contributes to entrepreneurial learning research (Cope, 2005; Deakins et al., 2002; Politis, 2005) by demonstrating how learning can be institutionalized as an organization-level capability so that experiential knowledge becomes cumulative and transferable across ventures. Third, it refines our understanding of portfolio entrepreneurship (Carter and Ram, 2003; Parker, 2014; Wiklund et al., 2008) by introducing the concept of institutionalized portfolio entrepreneurship, showing how entrepreneurial agency and cognition (Bastian et al., 2025) can be extended from individuals to organizations through structured human capital deployment and organizational learning mechanisms (Argote and Miron-Spektor, 2011; Nonaka et al., 1996, 2000).

2. Theoretical background

2.1. Entrepreneurial human capital and learning in new venture creation

Entrepreneurial human capital constitutes one of the most established explanations for heterogeneity in venture performance and innovation outcomes (Marvel et al., 2016; Unger et al., 2011). Originally developed to examine the economic value of education (Becker, 1964; Schultz, 1961), human capital theory highlights that individuals possess diverse knowledge, skills, and experiences that can be productively applied in the creation of new firms. Especially in the early life of a start-up, entrepreneurial human capital is a critical resource influencing survival and growth (Baptista et al., 2014; Huang et al., 2012; Siepel et al., 2017; Shrader and Siegel, 2007). It fuels creativity and innovation during idea generation (Dimov, 2010; Marvel and Lumpkin, 2007) and provides the strategic insight required to navigate uncertainty, assess opportunity-market fit, and evaluate venture feasibility (Grégoire et al., 2010). Evidence from nascent entrepreneurship further suggests that human capital, particularly formal education and previous start-up experience, helps explain entry into new entrepreneurial activity (Davidsson and Honig, 2003). Founders with broader and more diversified knowledge are typically more capable of identifying scalable business opportunities (Colombo and Grilli, 2005; Sternberg, 2004), in part because accumulated knowledge and experience enhance the effective use of heuristics in decision-making (Einhorn, 1980).

Entrepreneurs who repeatedly create and manage ventures, often referred to as serial and portfolio entrepreneurs (Parker, 2014; Westhead et al., 2005), develop what can be termed consolidated entrepreneurial human capital: a synergistic combination of skills and knowledge that enables them to detect and act on growth opportunities more effectively. Such consolidation reflects the experiential learning process through which experience, reflection, and adaptation enhance future performance (Cope, 2005; Politis, 2005). Yet much of what entrepreneurs learn remains tacit, embedded in intuition and personal cognition, and therefore difficult to articulate or transfer (Marvel and Droge, 2010; Sternberg, 2004).

From an organizational-learning perspective, venture creation itself can be understood as a sequence of exploration and exploitation activities (Argote and Miron-Spektor, 2011; Crossan et al., 1999). Learning becomes institutionalized when experiential insights are converted into codified routines and shared cognitive frameworks that guide subsequent actions (Levitt and March, 1988; Zollo and Winter, 2002). However, in most early-stage firms this process remains informal and person-dependent (Khurana, 2021); organizational mechanisms for codifying and retaining knowledge are typically underdeveloped (Aldrich and Yang, 2014). Consequently, entrepreneurial know-how often dissipates when key individuals exit or when new teams are formed, as much of a young firm's entrepreneurial knowledge is embedded in founders' tacit experience and seldom codified (Morrison and Wilhelm, 2004; Penrose, 2009). Bridging these views, entrepreneurial human capital can therefore be conceptualized as both an individual and an organizationally transferable capability. The mechanisms that enable such transfer (e.g., documentation, role specialization, and the circulation of experienced individuals across activities and processes) determine whether entrepreneurial learning remains idiosyncratic or becomes cumulative and scalable (Nonaka et al., 1996, 2000; Zack, 1999).

Academic debates in entrepreneurship and innovation have increasingly called for attention to organizational models that can deliberately embed and scale entrepreneurial knowledge (Aldrich and Yang, 2014; Zollo and Winter, 2002). VSs offer a particularly relevant setting for advancing theory on how entrepreneurial human capital and learning may become institutionalized. As organizations that systematize venture creation through shared resources and routines, they provide a promising context for examining how individual experience can be transformed into collective and codified capabilities. Understanding

this transformation is theoretically significant because it links individual-level processes of entrepreneurial cognition and learning (Bastian et al., 2025; Mitchell et al., 2002; Sternberg, 2004) to the organizational-level mechanisms that sustain repeatable and parallel venture creation, thereby laying the foundation for higher-order forms of organizational learning, in which organizations reflect on and refine how they learn (Thompson and Cohen, 2012).

2.2. Entrepreneurial human capital and learning in actors supporting venture creation

Entrepreneurial learning is fundamentally driven by interaction (Deakins et al., 2002; Politis, 2005; Taylor and Thorpe, 2004). When entrepreneurs engage with organizations that support venture creation, experiential learning processes are accelerated and enriched through access to external knowledge, feedback, and networks (Cope, 2005; Deakins et al., 2002; Kubberød et al., 2018; Taylor and Thorpe, 2004). Over the past two decades, a variety of support organizations have emerged to enhance this process by providing entrepreneurs with structured access to resources, expertise, and connections (Bergman and McMullen, 2022; Block et al., 2018; Cavallo et al., 2026). These ESOs - including incubators and accelerators (Bruneel et al., 2012; Cohen et al., 2019), VCs (Lerner et al., 2012), and business angel organizations (Mason et al., 2019; Tenca et al., 2018) - play an increasingly central role in shaping how entrepreneurial human capital is developed and deployed within entrepreneurial ecosystems (Alvedalen and Boschma, 2017; Serpente et al., 2025; Spigel, 2017). Through mentoring, investment-readiness programs, and exposure to experienced founders and investors, ESOs enhance entrepreneurs' ability to make informed judgments and strategic decisions (Colombo and Grilli, 2010; Pauwels et al., 2016). These activities constitute important mechanisms of entrepreneurial learning, as they allow entrepreneurs to test ideas, interpret market feedback, and refine their decision-making capabilities (Deakins et al., 2002; Eveleens et al., 2017).

At the same time, the way ESOs foster learning remains largely externalized. The locus of human capital development is external to the supporting organization: while many ESOs facilitate access to expertise, mentors, and networks (Eveleens et al., 2017; Politis, 2008), they do not directly engage in all activities of the entrepreneurial process through which experiential learning and capability building take place (Aldrich and Yang, 2014; Politis, 2005). Knowledge, indeed, flows through temporary, project-based interactions (such as mentoring sessions, pitch events, and workshops). In this sense, ESOs act as know-how facilitators rather than learning organizations (De Clercq and Dimov, 2008; Pinelli et al., 2025): they enable entrepreneurs to build their own human capital but do not themselves accumulate or redeploy entrepreneurial experience. This distinction raises an important theoretical issue regarding how organizational arrangements differ in their capacity to embed and redeploy entrepreneurial human capital. Whereas incubators, accelerators, and investors tend to stimulate externalized learning, VCs integrate entrepreneurial human capital within their structures more directly. By participating in venture creation as co-founders (Baumann et al., 2018; Moiana et al., 2025), VCs offer a different setting in which experiential learning is not only facilitated but also experienced internally. Investigating how this occurs is essential to advancing our understanding of the institutionalization of entrepreneurial learning and to identifying the organizational elements and mechanisms that enable the transition from facilitating individual-level human capital development to actively driving its integration at the organizational level.

3. Methodology

Given the limited empirical research on VCs, we first constructed a comprehensive global database of existing VCs. Recognizing their nascent and evolving nature, we carried out a validation procedure to ensure the reliability and accuracy of the dataset. The database, updated

in 2025, includes 1,006 VCs worldwide. Appendix A provides a description of the database construction and validation procedures. Drawing on this database, we employed a multiple case study methodology (Eisenhardt, 1989, 2021) to examine VCs' distinct features and modus operandi. Accordingly, this stage involved 12 VCs drawn from our database and 2 international VC networks. To enhance the rigor of the case studies, we adopted the Case Study Evaluation Template (CASET) developed by Goffin et al. (2019). Additionally, to corroborate the quality of our results, we also carried out a worldwide survey of VCs. By combining a multiple case study approach with survey data, we sought to triangulate our findings, achieving an in-depth understanding of VCs' operations from the cases, while also validating broader patterns across a larger sample. This methodological design increases the robustness and generalizability of our results.

3.1. Data collection

3.1.1. Multiple case studies

Following the CASET framework (Goffin et al., 2019), we conducted a pilot study prior to the main case studies to ensure methodological robustness. The pilot study was carried out with a Spanish VC in February 2020, and the interview lasted 1 h. After the pilot study, we refined our protocol and the observation guides for the main case studies. A board member of an international network of VCs also validated the protocol. To conduct our multiple case studies, we selected a sample of 18 European VCs based on employee count and revenue data available from Orbis, ensuring the inclusion of sufficiently developed and experienced VCs. At the same time, the selected VCs differed in age, scale, and sector, allowing us to capture variation in the degree of formalization of venture creation processes and playbooks across cases. In total, 12 European VCs agreed to take part, resulting in 31 interviews. They were interviewed in 2020 and 2022, and we applied snowball sampling to identify additional interview participants (Biernacki and Waldorf, 1981). The data collection protocol was theoretically informed by the human capital literature (e.g., Becker, 1964; Marvel et al., 2016) and the organizational-learning perspective (Argote and Miron-Spektor, 2011; Crossan et al., 1999; Nonaka et al., 1996, 2000). These lenses guided our analysis in explaining how prior entrepreneurial experience is transformed into collective capabilities and standardized routines. Accordingly, interview questions explored founders' and teams' previous experiences, their views on how learning and expertise circulate across entrepreneurial activities within a VC, how these organizations operate and coordinate their internal processes, and the mechanisms that enable the transfer and codification of experiential knowledge within the organization. These questions also explored how they perceived differences in relation to similar existing organizations. We complemented the case-study interviews with 3 interviews with representatives of 2 well-known international VC networks. In 2025, we then carried out a follow-up round of data collection to deepen specific aspects that emerged from the earlier analysis, particularly concerning the mechanisms through which entrepreneurial human capital and learning become institutionalized and inform the design of standardized and repeatable venture creation processes. This complementary phase also provided richer insights into how learning is intentionally organized within VCs, thereby differentiating the VC model from other entrepreneurial actors involved in venture creation. Table 1 presents information from these interviews and follow-ups.

Each interview lasted approximately 40 min and, except for one interview, was conducted online. In addition, we integrated the collected data about the selected case studies with secondary sources and archival data, such as websites, posts on social media and official social networking platforms, magazines and newspaper articles, reports and articles written by the interviewees, transcriptions of video interviews, and documents that VCs and VSNs shared with us. Examples of additional sources used are the official Slack channels of the VSN1, where one of the authors was added by the VC network. Using all the

Table 1

Overview of interviews and follow-ups - primary data.

ID	City and country	Date of the interview	Role of the interviewee	N. interview	Answered follow-up in 2025?
VS1	Turin, Italy	March 2, 2020	Founder and CEO	1	Yes
		May 18, 2020	Growth Marketer	2	
		May 19, 2020	Data Analyst	3	
VS2	London, UK	April 15, 2022	Project Manager	4	Yes
		March 7, 2020	Software Engineer	5	
		March 18, 2020	Director and CTO	6	
VS3	Berlin, Germany	March 24, 2022	Venture Design	7	No
		March 11, 2020	Senior Business Developer	8	
		March 15, 2022	Venture Architect	9	
VS4	Malmö, Sweden	April 20, 2022	Venture Architect and Medical Expert	10	Yes
		March 12, 2020	Founder	11	
		March 16, 2022	Co-founder and Partner	12	
VS5	Milan, Italy	March 17, 2022	Co-founder and Chairman of the Board	13	Yes
		February 25, 2022	Co-founder and CEO	14	
		March 9, 2022	Co-founder and COO	15	
VS6	Paris, France	March 15, 2022	Project Manager	16	Yes
		March 3, 2022	Partner	17	
		March 23, 2022	CEO and Founder	18	
VS7	Paris, France	April 27, 2022	Vice President and Venture Creator	19	Yes
		March 9, 2022	Communications Manager	20	
		March 30, 2022	Head of Product	21	
VS8	Prague, Czech Republic	April 20, 2022	Legal General Counsel	22	Yes
		March 11, 2022	Project Manager	23	
		March 11, 2022	Senior HR	24	
VS9	Madrid, Spain	March 16, 2022	CFO	25	Yes
		March 29, 2022	Venture Manager	26	
		April 1, 2022	Venture Architect	27	
VS10	Rotterdam, Netherlands	April 27, 2022	Venture Manager	28	Yes
		March 18, 2022	Founder and Managing Director	29	
		April 6, 2022	Venture Developer	30	
VS11	Berlin, Germany	April 6, 2022	Venture Developer	30	Yes
VS12	Freienbach, Switzerland	April 27, 2022	Associate Partner	31	Yes
VSN1 ^a	Denver, Colorado, US	March 18, 2022	Board Member	32	Not required
		March 31, 2022	Director	33	
VSN2	Turin, Italy	March 23, 2022	President	34	Not required

^a The acronym "VSN" refers to Venture Studio network.

data collected, a data triangulation was performed to validate emerging insights from the interviews. At the end of this process, we compiled a 2,029-page, single-spaced A4 corpus. Table 2 presents the data collected.

3.1.2. Worldwide survey

To explore the characteristics and *modus operandi* of VSNs in more detail, we also conducted a worldwide survey. All the respondents were required to indicate the name of their organization to check the validity and origin of the responses. The survey was divided into three sections. The first section was dedicated to the main characteristics of a VSN (e.g., the year of foundation, the number of founders, and the headquarters). The second section focused on exploring human capital within VSNs, specifically investigating the knowledge and experience of their founders. The third section explored the venture creation process and organizational routines adopted by VSNs. Consistent with the theoretical foundations of our analysis, the survey design drew on the human capital literature and the organizational-learning perspective to explore how experience, expertise, and organizational routines contribute to capability development and the repeatability of venture-creation activities within VSNs. Specifically, the survey was designed based on insights derived from a preliminary analysis of a subset of our case-study data, enabling us to corroborate and extend our findings. In this way, the survey complemented the case-study analysis by triangulating the evidence and supporting the broader generalization of the mechanisms identified, particularly those related to learning institutionalization and process standardization as distinctive sources of capability development within VSNs. The survey was distributed through different channels (e-mails, main social media such as LinkedIn and X - formerly Twitter) from May 2021 to July 2021. In total, we collected 71 valid responses out of 420 identified VSNs at that time. Consistent with the geographical distribution observed in our database, our sample is broadly representative

of the population. Table 3 presents descriptive data about this sample.

Regarding the geographical distribution of VSNs that responded to our survey, the U.S. ranks first (10 VSNs), followed by the U.K. (5 VSNs) and France (5 VSNs).

3.2. Data analysis

Our data analysis followed the principles of the Eisenhardt method for cross-case comparison (Eisenhardt, 1989, 2021; Eisenhardt and Graebner, 2007), complemented by an abductive logic (Pedersen and Blok, 2024). In line with prior studies applying a similar methodological approach (e.g., Graebner and Eisenhardt, 2004), we began by constructing detailed case study histories for the 12 VSNs and 2 international networks, integrating interview data with extensive secondary sources. While only interview data were subject to formal coding, secondary materials and worldwide survey data were used to corroborate and contextualize interview evidence by verifying organizational information, cross-checking factual statements, and capturing additional insights. Moreover, we followed an iterative process of moving between data and theory to progressively refine our analytical categories.

To guide this analytical process, we relied on the activity system framework (Zott and Amit, 2010) as a structural lens to explore how VSNs organize, coordinate, and govern their activities, and how these configurations enable them to systematize learning processes in their venture creation. The framework conceptualizes each organization as a system of interdependent activities characterized by design elements - i.e., content (what activities are performed), structure (how they are linked and sequenced), and governance (who performs them and where) - and design themes that explain sources of value creation: novelty, lock-in, complementarities, and efficiency. Building on prior applications of this framework to other entrepreneurial actors (Alaassar et al., 2021; Pauwels et al., 2016), we adapted it to examine how VSNs

Table 2
Overview of qualitative primary and secondary data.

ID	Primary data		Secondary data	
	Duration of interviews (HH:MM:SS)	# of pages (including follow-ups)	Sources	# of pages
VS1	02:52:37	56	Blogs, VS's social media and website, newspapers, podcasts, YouTube	116
VS2	02:03:37	34	Blogs, VS's social media and website, newspapers, YouTube	122
VS3	01:58:29	31	Blogs, VS's social media and website, newspapers, YouTube	83
VS4	02:04:32	37	Blogs, VS's social media and website, newspapers	84
VS5	01:59:05	34	Blogs, VS's social media and website, newspapers, YouTube	109
VS6	02:02:29	36	Blogs, VS's social media and website, newspapers	95
VS7	01:50:18	32	Blogs, VS's social media and website, newspapers, YouTube	138
VS8	01:36:19	30	Blogs, VS's social media and website, newspapers, YouTube	126
VS9	01:38:26	31	Blogs, VS's social media and website, newspapers	92
VS10	00:56:20	24	Blogs, VS's social media and website, newspapers	102
VS11	00:35:25	14	Blogs, VS's social media and website, newspapers, YouTube	92
VS12	00:45:31	15	Blogs, VS's social media and website, newspapers, YouTube	113
VSN1	00:59:27	18	Blogs, VSN's social media and website, newspapers, YouTube	192
VSN2	00:38:04	14	Blogs, VSN's social media and website, newspapers, YouTube	159
Total duration - # of pages	22:00:39	406	N.A.	1,623

Table 3
Descriptive data from the survey.

Info	Min	Max	Median	Mean
Year of foundation	2000	2020	2015	2015
#Founders	1	19	3	3
#Total start-ups created	2	120	10	15
#Start-ups created per year	1	15	2	3

organize and systematize their venture creation processes. More specifically, the framework allowed us to connect micro-level practices to system-level configurations, thereby uncovering how VSs operate as integrated, learning-oriented organizations.

Similar to [Alaassar et al. \(2021\)](#), we analyzed the interviews using an abductive coding approach. We began with open coding, generating first-order codes taken directly from the text (i.e., in vivo codes). Two researchers independently coded the transcripts, achieving a 92% intercoder agreement rate. As suggested by the literature ([Saldana, 2021](#)), this level of agreement is considered satisfactory. Discrepancies were resolved through discussion with a third author. Once coding consistency was established, the transcripts were re-coded using the finalized scheme. These final codes were then aggregated into second-order themes generated by identifying recurring patterns in how VSs organize their activities, deploy and recombine human capital, and build ventures. Each theme was mapped to one or more of the activity system framework's design elements. This allowed us to build structured case-level models that represented the internal activity architectures of each VS. At this stage, we integrated human capital theory and the organizational-learning perspective to interpret how specific activities and linkages within each system contribute to learning and capability building. Concretely, during coding we traced references to individual and collective learning events, mechanisms of knowledge transfer (e.g., playbooks, shared teams, after-action reviews), and practices of human capital redeployment. These were then mapped onto the activity system framework to understand where within the VSs' activity systems these processes occurred (content), how they were connected and sequenced (structure), and who was responsible for performing and governing them (governance). Similar to previous literature applying the activity system framework ([Alaassar et al., 2021](#); [Pauwels et al., 2016](#); [Viglialoro et al., 2026](#)), once the design elements were established, we identified the corresponding design themes. These were not imposed deductively but emerged once the system elements were sufficiently well understood. This layered process enabled differentiation among VSs both in terms of how they organize entrepreneurial activity and the reasons behind the specific ways they do so. Following [Pauwels et al. \(2016\)](#), we then moved to cross-case comparison. Consistent with Eisenhardt's approach ([Eisenhardt, 1989, 2021](#); [Eisenhardt and Graebner, 2007](#)), we identified common patterns and divergences across VS cases. This process revealed the emergence of two distinct organizing roles that VSs play within the entrepreneurial ecosystem. To ensure theoretical consistency, we again drew on human capital literature and the organizational-learning perspective, using the activity system framework as an integrative analytical lens. These theoretical lenses guided our interpretation of how specific configurations of activities and design themes reflected the development, accumulation, and transfer of entrepreneurial human capital within and across VSs. More specifically, we compared our emerging framework and insights with existing studies on human capital and organizational learning that conceptualize how firms create value through capability development and experiential knowledge accumulation (e.g., [Bastian et al., 2025](#); [Marvel et al., 2016](#); [Nonaka et al., 1996, 2000](#); [Zack, 1999](#)). Drawing from this literature, we identified learning mechanisms such as knowledge codification, transfer, and retention as well as the redeployment of human capital as central processes through which VSs generate and diffuse value internally and externally, illustrating the mechanisms through which learning and capability accumulation translate into organizational value creation. To enhance the credibility and robustness of the findings, we employed an insider-outsider approach ([Gioia et al., 2010](#)), involving an independent researcher in the data analysis. Insights derived from case studies were integrated with data from our survey. Specifically, the data collected by the survey were compared with those of the different case studies to identify recurring patterns and trends, thereby enhancing the robustness and generalizability of our findings.

Finally, we conducted a structured comparative analysis between VSs and other key actors in the entrepreneurial landscape: incubators

and accelerators, VCs, and business angel organizations. This comparison was grounded in interview and survey data, supported by secondary sources, the worldwide survey, and informed by relevant academic literature on ESOs (e.g., Bergman and McMullen, 2022; Mason et al., 2013; Sansone et al., 2020). We compared these actors across different analytical dimensions: governance and involvement in venture creation, the learning process, the human capital locus, standardization activities, the type of support provided, and ecosystem contribution. To strengthen the validity of our comparison, we shared and discussed our emerging framework with external academics and other experts in entrepreneurship and innovation. They provided feedback on the plausibility and distinctiveness of our categories, confirming the analytical clarity and relevance of our distinctions. Additionally, we conducted an interpretive comparison with serial and portfolio entrepreneurs (Parker, 2014; Wiklund and Shepherd, 2008). Although our data did not include direct interviews with them, we drew on prior literature and conceptual insights to explore how VEs differ in their learning mechanisms, ownership structures, and capacity for parallel venture creation. This interpretive layer allowed us to position VEs as an institutionalized form of portfolio entrepreneurship, distinct from ESOs and from individual founder-led approaches to venture creation.

4. Results

4.1. Design elements of the Venture Studio model

VEs standardize venture creation processes by institutionalizing entrepreneurial human capital and entrepreneurial learning through a set of interconnected design elements that transform accumulated entrepreneurial experience into collective and reusable capabilities. VEs are typically founded and led by experienced entrepreneurs whose prior ventures provide a reservoir of entrepreneurial human capital that becomes embedded from the outset into the VE's organizational fabric. Rather than focusing solely on procedural efficiency, these mechanisms convert that pre-existing human capital into structured routines, shared tools, and coordinated team practices that embed learning into the very architecture of venture creation. Across cases, we observed that VEs organize their activity systems so that human capital accumulated in each venture, inherited from past entrepreneurial trajectories, is systematically codified, shared, and redeployed across the portfolio. This institutionalization occurs through deliberate organizational design choices in the content, structure, and governance (Zott and Amit, 2010). These elements mark a divergence from ESOs, in which expertise tends to be episodic and external, as opposed to being internally institutionalized and systematically redeployed as an organizational resource. Unlike ESOs, VEs act as an organizational learning model that both leverages and expands entrepreneurial human capital. Rather than simply supporting founders, they continuously observe, codify, and refine how entrepreneurial knowledge is created and applied across ventures. The result is not only a cumulative stock of expertise but an institutionalized capability for “learning how to learn”, i.e., a form of collective entrepreneurial intelligence that fuels repeatable and adaptive venture creation. This collective intelligence emerges not only from the standardization of venture creation processes, but also from the systematic circulation of knowledge, people, networks, and resources across ventures in the portfolio. Based on Zott and Amit (2010), Table 4 shows the design elements identified and how these elements are constructed.

The evidence reported in Table 4 shows that VEs institutionalize entrepreneurial learning through complementary mechanisms that connect individual experience with organizational routines. Embedding consolidated entrepreneurial human capital ensures that prior entrepreneurial knowledge becomes part of the organization's baseline capability. Standardized venture creation processes translate this knowledge into repeatable practices, while developing collective entrepreneurial learning and metacognition introduces reflexivity and

Table 4
Design elements of a Venture Studio.

Design elements	Constructs	Examples of representative quotes
Embedding consolidated entrepreneurial human capital	Founder(s)' knowledge and experience	“Founders made a millionaire exit” (VS2, Interview 5) “The founder was a CEO with entrepreneurial experience and knowledge. For instance, he also worked for one of the biggest VCs in France” (VS3, Interview 9) “In 2018, he made an exit with the company that he created [...]. It was an IoT platform sold for, I think, 300 million” (VS11, Interview 30) “I worked in corporate, e-commerce, innovation in large corporate ventures in France, and then I set up some start-up projects on my own; I built my start-ups a few times, I failed with two of them, and I succeeded with one” (VS2, Interview 6) “We are entrepreneurs, founders, and tech experts with a great deal of experience in the start-up and digital sector” (VS3, Interview 8) “A lot of people here have previous experience with their own ventures” (VS8, Interview 25)
	Team's knowledge and experience	“We follow a standardized process in which we start from an idea generation” (VS1, Interview 2) “They use a playbook for repeating venture building” (VSN1, Interview 32) “We standardize our venture building methodology” (VS10, 2025 follow-up) “We call it parallel entrepreneurship” (VS1, Interview 2) “Now we are active on, I would say, seven or eight [start-ups]” (VS4, Interview 11) “In our network, there are Venture Studios that created ten start-ups per year and others that are simultaneously working on 20 start-ups. But on average, I think that the realistic average is two start-ups per year” (VSN2, Interview 34) “We also try to copy from other successful ventures” (VS1, Interview 3) “Either we have an idea, and we find co-founders, or someone else has the idea” (VS4, Interview 11) “We basically create ideas internally” (VS7, Interview 21) “We do multiple very heavy validation” (VS3, Interview 8) “If the start-up passes validation thresholds tested
Standardized venture creation process conducted in parallel	Standardized process codified in a playbook	
	Parallel process	
	Idea generation for new start-ups	
	Validation and selection of a business idea for a new start-up	

(continued on next page)

Table 4 (continued)

Design elements	Constructs	Examples of representative quotes
Developing collective entrepreneurial learning and metacognition	Creation of a start-up team	through smoke tests, interviews, and other tests, the idea is developed" (VS5, Interview 14) "We call it kind of " <i>topic validation stage</i> ", where we look at this business model in more detail and say: does that really work here?" (VS12, Interview 31) "We find co-founders" (VS4, Interview 11) "In our recruiting process, we usually find people [...] we say: guys, I think you should be a CEO or a CTO for the newer start-up that we are working on" (VS9, Interview 28) "Then, Venture Studio recruits a founder" (VSN1, Interview 33)
		"We build the MVP" (VS2, Interview 6) "We work on the MVP" (VS3, Interview 9) "We can start with the MVP phase" (VS8, Interview 23) "We establish the start-ups once they have successfully passed through the previous phases" (VS1, Interview 3) "We will help you pitch to investors, help you with our network by trying to close business contracts or recruit employees, so it is more like a business development phase" (VS4, Interview 11)
		"Then, we launched the start-up" (VS7, Interview 20) "A few have been incorporated" (VS3, Interview 8) "Our goal is to sell off the company" (VS5, Interview 15) "The aim at the end is to sell the start-up" (VS8, Interview 24)
		"We update the playbooks immediately, so the " <i>latest good way</i> " becomes the default" (VS6, 2025 follow-up) "We've changed our model five or six times and built extensive playbooks on everything we did before" (VS10, 2025 follow-up) "We operate with a " <i>learning loop</i> " built into every venture-building phase" (VS12, 2025 follow-up)
Developing collective entrepreneurial learning and metacognition	Exit strategy	"There really is a daily exchange of information" (VS5, Interview 16) "Our repeatability lives in people and shared capabilities" (VS4, 2025 follow-up) "We use a shared, rotating pool of operators so lessons travel with people, not just
	Updating playbooks and learning loops	

Table 4 (continued)

Design elements	Constructs	Examples of representative quotes
	Metaheuristic and reflective routines	documents" (VS6, 2025 follow-up) "At the end of each phase, reflections are made, and a decision is taken to go ahead or not" (VS9, Interview 27) "We reflect on how we make decisions and choose the best shortcuts" (VS1, 2025 follow-up) "We run a lightweight weekly " <i>report-reflect-decide</i> " cadence [...] to convert observations into explicit next actions across ventures" (VS6, 2025 follow-up)

renewal, i.e., mechanisms through which teams scrutinize, update, and recombine what has been learned. Through this layering, VSSs transform accumulated experience into an adaptive architecture for venture creation: a system that not only standardizes what is known but also continually questions and improves how it is known. This adaptive architecture does not imply that entrepreneurial expertise is fully absorbed into routines. Rather, VSSs codify and redeploy knowledge held by experienced entrepreneurs and specialized internal teams, while continuing to draw on their tacit judgment, relational capital, and direct involvement in venture creation. Playbooks and stage-gates therefore operate as a shared baseline for action, not as substitutes for the experienced actors who interpret and apply them across ventures.

4.1.1. Embedding consolidated entrepreneurial human capital

The first design element concerns the embedding of entrepreneurial human capital within the VS. Our analysis shows that the governance of VSSs is primarily composed of experienced entrepreneurs who decide to establish a VS after one or more successful exits: a pattern consistently observed across our case studies and survey data. Table 5 reports, for each experience category, the minimum, maximum, median, and mean share of founders within each VSS's founding team who possess that experience across the 71 surveyed VSSs.

Table 5 highlights that founders frequently combine experience in VCs, angel investing, and start-up operations, enabling them to draw on a broad set of heuristics, strategic insights, and stakeholder engagement strategies. VSSs thus embody the accumulated knowledge individuals gain from various entrepreneurship-related activities (such as mentoring or investing in start-ups) along with insights from their interactions with ecosystem actors. Founders of VSSs integrate this diverse background with their own entrepreneurial experience, combining knowledge of multiple actors and stages of venture development to provide start-ups with consolidated entrepreneurial human capital.

Our analysis also shows that VSSs are staffed by employees with a high level of expertise in venture creation, validation, and early-stage strategy. This concentration of prior experience means that, unlike traditional entrepreneurs, who usually need time to develop their entrepreneurial human capital (Gimmon and Levie, 2010), VSSs embed this learning from the outset. Their teams possess codified knowledge

Table 5
Venture Studio founders' experience (survey data).

	Min	Max	Median	Mean
Managerial experience	0%	100%	100%	80%
VC experience	0%	100%	0%	27%
Business angel experience	0%	100%	33%	37%
Start-up experience	17%	100%	100%	74%
Exit	0%	100%	50%	60%

and heuristics (Ghezzi, 2020; Gilbert-Saad et al., 2023; Maxwell et al., 2011) that allow them to rapidly recognize patterns, allocate resources efficiently, and anticipate typical early-stage challenges. For instance, in the fundraising phase, the VSs' past exposure to investor dynamics allows them to coach other co-founders and shape narratives in ways that align with investor expectations. One of our respondents declared: *"The Studio's team pitches the business ideas to investors together with you [...] so that it is clear that it is coming from us"* (VS4, Interview 11). By embedding consolidated entrepreneurial human capital within their organizational architecture, VSs transform individual expertise into a shared resource base that supports both ongoing and future venture creation. In practice, VSs embed entrepreneurial knowledge and experience through their founders and team members. These knowledge bases and accumulated experiences enable VSs to develop entrepreneurial learning processes through which prior entrepreneurial insights are collectively shared, refined, and codified into standardized venture creation mechanisms. However, this embedded human capital is not exhausted by codification. Experienced entrepreneurs therefore perform a dual and evolving role within VSs. On the one hand, they contribute to codifying prior entrepreneurial knowledge and experience into playbooks, templates, stage-gates, and routines, while continuing to interpret, update, and refine these tools as new evidence emerges across ventures. On the other hand, their contribution remains partly tacit, relational, and action-based: they exercise strategic judgment and bring social capital, credibility, mentorship, strategic advice, and access to networks in activities such as market validation, pitch preparation, investor interactions, team formation, business development, and go/no-go decisions. Thus, codified routines remain important, but they do not substitute for the context-dependent judgment and personal engagement of experienced entrepreneurs. This involvement is also phase-contingent. In the earliest phases of venture creation, VS founders and experienced teams tend to provide a larger share of entrepreneurial knowledge and hands-on support. As ventures mature and co-founders gain experience, part of this knowledge is progressively transferred to the venture team, allowing experienced entrepreneurs to shift from intensive operational involvement to more selective guidance and intervention. Institutionalization, therefore, does not replace experienced entrepreneurs; rather, it partially codifies, updates, and redeploys their embodied expertise while preserving their role in moments where tacit judgment, social capital, and personal credibility remain critical.

4.1.2. Standardized venture creation process conducted in parallel

The second design element concerns the standardization of venture creation routines, which enables VSs to transform experiential knowledge into structured, repeatable processes. Rather than a rigid sequence of phases, standardization represents an entrepreneurial learning architecture (Holcomb et al., 2009), i.e., a set of codified routines, heuristics, and decision criteria that translate past entrepreneurial experience into systematic process management. Most VSs follow a repeatable development logic structured around six main phases: idea generation, validation, team formation, MVP development, venture establishment, and exit. However, the emphasis lies in how these phases are codified, compared, and continuously improved rather than in their sequence.

As one respondent described: *"We maintain a venture building playbook as the single source of truth"* (VS11, 2025 follow-up). In practice, this playbook specifies both *"what to do"* and the expected standards of performance at each stage of venture building, translating prior experience into shared criteria, templates, and decision rules that can be applied consistently across venture teams. In line with this view, another VS noted: *"We maintain detailed playbooks and digital toolkits defining key milestones, KPIs, governance structures, and templates for each stage"* (VS12, 2025 follow-up). Interviewees described playbooks as including stage-gate entry or exit criteria and evidence thresholds (e.g., validation checklists for interviews and smoke tests), standardized templates for customer discovery, venture scorecards and KPI dashboards used in

weekly reviews, role definitions and hiring checklists for founding-team formation, and operational templates supporting early set-up and investor readiness. Importantly, respondents emphasized that playbooks are initially created by codifying founders' prior venture-building experience and lessons from the first internally built ventures and are then refined as additional ventures generate new evidence and routines. For instance, one respondent highlighted, *"We have developed a proven methodology refined over 14 years, documented in our playbook, which codifies learnings from building more than 50 companies. This playbook is applied consistently across all new ventures"* (VS7, 2025 follow-up). This process can be viewed as a form of knowledge codification (Zack, 1999), through which VSs convert experiential insights into explicit, reusable assets that support the standardization of venture creation. In this way, standardization makes learning comparable, transferable, and cumulative across ventures, enabling entrepreneurial learning to become embedded at the organizational level. By transforming individual entrepreneurial heuristics (Ghezzi, 2020; Gilbert-Saad et al., 2023) into playbooks, templates, and validation thresholds, VSs capture entrepreneurial human capital and redeploy it within and between venture teams. This codification does not suppress creativity; rather, it provides a baseline for adaptation and reflection, ensuring that each new project begins from an accumulated knowledge stock rather than from zero. As one founder noted, *"If a Venture Studio has a playbook, the risks are minimized"* (VS9, Interview 26). Beyond procedural efficiency, standardization serves a cognitive and relational function: it establishes a shared language for decision-making and coordination across multidisciplinary teams. Several interviewees described validation as an *"evidence threshold"* exercise in which teams run a defined set of validation tests, record outcomes in shared templates, and only advance when pre-specified criteria are met, thereby reducing idiosyncratic judgment across venture teams. As one respondent put it, *"Each phase ends with a go/no-go gate"* (VS9, 2025 follow-up). Teams conduct simultaneous projects (what VS1 referred to as *"parallel entrepreneurship"*) that operate as comparative experiments, enabling cross-venture learning and the rapid diffusion of successful practices. This pattern aligns with the portfolio entrepreneurship literature, where parallel venture creation and portfolio entrepreneurship are closely connected. Parker (2014), for instance, distinguishes serial entrepreneurs, who run businesses in sequence, from portfolio entrepreneurs, who run businesses in parallel, while Alsos and Kolvereid (1998) refer to *"parallel (portfolio) business founders"*. More broadly, portfolio entrepreneurship is commonly defined as the simultaneous ownership of several businesses (Carter and Ram, 2003) or as holding ownership stakes in two or more independent businesses (Westhead et al., 2005). In VSs, however, this portfolio logic is enacted not as an individual entrepreneurial strategy, but as a coordinated organizational process through which experienced teams combine tacit judgment, codified routines, shared criteria, and cross-venture learning mechanisms to create, validate, and develop multiple ventures in parallel. Unlike ESOs that primarily support ventures from the outside, VSs embed this process within their own organizational structure. Their entrepreneurial learning therefore resides within the organization, not only in the individual start-ups they create. In this sense, the institutionalization of human capital is an outcome of standardization within VSs, as codified routines and tools convert individual experience into collective organizational capabilities. This is how VSs preserve and redeploy the accumulated experience of their founders and teams, ensuring continuity of strategic judgment, comparability of performance, and speed of iteration across ventures. Therefore, standardization is the vehicle that transforms individual human capital into a firm-level capability (Zollo and Winter, 2002). Standardized routines, however, remain dynamic artefacts: while they provide stability, VSs periodically revisit and refine them through structured review moments. This organizational self-reflection relies on mechanisms such as feedback meetings, cross-venture debriefs, and the iterative updating of playbooks, which ensure that accumulated knowledge remains current and relevant as ventures evolve.

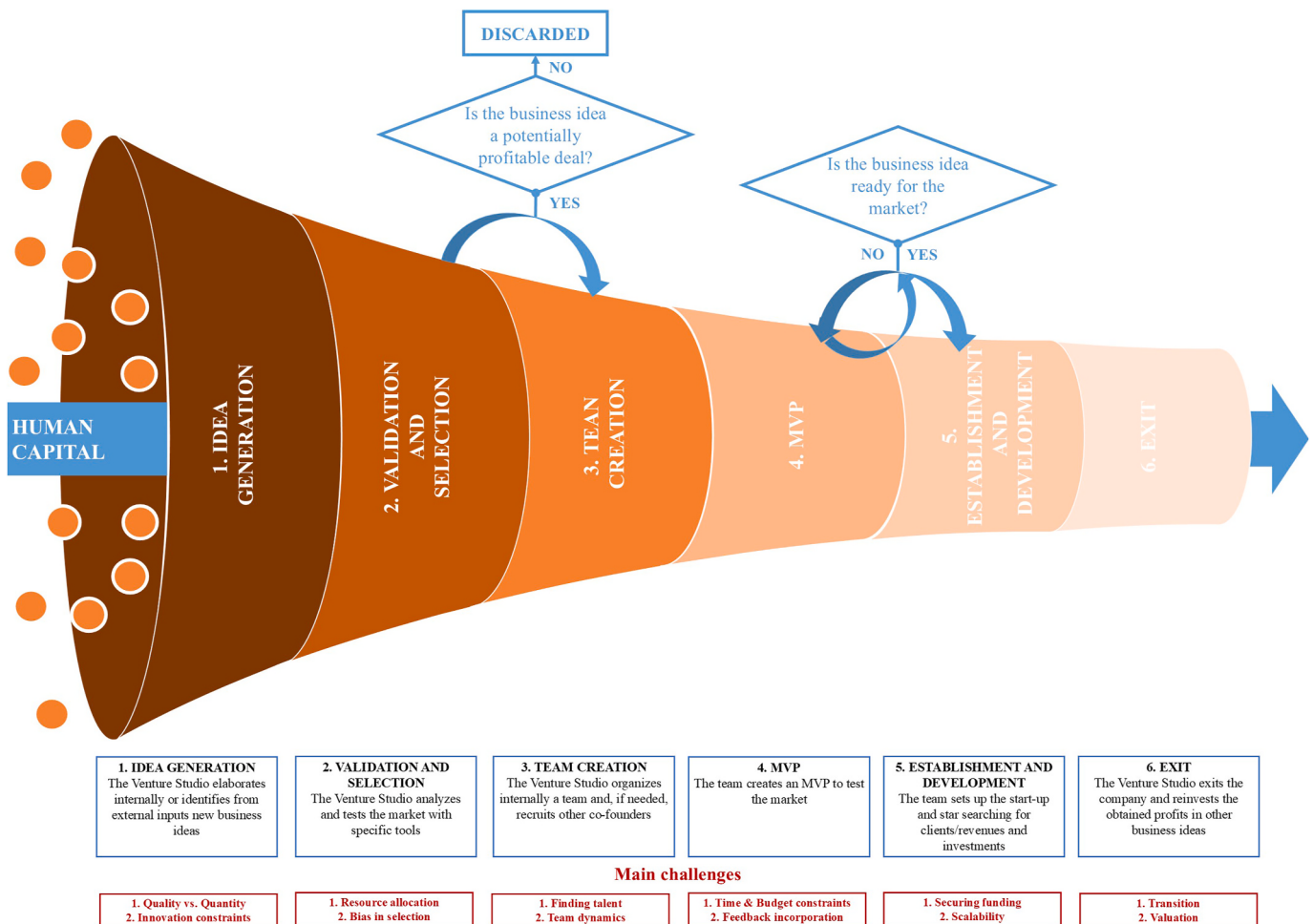


Fig. 1. Venture Studio's venture creation process and main challenges.

Fig. 1 visualizes the funnel-shaped process through which VSS generate, validate, and scale ventures in parallel. Each stage involves dominant challenges such as opportunity identification, bias reduction during validation, or resource prioritization during development, which teams address through codified routines and feedback checkpoints. This configuration supports efficient knowledge transfer and adaptive experimentation across parallel ventures, consistent with the logic of portfolio entrepreneurship (Parker, 2014) and with models of innovation-driven venture design (Kirschbaum, 2005; O'Sullivan and Dooley, 2009). A detailed description of each phase and the full mapping of phase-specific challenges are provided in Appendix B.

Across our cases, the stage-gate logic in Fig. 1 represents a shared core architecture of venture creation and development, in which ventures progress through explicit evaluation moments and evidence thresholds. At the same time, our data indicate variation across VSS, for instance in terms of sectoral focus and stage of development. VSS tend to formalize and refine this architecture over time, as playbooks, templates, and gate criteria become more explicit and systematically applied. Moreover, while the overarching logic remains consistent, VSS may tailor specific criteria and documentation to different venture domains and operating contexts, reflecting differences in validation needs and challenges.

4.1.3. Developing collective entrepreneurial learning and metacognition

While standardized venture creation processes enable VSS to codify and transfer entrepreneurial knowledge, they are not static. Our findings show that VSS complement standardization with a higher-order capability that regulates how learning itself occurs, i.e., what we

conceptualize as collective entrepreneurial learning and metacognition. In entrepreneurship research, metacognition refers to the awareness, monitoring, and regulation of one's cognitive and learning processes (Haynie et al., 2010; Mitchell et al., 2007). Prior research suggests that metacognition can also operate at reflective, or higher-order, levels, where organizations collectively think about and regulate how they learn (Thompson and Cohen, 2012). Recent literature identifies five key attributes of entrepreneurial metacognition: adaptive cognition, metaheuristics, self-regulated cognition, cultural adaptation, and meta-competencies that together explain how entrepreneurs learn to improve their own decision processes (Bastian et al., 2025). Extending this framework to the organizational level, we find that VSS institutionalize these attributes collectively through three interconnected mechanisms: (i) updating playbooks and learning loops, (ii) cross-venture learning transfer and knowledge sharing, and (iii) metaheuristic and reflective routines.

The first mechanism, updating playbooks and learning loops, embodies self-regulated cognition and adaptive cognition. VSS periodically revise playbooks and standardized procedures to incorporate new insights, sustaining entrepreneurial learning at the organizational level and ensuring that organizational knowledge remains current and empirically validated. As one respondent noted, "The playbook is versioned and updated after each sprint or experiment review" (VS11, 2025 follow-up). Similarly, another VS emphasized the organizational infrastructure behind these updates: "We maintain centralized documentation of playbooks, frameworks, and templates that are continuously updated based on project learnings, post-mortems, and experimentation outcomes" (VS12, 2025 follow-up). This structured approach gives rise to what

York et al. (2024) define as an entrepreneurial learning loop: a continuous, organization-wide mechanism through which insights from both ongoing and previous venture creation efforts are captured, tested, and redeployed in real time. Rather than simply reusing past experience, VSs continuously update and refine their experiential base, integrating fresh evidence from active projects to recalibrate routines and decision rules. This exemplifies self-regulated and adaptive cognition (Bastian et al., 2025) at the organizational level as VSs revise the “rules for using rules”. In this sense, our evidence suggests that VSs institutionalize entrepreneurial learning by codifying, reusing, and refining shared routines and tools across ventures, turning individual experience into a collective baseline that can be redeployed and improved over time. This dynamic process ensures that codified knowledge evolves alongside the organization's activities, keeping the collective knowledge base both stable and adaptive. In this way, VSs structure learning not only as a collective process but also as a strategic capability for continuous renewal and scale.

The second mechanism, cross-venture learning transfer and knowledge sharing, reflects the dimensions of adaptive cognition, cultural adaptation, and metacompetencies (Bastian et al., 2025). VSs create continuous spaces for dialogue and comparison among ventures through daily debrief meetings, shared digital repositories, and rotation of operators. In our cases, operators refer to dedicated venture-building staff members (e.g., functional specialists in product, operations, or venture development) who execute and coordinate recurring venture-creation tasks across multiple ventures, distinct from the entrepreneurial role of originating and owning a specific venture. Through this combination of routines and actors, VSs circulate venture-specific and relational knowledge across projects, including market insights, customer needs, commercial and ecosystem contacts, investor expectations, validation lessons, and business development opportunities. This circulation enables not only the diffusion of existing knowledge but also its continuous renewal and learning, as feedback and insights from ongoing projects are integrated into collective understanding. In this context, adaptive cognition manifests as the capability of VS teams to consciously modify their cognitive approaches and decision frameworks in response to dynamic environments. By reflecting on prior strategies, evaluating alternatives observed in other ventures, and recalibrating their own practices, teams enact an organizational form of cognitive flexibility that allows learning to remain responsive under uncertainty. In this sense, knowledge is not simply transferred but reconstructed and updated through interaction, a dynamic process that mirrors what Nonaka et al. (1996) describe as the SECI (socialization-externalization-combination-internalization) cycle of organizational knowledge creation. Within VSs, tacit entrepreneurial experience accumulated through venture development is socialized through close collaboration and discussion, then externalized when articulated in playbooks, combined with data and procedures from other ventures, and finally internalized by new teams as part of their operating routines. Through these cross-venture exchanges and project rotations, VS teams also develop what Bastian et al. (2025) describe as cultural adaptation: the cognitive capability to learn, interpret, and adjust thinking and behavior in response to different contextual and cultural signals. Specifically, VSs facilitate the translation of cultural dynamics and experiential knowledge across ventures operating in diverse entrepreneurial ecosystems, enabling teams to recognize and respond to contextual variation while maintaining internal coherence. By continuously interpreting and integrating knowledge from these heterogeneous contexts, VSs transform situational learning into shared understanding, progressively weaving individual cognitive adjustments into collective organizational routines. Through this cyclical conversion, individual human capital becomes a shared organizational resource that can be reapplied and reinterpreted across the portfolio. As these cycles are repeated, VSs develop collective metacompetencies, which allow them to recognize who knows what, how expertise should be mobilized (organizational metaknowledge), and how to sustain commitment and persistence under uncertainty

(collective meta-affectation). These higher-order abilities enable continuous adaptation while preserving coherence among teams, ensuring that learning remains both cumulative and flexible.

The third mechanism, metaheuristic and reflective routines, captures metaheuristics and self-regulated cognition (Bastian et al., 2025). VSs regularly examine the decision heuristics that guide their evaluations, revisiting assumptions and adjusting judgment rules when needed. These structured reflection sessions transform individual intuition into shared reasoning patterns, embedding metaheuristics (i.e., rules about how and when to use heuristics) into the organizational fabric. In this sense, VSs partially articulate tacit entrepreneurial cognition and make it more transferable through explicit, revisable knowledge (Nonaka et al., 1996, 2000), while continuing to rely on embodied expertise and context-dependent judgment.

Taken together, these mechanisms create a collective entrepreneurial learning and metacognition that regulates how VSs learn and evolve. Through continuous playbook revision, cross-venture knowledge exchange, and reflective decision routines, VSs embed the core attributes of metacognition and learning into their organizational model. Unlike ESOs, where learning remains externalized and mostly episodic (e.g., Cohen et al., 2019; Mason et al., 2013), VSs internalize how learning occurs. This collective learning and metacognition ensure that standardized processes remain dynamic, and that the organization continually improves its ability to sense, interpret, and respond to new opportunities. By combining structured learning with reflexive regulation, VSs convert accumulated entrepreneurial human capital into a systemic, organization-level capability for learning how to learn: a key manifestation of institutionalized entrepreneurial intelligence.

4.2. Design themes and roles of Venture Studios

The interaction of the design elements previously identified gives rise to higher-order design themes (Zott and Amit, 2010) that express how VSs configure and capture value within their activity systems. While the design elements describe how VSs institutionalize entrepreneurial human capital and learning, the combination of these elements reveals what forms of value are produced through this organizational design. Specifically, two complementary value configurations emerge. First, by integrating entrepreneurial human capital with iterative validation and reflective learning, VSs create validated and knowledge-intensive ventures that embody the organization's accumulated human capital. Second, by orchestrating the redeployment and renewal of entrepreneurial experiences and learning across projects, VSs create a dynamic stock of entrepreneurial human capital, i.e., a collective capability that retains and multiplies value across ventures. These configurations correspond to two interrelated organizing roles: the “Creator of validated start-ups”, oriented toward generating market-tested entrepreneurial opportunities, and the “Human capital driver”, oriented toward sustaining and amplifying the organization's capability base. Together, they show that the VS model not only structures entrepreneurial processes but also transforms entrepreneurial human capital into a scalable and repeatable source of value creation, while continuing to draw on the tacit judgment and relational engagement embedded in that human capital. Table 6 summarizes how the three design elements identified earlier combine to produce these two organizing themes and roles.

4.2.1. Continuously creating validated ventures through structured learning

The first organizing role of VSs can be described as that of “Creator of validated start-ups”, that is, organizations that convert accumulated entrepreneurial experience and structured learning into a systematic process of venture generation. Rather than acting as passive investors or facilitators, VSs internalize the venture creation process, building and operating start-ups directly. As one interviewee explained, “Rather than offering guidance from the sidelines, we work as co-founders” (VS7, 2025 follow-up). This statement captures the distinctive logic of VSs: they act

Table 6

Design themes and roles of a Venture Studio.

Design themes	Continuously creating validated ventures through structured learning	Matching new opportunities with embedded consolidated entrepreneurial human capital
<i>Roles</i>	<i>Creator of validated start-ups</i>	<i>Human capital driver</i>
Embedding consolidated entrepreneurial human capital	Embedded entrepreneurial human capital provides the foundation for identifying and shaping viable opportunities. VS teams leverage accumulated heuristics and prior venture experience to evaluate feasibility and anticipate challenges, enabling rigorous internal validation before market exposure.	By embedding entrepreneurial human capital within the organization, VSs iteratively match new business ideas with the expertise, heuristics, and experiential knowledge of internal teams. This structured alignment renews and redeploys embedded human capital across ventures, ensuring that accumulated know-how remains a dynamic organizational resource.
Standardized venture creation process conducted in parallel	Shared playbooks and stage-gates translate individual human capital into codified routines for idea validation and testing. Running multiple opportunities in parallel under a common logic yields a steady flow of ventures that meet predefined validation thresholds and reduce market uncertainty.	Standardized procedures ensure each opportunity is assessed for fit with available expertise. Institutionalized heuristics let multiple start-ups inherit a common foundation of skills and cognitive routines, improving efficiency and preserving human capital within the VS.
Developing collective entrepreneurial learning and metacognition	Debriefs, learning loops, and cross-team reviews ensure each validation cycle improves the next. Metacognitive routines refine evaluation criteria and strengthen the collective ability to sense and assess opportunities; thus, novelty is consistently paired with validation, sustaining the VS's capability to generate reliable, high-quality ventures.	Continuous reflection renews both human capital and matching criteria. VSs learn how to make the venture creation process more effective, improving the rules for aligning ideas and capabilities over time and enabling the renewal of the organization's entrepreneurial knowledge base.
Examples of representative quotes	"We create start-ups in parallel" (VS7, Interview 21) "We build and operate the venture, not just advise or fund. Unlike incubators or accelerators that give tools or mentorship, we create from scratch" (VS4, 2025 follow-up)	"The idea of [VS2] is to find the formula, the key to be successful in reproducing businesses" (VS2, Interview 5). "The patterns that worked became part of how we start the next venture" (VS4, 2025 follow-up)

as institutional founders that combine entrepreneurial human capital, codified routines, and entrepreneurial learning mechanisms to create start-ups that are both validated and scalable from inception. Embedded consolidated entrepreneurial human capital provides the foundation for this role. As we have shown, VSs are typically founded and staffed by individuals with substantial entrepreneurial experience, whose heuristics and judgment guide the identification and refinement of business ideas. Through structured ideation and evaluation sessions, teams mobilize accumulated human capital to assess opportunity feasibility and adapt business models before external testing. This internal learning architecture allows VSs to reduce the uncertainty of early-stage

entrepreneurship by transforming individual human capital into a shared capability for opportunity validation. In this sense, the creation of a start-up is not a one-off act but the output of iterative, knowledge-based experimentation that integrates prior human capital into repeatable organizational routines.

Standardized processes such as playbooks, stage-gate validation, and structured debriefs institutionalize this learning. Each new project proceeds through internally codified stages under the supervision of experienced operators who act as both mentors and co-founders. As one VS interviewed put it, "*We run every venture through a consistent, stage-gated process*" (VS2, 2025 follow-up). In practice, this meant that ventures advanced only when predefined evidence thresholds were met (e.g., validation results recorded in shared templates and assessed at go/no-go gates), thereby making early-stage evaluation comparable across projects and reducing idiosyncratic judgment. By embedding learning directly into the venture creation infrastructure, VSs transform the uncertainty of entrepreneurship into a managed, iterative process of discovery. Each validation cycle contributes to a growing repository of tested assumptions and refined heuristics, creating a cumulative learning advantage across the portfolio. Through this configuration, VSs not only act as creators of start-ups but also as creators of validated investment opportunities.

Internal validation mechanisms and collective expertise generate a pipeline of ventures that already meet minimum viability and scalability thresholds before external funding. As one interviewee noted, "*The key challenge is to understand how to allocate all our resources to get the maximum value we can capture if we want to make all the start-ups VC-friendly*" (VS9, Interview 26). By signaling organizational credibility and providing pre-tested business models, VSs serve as entities that translate embedded entrepreneurial human capital into investable opportunities and reduce risk for investors. Indeed, another participant emphasized this trusted relationship: "*We have a network of investors that are willing to invest in our companies*" (VS7, Interview 21). Hence, the creator role embodies both learning and validation as organizational capabilities: through structured human capital, codified heuristics, and meta-cognitive routines, VSs turn experience into scalable entrepreneurial output.

In summary, the creator of validated start-ups represents the external, venture-facing value configuration of the VS model. By institutionalizing entrepreneurial human capital within a standardized learning architecture, VSs generate ventures that are not only new but also validated, reducing uncertainty for founders, partners, and investors alike.

4.2.2. Matching new opportunities with embedded consolidated entrepreneurial human capital

The second design theme identifies VSs as "*Human capital drivers*", whereby these organizations continuously renew and redeploy their entrepreneurial expertise across ventures.

Whereas the previous theme captured how VSs create validated ventures through structured learning, the present one shows how they create renewable entrepreneurial human capital through collective and iterative learning. In this sense, VSs act not only as creators of start-ups but also as institutional repositories of entrepreneurial intelligence, sustaining a cumulative capability base that enhances efficiency, adaptability, and ecosystem value. Unlike ESOs, where learning remains external to the supporting organization (e.g., Pinelli et al., 2025), VSs internalize both the creation and renewal of entrepreneurial capabilities through continuous knowledge recombination. Embedded consolidated entrepreneurial human capital forms the foundation of these capabilities. VSs assemble experienced entrepreneurs and operators, who work together on multiple ventures, transforming what is normally individual human capital into a shared resource pool. Within VSs, venture-building involves both entrepreneurial roles (venture ownership and strategic direction) and operator roles (hands-on execution and coordination across ventures). Across cases, operators are venture-building specialists

and executors who move across ventures to apply and refine the VS's playbooks, while entrepreneurs remain primarily responsible for venture-level ownership and overall strategic direction. By rotating across ventures, operators transfer tacit knowledge, apply standardized routines, and help convert individual experience into a shared organizational capability. VSs map opportunity requirements to an internal heuristics inventory, rotate operators across ventures, and use stage-gated mechanisms so lessons from one build are codified and shared in the playbooks. For instance, several VSs described deliberately rotating experienced operators across ventures and translating recurring issues into updated checklists and templates that become part of the shared playbook, embedding entrepreneurial learning in organizational routines and shared resources. In this way, lessons and tacit insights travel both through people and through artefacts, helping align each new idea with the organization's embedded expertise. Within this shared resource pool, the continued involvement of VS founders and experienced VS team members remains important because knowledge circulates not only through templates and playbooks, but also through tacit, strategic, and relational contributions in activities such as opportunity validation, team formation, fundraising, investor interaction, and go/no-go decisions. As one VS observed, *"We embed entrepreneurial knowledge through daily collaboration rather than formal programs or mentoring; this ensures immediate, applied learning in real business contexts"* (VS12, 2025 follow-up). This approach does not imply mechanical repetition; rather, it reflects a process of continuous learning and recombination, building on the experience of everyone involved in the venture creation process. Through this mechanism, entrepreneurial human capital becomes both standardized and evolving: codified through playbooks and checklists, yet constantly refined through experience. This structure creates what can be understood as an organizational learning loop (York et al., 2024), in which knowledge from one venture is captured, transferred, and adapted to the next. Rather than resetting after each venture, the VS's collective experience compounds over time. As noted above, operators rotate across projects, ensuring that tacit insights travel with people, not only documents. In this way, the VS's workforce becomes a dynamic carrier of entrepreneurial learning, enabling each new venture to start from a higher baseline of human capital. This mechanism illustrates how individual entrepreneurial experience, typically idiosyncratic and difficult to transfer (Becker, 1964; Marvel et al., 2016), becomes an organizational capability through deliberate learning structures (Nonaka et al., 1996, 2000; Zollo and Winter, 2002). This continuous renewal reflects a form of collective entrepreneurial metacognition: the shared capacity of teams to monitor, evaluate, and adjust how learning occurs. Building on this element, VSs embed reflective practices that allow them to question not only what they have learned but how they have learned it. These routines also transform tacit knowledge into explicit, revisable insights, consistent with Nonaka et al.'s (1996) model of knowledge conversion. Moreover, by periodically updating their playbooks and codified procedures, VSs ensure that embedded human capital remains adaptive rather than inert, i.e., a living system of expertise that evolves with every iteration. This is how VSs institutionalize the principle of learning how to learn: they turn entrepreneurial reflection into a formal organizational capability. The value created through this configuration extends beyond internal efficiency. By sustaining a collective pool of entrepreneurial human capital, VSs enhance the quality and speed of future venture creation, shorten learning cycles, and contribute to ecosystem-level capability building. Their embedded expertise and network connections allow them to act as knowledge multipliers, diffusing proven practices to co-founders, investors, and partners. In this sense, VSs not only produce start-ups but also generate organizational learning externalities, improving the collective intelligence of the entrepreneurial ecosystem.

In summary, this design theme shows that VSs transform consolidated entrepreneurial human capital into a renewable organizational resource through structured reflection, knowledge codification, cross-

venture transfer, and the continued circulation of tacit, strategic, and relational expertise. This role complements the previous one: while creating validated ventures converts learning into market value, matching opportunities with embedded human capital converts learning into organizational value. Together, these mechanisms illustrate how VSs institutionalize entrepreneurial learning as both a productive and regenerative model, making them not only venture creators but enduring engines of entrepreneurial capability. In doing so, the VS model shows how entrepreneurial learning can become an organization-level capability (partly codified, transferable, and continuously renewed), rather than remaining solely tacit, individual-bound, or confined to single ventures.

4.3. Differentiating and positioning Venture Studios within the entrepreneurial ecosystem

Our analysis reveals that VSs organize entrepreneurial activity through two interdependent value configurations: the creation of validated ventures through structured learning and the renewal of entrepreneurial human capital through collective reflection and redeployment. Together, these mechanisms define a model of institutionalized portfolio entrepreneurship (Baert et al., 2016; Carter and Ram, 2003) that distinguishes VSs from other actors in the entrepreneurial ecosystem. While accelerators and incubators, VCs, and business angel organizations support entrepreneurial learning from the outside (Bergman and McMullen, 2022; De Clercq and Dimov, 2008; Mason et al., 2013), VSs internalize both the creation and renewal of entrepreneurial knowledge, transforming it into a collective, organizational capability. Their distinctiveness lies not in financial mechanisms or portfolio logic but in how they embed entrepreneurial human capital and learning within an organizational architecture of continuous venture creation. Table 7 summarizes these distinctions, drawing on the theoretical and empirical literature that characterizes each actor's role and learning logic (e.g., Botelho and Mason, 2024; Buttice et al., 2021; De Clercq and Sapienza, 2005).

In incubators and accelerators, learning is intentionally structured but remains externalized: mentoring, workshops, and cohort programs create temporary interfaces for capability development (Bruneel et al., 2012; Cohen et al., 2019). As shown by the literature (e.g., Pinelli et al., 2025), these ESOs foster founders' cognitive development, facilitating the acquisition of heuristics and enabling both experiential and vicarious learning. However, this knowledge accumulates within individual entrepreneurs rather than within the supporting organization, reflecting distributed learning without retention. By contrast, VSs retain and redeploy knowledge internally through codified routines, thereby institutionalizing a learning process cycle (Nonaka et al., 1996, 2000).

VCs, although structurally sophisticated, focus primarily on financial rather than learning governance (Caselli et al., 2009; Lerner et al., 2012). Their expertise accumulates in investment heuristics and screening mechanisms, not in direct venture creation knowledge. Prior literature confirms that VCs develop both internal and external knowledge through their portfolio management and syndication activities (De Clercq and Dimov, 2008), but this knowledge primarily concerns evaluating, scaling, and governing portfolio firms rather than founding and building new ones. While VCs may accumulate domain-specific knowledge in particular industries and codify insights related to growth and scaling through processes resembling absorptive capacity (Zahra and George, 2002), this learning remains investment-oriented rather than creation-oriented. Empirical evidence also shows that VC learning from portfolio companies is contingent, fragmented, and behaviorally constrained; affected by factors such as trust, knowledge overlap, and performance rather than organizational routines (De Clercq and Sapienza, 2005). VSs differ fundamentally in this regard: they embed heuristic learning directly in operational processes, what Zollo and Winter (2002) call deliberate learning processes, transforming past experience into standardized routines for opportunity identification, validation, and

Table 7

Comparative synthesis of VEs and other entrepreneurial ecosystem actors.

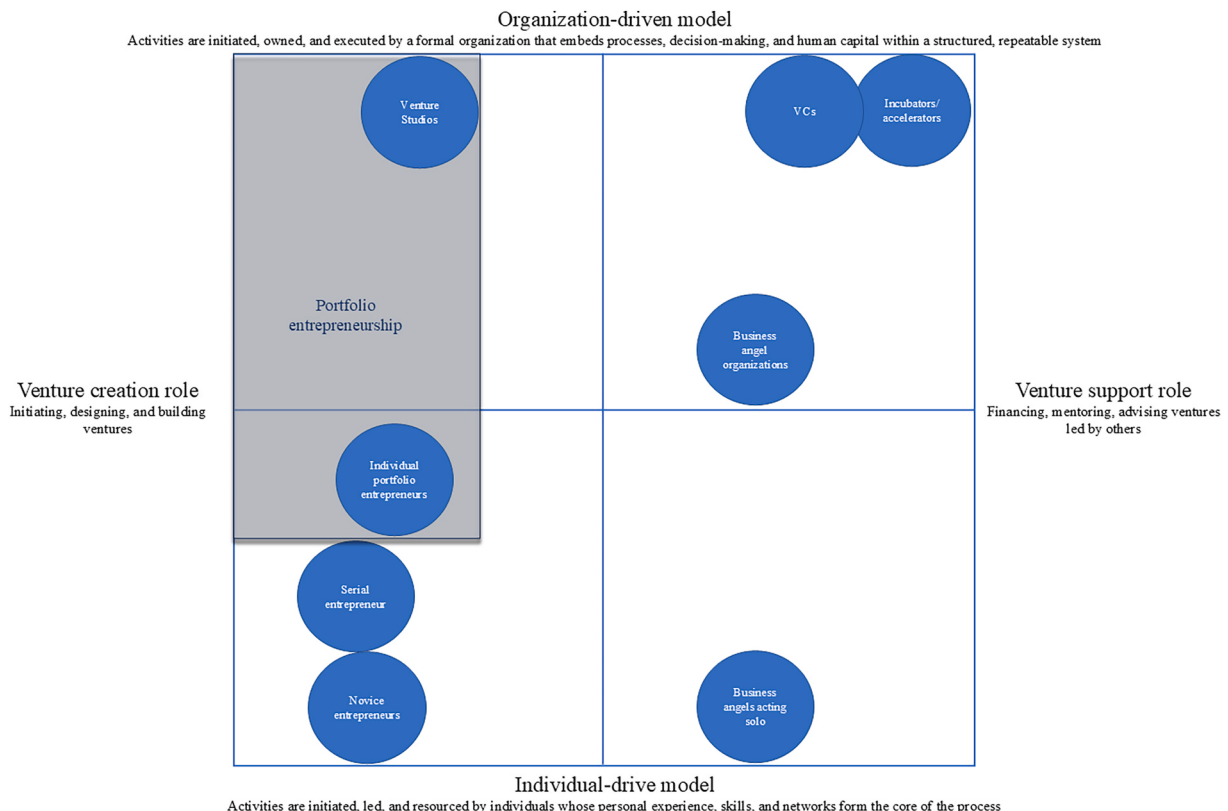
	VEs	Incubators/accelerators	VCs	Business angel organizations
Governance and involvement in venture creation	Institutionalized portfolio entrepreneurs; act as founders/co-founders and retain equity	External facilitators; support time-bound cohorts; limited equity involvement	Financial intermediaries; minority equity; governance via investment contracts	Associations of individual investors; minority equity
Entrepreneurial learning process	Continuous, internalized, and metacognitive; learning loops embedded in venture creation routines	Episodic and externalized; learning through mentoring and training	Evaluation-based and largely ex-post; learning through deal experience, not venture creation	Experiential and informal; knowledge sharing through ad-hoc interactions
Human capital locus	Embedded within the organization; collective and renewable	Primarily external; individual entrepreneurs retain experience	External; located in investors' analytical expertise	External; located in business angels; individual and fragmented
Standardization activities	Codified playbooks and adaptive processes	Standardized curricula but low process integration	Financial-decision routines, little operational standardization	Case-by-case investment practices
Type of support provided	All types (managerial, operational, and financial)	Mostly mentoring support, sometimes financial	Financial and managerial	Financial and managerial
Ecosystem contribution	Creation of validated, investable ventures; diffusion of organizational learning to ecosystem partners	Venture readiness and network expansion for start-ups	Financial capital, signaling, and scaling of proven ventures	Early-stage financing and mentorship through personal expertise (smart money)

scaling.

Business angel organizations rely on individual human capital and tacit experiential transfer through informal mentoring (Butticè et al., 2021; Cavallo et al., 2019; Mason et al., 2013). This distributed expertise remains personal and fragmented. VEs, in contrast, convert individual entrepreneurial experience into organizational human capital by codifying it into playbooks, validation thresholds, and team-level practices. This codification enables learning to persist beyond any of the founders, addressing the challenge of transferability that limits both business angel organizations and VC learning systems. Consistent with this logic, respondents described playbooks as organization-wide reference points that standardize evaluation and coordination across ventures. In contrast to VCs and business angel organizations, whose equity participation primarily reflects financial commitment rather than hands-on involvement in creating ventures, VEs act as organizational

founders. They internalize venture-creation activities within their structure and routines, integrating learning directly into how ideas are generated, validated, and developed.

Beyond these ESOs, VEs also differ from individual forms of entrepreneurship such as novice, serial, and portfolio entrepreneurs (Parker, 2014; Westhead et al., 2005). In the individual models, entrepreneurial learning is experiential and idiosyncratic (Cope, 2005; Politis, 2005); accumulated heuristics remain embodied in personal cognition. While individual entrepreneurs also internalize learning through personal reflection and iterative experience (Haynie et al., 2010), the distinctiveness of VEs lies in their ability to institutionalize this process at the organizational level. In VEs, learning is not confined to individual cognition but embedded in collective routines, codified tools, and governance mechanisms that ensure its retention and redeployment across ventures. This structural configuration enables VEs to transform

**Fig. 2.** Positioning of the Venture Studio model.

learning from an episodic process to a cumulative and renewable process of entrepreneurial capability building.

Fig. 2 visualizes this positioning across two dimensions: (i) the actor's role in venture creation (creating and building ventures versus supporting or financing ventures led by others) and (ii) the degree of organizational involvement (individual-driven versus organization-driven).

VSs occupy the upper-left quadrant, combining organizational ownership with direct venture creation. This configuration explains why VSs can internalize entrepreneurial learning and human capital development more effectively than other actors: by integrating governance, experience, and reflection within a single organizational entity, they achieve a systemic and self-reinforcing model of entrepreneurial learning.

In summary, distinct from ESOs and individual models of entrepreneurship, VSs represent an institutionalized organizational model of portfolio entrepreneurship that combines the creative agency of individual founders with the structural and learning advantages of formal organizations.

5. Discussion and implications

This study positions the VS model as a distinct and increasingly influential organizational form within the entrepreneurial landscape. Our global dataset shows that the number of VSs is growing at an average annual rate of 18%, reflecting both the model's operational relevance and its expanding adoption. Despite the growing trend and the organizational innovations introduced by the phenomenon under scrutiny, VSs have been surprisingly under-investigated in academic research. Responding to recent calls for deeper investigation into these organizations (Patel and Chan, 2024), this exploratory study offers original theoretical insights by conceptualizing VSs as institutionalized portfolio entrepreneurship actors and by unpacking the organizational mechanisms through which they make venture creation more structured, repeatable, and continuously improvable. In doing so, the study speaks directly to core entrepreneurship debates on: 1) the tension between emergent, founder-centric views of venture creation and the possibility of deliberately organized venture-building processes, 2) the extent to which entrepreneurial learning can be institutionalized as an organization-level capability, and 3) how portfolio entrepreneurship can be enacted as an organizational form rather than solely an individual strategy. To develop these entrepreneurship implications, we draw on human capital theory (Becker, 1964; Marvel et al., 2016; Unger et al., 2011), organizational learning (Argote and Miron-Spektor, 2011; Nonaka et al., 1996, 2000), and entrepreneurial cognition research (Bastian et al., 2025; Haynie et al., 2010; Mitchell et al., 2007) as complementary interpretive lenses. By integrating these perspectives, we explain how VSs transform the experiential knowledge of individual founders, operators, and venture team members into collective, codified, and redeployable capabilities that enable repeatable venture creation. Building on the notion of collective entrepreneurial metacognition, we further argue that VSs institutionalize higher-order learning routines that allow them not only to replicate entrepreneurial processes but also to monitor, evaluate, and refine how entrepreneurial learning itself occurs across ventures.

5.1. Theoretical contributions

VSs bring into view a form of venture creation that is deliberately organized and repeatable: an empirical pattern that sits uneasily with dominant portrayals of entrepreneurship as informal, emergent, and founder-centric (e.g., Aldrich and Yang, 2014; Hoang and Gimeno, 2010; Roach and Sauermann, 2015). Building on our evidence, we argue that this repeatability is produced through the institutionalization of entrepreneurial learning within an organizational architecture: codified playbooks, stage-gated evaluation routines, and reflective

learning loops that, together with the continued active contribution of experienced VS team members, allow venture creation to be executed in parallel and improved over time. In doing so, the study advances entrepreneurship research in three interrelated ways.

First, we contribute to debates on entrepreneurial processes (e.g., Baron, 2008; Leyden and Link, 2015) by showing that venture creation can be intentionally structured and formalized without becoming rigid. While entrepreneurship is often theorized as a loosely organized process shaped by emergence and iteration (Galkina et al., 2022), VSs enact a stage-gate venture creation architecture in which ventures progress through explicit evaluation moments and evidence thresholds, akin to innovation management models (Kirschbaum, 2005; O'Sullivan and Dooley, 2009). This reframes venture creation from a predominantly idiosyncratic founder-led sequence to an organizationally orchestrated process in which entrepreneurial judgment becomes more comparable and replicable across projects. Notably, our findings also show that this structuration is not synonymous with rigidity: standardized routines provide a baseline that supports disciplined experimentation and faster iteration rather than suppressing novelty.

Second, we advance entrepreneurship research on entrepreneurial learning (Cope, 2005; Deakins et al., 2002; Politis, 2005) by demonstrating that learning can be institutionalized as an organization-level capability rather than remaining primarily individual, tacit, and episodic. Prior research emphasizes learning as experiential, often embodied in entrepreneurs' cognition and reflection (Baron, 2008; Politis, 2005). In VSs, by contrast, learning becomes embedded in shared tools and routines (e.g., playbooks, templates, gate criteria, and learning loops) that are continuously refined through post-mortems and reflective review moments. This shows how their ventures can start from a higher baseline of validated knowledge and how learning can become cumulative across venture-building efforts. In the VS model, learning is not only a by-product of venture creation but can become part of the venture-creation infrastructure itself, with implications for how early-stage uncertainty is managed (McMullen and Shepherd, 2006) and for the consistency and scalability of venture creation outcomes over time (Davidsson and Gordon, 2012). Moreover, by embedding routines that monitor and refine how learning itself occurs across ventures, VSs develop a form of collective entrepreneurial metacognition (Bastian et al., 2025; Thompson and Cohen, 2012) through which organizations revise the "rules for using rules" over time.

Third, we extend research on portfolio entrepreneurship (Carter and Ram, 2003; Wiklund et al., 2008) by conceptualizing VSs as an organizational form of institutionalized portfolio entrepreneurship. Portfolio entrepreneurship has largely been treated as an individual-level strategy and behavioral pattern through which entrepreneurs own and manage multiple ventures (Parker, 2014; Westhead et al., 2005). Our findings show how portfolio venturing can instead be institutionalized within an enduring organization that creates, validates, and scales ventures in parallel through shared human capital and standardized learning infrastructures. Rather than relying only on the replication of standardized routines, this institutionalized form of portfolio entrepreneurship depends on the coordinated circulation of venture-specific insights, relational assets, operational learning, and opportunity-related resources across ventures, a process orchestrated by experienced entrepreneurs and teams endowed with consolidated entrepreneurial human capital. This reframes portfolio entrepreneurship as not only an individual pattern of action but also an organizational design that enables compounding learning across ventures and systematic replication of venture-building capability. In doing so, the study clarifies why VSs represent a distinct upstream actor within entrepreneurial ecosystems (Alvedalen and Boschma, 2017; Cavallo, 2024; Spigel, 2017), internalizing venture building rather than merely facilitating it (Serpente et al., 2025).

Taken together, these contributions reshape our understanding of venture creation and entrepreneurial learning: from processes traditionally treated as individual, founder-centric, episodic, and largely tacit

(Baron, 2008; Cope, 2005; Politis, 2005), to an organizationally embedded, repeatable, and continuously improvable architecture for venture building.

5.2. Practical implications

This study offers several practical implications for entrepreneurs, investors, corporations, and policymakers. Our findings highlight VSs as a distinctive organizational model that can enhance the overall effectiveness and inclusiveness of entrepreneurial ecosystems while complementing, rather than substituting, other key entrepreneurial ecosystem actors, such as incubators, accelerators, and investors. In this sense, the VS model should be viewed as an integrative component of the broader ecosystem architecture (Hess et al., 2025; Stam et al., 2025), capable of strengthening linkages among its different stakeholders.

First, for entrepreneurs, particularly those at early stages, and for individuals interested in becoming entrepreneurs, joining or co-founding ventures within a VS provides access to embedded human capital, structured learning environments, and proven venture creation routines. These benefits extend beyond access to codified methods, playbooks, templates, and systematic processes. Within this setting, novice entrepreneurs are not simply given tools to follow; they also gain close exposure to the tacit judgment and experiential guidance of experienced entrepreneurs, who work alongside them in concrete entrepreneurial activities such as opportunity validation, pitch preparation, investor interaction, team formation, business development, and go/no-go decisions. VSs thus provide a practice-based learning environment in which codified tools are complemented by direct exposure to entrepreneurial decision-making in action. By integrating individual founders into collective learning architectures, VSs enable them to accumulate relevant entrepreneurial human capital more rapidly, reach early venture milestones more efficiently, and mitigate the uncertainty that typically characterizes first-time venture creation (Davidsson and Honig, 2003; McMullen and Shepherd, 2006). This is especially valuable in ecosystems characterized by limited founder networks or institutional support, where VSs complement independent entrepreneurial initiatives by bridging critical knowledge and capability gaps.

Second, for experienced entrepreneurs, VSs offer a platform to transition toward institutionalized portfolio entrepreneurship (Parker, 2014; Wiklund et al., 2008). By embedding their expertise within a structured organization, habitual entrepreneurs can replicate and scale their accumulated knowledge across multiple ventures, transforming personal success into a systematized form of entrepreneurial capability.

Third, for investors, VSs serve as credible partners that generate validated, investment-ready start-ups. Their systematic approach to opportunity validation, team formation, and early-stage support improves the quality of deal flow and reduces due-diligence uncertainty. In this sense, VSs act as upstream and complementary contributors in the venture pipeline, supplying well-prepared, lower-risk projects to accelerators, VCs, and business angel organizations.

Fourth, the study provides implications for corporations and policymakers seeking to enhance innovation capacity and ecosystem development (Cavallo, 2024; Hess et al., 2025). For corporations, VSs offer an actionable model for open innovation (Chesbrough, 2003) and intrapreneurship (Antoncic and Hisrich, 2001). By partnering with or establishing internal VSs, corporations can experiment with new business models, externalize exploratory projects, and re-internalize validated ventures or technologies. For policymakers, VSs represent strategic assets for regional, national, and international innovation systems. Their capacity to consolidate entrepreneurial human capital and translate it into scalable venture production positions them as key intermediaries for fostering sustainable start-up formation and innovation. Policy measures could include tailored co-investment schemes, tax incentives, or public-private partnerships that recognize VSs' dual contribution as both venture creators and capability builders. Governments could also promote structured collaborations between VSs,

universities, technology transfer offices, and research parks to channel patent-based and research-driven innovations into market-ready ventures. In this way, VSs can act as vehicles for research and patent valorization, converting scientific knowledge and latent intellectual property into scalable entrepreneurial opportunities through systematic venture creation and organizational learning.

5.3. Limitations and future research directions

Our study is not without limitations. First, while our survey achieved global reach, the multiple case study component focused exclusively on 12 VSs located in Europe. Future research should extend comparative analyses to other geographies, such as North America or emerging economies, where VSs may operate under different market dynamics. Exploring region-specific institutional, cultural, or financial factors (Stam et al., 2025) could help uncover how these contexts shape the VS model and its effectiveness.

Second, the study is qualitative in nature and, therefore, does not quantitatively assess the performance outcomes of start-ups created within VSs versus those emerging from other models. As a result, although we unpack how the VS model operates and suggest several potential advantages (e.g., embedded human capital, institutionalized learning, standardized processes), we do not statistically validate its superior effectiveness. Accordingly, we interpret the advantages discussed in this paper as theoretically meaningful and empirically grounded in process-level evidence, rather than as demonstrated performance effects. Nevertheless, indicative evidence of the model's effectiveness emerges from our case studies: some VSs have achieved multiple successful exits within a few years. For instance, VS7, founded in 2011, reached its sixth successful exit in 2021, providing a concrete indication of the scalability and repeatability of their venture creation approach. In line with this, future research could undertake quantitative comparisons between start-ups created by VSs and those developed through traditional entrepreneurial pathways to test whether structural differences in venture creation processes translate into differences in survival, scalability, or innovation outcomes. In more detail, future research could adopt large-scale, longitudinal, or matched-sample designs to evaluate whether VS-backed ventures outperform traditional start-ups on metrics such as survival and growth. In addition, scholars might explore whether the logic underlying the VS model translates into repeatable success and can be taught or adapted by other entrepreneurial actors. This includes examining to what extent its principles (e.g., validation heuristics, team formation practices, learning mechanisms) are replicable outside the VS context or require specific organizational scaffolding and embedded capabilities. Relatedly, future studies could explicitly theorize and test conditions under which greater formalization of VSs' venture creation is beneficial (e.g., highly regulated or technologically complex contexts) versus contexts where more emergent and loosely organized entrepreneurial processes remain advantageous. Such inquiry would help clarify the boundary conditions of model diffusion and provide insights into how organizational venture-building logics might extend beyond the VS setting.

Third, our results open up promising directions for advancing the literature on portfolio entrepreneurship (Parker, 2014; Wiklund et al., 2008). In contrast to most prior studies that have analyzed this concept at the individual level (e.g., Baert et al., 2016), we introduce the idea of institutionalized portfolio entrepreneurship as embodied by the VS model. Future research could build on this insight by comparing the VSs' institutionalized portfolio entrepreneurship with individual-level portfolio and serial entrepreneurship (Westhead et al., 2005), examining how differences in ownership, team composition, and learning infrastructures shape opportunity selection, venture development speed, and venture outcomes.

Fourth, our database confirms the existence of multiple types of VSs, such as Corporate VSs and those pursuing copycat strategies. These emerging forms deserve further empirical scrutiny. Moreover, as the

ecosystem matures, new variants such as University VSs and Virtual VSs have begun to emerge. Future studies should map and differentiate extant subtypes, examining their distinctive organizational architectures, processes, goals, and outcomes. In particular, scholars could investigate how different subtypes vary in the extent of process standardization, playbook codification, and learning governance, and whether such variation is associated with differences in VSs' venture creation trajectories. This line of inquiry would mirror parallel efforts in the ESOs literature (Etzkowitz et al., 2023; Grimaldi and Grandi, 2005; Mian, 1997; Nafari et al., 2024) and help build a dedicated stream of research on VSs. Relatedly, a further avenue concerns the intersection between VSs and intellectual-property management, especially in collaborations with research-based institutions. As some VSs already collaborate with universities and technology transfer offices, future research could examine how these organizations contribute to the valorization of patent- and research-based ideas.

Finally, while our study offers exploratory insights into how learning unfolds within VSs and how individual entrepreneurial human capital is translated into collective organizational capabilities, future research could focus on an individual-level perspective to examine the cognitive and behavioral dimensions of founders and operators within VSs. Relatedly, future studies could investigate the motivations and strategic intentions of VS founders. Our interviews indicate that some founders view the VS model as a way to enhance efficiency and reduce uncertainty in early-stage venture creation, as illustrated by one interviewee: *"He decided to create the Studio in order to improve the efficiency of the current start-up ecosystem"* (VS1, Interview 3). Understanding the cognitive and strategic drivers behind the decision to establish a VS would deepen our knowledge of how and why this model emerges, and how founders' beliefs shape the institutionalization of learning and standardization. We suggest that dedicated qualitative or mixed-method studies could explore this question as a distinct stream of research, complementing our organizational-level analysis. Moreover, future studies could examine how different types of entrepreneurs experience the VS model, including how they perceive psychological ownership, autonomy, and the degree of fit with the model. This shift in focus would complement the organizational analysis by exploring the founder-level implications of institutionalized parallel venture creation. Additionally, future research could compare psychological ownership across different models of venture creation or investigate how institutionalized idea selection frameworks affect innovation outcomes. Understanding these dynamics may enrich the literature on organizational learning, entrepreneurial cognition, and venture development.

6. Conclusion

VSs are rapidly gaining traction in the entrepreneurial landscape, yet academic research has only begun to explore this phenomenon. Our study addresses this gap by explaining how VSs operate and what sets them apart from other entrepreneurial actors and venture creation models. We show that VSs leverage a distinctive combination of

embedded entrepreneurial human capital, standardized processes, and organizational learning mechanisms to create a portfolio of start-ups: a model that brings into view an organizational form of venture creation that is deliberately organized and repeatable. Drawing on human capital and organizational learning literatures, our results show that VSs transform individual experience into institutionalized, repeatable venture creation capabilities through an organizational architecture that makes entrepreneurial learning cumulative and transferable. By embedding reflection and feedback routines into their operational design, VSs develop collective entrepreneurial learning and metacognition, i.e., a higher-order learning capability through which teams observe, evaluate, and refine how entrepreneurial human capital is created, redeployed, and applied. In this way, VSs extend the logic of portfolio entrepreneurship from individuals to organizations, revealing how entrepreneurial agency and cognition can be institutionalized within a deliberate organizational system of venture creation. Overall, our findings suggest that entrepreneurship should not be understood only as the outcome of isolated individual action or as an emergent, founder-centric process: under certain organizational conditions, venture creation and entrepreneurial learning can become institutionalized, cumulative, and continuously improvable over time.

CRedit authorship contribution statement

Davide Viglialoro: Writing – original draft, Supervision, Project administration, Methodology, Investigation, Formal analysis, Data curation, Conceptualization, Visualization. **Giuliano Sansone:** Writing – original draft, Supervision, Project administration, Methodology, Investigation, Formal analysis, Data curation, Conceptualization, Visualization. **Elisa Ughetto:** Writing – original draft, Supervision, Investigation, Conceptualization. **Paolo Landoni:** Writing – original draft, Supervision, Investigation, Conceptualization. **Martin Lukes:** Writing – original draft, Supervision, Investigation, Conceptualization.

Declaration of conflict of interest

None of the authors have a conflict of interest to declare.

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APPENDIX A

Database creation

In order to analyze the phenomenon of Venture Studios (henceforth, VSs), we created an updated worldwide database based on previous lists of VSs. Table A.1 presents the five sources consulted.

Table A.1
Existing lists of Venture Studios

Source type	Source name	Date of last consultation	Link
Network	Morrow (formerly GSSN)	October 1, 2025	https://morrow.co/startup-studios/
Network	Studio Hub Europe	October 1, 2025	https://www.studiohub.org/startup-studios
Venture Studio	InfiniVentures	October 1, 2025	https://infiniventures.com/studiomap
Magazine	Medium	October 1, 2025	https://medium.com/@adrian.calma/list-of-startup-studios-a92cbb417d69
Magazine	Business of Crypto	October 1, 2025	https://www.thebusinessofcrypto.com/company/venture-builder

However, these lists contained some errors, such as including some VSs that were out of business. To avoid these errors, we verified each possible VS in these lists independently and in parallel. To carry out this phase of the study, we identified the essential characteristics of a VS. The identified characteristics were the following: 1) it was aimed at creating new ventures, and not just products; 2) it operated directly from idea generation to an exit strategy; 3) it was an organization and not an individual (e.g., a business angel or a serial or portfolio entrepreneur); 4) it did not work on cohorts for a limited period of time. Based on these essential characteristics identified, a brief evaluation template was created. The evaluation template was also validated with a team of international experts on incubators and accelerators, VCs, and angel investing. In particular, they received a draft for a definition independently, and then we further revised the definition following their feedback. Each researcher verified whether the identified organization was a VS according to the evaluation template. Decisions were cross validated by all the researchers involved in the project, thus obtaining an interrater reliability of 89%. When inconsistencies arose, a final decision was made by involving an international entrepreneurship expert, who is a scholar and entrepreneur with several publications in the field of entrepreneurship.

In addition to these lists, we performed research based on keywords. We retrieved a number of keywords to identify VSs, namely, in alphabetical order, “Operational VC”, “Start-up Accelerator”, “Start-up Builder”, “Start-up Building”, “Startup Creation”, “Start-up Creator”, “Start-up Factory”, “Start-up Foundry”, “Start-up Incubator”, “Start-up Lab”, “Start-up Nursery”, and “Start-up Studio”. We searched secondary resources such as Google, CrunchBase, D&B Hoovers, EMIS Professional, Orbis, and Reference USA with reference to these keywords. We always searched using the words “Start-up” or “Startup” or “Company”, or “Venture”. For instance, we searched for “Start-up Builder”, “Startup Builder”, “Company Builder”, and “Venture Builder”. Even though we are aware that incubators are not VSs, we used the keywords “Start-up Incubator” and “Start-up Accelerator” since Miller and Bound (2011) related them to a “Venture Incubator”. In this way, we obtained a total of 45 keywords regarding a VS. We only defined an organization as being a VS when it fitted all of the four previously explained characteristics. Moreover, we initially associated each used keyword with all of the 193 Member States of the United Nations. “Brazil Venture Studio”, “Jamaica Venture Nursery”, and “Malta Operational VC” are some examples of the more than 8,685 searches. Moreover, following the classification made in the literature of the different types of incubators and venture capital (e.g., Aernoudt, 2004; Grimaldi and Grandi, 2005; Sansone et al., 2020), we combined four different models and types (i.e., Corporate, University, Virtual, and Social) with the 45 identified keywords and searched different databases. “Corporate Venture Creation”, “University Company Foundry”, “Virtual Startup Lab”, “Social Start-up Factory” are some examples of the more than 180 searches. We later combined these searches with all of the 193 Member States of the United Nations. “Tunisia Corporate Venture Lab”, “Switzerland University Company Foundry”, “Italy Virtual Startup Lab”, and “Uruguay Social Start-up Creation Venture” are some examples of the more than 34,740 searches. Even though the results of the search for “Venture Studio” and, for instance, “Uruguay Social Venture Studio” may be similar since the first words were included in the second search, we preferred to perform all analyses because the more detailed the analyses are, the more precise the results.

In order to strengthen the quality of the collected data, all the searches were performed independently by four researchers involved in the research project to limit potential dataset bias (e.g., HTTP cookies, geolocation, etc.). We performed all analyses with English keywords only because English terms are common in the field of entrepreneurship. For instance, the word “Start-up” (or “Startup”) is commonly used around the world. Each team member later verified whether the identified organization had the abovementioned characteristics to be qualified as a VS, and, when inconsistencies arose, a final decision was made by involving an international entrepreneurship expert. As a result, 263 organizations were discarded because they did not have all of the four identified characteristics of a VS.

We then carried out a database validation process. Specifically, in 2020, we sent a short survey to all the identified VSs, asking whether they agreed with being classified as VSs and requesting confirmation of other information. This short survey preceded the main worldwide survey conducted in 2021. To check the validity and origin of the responses, all respondents were required to indicate the name of their organization. Overall, this short survey yielded 105 valid responses from VSs around the world, which enabled us to validate a list of 420 VSs.

In 2025, we complemented the original mapping by consulting the most recent available sources and databases on VSs worldwide. This update aimed to verify the existence and activity status of the previously identified organizations and to identify newly established VSs. To do so, we cross-checked our original dataset with multiple online repositories, lists, industry reports, and specialized directories, ensuring that each organization was still active and met the definitional criteria of a VS. This process allowed us to maintain an up-to-date and reliable global database, reflecting the ongoing evolution of the VS landscape.

In short, we identified a population of 1,006 VSs operating in 2024. We created a dataset adding information such as the website, e-mail, phone, social media accounts, year of foundation, city, and country. Out of 1,006 VSs, 421 are located in the Americas, 408 in Europe, 134 in Asia, 29 in Africa, and 14 in Oceania (Fig. A.1).

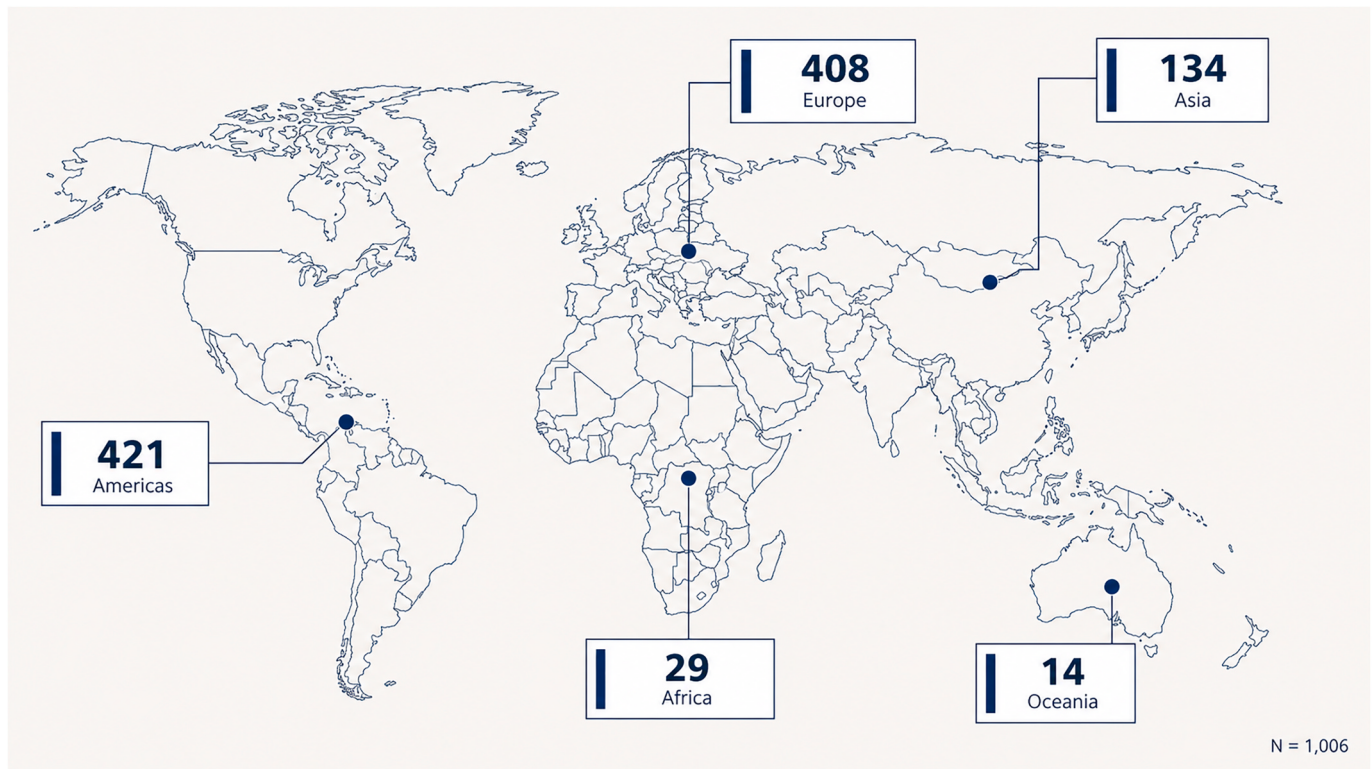


Fig. A.1. Worldwide map of the Venture Studios.

APPENDIX B

The venture creation process

As explained in the main text and as graphically depicted in Fig. 1, Venture Studios (henceforth, VSs) follow a standardized venture creation process, carried out in parallel, encompassing a sequence of interrelated phases from idea generation to exit. This process is designed to enable continuous experimentation and reuse of embedded consolidated human capital across multiple start-ups within the same organizational infrastructure. At the same time, while the core stage-gate logic is shared across our cases, VSs vary in the degree of formalization and in the specific criteria used at each gate, reflecting differences in organizational development and venture contexts. Across these phases, codified routines are complemented by the continued active contribution of experienced VS team members, including VS founders, who provide judgment, guidance, and hands-on support throughout the venture creation process. Naturally, the process can be adapted or expanded to fit the specific needs of each start-up, its distinctive challenges, or the type of VS involved. For instance, Corporate VSs may tailor the process and adjust performance thresholds according to the strategic objectives and resource constraints of their parent company.

The following sections outline the typical phases of this process and summarize the principal challenges observed across cases.

Idea generation

A VS generates ideas (i) internally, (ii) externally, or (iii) through both options. In the first option, a VS acts as an organizational founder, aiming to launch its own business ideas. The second option incorporates different strategies. Specifically, a VS can act: 1) as a co-founder, starting with the entrepreneur who identifies the business idea; 2) as a late co-founder, joining a business project with early traction; or 3) as a re-founder, acquiring business ideas and ventures to relaunch in the market. Additionally, a VS can try to replicate business ideas established elsewhere by individuals or organizations (i.e., copycat strategy), acting as a “clone factory”. Our case studies indicate that a key challenge during this phase is balancing the generation of a high volume of ideas with the need to maintain strategic and technical quality. Table B.1 displays survey data regarding this phase.

Table B.1
Idea generation strategies (survey data)

	Answers	Percentage
Idea generation	Internal or external	76%
	Internal only	20%
	External only	4%
Copycat strategy	Always	3%
	Frequently	0%
	Sometimes	25%
	Rarely	28%
	Never	44%

Validation and selection

After the first phase, a VS uses specific tools, such as a smoke test or competitor analysis, to validate its business ideas. It can also involve external experts from the entrepreneurial landscape, as suggested by the co-founder and CEO of VS5 (Interview 14): “We present our business ideas to other entrepreneurs and investors to obtain opinions and feedback”. Across interviews, we found that most ideas are discarded at this stage, and only the most promising ones proceed to the next phase. The primary challenges here involve efficiently allocating resources to test ideas and avoiding bias during the selection process to ensure the best concepts move forward. Our analysis reveals that, during this phase, VSs use an “elimination-by-aspects” heuristic (Maxwell et al., 2011), leveraging consolidated entrepreneurial knowledge and experience, to select and narrow down business ideas to a manageable number. Specifically, the VS sets minimum acceptance thresholds for business ideas to minimize entrepreneurial risks and focus efforts on the most promising opportunities.

Team creation

After validation, the next phase involves creating a team. The team can be formed entirely from within the VS or include members brought in from outside. In this phase, if a VS asks someone to join the team to create and develop the idea, the external individual(s) will usually be a co-founder of the start-up. Based on our analysis, the critical challenges in this phase are selecting the right talents and co-founders to build a strong team and managing team dynamics to foster collaboration and productivity. This selection often draws on datasets that VSs have curated through past experiences, networks, and activities like entrepreneurial workshops. Figure B.1 compares the main idea generation and team creation approaches.

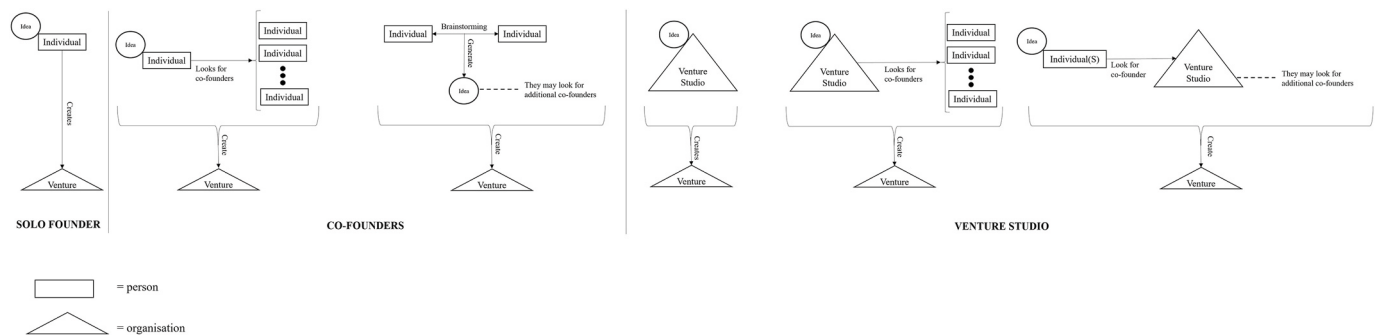


Fig. B.1. Comparison among idea generation and team creation approaches.

MVP

The new team then develops the minimum viable product (MVP) to test the business ideas in the market. During this phase, a VS uses the MVP as a cognitive lens to generate an iterative sequence of fast and frugal heuristics (Ghezzi, 2020) that result in the identification and creation of the most suitable product or service. Based on our analysis, the main challenges in this phase include adhering to time and budget constraints while effectively incorporating feedback to refine the product. For example, several interviewees highlighted the difficulty of prioritizing feedback when user input conflicted with internal hypotheses or strategic goals. These challenges are addressed through routinized decision checkpoints, including rapid iteration cycles, kill criteria, and founder-team reviews. Such structured heuristics, which are part of the VS's accumulated entrepreneurial experience, help mitigate the risks of over-investment in unvalidated solutions.

Establishment and development

Subsequently, the team establishes the start-up and develops its business activities by investing their own money and seeking external financing through their networks. In this phase, securing the necessary funding and ensuring the scalability of the business model are the two major challenges. This is evident, for example, in some of the analyzed case studies, where deep-tech and clean-tech start-ups struggled to effectively communicate their value propositions to early-stage investors. Although the teams had strong technical capabilities, they lacked the storytelling and financial framing expected by investors at the pre-seed stage, resulting in a delayed funding round. To address such issues, VSs drew on their internal expertise and standardized templates for pitch decks, investor targeting, and narrative framing. In some specific cases, the VSs' core teams, which include former entrepreneurs with funding experience, stepped in to coach other co-founders, refine the messaging, and introduce them to targeted investor contacts. These routines, codified in internal processes and training documents, facilitated the transfer of experiential knowledge about fundraising and increased credibility in accessing external financing. The cases illustrate how VSs systematically embed fundraising readiness into the venture development pipeline and accelerate access to capital, particularly in sectors where perceived risk is high or technical content is complex.

Exit

Finally, if the start-up achieves the targeted results, an exit strategy is implemented, and the VS reinvests the proceeds into other business ideas. According to our analysis, the primary challenges at the exit phase are ensuring a smooth transition and accurately valuing the company to maximize returns. This challenge was observed across different cases, where start-ups approaching acquisition faced difficulties in capturing the full value of the VS's foundational contributions, such as strategic framing, team formation, and early-stage validation. In some cases, acquirers initially perceived the VS as a background support organization rather than as a true entrepreneurial co-founder, leading to tensions in valuation and equity negotiation. To address these issues, VSs have institutionalized a set of practices aimed at clarifying and legitimizing their entrepreneurial role. These include formalized shareholding schemes, transparent documentation of support activities, and standardized valuation metrics that explicitly account for the VS's involvement from inception to growth. Different interviewees noted that lessons from earlier exits were codified into internal protocols to avoid

under-recognition in future deals. This highlights how VEs not only create ventures but also actively protect and valorize their role as institutional co-founders, ensuring that their contributions to building and scaling the start-up are fully recognized and fairly valued by external stakeholders during the exit phase.

Data availability

The data that have been used are confidential.

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