



HOW DOES THE EDUCATIONAL BACKGROUND OF CULTURAL
AND CREATIVE ORGANIZATION FOUNDERS INFLUENCE
INTELLECTUAL CAPITAL AND BUSINESS MODELS?
EVIDENCE FROM THE ARCHAEOLOGICAL FIELD

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Abstract

Purpose. This work investigates how the educational background of founders of cultural and creative organizations affects the relationship between intellectual capital and business models.

Design/methodology/approach. A narrative literature review revealed a lack of studies in arts and humanities focusing on the relationship between intellectual capital and business models. The empirical investigation involved three case studies of three SMEs operating in the archaeological field, demonstrating that educational background significantly influences these relationships.

Findings. The analysis identifies four key factors: creativity, network relationships, cross-disciplinary competencies, and adaptability to new technologies. Firstly, creativity serves as a driving force in the early stages of a start-up. Secondly, strong network relationships can provide access to external knowledge and resources, enhancing key assets. Thirdly, collaboration with partners enables organizations to adapt to evolving conditions, such as technological advancements, impacting both human and structural capital. Lastly, cross-disciplinary competencies allow for a multidisciplinary approach to problem-solving, fostering internal skill development. The findings suggest that educational background equips SMEs founders with the tools to create a compelling value proposition by leveraging cultural and creative organizations intellectual capital.

Practical and Social implications. Higher education institutions can encourage entrepreneurship by involving students in knowledge-transfer projects, like academic spin-offs.

Originality of the study. The study provides insights into four directions associated with the effects of cultural and creative organizations founders educational background on the relationships between intellectual capital and business model.

1. Introduction

The cultural and creative industry calls for highly talented individuals who can innovate, inspire, and drive the evolution of artistic expression and cultural heritage. That is because cultural and creative organizations (CCOs) “have their origin in individual creativity, skills, and talent and with a potential for wealth and job creation through the generation and exploitation of intellectual property” (DMCS UK, 2001, p. 3). Thereby, artists, academics, filmmakers, musicians, and writers, to name a few, bring their ingenuity to CCOs.

Such creativity reflects the educational background (EB) of CCO founders, which emerges from their personal history of acquiring knowledge, skills, values, and understanding through training, research, experience, or practice, supporting intellectual, technical, and social development. This educational foundation contributes significantly to the intellectual capital (IC) of CCOs, which is recognized as a crucial asset for organizational development (Comunian & Gilmore, 2015).

IC outlines the knowledge embedded in the human resources, the organizational system, and the relationships an organization has with its stakeholders’ network. Such a view of IC profiles three components, i.e., the “human capital, structural capital, and relational capital” (Guthrie et al., 2012, p. 70). In this perspective, the three components of IC can be regarded as the result of effective organizational routines, compounding people’s competencies and skills (Amit & Schoemaker, 1993; Schendel, 1994), which, in turn, support the organization in building up structural (e.g., patents, organizational culture, technologies, and dataset) and relational (e.g., user satisfaction, partnerships, and company image) assets.

The reality of big tech giants offers vivid examples of how the EB of founders has influenced the development of specific knowledge assets that ultimately appear to be decisive for organizational success. For instance, the founders of Netflix, Reed Hastings and Marc Randolph thanks to their background in computer science, leveraged Netflix value creation and capture through personalization/recommendation and subscription, respectively. YouTube’s former CEO, Susan Wojcicki, holds degrees in history, literature, economics, and business administration. This diverse educational background allowed her to sustain YouTube’s business model (BM) through user creativity, community engagement, and commercials for monetization. These instances demonstrate that founders EB is critical for BM design, especially in those industries in which IC is a cornerstone for success.

Literature on SMEs corroborates such evidence (Cosenz & Bivona, 2021a; Le et al., 2024). Scholarly research shows that founders’ educational background (EB) shapes the components of IC and BM (Baden-Fuller &

Mangematin, 2013; Edvinsson & Malone, 1997a; Quintero-Quintero et al., 2021; Schiuma, 2017a; Secundo et al., 2018; Teece, 2010a), boosting value creation and capture processes of CCOs (Bini et al., 2016; Bowman & Ambrosini, 2000; Lepak et al., 2007).

Although management and organizational studies concur that founders' personal background influences corporate culture (Schein E., 2010; Schein E. H., 1983), the literature debates whether the people belonging to teams, as opposed to individual entrepreneurs who shape the formation of new business ventures (Klotz et al., 2014).

Such a dyadic approach limits our understanding of how personal traits of founders impact business development. Specifically, among the several aspects profiling CCOs founders background, we explore founders EB to understand how their education paths, professional experiences, and socio-cultural values impact the human, relational and structural capital of an organization (i.e., IC), and the way it creates and delivers value (i.e., BM). The literature investigating the relationships between IC and BM is scant in arts and humanities (Benneworth & Jongbloed, 2009; Gilmore & Comunian, 2016), while it is abundant in life sciences (Steen et al., 2010), physical sciences, and engineering (Landry et al., 2006; O'Shea et al., 2005; Pazos et al., 2012). Such a gap limits our comprehension of the enabling conditions of IC when approaching BM design in CCOs.

Therefore, we ask: how does the EB of CCO founders influence the relationship between IC and BM? To make this question the thrust of this article, we posit that founders' EB influences the relationships between IC and BM, especially for CCOs, whose success is contingent on creativity, talent, and partnerships. This influence manifests in how EB nurtures human, structural, and relational capital – positioning IC as a strategic determinant of value creation processes – and in its role in generating widely applicable resources and capabilities that reinforce CCOs' value propositions and support sustainable business model innovation.

From a methodological point of view, we used a convenience sample of three CCOs operating in the archaeological field. For each organization (level of analysis), we collected primary data through semi-structured interviews addressed to CCOs founders (unit of analysis) and a review of documents, including journal articles, company reports and projects, videos, and websites.

Our study offers empirical evidence showing that founders' EB significantly shapes the formation of IC, holding explanatory power for BM design. We respond to our study findings with theoretical implications, rendering CCO founders EB as a field hosting "creativity", "network relationships", "cross-disciplinarity", and "adaptability to technological innovation" as factors influencing the relationships between IC and BM. Such a novel conceptualization advances our understanding of how founders'

personal background influences corporate culture, offering new insights into the conditions under which a specific subset of individual characteristics, which in our case is the EB, impacts IC and BM, nearing the related body of knowledge, from an organizational culture perspective (Schein E. H., 1983).

Practical implications suggest that would-be CCO founders consider “creativity”, “network relationships”, “cross-disciplinarity”, and “adaptability to technological innovation” as enabling conditions of IC, when approaching BM design.

After the introduction, section 2 provides our narrative literature review on the relationship between CCO founders EB, IC, and BM. This sets the stage to appreciate the influence of IC on BM design through the BM canvas, in section 3. While an account of the research design and methods is provided in section 4, section 5 presents the analysis of three case studies of CCOs operating in the archaeological field. Section 6 discusses our study findings. Closing thoughts, implications, research limitations, and further potential development conclude the work in section 7.

2. Investigating the relationships among educational background, intellectual capital and business model in cultural and creative organizations

The effects of business founders background in shaping organizational culture and firm performance have been widely studied in both organizational and management studies. In our view, the findings from this body of knowledge are remarkable for CCOs due to the critical role of IC for effective BM design in this industry.

Among the several aspects profiling CCOs founders’ background, we focus on the EB. In this article, we regard CCOs founders EB as the result of a systematic process of acquiring knowledge, skills, values, and understanding – through various methods, such as training, research, or experience in an area of study or specialization – which foster intellectual, social, and personal development of individuals and groups (Cremin, 1976).

Literature shows that people with formal education in business, engineering, or social sciences may shape organizations differently. Organizational studies suggest that business education tends to emphasize structured decision-making and market-driven strategies (Hambrick & Mason, 1984), while technical background often fosters innovation-driven cultures (Ensley & Hmieleski, 2005). Differences in founders’ EB also resonate in managerial studies, noting that leadership style and decision-making routines can be agile and risk-taking or rigid and hierarchical, depending on the organizational culture (Baron et al., 1999). Explanations could be found in the variance among founders’ socio-cultural values, whereas individual-

ism may emphasize autonomy and competition, while collectivism prioritizes teamwork and shared responsibility (Breuer et al., 2018).

As CCO founders EB shape organizational culture, it can be regarded as a source of erudition in organizations (Kyser & Hill, 2016; Schein E., 2010), which helps develop human, structural, and relational capital (Edvinsson & Malone, 1997b). Evidence shows that the success of CCOs is rooted in the EB of founders, given the imprint of educational experiences on entrepreneurial creative identities (Steyaert & Hjorth, 2006). That is because formal education, such as degrees in fine arts, design, or creative writing, provide people with specialized knowledge and skills, which may become a valuable asset for generating and executing creative ideas (Baima et al., 2020).

As Hesmondhalgh and Pratt (2005) remarked, training, whether in the arts, media, or cultural studies, equips individuals with conceptual, methodological, or technical skills necessary for producing high-quality cultural and creative products. Scholars also noted that EB moderates recruitment, training, and retention of employees (Hitt et al., 2001) and that founders' learning attitude influences the formalization of knowledge management practices (Nonaka & Takeuchi, 1995). These findings corroborate the idea that the CCO founders EB provide artistic and technical foundations to design a unique value proposition (Crupi et al., 2021; Paoloni et al., 2020).

Literature shows that participation in prior networks and founders reputation are considered drivers of social capital and strategic alliances (Nahapiet & Ghoshal, 1998), extending the impact of EB on IC well beyond human knowledge and structural assets. Besides providing competencies and skills, education is conducive to networking and collaborations, which are essential for success in every market and even more in the cultural and creative industry. In line with this idea, Bilton (2007) highlighted that educational institutions can get people in contact with valuable partners, create joint ventures, and provide access to resources that are not available in the organization and might not be attained otherwise (Vignieri, 2020). This is expected to enable CCOs to be part of networks with industry professionals, peers, and mentors, fostering the exchange of ideas and innovations, which are fundamental in the creative field. As a result of networking activities, education provides individuals with diverse cross-disciplinary insights into different subjects (Sternberg, 2003). Creative entrepreneurs with knowledge in multiple fields can apply insights from one domain to create novel solutions and products, opening their organizations to new market opportunities and approaches to problem-solving (Chesbrough, 2019).

Findings show that CCO founders' EB is a significant source of IC, providing artistic and technical foundations to help execute creative ideas, guide talented teams, and build collaboration across borders. These insights indicate that the influence of CCO founders EB permeates the BM, defining how such organizations create, deliver, and capture value (Amit

& Zott, 2001; Teece, 2010a). This implies that founders' knowledge and experiences are critical to supporting the development of "a shared understanding of how their business venture will generate value" (Cosenz & Noto, 2018; Zott & Amit, 2010a), which eventually synthesizes into a value proposition (Carlile, 2004; Spee & Jarzabkowski, 2009). For instance, CCO founders with a background in finance prioritize BM scalability, when considering innovation (Chandler & Hanks, 1994; Zott & Amit, 2010b), while socially conscious ones care about integrating environmental and social considerations into their BM (Stubbs & Cocklin, 2008).

In this sense, IC and BM are mutually influenced by founders EB (Elia et al., 2017). This means that personal traits, such as educational attainment, professional experience, and socio-cultural values (Schein E., 2010; Schein E. H., 1983), sustain learning (Argyris & Schön, 1996) and growth in and of organizations (Barnabè et al., 2013; Kaplan R. S. & Norton, 2004).

Literature on IC and BM nuances such implications. First, formal education, training, and experiences support the development of specialized knowledge, effective organizational routines, and boundary-spanning behaviors (i.e., the three components of IC). Second, the consolidated learning outcome of formal education, training, and professional experiences represent the petri dish of feasible BMs (Bowman & Ambrosini, 2000; Elia & Lerro, 2020; Teece, 2010b). Third, as CCO founders creativity, technical skills, and experiences guide BM design with experience, routines, and partnerships, an effective value proposition requires that knowledge, skills, and networks be extended (Cosenz & Bivona, 2021a; Cosenz & Noto, 2018). This indicates that founders EB moderates the relationships between IC and BM.

IC is decisive in harnessing BM to achieve superior performance (Baima et al., 2020). A proper endowment of human, structural, and relational resources may help CCO founders and organizational teams spot gaps and frame innovation challenges impeding the design of an effective value proposition in the cultural and creative industry. IC can help CCO founders devise value propositions that are unique, innovative, and differentiated from competitors, increasing user satisfaction and loyalty. IC can improve business efficiency and reduce costs in production, distribution, and marketing (D'Amato, 2021) or diversify revenue streams through new services that complete customer needs, sustaining economic growth and reducing dependence on a single revenue source (Vidyarthi & Tiwari, 2019).

IC may provide resources to address critical questions bearing on the start-up and development phases of a CCO. What problems and needs do we aim to address? How do we identify, reach, inform, communicate, and maintain relationships with specific customer segments? What partnerships do we need to manage that can complement or enhance our value proposition? Considering our current value proposition cost structure and revenue streams, how do we pursue the economic equilibrium?

Appreciating the effects of CCO founders EB on the relationships between IC and BM entails framing CCOs value creation and capture (Amit & Zott, 2015). This is the object of the next section.

2. Framing value creation and capture of cultural and creative organizations through the business model canvas

In their book, “Business Model Generation”, Osterwalder and Pigneur (2010, p. 14) state that “a business model describes the rationale of how an organization creates, delivers, and captures value”. However, authors contended different interpretations and functions, particularly when studies and analysis move from a conceptual to an operational level (Cosenz & Noto, 2018; Wirtz et al., 2016).

The literature on BM is wide and covers several domains, with studies disseminated in the fields of business strategy (Teece, 2010b; Zott & Amit, 2010a), technologies and innovation management (Kohler & Nickel, 2017; Massa & Tucci, 2014), and social issues, such as the use of environmentally friendly technologies (Girotra & Netessine, 2013; Schaltegger et al., 2012), and fight against deep poverty (Seelos & Mair, 2007). Though the body of knowledge is immense, Massa et al. (2017, p. 537) critically organized major conceptualizations of BM in three interpretations. First, viewing BM as an attribute of a firm means interpreting empirical manifestations of a real organization in terms of similarity/distinction on relevant strategic variables (e.g., resources, capabilities, activities, processes, partnerships, and performance), which can be adopted to identify archetypes (e.g., freemium, multi-sided platform, razor-and-blade) (Casadesus-Masanell & Zhu, 2010; Chesbrough, 2010). The second interpretation defines BM as a cognitive or linguistic schema through which managers can address “Peter Drucker’s age-old questions: Who is the customer? And what does the customer value? [...] How do we make money in this business? What underlying economic logic explains how we can deliver value to customers at an appropriate cost?” (Magretta, 2002, p. 4). Research on the nature of business models as a cognitive/linguistic schema is primarily focused on the interpretation of these models by members of an organization and their impact on social interactions (Chesbrough, 2002; Martins et al., 2015). Third, interpreting BM as a formal conceptualization means expecting that it could provide a “blueprint of how a company does business. It is the translation of strategic issues, such as strategic positioning and strategic goals, into a conceptual model that explicitly states how the business functions” (Osterwalder et al., 2005, p. 3).

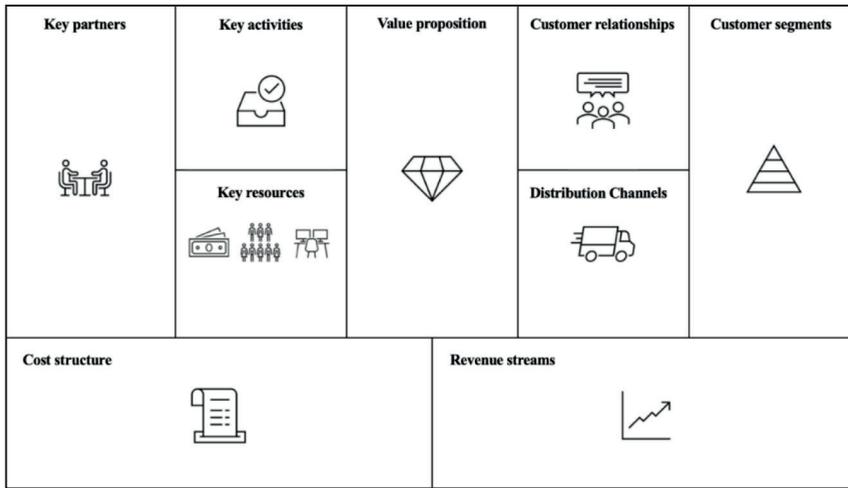
The latter conceptualization of BM refers to a detailed and systematic plan or design that outlines project specifications, layout, and key elements

through visual representations (Bowman & Ambrosini, 2000; Teece, 2010b). A commonly used BM representation is the Business Model Canvas (BMC) (Osterwalder & Pigneur, 2010), which incorporates the critical elements needed to characterize a business idea. As BMs “are not just for business” (Kaplan S., 2011), such visual representations are considered to be a dependable method “for describing many organizations” (Cosenz & Noto, 2018, p. 129; Gassmann & Frankenberger, 2014), including CCOs (Schiuma, 2017b).

The BMC configures a practical tool that can help entrepreneurs, such as CCOs founders, to move their entrepreneurial focus from “the product” to “the value” they offer in order to account for value creation (i.e., addressing user needs), distribution (i.e., service distribution channels), and capturing (i.e., revenue streams, pricing strategies, and cost structure). By doing this, the BMC provides CCO founders with the means to design, test, communicate, and picture their creative ideas in structured and systematic ways through nine building blocks – as shown in Figure 1. At the core of the BMC stands the “value proposition”, which describes what problems the organization addresses, what benefits it provides, and why users should opt for its bundle of products and services over those of competitors. An organization relies on partnerships with a network of suppliers and other allies to make such a value offering. This is captured by the component “key partners”, describing with whom the organization cooperates, what kind of relationships it has, and what benefits it gains from them. Both “key resources” and “key activities” are instrumental to value generation, distribution, and capture. The “key resources” component clusters the most important assets (i.e., physical, intellectual, human, and financial resources) that the business needs to build up to operate properly. This leads to the “key activities” component, clustering critical activities within specific organizational functions, i.e., production, marketing, sales, and post-sales support, among the relevant ones. While the component “customer segments” clusters service users into groups according to some dimensions, such as needs, age, location, or specific behavior (e.g., loyalty), “distribution channels” indicate how the organization delivers and sells its products and services, as well as reaches, informs, and entertains “relationships with customer”, individually and as a group.

From an economic perspective, on the one side, “revenue streams” account for the revenues generated from each customer segment, depending on pricing strategies and payment methods used. On the other side, “cost structure” accounts for the incurred costs (e.g., fixed and variable costs) affecting the profitability of the creative undertaking.

Figure 1. The Business Model Canvas



Source: Osterwalder & Pigneur, 2010.

Practitioners and researchers in various fields and industries have widely adopted the BMC, thanks to the advantages granted to such a visual aid. The canvas offers a holistic and systemic view of the main organizational processes through its nine building blocks rather than focusing on isolated aspects or functions. This facilitates communication and collaboration among teams (e.g., production, marketing, and finance) around different options (Gross et al., 2021), enabling creativity, innovation (Hoch & Brad, 2020), and experimentation (Lara Machado et al., 2023; Solaimani & Bouwman, 2012). By doing this, BMC helps align value propositions with customer needs and embody external environment and trends (e.g., technological innovation) in dynamic environments (Kouptsov & Srail, 2023).

As the BMC reveals the connections between the IC and BM, it can be helpful to identify how CCO founders' EB influences IC and BM.

3. Research design, methods, and data

To illustrate how CCO founders EB influence the relationships between IC and BM, we adopted a qualitative research methodology.

Within the SMEs research domain, qualitative research methods have gained substantial traction (Eisenhardt, 1989; Piperopoulos, 2010), offering deep insights into how the personal qualities of entrepreneurs critically influence the long-term survival, growth trajectories, and overall performance of SMEs (Curran & Blackburn, 2001; Storey, 2016).

Qualitative research methods offer powerful tools for exploring the SMEs research domain by enabling researchers to gain a nuanced understanding of how and why specific aspects related to entrepreneurial ventures unfold, what outcomes they produce, and what profiles warrant deeper investigation in future studies (Rossman & Rallis, 2017; Saunders et al., 2007). That is because qualitative data provide rich, detailed accounts that reveal the complexity of SMEs organizational life within the evolving context of (Amaratunga et al., 2002).

Our research methodology is based on two main phases. In the first phase, we developed a narrative literature review to investigate the relations among CCO founder personal traits, IC, and BM, showing that the EB moderates such mutual relationships. To this end, we selected top journal articles and well-known referenced works, based on their relevance to our research question, their publication in quality journals, and their contribution to the theoretical and empirical understanding of the three main concepts employed in this work, i.e., EB, IC, and BM (Baima et al., 2020; Gilmore & Comunian, 2016; Hambrick & Mason, 1984; Hoch & Brad, 2020; Osterwalder & Pigneur, 2010; Petty & Guthrie, 2000; Schein E., 2010; Schein E. H., 1983; Zott & Amit, 2010a).

In the second phase, findings from the literature review informed the design of our case studies, which portray three CCOs operating in the field of archaeology. The case study method provides in-depth understanding of complex phenomena, which are supported by primary data and compelling narratives that can be more engaging and persuasive than statistics alone (Eisenhardt, 1989; Stake, 2005).

For each case study, we employed multiple sources of evidence (Saunders et al., 2007; Yin, 2013), including primary and secondary data. This data comprises semi-structured interviews with CCO founders, scientific articles, company documents, press articles, and media. Table 1 lists the interviewees, semi-structured interview questions, and secondary sources.

From an analytical perspective, we adopted the BMC as a tool for analyzing how a specific subset of individual characteristics, which in our case is the EB of CCO founders, impacts IC and BM. Specifically, we framed EB as the academic qualifications and training of founders that drive knowledge development, resource allocation, and value creation and capture in CCOs. Therefore, the key variables contained by the BMC helped us to map the interplay between EB, IC, and BM, highlighting how founders' personal traits influence CCOs value creation and capture processes.

Table 1. A quantitative report of interviews, an outline of the semi-structured interview format, and a list of secondary sources of evidence

Primary data sources		
Case study	Interviewee	Questions
Archeòtipo	Co-founder 1 Co-founder 2	<ul style="list-style-type: none"> • If you had to present Archeòtipo to potential investors, what are the main objectives, and the products/services offered? • Concerning this, what customer needs are met? • Looking at the competitor, how does your offer differ? • Who are the main partners and/or stakeholders involved in your business? Among these, which ones would you define as essential for business operations? • Regarding these activities, could you describe some activities and processes relevant to the business routines? • In carrying out these activities, what resources are essential to enable your products/services to meet your customers' needs? • Who are your primary customers (individuals and/or organizations), and what kind of relationships do you have with them? What activities do you develop to find new ones? • From an economic point of view, could you describe the cost structure? • What are the revenue streams? • Could you tell me about the critical aspects and limitations of the business project?
Archeofficina	Co-founder 1	
Digital media curation agency	Co-founder 1	
Secondary data sources		
<ul style="list-style-type: none"> • Valenti, M., & Salzotti, F. 2017. For a participatory culture: the experience of Archeòtipo srl and the Poggibonsi Archaeodrome. In M. Cerquetti (Ed.), Bridging theories, strategies and practices in valuing cultural heritage: 243–260. Macerata: eum - edizioni università di macerata. • Company website • Other company documents (e.g., project for the spin-off) • Archeopop • Social media pages • Videos • Pictures 		

Source: Authors' elaboration.

In the next section, three CCOs operating in the field of archaeology will be analyzed.

5. The analysis of three cultural and creative organizations operating in the field of archaeology through the Business Model Canvas

In particular, the cases portray 1) a former university spin-off; 2) a cooperative of archaeologists; and 3) a digital media curation agency for cultural heritage.

5.1 *Archeòtipo from archaeological research to living history to the public*

Archeòtipo was founded in 2010 as a spin-off of the University of Siena to deliver living history and experimental archaeology services in Poggibonsi, a small town near Siena in Tuscany (Italy). Archeòtipo employs a team of 9 archaeologists – trained at the School of Medieval Archaeology of the University of Siena – and a group of external professional collaborators to portray the common scene of a common Carolingian Age village (see Figure 2). Based on a strict philological rigor, the archaeodrome is an “evolution of the most traditional way of understanding, managing, and communicating “the great beauty”. [...] What Archeòtipo means to “sell” is therefore not a monument, a museum, an archaeological site, or a landscape in itself, but much rather the years of common and collective research that we have been doing on the site and on the specific historical period for over two decades. We want to have a distinctive offer, based on proposing our scientific and experimental knowledge to the public” (Valenti & Salzotti, 2017, p. 249).

Figure 2. Poggibonsi Archaeodrome (Siena, Italy), inside the longhouse – Photo credits to Camillo Balossini



Source: Valenti & Salzotti, 2017, p. 260.

Figure 3 shows the relevant aspects of Archeòtipo BM, providing critical insights into how CCO founders EB influence the relationship between IC and BM. The value proposition of Archeòtipo consists of transferring historical knowledge to the public enabled by storytelling and sensory experiences, which take place on weekly appointments organized at the archeodrome of Poggibonsi, designed for schools, or specifically tailored initiatives, such as the reconstruction of the fresco “Allegory of Good Government”¹ (Lorenzetti, F., 1338-1339, Salon of Nine, Siena Council City Hall), occurred during the event “Siena Food Innovation” (Siena 5-6 October 2017). Such initiatives can be undertaken thanks to archaeological and historical research that can adequately support the reconstruction and reproduction of daily life scenes, including the structures/buildings and equipment of the High Middle Ages (see figure 2), in living history events and collective storytelling activities.

Figure 3. The business model of Archeòtipo

Key partners <ul style="list-style-type: none"> • University of Siena • Municipalities in the area • Local schools • Third-sector organizations 	Key activities <ul style="list-style-type: none"> • Living History Representations • Historical Research • Archeological Research • Re-construction of buildings and furnitures from the Middle-Age • Promotion and Marketing • Maintenance of the site 	Value proposition Transferring historical knowledge to the public enabled by storytelling and sensory experiences, which take places on weekly appointments organized at the archeodrome of Poggibonsi, through educational activities designed for schools, or specifically tailored initiatives.	Customer relationships Horizontal relations with local communities, school administrations, and other key players in the area (e.g., cultural associations)	Customer segments <ul style="list-style-type: none"> • Local governments. • Local communities. • Schools • Individual citizens
	Key resources <i>Tangible Resources</i> <ul style="list-style-type: none"> • Human Resources • Facilities & Equipment <i>Intangible Resources</i> <ul style="list-style-type: none"> • Know How • Scientific Expertise <i>Financial resources</i> <ul style="list-style-type: none"> • EU-funded Project budgets 		Distribution Channels Services are provided on specific locations, such as the archeodrome of Poggibonsi.	
Cost structure In order of relevance: <ul style="list-style-type: none"> • Personnel and labor costs • Equipment • Raw materials • Other direct and indirect costs (e.g., energy) 		Revenue streams In order of relevance: <ul style="list-style-type: none"> • Guided tours and teaching sessions at the archeodrome • Living history representation at specific events • Contributions from the Municipality of Poggibonsi • Contributions from Tuscany Regional Administration 		

Source: Authors' elaboration.

Human capital is instrumental in the development of such activities. In fact, as the “key resource section” in Figure 3 reports, the staff members contribute to enacting historical reconstruction activities with their know-how, know-what, and know-why. In this perspective, the University of Siena is an essential partner as Archeòtipo founders matured 15 years of research experience at the Laboratory of Computer Science Applied to Medieval Archaeology at the Department of Archaeology and History of Arts.

¹ The paintings depict the effects of good and bad government on the city and the countryside, as well as the allegorical figures of the virtues and vices of government.

Services are mainly delivered on commission to peculiar types of users, such as the municipalities located in the area and the schools. With them, Archeòtipo maintains horizontal relationships oriented to collaboration with the intent to strengthen partnerships, which may also lead to the development of new activities to enrich the current value proposition.

The bottom part of the BMC accounts for the economic aspect of Archeòtipo BM. The revenues primarily come from the sale of tickets to the archeodrome guided tours and teaching sessions. Though not frequent, historical reconstructions and representations on commission are a second relevant revenue source. In addition to that, Archeòtipo receives contributions from the Municipality of Poggibonsi and the Regional administration. The rigid cost structure primarily concerns personnel costs, associated labor costs, equipment uses, and construction of buildings and furniture, including maintenance.

The BMC portrays Archeòtipo as an example of an innovative CCO with a value proposition that highly relies on the robust research experiences of its founders. Their EB has enabled Archeòtipo to offer a comprehensive “archaeodrome experience” beyond mere feature restoration, making it a “Public Archaeology” endeavor that encourages audience participation through practical engagement. Thanks to the partnerships with the university, from which Archeòtipo has budded, and the specialized knowledge of the founding team, it has crafted a business model that effectively delivers an exceptionally creative value proposition. By conveying scientific data derived from archaeological research, supplemented by historical facts, they provide a more comprehensive and engaging portrayal of daily life during the Medieval Ages. This immersive approach allows individuals seeking to learn about history to have experiential activities that bring them closer to the tangible essence of history.

5.2 Archeofficina: a cooperative undertaking to enhance the archaeological, architectural, and cultural heritage

Founded in 2013 by three young archaeologists, Archeofficina is a cooperative of archaeologists that operates in Sicily, mainly in the province of Palermo (Italy), where it manages and promotes the use of two archaeological sites: the Catacomb of Porta d’Ossuna and the Catacomb of Villagrazia di Carini. These are two ancient underground cemeteries that date back to the 4th century AD and are examples of the early Christian culture and art in the region. For this reason, both archaeological sites are relevant tourist attractions in the area and are under the direction of the Pontifical Commission of Sacred Archaeology.

In addition to managing such sites, the scope of Archeofficina includes archaeological research, study, cataloging, graphic restitution, and resto-

ration of finds from excavations or museum deposits. It also covers archaeological education for schools through illustrative excavations and for universities through workshops and internships. As Figure 4 shows, Archeofficina value proposition consists of promoting and enhancing Sicily's archaeological, architectural, and artistic heritage and disseminating the techniques and methods of archaeological research.

The analysis of the BM of Archeofficina shows how the cooperative is able to offer value to the customer segments it addresses by leveraging IC. In this sense, the management of the catacombs requires the execution of some activities associated with the delivery of the service. The predominant activities are the administration of the two archaeological sites, which include ordinary and extraordinary activities (from project scouting to maintenance of the structures). Other essential activities concern marketing and promotion initiatives of the archaeological sites, which involve direct contact with potential customers (i.e., tourist groups and schools) and the dissemination of the Archeofficina cultural proposal. Project scouting is instrumental to developing the services offered, as external funding allows the CCO to make some critical investments (e.g., renovation of spaces, structures, and equipment). The preventive archaeology activities consist of the archaeological surveillance of the excavations, including works carried out on commission for the benefit of private companies.

Figure 4. The business model of Archeofficina

<p>Key partners</p> <ul style="list-style-type: none"> • Pontifical Commission for Sacred Archaeology • Regional control body of Cultural and Environmental Heritage • University of Palermo • Municipality of Carini 	<p>Key activities</p> <ul style="list-style-type: none"> • Management of archaeological sites • Tourism marketing • Project scouting • Archaeological research • Experimental archaeology • Preventive archaeology • Education and training <p>Key resources</p> <p><i>Tangible Resources</i></p> <ul style="list-style-type: none"> • Human Resources • Laboratories of experimental archeology <p><i>Intangible Resources</i></p> <ul style="list-style-type: none"> • Managerial skills • Teaching skills <p><i>Financial resources</i></p> <ul style="list-style-type: none"> • Projects fundings 	<p>Value proposition</p> <p>Archeofficina value proposition consists of the promotion and enhancement of the archaeological, architectural, and artistic heritage of the Sicilian territory, as well as on the dissemination of the techniques and methods of archaeological research.</p>	<p>Customer relationships</p> <p>Horizontal relations with local communities, school administrations, and other key players in the area (e.g., cultural associations)</p> <p>Distribution Channels</p> <p>Services are delivered at the archeological sites. Customer segments are addressed by marketing actions through web, email, and telephone.</p>	<p>Customer segments</p> <ul style="list-style-type: none"> • Tourists • Schools • Other archeologists • Universities • Palermo Curia
<p>Cost structure</p> <p>In order of relevance:</p> <ul style="list-style-type: none"> • Personnel and labor costs • Reimbursement of loans • Maintenance costs 		<p>Revenue streams</p> <p>In order of relevance:</p> <ul style="list-style-type: none"> • Catacombs tickets sale rate • Excavations • Workshops of experimental archaeology • Sponsorships 		

Source: Authors' elaboration.

To realize the activities at the center of the BM, Archeofficina has developed a set of strategic resources, configuring a system of tangible,

intangible, and financial assets that are critical to its value proposition. In particular, key resources are human resources and their skills. In fact, the archaeologists of Archeofficina have very varied skills that range from 3D modeling of buildings to research and publishing, from teaching and pedagogy in foreign languages to communication, web-publishing, and social media. These skills allow the cooperative to carry out many of the processes internally, thus increasing the added value. For instance, experimental archaeology workshops are devoted to schoolchildren and include simulations of excavations inside special formworks, the recovery of finds, and the realization of frescoes according to ancient techniques. Over the years, Archeofficina has acquired equipment and tools that today have an essential role in providing services (e.g., the walkways, the lighting system of the catacombs, exhibition panels, and the tools needed in experimental archaeology workshops). In addition, the cooperative has developed functional partnerships for value creation with the Pontifical Commission of Sacred Archaeology, the Regional control body of Environment and Heritage of Palermo (Italy), the University of Palermo (Italy), and the Municipality of Carini (i.e., a small town located near Palermo where one catacomb is located). Thanks to the intense collaborations with these stakeholders, Archeofficina can plan improvements in the quality of the services and further develop its value proposition. The revenue stream comes largely from visits to the catacombs and secondarily from excavation activities. Residuals are the sponsorships and the revenues associated with experimental archaeology workshops. Costs originate from personnel and reimbursement of loans.

The analysis of the business model of Archeofficina highlights that the value proposition of the cooperative is built around a very solid partnership with the Pontifical Commission of Sacred Archaeology. As the founder noted during the interview, while enrolled in a study program in Archaeology at the University of Palermo, they were involved in a research project targeting both catacombs by faculty members (e.g., professors and researchers). Thanks to the project, CCO founders strengthened the partnership with the Pontifical Commission of Sacred Archaeology, developing an after-plan to manage both archaeological sites. In addition, Archeofficina founders leveraged their competencies in archaeological methodology, 3D modeling, marketing, education, and training, even in other languages, to integrate different services along the value chain. In fact, as one of the founders reported during the interview, they managed the excavations of the catacombs and drew a comprehensive project to make such sites usable to visitors (e.g., lights, boardwalk, website, guided tours, and other materials). In this case, the educational background of CCO founders has enabled the development of IC components (i.e., human capital and relational resources), influencing the design of an integrated BM with a specific

value proposition that highly relies on network relationships and cross-disciplinary competencies.

5.3 Digital Media Curator Agency in the archaeological field

Founded by an archaeologist with expertise in social media marketing, the agency is committed to promoting cultural heritage. The agency runs ArcheoPop, i.e., an online community focused on archaeology. Also, it designs digital communication strategies for museums and cultural projects, including “MuseumWeek” and F@Mu (i.e., Family Day at the Museum), provides services to the Higher Institute for Conservation and Restoration of the MiBACT (i.e., Italian Minister of Cultural Heritage and Tourism), and collaborates on the Italian edition of the international project #SheMeans-Business, a conference organized by Facebook Inc.

The agency value proposition consists of collecting cultural content that is worthwhile to disseminate and communicate to the general public through traditional and/or digital media. Figure 5 shows the BM of a digital media curator agency. The activities associated with the value proposition are mainly editorial and are oriented to content editing for magazines or social network pages, including the search for scientific articles worth disseminating to the public. To carry out such activities, a set of resources is needed. Tangible assets include the community of users on different social networks (e.g., Facebook, Twitter, and Instagram users) to which the content is addressed, the technologies (e.g., website, platforms, newsletters) used to this end, and a large portfolio of contacts, which is a source of potential content and clients. Intangible resources cluster the professional skills (e.g., editorial skills) and professional reputation as a synthesis of the quality of the service rendered to customers.

Figure 5. The business model of a Digital Media Curation Agency

Key partners <ul style="list-style-type: none"> • Press agencies • Newspapers • Magazines • National museums • Local museums • Cultural associations • Cultural foundations • Networks of archaeologists 	Key activities <ul style="list-style-type: none"> • Collection, selection, and publications of contents • Press release • Delivery of report on exhibitions and cultural events 	Value proposition <p>Collecting cultural content that is worthwhile to disseminate and communicate to the general public through traditional and/or digital media.</p>	Customer relationships <p>Relationships are mainly of a formal/institutional nature. Horizontal relationships are instead the basis of networking activities during cultural events and exhibitions.</p>	Customer segments <ul style="list-style-type: none"> • National museums • Local museums • Cultural associations • Cultural foundations
	Key resources <p><i>Tangible Resources</i></p> <ul style="list-style-type: none"> • Users community on social networks • Technologies • Contacts portfolio <p><i>Intangible Resources</i></p> <ul style="list-style-type: none"> • Professional skills • Professional reputation 		Distribution Channels <p>Services are digitally and physically delivered. Customer segments are targeted by in-person relationships and managed through web, email, and telephone.</p>	
Cost structure <p>In order of relevance:</p> <ul style="list-style-type: none"> • Personnel and collaborators • Website costs (e.g., hosting and graphic design) • Editorial services • Advertisement on social media • equipment 		Revenue streams <p>In order of relevance:</p> <ul style="list-style-type: none"> • Consultancy activities 		

Source: Authors' elaboration.

The main customer segments are public administrations operating in the field of Cultural Heritage, including national and local museums and cultural associations and foundations. With them, relationships are mainly of a formal/institutional nature. Horizontal relationships are instead the basis of networking activities during cultural events and exhibitions, and aim to get in touch with new potential customers and/or collaborations. Key partners are the press agencies, newspapers, magazines, national and local museums, and professional networks of archaeologists. Besides personnel and collaborators, other costs mainly originate from the management of the website (e.g., hosting and graphic design), editorial services, social media advertisement costs, and equipment. Revenues come from the consultancy activities carried out.

As emerged from the interview with the founder, a digital media curator agency can create, deliver, and capture value if provided services ensure 1) high coverage of a potential audience; 2) high-impact publications, in terms of frequency and number of sharing and/or likes on social networks; and 3) high conversion rate of views into visits to the original source/sites. This entails blending the ability to deliver creative outputs, an attitude to sense emerging technological trends, and the ability to adapt to the implications of such innovation with specialized knowledge in the field where it operates. To gain such skills, a solid EB of the founders (i.e., a Master of Science completed with specialized studies in archaeology) with several experiences in digital media curation projects may be conducive. Effects of such influence can be found in the use of engaging, simple, clear, and sometimes even funny language, as well as in the editorial cut, the frequent updates of the content, the timeliness of the publication, the uniqueness of the con-

tent, and the wide coverage of the publications. IC and BM are affected by the EB, making the unique approach to communicating archaeology and cultural content a blend of the methodological rigor of a researcher, the marketing touch of a social media manager, and the passion of a blogger.

6. On the influence of educational background on the relationships between intellectual capital and business model

The evidence of the three cases previously commented offers a discussion basis to illustrate how CCO founders EB influence the relationships between IC and BM.

Archeòtipo is dedicated to educating the public about history through a unique approach focusing on immersive sensory experiences. With its wealth of intellectual capital, Archeòtipo offers innovative and appealing services, such as living history, collective storytelling, historical reconstruction and representation, and archaeological and historical research. Consolidated knowledge in medieval archaeology developed in 15 years of research has enabled Archeòtipo to deliver a remarkably creative value proposition while ensuring scientific methodological accuracy in their narrative approach to public archaeology. The strong partnerships with academic institutions and archaeological associations enhanced the project network.

Partnerships were also found important in the case of Archeofficina. A BM focal point is the relationship with the Pontifical Commission of Sacred Archaeology and the Palermo Curia. In this case, as the case analysis has shown, a wide portfolio of specialized competencies (e.g., archaeological methodology, 3D modeling, marketing, education, and training), which cut across different disciplines, have helped CCO founders design a highly integrated BM, with impact on the autonomy of the value proposition and the cost structure as well.

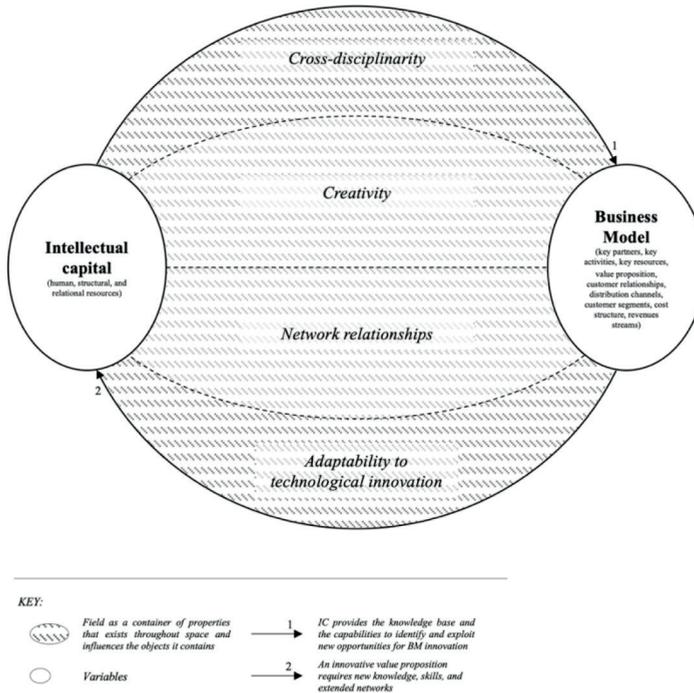
Additional signs of the influence of CCO founders educational background on the relationships between IC and BM were found in the case of a digital media curation agency. In this case, formal education blended with several prior experiences in digital media curation projects nurtured a strong professional capacity, which can be localized in the creativity of the outputs (e.g., media campaign, website editorial cut, and engaging communicative strategy) and adaptability to the implications of new technologies (e.g., active presence with highly effective timely publications on several social media).

Such evidence renders CCO founders EB as a field, moderating the relationships between IC and BM, as shown in Figure 6. We position IC and BM within such a field for three main reasons. First, specialized knowledge, effective organizational routines, and boundary-spanning behaviors

(i.e., the three components of IC) result from formal education, training, and experiences. Second, given that BMs provide structured representations of how organizations create, deliver, and capture value, the creativity, technical skills, and experiences of CCO founders become critical to turn their intentions into a feasible BM (Bowman & Ambrosini, 2000; Elia & Lerro, 2020; Teece, 2010b). Third, IC guides BM design with experience, capabilities, and relationships (i.e., arrow 1 in Figure 6); at the same time, BM innovation would require that knowledge, skills, and networks be extended (i.e., arrow 2 in Figure 6) (Cosenz & Bivona, 2021b). The field EB hosts four scalars that influence the relationships between IC and BM, as Figure 6 shown. Such scalars are used to represent the magnitude of a quantity. As Figure 6 shows, they are 1) creativity, 2) network relationships, 3) cross-disciplinarity, and 4) adaptability to technological innovation.

As for the first, our analysis has found that CCO founders' creativity may be an engine for early phases of start-up and development (Corvello et al., 2023) as it makes a value proposition highly competitive in satisfying users' needs (Dimitropoulou et al., 2023; Santoro et al., 2020). Concerning the second scalar, network relationships may have complex and multifaceted influences on IC and BM. They provide directions to CCO founders to turn their earlier connections into a system of key partnerships that are supportive to build structural capital and design a feasible value proposition. If supportive, a network of relationships can help the organization to access and exploit external knowledge, resources, and opportunities, which can improve its key assets (Elia & Lerro, 2020; Schiuma, 2017b). In fact, as discussed in the previous section, key resources like the funding in the case of Archeòtipo and the catacombs in the case of Archeofficina were made available by two partners, the University of Siena and the Pontifical Commission of Sacred Archaeology, respectively.

Figure 6. Educational background as a scalar field influencing the relationships between IC and BM



Source: Authors' elaboration.

Network relationships are also a source of challenges for human and structural capital as cooperation with partners can influence the organization's ability to adapt its BM in response to changing customer needs, market conditions, and technological innovation (Campos et al., 2022; Ferreira et al., 2022). This leads to the third scalar displayed in Figure 6, i.e., adaptability to technological innovation. As the example of a digital media curation agency has shown, social media is a powerful tool for disseminating cultural content, as it allows users to share, comment, and interact with various forms of media, such as text, images, videos, and audio, demanding CCO founders to tailor proposed content to the characteristics of the users, the platforms, and the means. Finally, the fourth scalar is cross-disciplinarity, which reflects CCO founders' ability to cut across different study disciplines and to integrate them to address a common problem (Heitzmann et al., 2021). This element was found in the case of the building of the archeodrome, which required the integration of archaeological and historical competencies with a mastery of Medieval construction techniques. Also, in the other two cases, as previously remarked, leveraging cross-disciplinary human capital impacts the value creation and value capture functions of the BM, positively affecting the cost structure.

7. Conclusion

In this work, we have investigated the influence of CCO founders EB on the relationships between IC and BM. As EB stems from formal education, training, and experiences, the formation of IC and its effects on BM design of CCOs are critically shaped by the founders' prior knowledge, experiences, and partnership. Evidence of such an influence has emerged from the empirical investigation. In fact, through the BMC analysis of three cases in the archaeological field, this paper has illustrated that EB has more far-reaching outcomes than the mere definition of a creative value proposition (Bini et al., 2016; Bowman & Ambrosini, 2000; Edvinsson & Malone, 1997a; Lepak et al., 2007). Creativity, network relationships, cross-disciplinary competencies, and adaptability to new technologies profile four scalars for the field EB, influencing the relationships between IC and BM.

In fact, our study addressed this gap by exploring how the EB of CCO founders influences the relationship between IC and BM. We posited that founders' EB nurtures human, structural, and relational assets, making IC a strategic asset in CCOs' value proposition. This reveals that founders' EB is critical for effective BM design and for building valuable and diffuse resources and capabilities.

By discussing the influence of EB on IC and BM in CCOs, this work has addressed the research question raised in the introduction of this work. This contributes to the literature on the relationships between IC and BM, with insights into four directions associated with the effects of CCO founders EB. Firstly, it has been noted that the creativity of CCO founders can act as a driving force during the early stages of a start-up and development (Corvello et al., 2023). This is because it enables the creation of a highly competitive value proposition that effectively satisfies users' needs (Dimitropoulou et al., 2023; Santoro et al., 2020). Second, establishing strong relationships within a network can greatly influence the development of IC and BM. For those leading a CCO, it is crucial to utilize their existing connections and foster key partnerships that can open doors to external knowledge, resources, and opportunities to enhance key assets (Elia & Lerro, 2020; Schiuma, 2017b). Third, collaborating with partners can have a significant impact on an organization's ability to respond to evolving environmental conditions, such as technological advancements, challenging both human and structural capital (Campos et al., 2022; Ferreira et al., 2022). Fourth, if CCO founders own multiple competencies that cut across different disciplines, they can address common problems through a multidisciplinary perspective, as well as benefit from key methodological and technical competencies developed internally (Heitzmann et al., 2021).

For CCOs, an increasingly remarkable role is played by intangible assets rather than physical resources as enablers of valuable BM. The EB may

provide CCO founders with the means to design a creative value proposition by unleashing the potential of IC. Higher education institutions may trigger student willingness to start a business, provided that educational programs involve students and early-stage researchers in knowledge-transferring projects, such as academic spin-offs (Bridgstock & Cunningham, 2016). In this case, we are not referring to academic entrepreneurship, i.e., scientists and professors who start a business or join the board of an existing company. Rather, we mean the capacity of an academic curriculum to trigger creative ideas that motivate students to exploit their EB. By playing such a role, higher education institutions may remarkably improve the influence of EB on the relationships between IC and BM along one or more of the four scalars identified in this work.

Theoretical implications of our study suggest that CCO founders' EB is a field hosting factors such as creativity, network relationships, cross-disciplinarity, and adaptability to technological innovation, which influence the relationships between IC and BM. This novel conceptualization advances our understanding of how founders' personal background influences corporate culture, offering new insights into the conditions under which specific individual characteristics impact IC and BM.

Practical implications recommend that would-be CCO founders consider creativity, network relationships, cross-disciplinarity, and adaptability to technological innovation as enabling conditions of IC when approaching BM design. By doing so, they can enhance their organization's ability to innovate, sustain competitive advantage, and achieve long-term success. In this context, emerging technologies such as artificial intelligence are reshaping the landscape in which CCOs operate, influencing education, IC development, and BMs configurations. This is relevant for SMEs, such as the CCOs, as AI tools increasingly mediate creative processes, decision-making, and knowledge development flows. For this reason, artificial intelligence introduces new opportunities for innovation and new challenges related to skills, ethics, and organizational adaptability.

Limitations of the study affect the scope of the empirical investigation, which has targeted CCOs in the archaeological field. Related to the case study, the reliance on a single field of practice may constrain the applicability of the findings to other organizational contexts where the interplay among EB, IC, and BM may differ to some extent. Additionally, while the study qualitative design offers rich contextual depth, the lack of disconfirmatory interviews limits the robustness of the findings by excluding potentially divergent or contradictory perspectives. Such methodological limitations impact the generalizability of the framework resulting from the conceptual and empirical investigation presented in this work.

Further research may address these limitations by expanding the empirical base to include multiple case studies related to SMEs across diverse in-

dustries, and employing mixed-methods approaches. Extending the scope of analysis to other domains – such as sports organizations or third-sector entities – could help strengthen the scalar dimensions that characterize EB, thereby enhancing the explanatory power and transferability of the framework.

References

- Amaratunga, D., Baldry, D., Sarshar, M., & Newton, R. (2002). Quantitative and qualitative research in the built environment: application of “mixed” research approach. *Work Study*, 51(1), 17–31. <https://doi.org/10.1108/00438020210415488>
- Amit, R., & Schoemaker, P. J. H. (1993). Strategic assets and organizational rent. *Strategic Management Journal*, 14(1), 33–46. <https://doi.org/10.1002/smj.4250140105>
- Amit, R., & Zott, C. (2001). Value creation in E-business. *Strategic Management Journal*, 22(6–7), 493–520. <https://doi.org/10.1002/smj.187>
- Amit, R., & Zott, C. (2015). Crafting Business Architecture: the Antecedents of Business Model Design. *Strategic Entrepreneurship Journal*, 9(4), 331–350. <https://doi.org/10.1002/sej.1200>
- Argyris, C., & Schön, D. (1996). *Organizational Learning: Theory, Method, and Practice*. Addison-Wesley.
- Baden-Fuller, C., & Mangematin, V. (2013). Business models: A challenging agenda. *Strategic Organization*, 11(4), 418–427. <https://doi.org/10.1177/1476127013510112>
- Baima, G., Forliano, C., Santoro, G., & Vrontis, D. (2020). Intellectual capital and business model: a systematic literature review to explore their linkages. *Journal of Intellectual Capital*, ahead-of-p(ahead-of-print). <https://doi.org/10.1108/JIC-02-2020-0055>
- Barnabè, F., Busco, C., & Hoque, Z. (2013). The causal relationships between performance drivers and outcomes. [Http://Dx.Doi.Org/10.1108/18325911211273518](http://Dx.Doi.Org/10.1108/18325911211273518). <https://doi.org/3150080405>
- Baron, J. N., Hannan, M. T., & Burton, M. D. (1999). Building the Iron Cage: Determinants of Managerial Intensity in the Early Years of Organizations. *Source*, 64(4), 527–547.
- Benneworth, P., & Jongbloed, B. (2009). Who matters to universities? A stakeholder perspective on humanities, arts and social sciences valorisation. <https://doi.org/10.1007/s10734-009-9265-2>
- Bilton, C. (2007). *Management and creativity: from creative industries to creative management*. Blackwell Publishing.
- Bini, L., Dainelli, F., & Giunta, F. (2016). Business model disclosure in the Strategic Report. *Journal of Intellectual Capital*, 17(1), 83–102. <https://doi.org/10.1108/JIC-09-2015-0076>
- Bowman, C., & Ambrosini, V. (2000). Value Creation Versus Value Capture: Towards a Coherent Definition of Value in Strategy. *British Journal of Management*, 11(1), 1–15. <https://doi.org/10.1111/1467-8551.00147>
- Breuer, W., Knetsch, A., & Salzmann, A. J. (2018). What Does It Mean When Managers Talk About Trust? *SSRN Electronic Journal*. <https://doi.org/10.2139/SSRN.3204621>
- Bridgstock, R., & Cunningham, S. (2016). Creative labour and graduate outcomes: implications for higher education and cultural policy. *International Journal of Cultural Policy*, 22(1), 10–26. <https://doi.org/10.1080/10286632.2015.1101086>
- Campos, S., Dias, J. G., Teixeira, M. S., & Correia, R. J. (2022). The link between intellectual capital and business performance: a mediation chain approach. *Journal of Intellectual Capital*, 23(2), 401–419. <https://doi.org/10.1108/JIC-12-2019-0302>
- Carlile, P. R. (2004). Transferring, Translating, and Transforming: An Integrative Framework for Managing Knowledge Across Boundaries. *Organization Science*, 15(5), 555–568. <https://doi.org/10.1287/orsc.1040.0094>
- Casadesus-Masanell, R., & Zhu, F. (2010). Strategies to Fight Ad-Sponsored Rivals. *Management Science*, 56(9), 1484–1499.
- Chandler, G. N., & Hanks, S. H. (1994). Market attractiveness, resource-based capabilities, venture strategies, and venture performance. *Journal of Business Venturing*, 9(4), 331–349. [https://doi.org/10.1016/0883-9026\(94\)90011-6](https://doi.org/10.1016/0883-9026(94)90011-6)
- Chesbrough, H. (2002). The role of the business model in capturing value from

innovation: evidence from Xerox Corporation's technology spin-off companies. *Industrial and Corporate Change*, 11(3), 529–555. <https://doi.org/10.1093/icc/11.3.529>

Chesbrough, H. (2010). Business Model Innovation: Opportunities and Barriers. *Long Range Planning*, 43(2–3), 354–363. <https://doi.org/10.1016/j.lrp.2009.07.010>

Chesbrough, H. (2019). Open Innovation in the Twenty-First Century. In *Open Innovation Results* (pp. 28–50). Oxford University Press. <https://doi.org/10.1093/oso/9780198841906.003.0003>

Comunian, R., & Gilmore, A. (2015). Beyond the Creative Campus. In *Reflections on the evolving relationship between higher education and the creative economy*. King's College London.

Corvello, V., Cimino, A., & Felicetti, A. M. (2023). Building start-up acceleration capability: A dynamic capability framework for collaboration with start-ups. *Journal of Open Innovation: Technology, Market, and Complexity*, 9(3), 100104. <https://doi.org/10.1016/j.joitmc.2023.100104>

Cosenz, F., & Bivona, E. (2021a). Fostering growth patterns of SMEs through business model innovation. A tailored dynamic business modelling approach. *Journal of Business Research*, 130, 658–669. <https://doi.org/10.1016/j.jbusres.2020.03.003>

Cosenz, F., & Bivona, E. (2021b). Fostering growth patterns of SMEs through business model innovation. A tailored dynamic business modelling approach. *Journal of Business Research*, 130, 658–669. <https://doi.org/10.1016/j.jbusres.2020.03.003>

Cosenz, F., & Noto, G. (2018). A dynamic business modelling approach to design and experiment new business venture strategies. *Long Range Planning*, 51(1), 127–140. <https://doi.org/10.1016/j.lrp.2017.07.001>

Cremin, L. A. (1976). *Public Education*. Basic Books.

Crupi, A., Cesaroni, F., & Di Minin, A. (2021). Understanding the impact of intellectual capital on entrepreneurship: a literature review. *Journal of Intellectual Capital*, 22(3), 528–559. <https://doi.org/10.1108/JIC-02-2020-0054>

Curran, J., & Blackburn, R. (2001). *Researching the Small Enterprise*. SAGE Publications, Ltd. <https://doi.org/10.4135/9781849209847>

D'Amato, A. (2021). Does intellectual capital impact firms' capital structure? Exploring the role of firm risk and profitability. *Managerial Finance*, 47(9), 1337–1356. <https://doi.org/10.1108/MF-02-2020-0089>

Dimitropoulou, A., Giotopoulos, I., Protogerou, A., & Tsakanikas, A. (2023). Does the innovativeness of creative firms help their business clients to innovate? *The Journal of Technology Transfer*, 48(1), 1–32. <https://doi.org/10.1007/s10961-021-09901-1>

DMCS UK. (2001). *Creative Industries Mapping 2001*.

Edvinsson, L., & Malone, M. S. (1997a). *Intellectual Capital: Realizing Your Company's True Value by Finding Its Hidden Brainpower*. HarperCollins.

Edvinsson, L., & Malone, M. S. (1997b). *Intellectual Capital: Realizing Your Company's True Value by Finding Its Hidden Brainpower*. HarperCollins.

Eisenhardt, K. M. (1989). Building Theories from Case Study Research. *The Academy of Management Review*, 14(4), 532–550. <https://doi.org/10.2307/258557>

Elia, G., & Lerro, A. (2020). Linking Business Model Mapping and Innovation with Intellectual Capital in Technological Start-Ups BT - *Innovative Entrepreneurship in Action: From High-Tech to Digital Entrepreneurship* (G. Passiante, Ed.; pp. 37–53). Springer International Publishing. https://doi.org/10.1007/978-3-030-42538-8_4

Elia, G., Lerro, A., Passiante, G., & Schiuma, G. (2017). An Intellectual Capital perspective for Business Model Innovation in technology-intensive industries: empirical evidences from Italian spin-offs. *Knowledge Management Research & Practice*, 15(2), 155–168. <https://doi.org/10.1057/s41275-017-0052-z>

Ensley, M. D., & Hmieleski, K. M. (2005). A comparative study of new venture top management team composition, dynamics and performance between university-based and independent start-ups. *Research Policy*, 34(7), 1091–1105. <https://doi.org/10.1016/J>

Ferreira, A., Franco, M., & Haase, H. (2022). Strategic alliances and development of intellectual capital: a study of technology-based SMEs. *International Journal of Organizational Analysis*, 30(6), 1644–1671. <https://doi.org/10.1108/IJOA-10-2020-2440>

Gassmann, O., & Frankenberger, K. (2014). *The Business Model Navigator: 55 Models That Will Revolutionise Your Business*. Pearson Education.

Gilmore, A., & Comunian, R. (2016). Beyond the campus: higher education, cultural policy and the creative economy. *International Journal of Cultural Policy*, 22(1), 1–9. <https://doi.org/10.1080/10286632.2015.1101089>

Girotra, K., & Netessine, S. (2013). OM Forum —Business Model Innovation for Sustainability. *Manufacturing & Service Operations Management*, 15(4), 537–544. <https://doi.org/10.1287/msom.2013.0451>

Gross, S., Stelzl, K., Grisold, T., Mendling, J., Röglinger, M., & vom Brocke, J. (2021). The Business Process Design Space for exploring process redesign alternatives. *Business Process Management Journal*, 27(8), 25–56. <https://doi.org/10.1108/BPMJ-03-2020-0116>

Guthrie, J., Ricceri, F., & Dumay, J. (2012). Reflections and projections: A decade of Intellectual Capital Accounting Research. *The British Accounting Review*, 44(2), 68–82. <https://doi.org/10.1016/j.bar.2012.03.004>

Hambrick, D. C., & Mason, P. A. (1984). Upper Echelons: The Organization as a Reflection of Its Top Managers. *Source: The Academy of Management Review*, 9(2), 193–206. <https://www.jstor.org/stable/258434>

Heitzmann, N., Opitz, A., Stadler, M., Sommerhoff, D., Fink, M. C., Obersteiner, A., Schmidmaier, R., Neuhaus, B. J., Ufer, S., Seidel, T., Fischer, M. R., & Fischer, F. (2021). Cross-Disciplinary Research on Learning and Instruction – Coming to Terms. *Frontiers in Psychology*, 11. <https://doi.org/10.3389/fpsyg.2021.562658>

Hesmondhalgh, D., & Pratt, A. C. (2005). Cultural industries and cultural policy. *International Journal of Cultural Policy*, 11(1), 1–13. <https://doi.org/10.1080/10286630500067598>

Hitt, M. A., Bierman, L., Shimizu, K., & Kochhar, R. (2001). Direct and Moderating Effects of Human Capital on Strategy and Performance in Professional Service Firms: A Resource-Based Perspective. *Source: The Academy of Management Journal*, 44(1), 13–28. <https://www.jstor.org/stable/3069334>

Hoch, N. B., & Brad, S. (2020). Managing business model innovation: an innovative approach towards designing a digital ecosystem and multi-sided platform. *Business Process Management Journal*, 27(2), 415–438. <https://doi.org/10.1108/BPMJ-01-2020-0017>

Kaplan, R. S., & Norton, D. P. (2004). *Balanced Scorecard: Insight, experience & ideas for strategy focused organizations*. Harvard Business Review, 4(1).

Kaplan, S. (2011). Business models aren't just for business. *Harvard Business Review*, 19.

Klotz, A. C., Hmieleski, K. M., Bradley, B. H., & Busenitz, L. W. (2014). New Venture Teams: A Review of the Literature and Roadmap for Future Research. *Journal of Management*, 40(1), 226–255. <https://doi.org/10.1177/0149206313493325>

Kohler, T., & Nickel, M. (2017). Crowdsourcing business models that last. *Journal of Business Strategy*, 38(2), 25–32.

Kouptsov, A., & Srari, J. S. (2023). Value proposition-driven reconfiguration of business models in dynamic industries: a design-science approach. *Business Process Management Journal*, 29(6), 1838–1866. <https://doi.org/10.1108/BPMJ-03-2023-0178>

Kyser, D. C., & Hill, T. (2016). Through the Looking Glass: Company Culture As a Reflection of Founder Personality in Entrepreneurial Organizations. *SSRN Electronic Journal*. <https://doi.org/10.2139/SSRN.2869658>

Landry, R., Amara, N., & Rherrad, I. (2006). Why are some university researchers more likely to create spin-offs than others? Evidence from Canadian universities. *Research Policy*, 35(10), 1599–1615. <https://doi.org/10.1016/j.respol.2006.09.020>

Lara Machado, P., van de Ven, M., Aysolmaz, B., Athanasopoulou, A., Ozkan, B., & Turetken, O. (2023). Methods that bridge business models and business processes: a

synthesis of the literature. *Business Process Management Journal*, 29(8), 48–74. <https://doi.org/10.1108/BPMJ-08-2022-0396>

Le, T. T., Quan Chau, T. Le, Vo Nhu, Q. P., & Ferreira, J. J. M. (2024). Digital platforms and SMEs' performance: the moderating effect of intellectual capital and environmental dynamism. *Management Decision*. <https://doi.org/10.1108/MD-04-2023-0616>

Lepak, D. P., Smith, K. G., & Taylor, M. S. (2007). Value creation and value capture: A multilevel perspective. *Academy of Management Review*, 32(1), 180–194. <https://doi.org/10.5465/AMR.2007.23464011>

Magretta, J. (2002). Why business models matter. *Harv Bus Rev*, 80(5), 86–92,133.

Martins, L. L., Rindova, V. P., & Greenbaum, B. E. (2015). Unlocking the Hidden Value of Concepts: A Cognitive Approach to Business Model Innovation. *Strategic Entrepreneurship Journal*, 9(1), 99–117. <https://doi.org/10.1002/sej.1191>

Massa, L., & Tucci, C. L. (2014). Business Model Innovation. In M. Dodgson, D. M. Gann, & N. Phillips (Eds.), *The Oxford Handbook of Innovation Management*. Oxford University Press. <https://doi.org/10.1093/oxfordhb/9780199694945.013.002>

Massa, L., Tucci, C. L., & Afuah, A. (2017). A Critical Assessment of Business Model Research. *Academy of Management Annals*, 11(1), 73–104. <https://doi.org/10.5465/annals.2014.0072>

Nahapiet, J., & Ghoshal, S. (1998). Social Capital, Intellectual Capital, and the Organizational Advantage. Source: *The Academy of Management Review*, 23(2), 242–266.

Nonaka, I., & Takeuchi, H. (1995). *The Knowledge-Creating Company: How Japanese Companies Create the Dynamics of Innovation*. <https://doi.org/10.1093/OJO/9780195092691.001.0001>

O'Shea, R. P., Allen, T. J., Chevalier, A., & Roche, F. (2005). Entrepreneurial orientation, technology transfer and spinoff performance of U.S. universities. *Research Policy*, 34(7), 994–1009. <https://doi.org/10.1016/j.respol.2005.05.011>

Osterwalder, A., & Pigneur, Y. (2010). *Business model generation a handbook for visionaries, game changers, and challengers*. Wiley.

Osterwalder, A., Pigneur, Y., & Tucci, C. L. (2005). Clarifying business models: Origins, present, and future of the concept. *Communications of the Association for Information Systems*, 16(1), 1–25.

Paoloni, M., Coluccia, D., Fontana, S., & Solimene, S. (2020). Knowledge management, intellectual capital and entrepreneurship: a structured literature review. *Journal of Knowledge Management*, 24(8), 1797–1818. <https://doi.org/10.1108/JKM-01-2020-0052>

Pazos, D. R., López, S. F., González, L. O., & Sandiás, A. R. (2012). A resource-based view of university spin-off activity: New evidence from the Spanish case. *Revista Europea de Dirección y Economía de La Empresa*, 21(3), 255–265. <https://doi.org/10.1016/j.redee.2012.05.006>

Petty, R., & Guthrie, J. (2000). Intellectual capital literature review. *Journal of Intellectual Capital*, 1(2), 155–176. <https://doi.org/10.1108/14691930010348731>

Piperopoulos, P. (2010). Qualitative research in SMEs and entrepreneurship: a literature review of case study research. *International Journal of Economics and Business Research*, 2(6), 494. <https://doi.org/10.1504/IJEBR.2010.035701>

Quintero-Quintero, W., Blanco-Ariza, A. B., & Garzón-Castrillón, M. A. (2021). Intellectual Capital: A Review and Bibliometric Analysis. *Publications*, 9(4), 46. <https://doi.org/10.3390/publications9040046>

Rossman, G. B., & Rallis, S. F. (2017). *An Introduction to Qualitative Research: Learning in the Field*. SAGE Publications, Inc. <https://doi.org/10.4135/9781071802694>

Santoro, G., Bresciani, S., & Papa, A. (2020). Collaborative modes with Cultural and Creative Industries and innovation performance: The moderating role of heterogeneous sources of knowledge and absorptive capacity. *Technovation*, 92–93, 102040. <https://doi.org/10.1016/j.technovation.2018.06.003>

Saunders, M., Lewis, P., & Thornhill, A. (2007). *Research methods for business students*.

Financial Times/Prentice Hall.

Schaltegger, S., Freund, F. L., & Hansen, E. G. (2012). Business cases for sustainability: the role of business model innovation for corporate sustainability. *International Journal of Innovation and Sustainable Development*, 6(2), 95. <https://doi.org/10.1504/IJISD.2012.046944>

Schein, E. (2010). *Organizational Culture and Leadership*.

Schein, E. H. (1983). The role of the founder in creating organizational culture. *Organizational Dynamics*, 12(1), 13–28. [https://doi.org/10.1016/0090-2616\(83\)90023-2](https://doi.org/10.1016/0090-2616(83)90023-2)

Schendel, D. (1994). Toward an organizational-based theory of competitive advantage. *Strategic Management Journal*, 15(1994), 1–4.

Schiuma, G. (2017a). The business model prism: managing and innovating business models of arts and cultural organisations. *Journal of Open Innovation: Technology, Market, and Complexity*, 3(3), 1–13. <https://doi.org/10.1186/s40852-017-0066-z>

Schiuma, G. (2017b). The business model prism: managing and innovating business models of arts and cultural organisations. *Journal of Open Innovation: Technology, Market, and Complexity*, 3(3), 1–13. <https://doi.org/10.1186/s40852-017-0066-z>

Secundo, G., Lombardi, R., & Dumay, J. (2018). Intellectual capital in education. *Journal of Intellectual Capital*, 19(1), 2–9. <https://doi.org/10.1108/JIC-10-2017-0140>

Seelos, C., & Mair, J. (2007). Profitable Business Models and Market Creation in the Context of Deep Poverty: A Strategic View. *Academy of Management Perspectives*, 21(4), 49–63. <https://doi.org/10.5465/amp.2007.27895339>

Solaimani, S., & Bouwman, H. (2012). A framework for the alignment of business model and business processes. *Business Process Management Journal*, 18(4), 655–679. <https://doi.org/10.1108/14637151211253783>

Spee, A. P., & Jarzabkowski, P. (2009). Strategy tools as boundary objects. *Strategic Organization*, 7(2), 223–232. <https://doi.org/10.1177/1476127009102674>

Stake, R. E. (2005). Multiple Case Study Analysis. Guilford Publications. https://books.google.it/books?id=Iht_QgAACAAJ

Steen, M. Van der, Ortt, R., & Scholten, V. (2010). Exploring determinants of life sciences spin-off creation: empirical evidence from the Netherlands. *International Journal of Entrepreneurship and Small Business*, 10(1), 30. <https://doi.org/10.1504/IJESB.2010.033047>

Sternberg, R. J. (2003). *Wisdom, Intelligence, and Creativity Synthesized*. Cambridge University Press. <https://doi.org/10.1017/CBO9780511509612>

Steyaert, C., & Hjorth, D. (2006). *Entrepreneurship as social change: A third movements in entrepreneurship book*.

Storey, D. J. (2016). *Understanding The Small Business Sector*. Routledge. <https://doi.org/10.4324/9781315544335>

Stubbs, W., & Cocklin, C. (2008). Conceptualizing a “Sustainability Business Model.” *Organization & Environment*, 21(2), 103–127. <https://doi.org/10.1177/1086026608318042>

Teece, D. J. (2010a). Business Models, Business Strategy and Innovation. *Long Range Planning*, 43(2–3), 172–194. <https://doi.org/10.1016/j.lrp.2009.07.003>

Teece, D. J. (2010b). Business Models, Business Strategy and Innovation. *Long Range Planning*, 43(2–3), 172–194. <https://doi.org/10.1016/j.lrp.2009.07.003>

Valenti, M., & Salzotti, F. (2017). For a participatory culture: the experience of Archeòtipo srl and the Poggibonsi Archaeodrome. In M. Cerquetti (Ed.), *Bridging theories, strategies and practices in valuing cultural heritage* (pp. 243–260). eum - edizioni università di macerata.

Vidyarthi, H., & Tiwari, R. (2019). Cost, revenue, and profit efficiency characteristics, and intellectual capital in Indian Banks. *Journal of Intellectual Capital*, 21(1), 1–22. <https://doi.org/10.1108/JIC-05-2019-0107>

Vignieri, V. (2020). Leveraging Collaborative Governance: How Co-production Contributes to Outcomes and Public Value in a Small Town. In C. Bianchi, L. F. Luna-Reyes, & E. Rich (Eds.), *Enabling Collaborative Governance through Systems Modeling Methods*

(pp. 47–71). Springer. https://doi.org/10.1007/978-3-030-42970-6_3

Wirtz, B. W., Pistoia, A., Ullrich, S., & Göttel, V. (2016). Business Models: Origin, Development and Future Research Perspectives. *Long Range Planning*, 49(1), 36–54. <https://doi.org/10.1016/j.lrp.2015.04.001>

Yin, R. K. (2013). *Case Study Research: Design and Methods*. SAGE Publications.

Zott, C., & Amit, R. (2010a). Business Model Design: An Activity System Perspective. *Long Range Planning*, 43(2), 216–226. <https://doi.org/https://doi.org/10.1016/j.lrp.2009.07.004>

Zott, C., & Amit, R. (2010b). Business Model Design: An Activity System Perspective. *Long Range Planning*, 43(2), 216–226. <https://doi.org/https://doi.org/10.1016/j.lrp.2009.07.004>