



The potential of futures literacy for impact-oriented business schools

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ABSTRACT

Current marketplace narratives increasingly demand a move from shareholder towards stakeholder primacy and responsible capitalism yielding *social value creation*. In parallel, the demand for *entrepreneurial value creation* at higher education institutions (including, but not limited to business schools) continues to grow. The intersection of these two demands, however, engenders critical tensions. While social value creation emphasizes stakeholder returns and a long-term perspective, entrepreneurial value creation revolves around investment returns and short-term agility. As a result, business schools have been grappling to find ways to incorporate a broader, holistic view on value creation into their activities. We bring together future studies and management scholars and scholarship to explore futures literacy as a potentially instrumental capability for business schools. Our investigation suggests that an interdisciplinary approach is particularly promising since both management and futures studies investigate how to engage with uncertainty and chart more desirable futures. We illustrate the instrumental role of futures literacy and foresight with an educational program built at the intersection of entrepreneurial and social value creation and with anticipatory practices at its core. We suggest that anticipatory practices are currently underutilized in business schools' curricula, outreach activities, and strategy making, and may be necessary to shape productive and constructive business schools of the future.

The business leaders of tomorrow are likely to experience increased motivation, as well as increased accountability, for positive societal impact. Business schools, in their roles as educators, knowledge creators, and community partners, play a key role in strengthening these organizational and community outcomes. (AACSB Briefing Paper, 2020¹)

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¹ <https://www.aacsb.edu/-/media/a34c23171bcb477b893408ccc690d956.ashx>

Entrepreneurship isn't a buzzword anymore—it's an instinctual drive that blends visionary, creative thinking with a little bit of bravery...For today's world, graduates need to be agile thinkers, and business schools are putting the mechanisms into place that challenge students to anticipate the unknown. (Thomas R. Robinson, President and CEO of AACSB, 2017²)

1. Introduction

Academics across business disciplines are grappling with the shifting demands placed on the institutions (i.e., business schools and universities) they are embedded in. In this shifting landscape, two trends are especially salient, as borne out of by the quotes drawn from the leading global business school accreditation body (i.e., AACSB) above.

First, over the past few years, marketplace narratives have proclaimed a new type of organizational purpose: away from unquestioned shareholder primacy and towards stakeholder and responsible capitalism. For-profit firms are increasingly being called on to effectively create sustainable and long-term social value, with major attention garnered by BlackRock's annual letter to CEOs (2019), Business Roundtable's redefinition of business purpose (2019) and Klaus Schwab's 2020 Davos Manifesto (2019). Policy makers (who also act as funders for higher education institutions, including business schools) are also calling for demonstrable positive societal impact from the activities conducted at higher education institutions (e.g., REF, 2021). As a result, business schools have been grappling to make sense of this expanded marketplace narrative and find ways to incorporate a broader view on value creation and capture (Smith & Rönnegard, 2016) into research, teaching, and outreach activities. A *New York Times* guest essay recently pointed out that “[a]fter decades of emphasis on financial markets and shareholder returns, business schools are trying to take on deeper philosophical problems—including, maybe, tentative questions about the means and ends of capitalism itself” (Worthen, 2022).

Second, programs and activities within business schools targeting entrepreneurial value creation have been increasing steadily, building on the belief that entrepreneurial qualities, such as innovation, proactiveness, opportunity recognition and risk-taking (Covin & Slevin, 1989; Lumpkin & Dess, 1996; Miller, 1983) are critical for a healthy economy, and increasingly also for a healthy planet and societal wellbeing (e.g., through social and responsible entrepreneurship; Dacin, Dacin, & Tracey, 2011; Fuller & Tian, 2006). The Covid-19 pandemic has further stimulated interest and activity in entrepreneurship (Global Entrepreneurship Monitor, 2021). As Randerson (2016) points out, an (implicit) assumption in entrepreneurship research (and often also policy) is that entrepreneurship is “universally desirable and beneficial” (p. 585), although culturally conditioned (Hayton, George, & Zahra, 2002), potentially leading to risky or unethical behaviors (Karmann, Mauer, Flatten, & Brettel, 2016), and often characterized by unequal representation (e.g., entrepreneurship gender gap; Padilla-Angulo, García-Cabrera, & Lucia-Casademunt, 2021). Agility, experimentation, and quick (re) actions to identified or created opportunities (Alvarez & Barney, 2010) are at the center of entrepreneurship curricula and programs at business schools, with accompanying policy initiatives to foster entrepreneurial capabilities and activities (e.g., EntreComp, an entrepreneurship competences framework published by the European Union,³ the Next Generation Entrepreneurship Corps Act in the United States,⁴ and the EXIST Gründerstipendium in Germany⁵).

At first glance, the above identified two trends point to a future of business schools that is solidly built on a fundament of *social and entrepreneurial value creation* as key imperatives. An implication of this conclusion would be that business schools are shifting away from teaching and researching profit maximization and shareholder supremacy, not simply supplementing curricula⁶ and scholarly output thematically with responsibility-focused elements. Yet, two tensions complicate this apparently simple resolution akin to a prism that projects potential futures across a spectrum of colors. The first tension emerges around *temporal frames*: social value creation (encompassing value creation towards society and the natural environment) requires a long-term perspective (Voegtlin & Scherer, 2017), while entrepreneurship emphasizes shorter-term horizons to allow for pivots (Grimes, 2018) and experimentation (e.g., through Lean Startup principles; Ries, 2011) towards quick market wins. The second tension is one that speaks to dominant *strategic frames*: On the one hand, to move consequently to a stakeholder view of business, an integration of social and commercial logics is needed (Pache & Santos, 2013), where stakeholder returns are the dominant strategic goals supporting adaptability and flexibility in social value creation. On the other hand, adopting an entrepreneurial value creation stance emphasizes investment returns as a dominant strategic goal, encompassing (cost) efficiency and financial metrics as core elements. Entrepreneurship research has thus widely investigated antecedents to financial performance, such as how to build teams to maximize new venture performance (for a meta-analysis see Jin et al., 2017).

Given these intersecting tensions (temporal and strategic frames), the potential futures of business schools' roles in enabling businesses that promote sustainability, wellbeing, and resilience are manifold and necessitate elucidation. In this paper, we discuss how business schools might integrate anticipatory, future-oriented research, teaching, and outreach activities in order to manage (seemingly) paradoxical imperatives from its stakeholders. Next, we provide a brief conceptual background on social and entrepreneurial value creation, as well as futures literacy in the business (school) context. Subsequently, we illustrate the potential for embracing the identified intersecting tensions through an educational program that builds on futures literacy and anticipatory beliefs

² <https://www.aacsb.edu/newsroom/2017/4/aacsb-schools-foster-new-paths-to-entrepreneurship>

³ See <https://publications.jrc.ec.europa.eu/repository/handle/JRC101581>

⁴ <https://www.congress.gov/bill/117th-congress/house-bill/1226>

⁵ <https://www.exist.de/EXIST/Navigation/EN/Home/home.html>

⁶ Examples include dedicated sustainability- or responsibility-focused specialized programs, offered alongside the more mainstream programs in business schools. While such specialized programs may become more prevalent, and even mainstream over time, this cannot occur without the identified tensions being resolved.

and practices (i.e., the “Startup Impact Readiness” program, with a dedicated foresight module). We conclude by discussing challenges and priorities for business schools engaging with holistic value creation and entrepreneurship-focused programming in terms of teaching, research, and outreach.

Our paper contributes to the ongoing discussion on business schools’ responsibility to contribute positively to society and create social value, and the role of strategic foresight and futures as a pivotal literacy for business schools (and the entrepreneurs they educate) to integrate long-term, holistic goals (i.e., the UN Sustainable Development Goals) into their business model logics. We examine how futures literacy can be deployed in educational curricula and used as a mode of addressing the above identified tensions in entrepreneurial development programs, before reflecting on what futures literacy education can do to help extend the time horizon of schools’ strategic decisions and account for stability and change in student expectations through discourse.

While this paper does not specifically project and evaluate alternative futures for business schools, we acknowledge that (a) the futures of higher education itself (and implicitly business schools, assuming they remain integrated within those evolving systems; Alexander, 2020) and (b) the integration of futures and foresight curricula (Dator, 2002; Gidley, Bateman, & Smith, 2004; Hicks, 2003) in higher education and business schools are critical ongoing discussions in the literature. Studies that outline the role of higher education in creating long-term social change (Király & Géring, 2019; Bell, 2002) are thus particularly important. Indeed, higher education actively shapes society by emphasizing certain curricular content and perspectives reflected in them. Whether students are exposed to integrated ethical (Monteiro, Leite, & Rocha, 2019), ecological (Hampson, 2012) or shareholder primacy (Smith & Rønnegard, 2016) thinking can (re)define the types of students, managers, entrepreneurs and citizens higher education is producing (Gáspár, Hideg, & Köves, 2021). Within the context of business schools, we frame projects like the “Startup Impact Readiness” program as a part of this larger transformation in higher education, despite the challenges that emerge from the difference between theoretical and practical transformation (Toarniczky, Matolay, & Gáspár, 2019).

2. Emerging business school imperatives and resulting temporal and framing tensions

2.1. The emerging social value creation imperative

In 2005, John Mackey, CEO and founder of Whole Foods, declared that all stakeholders affected by the company’s actions should fall under the responsibility of executives and argued later for businesses to embrace conscious capitalism (Mackey & Sisodia, 2014). More recently, Oliver Zipse, CEO of the BMW Group, announced that top management’s remuneration will be aligned to sustainability goals (Fasse, 2020). These examples indicate that creating social value is no longer an organizational imperative restricted to philanthropic or non-profit organizations. Instead, for-profit firms have been called on to also positively contribute to society – a call that has elicited an ongoing discussion in academic and practitioner circles (e.g., Fink, 2019; George, Howard-Grenville, Joshi, & Tihanyi, 2016; Schwab, 2019; Wang, Tong, Takeuchi, & George, 2016). Corporate leadership groups have further declared the importance value creation for all stakeholders (Business Roundtable, 2019), moving beyond financial and customer dimensions to encompass societal and ecological aspects.

While the above quotes capture the phenomenon of the move from a shareholder to a stakeholder orientation in firms, scholars across business disciplines have also called for prioritizing academic inquiries into for-profit firms’ social value creation (de Bakker, Matten, Spence, & Wickert, 2020) and their contributions to societal progress and grand challenges (Barnett, Henriques, & Husted, 2020). Studies have demonstrated this shift in orientation by documenting various emerging firm strategic orientations, such as environmental orientation (Fraj-Andrés, Martínez-Salinas, & Matute-Vallejo, 2009), stakeholder orientation (Brulhart, Ghera, & Quelin, 2019; Flammer & Kacperczyk, 2016) and sustainability orientation (Calic & Mosakowski, 2016; Cheng, 2020), among others, influencing firm actions and performance.

Although a wide variety of “social value” definitions are emerging in the business literature, we follow Garst, Blok, Branzei, Jansen, and Omta (2019) and understand *social value creation* as *all business activities that generate (in)directly measurable beneficial outcomes for the society at large*. Such beneficial outcomes, at times referred to as positive social impact, are related to individual, technological, social or structural factors enabling greater social welfare, individual and group resilience, innovation, and environmental sustainability (George et al., 2016; Maas & Liket, 2011). The inclusive scope of Garst et al.’s (2019) definition of social value in business, however, also highlights the formidable challenge for-profit firms are confronted with when attempting to integrate this additional organizational imperative into core business activities. Such an integration requires firms to adapt their socio-cognitive patterns, cultural justifications, assumptions, beliefs, rules and organizing principles (Besharov & Smith, 2014; Thornton & Ocasio, 1999) to support practices aligned with the expanded view of value creation. Put differently, by bringing social value into core business activities, firms are forced to adapt their existing institutional logics.

Yet, integrating a social logic (principles of decision-making focused on the long-term wellbeing of the society and the common good (Blackburn, 2007; Saebi, Foss, & Linder, 2019; Yan, Ferraro, & Almandoz, 2019) into business’s dominant commercial logic (principles of decision-making focused on short-term shareholder’s profit maximization and individualism; Friedman, 1970) is anything but simple. Entrepreneurship scholarship reflects this difficulty in integrating social, ecological and economic value creation logics, with separate streams having developed in parallel focusing on either ecological or social entrepreneurship, both largely disconnected from “mainstream” entrepreneurship research (Vedula et al., 2022). Resulting hybrid organizations are per se exposed to contradictions, competing demands (Pache & Santos, 2013), and cognitive as well as action paradoxes (Sharma & Bansal, 2017), which pose a major challenge not only for current but also for future decision-makers. The latter is one critical target group of educational programs in business schools aiming to prepare students and lifelong learners for possible futures and associated challenges (Király & Géring, 2019).

As in firms, business schools are required to react to this broadened view on value creation (Smith & Rönnegard, 2016) and are responsible for equipping future (and current) leaders, managers, decision-makers and entrepreneurs with competencies and capabilities (Aavik, 2019) required to effectively contribute to a transformative economy. Moreover, business schools face demands to actively shape the society (Király & Géring, 2019) and develop research as well as teaching with positive societal impact (Gupta & Singhal, 2017; Jamali & Abdallah, 2012; Smith & Rönnegard, 2016). However, the current understanding of what social value creation via university activities can and ought to entail differs between business schools (Compagnucci & Spigarelli, 2020). The same is true of their imagination of future consequences of this transforming environment for business schools' institutional structures and relationships with societal, political or economic actors (Compagnucci & Spigarelli, 2020). In this conversation, some argue that business schools should focus exclusively on teaching competitiveness and associated "tough choices," and that the increased attention on sustainability, wellbeing and social value creation not only detracts from business schools' purpose, but weakens managerial, organizational, and economic abilities required to excel in competitiveness (Simons, 2013). Aligned with this, and based on an analysis of online curricular communication among top global business schools, Csillag, Király, Rakovics, and Géring (2022) identify a highly selective and superficial use of sustainability and responsibility topics, restricted to those that are congruent with a business education that continues to focus on economic performance.

Consequently, no one-size-fits-all recommendation for business schools' structural and processual implementation of the extended view on value creation can be made. Just as within for-profit firms, the implemented logic around social value and impact depends on how a fit between the competing demands for contributions to society and sound economic deployment of resources can be achieved (Benneworth, Pinheiro, & Sánchez-Barrioluengo, 2016; Callagher, Horst, & Husted, 2015). Factors determining this fit are the technical, cultural and political environment of a business school, and the level of legitimacy, resource availability, and collaboration that can be obtained for an adapted curriculum built on a holistic view of value creation in business (Slager, Pouryousefi, Moon, & Schoolman, 2020). In other words, business schools need to make decisions on whether and how to adapt research, teaching and outreach activities to enable faculty, students, and staff to create social value.

As social value creation is contingent on the composition of a society and its implicit or explicit social goals, building capacities for entrepreneurs and other business school graduates to reflect on their personal and organizational agency under a variety of different social conditions is important (Henderson, Wersun, Wilson, Yeung, & Zhang, 2019). One way to achieve this is by integrating curricula that help students understand the possible evolutions that societies may undergo as they face a broad array of future challenges and opportunities. This is particularly important as business school education generally takes a market perspective, emphasizing shareholder over stakeholder value (Kitchener, Levitt, & Thomas, 2022), and generally in contradiction with a public or social good perspective (Augier, March, & Sullivan, 2005). In the discussion, we look briefly at the intersection of alternative futures for higher education systems (Gidley, 2012), and a selection of broader national and global future scenarios, to carve out some futures for business schools in which the illustrative "Startup Impact Readiness" or similar programs focused on promoting a holistic view of value creation, become integral to responsible societal transformation (Henderson et al., 2019).

2.2. The emerging entrepreneurial value creation imperative

In parallel to grappling with making sense of, and integrating, social value into their activities, business schools have also experienced an ever-increasing mandate to "create" entrepreneurs and enable venture creation. With the number of students interested in entrepreneurial programs and educational experiences increasing (Katz, 2003), entrepreneurship-focused educational offerings climbing (Kuratko, 2005; Solomon, 2007), and public policy declaring entrepreneurship as higher education institutions' "third mission" mandate (Fayolle, Gailly, & Lassas-Clerc, 2006), a proliferation of studies have seemingly supported the assumption that business school activities around venture creation positively influence subsequent entrepreneurial activities and outcomes. However, Lorz, Mueller, and Volery (2013) suggest that most of the available evidence emerges from studies lacking sufficiently rigorous methodologies, in part due to the absence of control groups and the prevalence of cross-sectional designs (Martin, Nejad, Colmar, & Liem, 2013; Rideout & Gray, 2013). As a result, more research is needed to fully understand how students are really impacted by entrepreneurship programs (Nabi, Liñán, Fayolle, Krueger, & Walmsley, 2017) and whether entrepreneurship is able to transform society (Ratten & Usmanij, 2021). Indeed, "whereas the scholarship and pedagogy within the field of entrepreneurship education has matured considerably over the last 20 years, major gaps remain to what content to teach, how to teach it, who qualifies to teach, and to what type of student" (Turner & Gianiodis, 2018, p. 131).

Increasing the challenges associated with the entrepreneurship imperative is the inherent inter- or multi-disciplinarity of venture creation and the need for it to be reflected in entrepreneurship educational offerings. Unfortunately, interdisciplinary programs and accompanying research continues to be substantially lagging (Fellnhöfer, 2019). This puts business schools at a crossroads, having to decide whether to retain disciplinary ownership of the domain or co-create programs with other disciplines to achieve entrepreneurship education objectives. As higher education institutions are pressed to be and become more "entrepreneurial" (Siegel & Wright, 2015), the establishment of entrepreneurial university centers outside the business school has also increased. As a result, the futures of business schools may be more or less interdisciplinary, depending at least partly on which value dimensions (i.e., economic, social, and ecological) are deemed as integral to the business function.

Finally, entrepreneurship education emphasizes an experimental approach to business, emphasizing agility and novelty (Fellnhöfer, 2019). In contrast, much of business schools' curricula focus on imparting frameworks for managerial efficiency and stability. While management research has examined the paradox of ambidexterity (Andriopoulos & Lewis, 2009; Lin, McDonough, Lin, & Lin, 2013), where companies are at once flexible and reliable, adaptive and efficient, management education does not engender these qualities across curricular offerings. As a result, entrepreneurial courses and programs are not always integrated into a coherent overall

business curriculum, potentially eliciting an apparent clash of dominant strategic frames that pit efficiency against flexibility, stability against adaptability, and exploitation against exploration.

Conflicting or potentially paradoxical frames can hinder an effective invention of futures, since frames used to envision alternative futures are critical, yet often unremarked (Mangus et al., 2021). Importantly, for business schools to be productive contributors to long-term sustainability and well-being, they need to develop resilience that allows them to “bounce forward” rather than just “bounce back” (Hynes, Trump, Love, & Linkov, 2020). Embracing and leveraging the tensions (as depicted in Fig. 1) engenders such resilience.

In sum, we propose that educational programs confronting and embracing the aforementioned tensions hold much potential to enable holistic value creation and transform business school activities and futures. We argue that designing such programs will benefit from building on the concept of futures literacy, which we discuss next.

2.3. What futures for business schools?

The identified emerging tensions in temporal and strategic frames (as summarized in Fig. 1) open up new possible futures for business schools to envision and strive to realize, ranging from a traditional market-focused business school (Fotaki & Prasad, 2015) to a purposeful one (Kitchener et al., 2022). To tease out these alternatives, we might consider alternative configurations of business school that roughly fall within either the *Social Value Creation Imperative* or the *Entrepreneurial Value Creation Imperative*.

2.3.1. Strong adherence to social value creation

One possibility could be business schools' inclusion of curricula that account for ideas like degrowth (Garcia-Olivares & Solé, 2015) or the transformation of capitalism (Izak, Mansell, & Fuller, 2015) – a position that might challenge long-standing assumptions in dominant business school models, but could better reflect a type of long-term capital investment position. The dominance of neoliberal framing of university long-term planning, at least in some regions (Aavik, 2019), might become more difficult in light of changing environmental conditions for higher education, thus requiring business schools, as part of higher education systems, to take on an alternative economic framing (i.e., light capitalism; Lennerfors, 2015). If systemic change is viewed as an investment goal then entrepreneurial graduates and startups that can speak to those concerns become an asset for business programs, evidencing the success of new approaches to curricular design.

A second possibility could be business schools' broad adoption of frameworks like the Principles for Responsible Management (PRM) (Henderson et al., 2019), with business schools embracing their leading role in developing management models, and becoming innovation hubs for the next iterations of these frameworks. Similarly, business schools adopting a purpose orientation need “public engagement entrepreneurs” (Kitchener et al., 2022) as external partnerships and boundary-spanning activities enable transformative paths into the future. Business schools have long participated in the creation and dissemination of new organizational models, and are well positioned to bring that innovative capacity to creating principle-based systems for socially and ecologically responsible organizational structures and management.

2.3.2. Strong adherence to entrepreneurial value creation

There are also business school transformations that might look to generate social value creation in the long-term, by focusing on the shorter term needs of those entities searching for stakeholder returns. For example, we might see business school concepts and

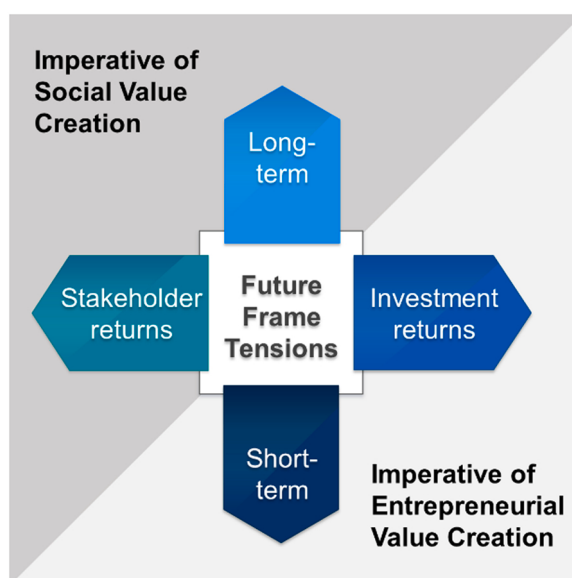


Fig. 1. Strategic framing tensions for business programs.

practices become more widely integrated across all disciplines, as part of a more entrepreneurial approach to the creation and dissemination of knowledge and practice from across disciplines. For instance, the “Seeds of a Good Anthropocene” (Bennett et al., 2016) project has been bridging anthropological and ethnographic science with global dissemination of local practical knowledge aimed at creating new social value in a sustainable and localized manner. While practices embedded within many of these “Seeds” projects are based on situated knowledge, they can result in profitable products and services that the overall project highlights as examples of new, differentiated economic models. Were business schools to focus on facilitating these types of programs (i.e., co-developing sustainable and scalable solutions, and helping ensure their adaptation to new localities in an action research model), business education would likely engender also greater public cooperation and sensitivity to localized needs and desires.

Finally, we can imagine a future in which business schools’ mainstream principles and theories (e.g., the prioritization of market values, maximizing financial returns without accounting for broader effects, stimulating human desires without acknowledging potential associated systemic non-economic impacts, etc.) remain unchanged. This would assume that long-standing concerns about the present model and its perceived failures (for example, failing to develop excellent managers; Gosling & Mintzberg, 2004; Khurana, 2007; continuing to produce practice-irrelevant research; Gioia, 2022) remain fundamentally unchanged; a scenario referred to as “going with the flow” (Starkey & Tiratsoo, 2007).

It is worth noting that the above four scenarios, though roughly outlined according to our diagram of tensions faced by business schools, are only tentative compositions, fragile to external factors and additional degrees of complexity. Consider, for instance, potential changes to legal conditions and liability of investors with respect to social, environmental, or political costs of their investment products. Such a legal change (executed and enforced through a combination of policy, regulation, and taxation) would likely strike at the meaning and understanding of what constitutes successful business practice, and could incentivize a broad redefinition of business school missions and curricula. As a result, investor positions would be radically redefined towards those inclusive of, rather than opposed to, stakeholder value.

From a technological perspective, the continued propagation of automated systems and algorithms might be given broader decision-making and action-execution powers over investments in the future – a situation in which personnel, operations, and logistics decisions are increasingly informed, if not outright finalized, by algorithmic systems removed from human purview. Given the speed at which such systems can both run analyses and reach a conclusion, the amounts of data that can be considered, and the adaptive, often obscured, formulas by which analysis and action are decided upon, the tension between short- and long-term temporal considerations could become unknowable from a human vantage point. How does a business school reflect such a change in the economic landscape, and how do they respond on behalf of students and institutional stakeholders?

While these speculative missives might be written off as impossible or improbable, recall the disruption to university operations presented by the COVID-19 pandemic. It was not long ago that, outside of a few professions, a global pandemic was consigned to the realm of Hollywood fantasy, if it was considered at all. Looking at what COVID-19 has done to higher education exceeds the scope of this paper, but many note that it has accelerated some aspects of the digitalization of higher education aligning with novel remote-educational system models (Gidley, 2012), raised the stake for some images of competitive educational futures (Lefrere, 2007), and has helped redefine how higher education programs and systems succeed (Moldoveanu, 2020). Fleming (2022), for example, calls attention to the pandemic as a critical incident catalyzing external influences (such as consultants) and suggests that:

“the growing influence of management consultants introduces a professional paradox for management educators. It is remarkable that external experts are enlisted for help when in most business schools one would find leading scholars on organizational change, leadership, strategy and so forth. Moreover, how can management schools insist that their research has important social “impact” when they themselves do not use in-house knowledge? I foresee this professional paradox fueling a legitimacy crisis in business schools.” (p. 2).

2.4. Futures literacy and its potential for catalyzing business school tensions

Foresight and the concept of *futures literacy* have a long tradition of being used within the context of business strategy and planning (Slaughter, 1996) with renewed interest in futures literacy as developed through scenario processes emerging over the last decade in both private and public organizations (Cagnin, 2018; Miller, 2007, 2015). Developing futures literacy has been identified as part of an academic curriculum (Damhof et al., 2020; Dator, 2002; Milojevic & Markov, 2008), a component of business competence (Major, Asch, & Cordey-Hayes, 2001), and an element of both understanding and changing organizational institutions and practices (McAdam, Miller, & McAdam, 2018). As futures literacy is based on the deepening of anticipatory thinking and its translation to actions, understanding the “anticipatory regime” (Amsler & Facer, 2017) of business schools in which initiatives like the “Startup Impact Readiness” program operate, can facilitate the design of curricula that (gently) challenge presupposed future-orientations and foster foresight competencies (Rincón & Díaz-Domínguez, 2022).

With respect to entrepreneurial foresight, we view an opportunity to weave futures literacy into the fabric of an organization, making the most of the inherent nimbleness of early phase ventures. Within larger and more mature organizations (i.e., social entities with a long history and expectations to persist that tend to seek foresight out) there are well documented obstacles and challenges to transforming knowledge products from foresight and futures projects (Huang, Lai, Lin, & Chen, 2013; Kelly & Amburgey, 1991). Organizational inertia is often exacerbated when future-oriented research and activities are engaged, new visions are adopted, environmental changes are recognized and adapted to, and ongoing operations are (re)aligned with a (re)imagined future. All of this must work with, through, or against those aspects of the organization that already exist (Vecchiato, Favato, Maddaloni, & Do, 2020).

In contrast, introducing foresight and alternative futures to early-phase ventures (i.e., startups) or entrepreneurial actors (i.e.,

founders and founder teams), presents the opportunity to instill a new type of futures-orientation into the “corporate genetics” of companies who have yet to fully bloom (Govindarajan & Trimble, 2005; Weir, Marsh, & Greenwood, 2009). As Slaughter pointed out when stating his case for the use of scenario processes (Slaughter, 1996, 2002), and has been echoed across the field’s literature (Morgan, 2010; Van der Laan, 2020), humanity faces civilizational challenges, and startup companies are not separate from, but rather integral to, innovative societal responses addressing those challenges.

Of course, startups have an implicit future-orientation given their innate prospective ambitions, but assessing to what degree these ambitions hang on “used futures” (Inayatullah, 2008) and might be shifted by exposure to alternative images of the future, is at the core of the efficiency/flexibility tension faced by business schools and as described above. Entrepreneurial activities are characterized by a radical uncertainty, given that they have no way of knowing the “optimal solution” (efficiency and decision-making; McKelvie, Haynie, & Gustavsson, 2011), and possess limited data regarding how to best utilize (Hastie & Dawes, 2009) the flexibility innate to their smaller size, early stage product design, and more fluid organization structure. Under such radical uncertainty, entrepreneurs devise conviction narratives (Tuckett & Nikolic, 2017) to articulate their understanding and response to this uncertainty. Given limited time to research and reflect on the myriad types of uncertainty the futures present (i.e., temporal tension), utilizing preexisting scenarios provides entrepreneurs with the capacity to test those convictions against the future narratives developed by others.

This dialogue between conviction narratives and environmental scenarios activates a reflexive mode of entrepreneurial foresight, complementing the reflexivity essential to innovation systems (Lindner et al., 2016). Whereas reflexive innovation hinges on the incorporation of input from variety of actors and stakeholders, scenarios derived from a participatory process might stand in lieu of broad engagement for early stage startups given the temporal framing tension. Furthermore, by encouraging companies to adopt a more robust future-orientation, and introducing them to some of the tools and methods that can foster a deeper futures literacy capacity, we might address the problem of increasingly myopic and limited organizational attention (Schoemaker, 2019).

Recently, scholarly work has utilized foresight methods to examine the future skills and qualities for leadership development within startups (Prommer, Tiberius, & Kraus, 2020). Curiously, foresight and futures literacy were not specifically identified as core competencies themselves, though several of the development areas imply a reflexive strategy (experiential learning, action learning, etc.) that were recently connected to participatory foresight methods (Rosa, Kimpeler, Schirrmeister, & Warnke, 2021) conjoining with respect to building inclusive innovation practices into transdisciplinary education programs (Poamé, 2020).

Building on Rosen’s investigations into anticipatory systems (Rosen, 1985), the concept of anticipation is central to the Futures Literacy Framework, and its focus on the development of an ontological state of conscious anticipation through engagement with alternative futures. Rosen’s work was focused on single-celled organisms, a fundamental life-form, analogically similar to an incubator or accelerator phase startup. Indeed, a recent critique (Felin, Gambardella, Stern, & Zenger, 2020) of the “lean startup” approach to entrepreneurial value creation points to the (inadvertent) confirmatory, reductionist principles engendered in this highly popular business model development method. Such a critique relates to the proposition of alternative framings for startup value creation, and exemplifies the conscious/nonconscious anticipation ontology within the context of the illustrative educational program we discuss in the next section.

It could be read that Felin et al.’s (2020) examination of the “lean startup” method’s emphasis on a rapid cycle of experimentation and validation focuses on what Miller (2018, p. 6) has called the non-conscious mode of anticipation, focusing on the functional finding of incremental value rather than the creation of a more rich and complex type of value. Felin et al. (2020) conclude that in encouraging the pursuit of *social proofs* (i.e., evidence that supports or invalidates a consciously created theory of value proposed by entrepreneurs), a startup builds the capacity to “persuasively convey a possible future contrary to existing facts” (p. 5). The creation of a startup’s fundamental theory of value, and the corresponding development and testing of that theory in pursuit of social proofs, is then analogous to a consciously anticipatory ontology as it is reflexive, rigorously tested, and refined (Miller, 2018). Futures Literacy, as a structured approach to developing conscious anticipation through the utilization of futures and foresight methods, can thus be viewed as an instrumental capability to foster in early-phase entrepreneurial education, embracing if not resolving the tensions in temporal and strategic frames discussed previously.

2.5. How does futures literacy change prospects for futures of business schools?

What remains to be studied and more fully addressed are the effects of futures literacy integration on the changing prospects for futures of business schools. If futures literacy (as a formal system for exploring and utilizing alternative futures) were to be taken up as foundational knowledge by a wider scope of business schools, its effects could be manifold across students, faculty, and administrative components. As futures literacy helps to transform possible futures into places for rigorous imagination and creative experimentation, it requires the development of faculties that are not typically developed before higher education (for example, long term “planning,” critical thinking about assumptions, acknowledging complexity and emergence, among others). This would require that some portion of the teaching faculty become fluent in futures theory and methodology, and would imply that the knowledge would slowly build within the student body as cohorts are introduced and have the chance to build their familiarity with futures literacy. While it remains unclear whether or not such an approach would be welcomed within the administrative segments of the institution, or that futures literacy would be viewed as an integral capacity for governance, the need for some futures literacy (if only to communicate with students and staff) holds great potential and promise.

For example, in learning and using such tools, business schools and programs could be better equipped to proactively approach internal transformation as a mode of preparing for future disruptions. They would be better prepared to conduct horizon scanning research, to imagine, build, and utilize future scenarios, and to negotiate and find compromises between alternative visions for the school and/or program. In this way, futures literacy adopted into curricula encourages wider diffusion, becoming a generative force for

individual programs or departments, with the potential for broader implications for the wider futures of business schools. Futures literacy is a fundamental shift in position with respect to futures, building anticipatory capacities by encouraging business schools (or any organization) to identify the agency they have and utilize with respect to those aspects of the future over which they do not have control. A multi-stakeholder (students, staff, faculty, administration) approach to futures literacy within departments can create the conditions for futures literacy to generate real alternative pathways for future business schools.

3. Illustrative case: “startup impact readiness” program

We illustrate the promise of futures literacy to facilitate the embracing of emerging tensions in business schools around temporal and strategic frames through the deployment of a dedicated entrepreneurial educational offering: the “Startup Impact Readiness” program. It is important to note that the paper neither aims to demonstrate the uniqueness nor test the effectiveness of the program, as our aim is primarily to elucidate the identified tensions arising from the increasing demands placed on business schools to enable both entrepreneurial and social value creation. Rather, we are using the program to illustrate and discuss the promise of futures literacy in turning potentially detrimental tensions in business schools (in terms of strategic and temporal frames) into an opportunity for managing what appear to be paradoxical demands on business school administrators, faculty, and students.

3.1. “Startup impact readiness” program: a brief overview

The “Startup Impact Readiness” program aims to educate (future) entrepreneurs and prepare them to meet economic, social, and ecological demands, by conveying impact-thinking and thereby getting them to adopt a holistic value creation mindset and to implement this mindset in their business models. As described earlier there is a fundamental tension between startups requiring short-term flexibility and continuous adaptation as they operate under extreme uncertainty and often struggle to survive on the one hand, and the fact that impact requires long-term thinking and holistic value management across stakeholders, on the other. The aforementioned paradox of stakeholder imperatives (simultaneous expectations of relatively short-term returns on investments, adherence to a sometimes volatile governance environment and the development of socially and ecologically sustainable businesses) heightens both temporal and strategic tensions by demanding that startups consistently critique and communicate their operating convictions along three different time horizons. Nascent firms, already grappling with the complexity of establishing fundamental operations and the provision of products or services, are also being asked to anticipate and plan for events and changing environmental conditions along the medium and long-term time horizon in a convincing manner. Therefore, the “Startup Impact Readiness” program eases this tension by engaging entrepreneurs directly in setting basic mechanisms in the startups’ DNA that enable managing these tensions and even exploiting related opportunities.

The program was developed at a major university in Germany, and funded by the Federal Ministry for Economic Affairs and Climate Action of Germany through the EXIST initiative, which facilitates the implementation of an active and visible culture of entrepreneurship at higher education institutions and supports the formation of regional and international entrepreneurial networks. Universities and business schools can strengthen and leverage their future innovation potential through their embeddedness in a receptive innovation environment. The implementation of the “Startup Impact Readiness” program provides a meaningful way to engage faculty and students in the conversation around social value creation beyond customer and financial value from business activities.

The “Startup Impact Readiness” program has been and continues to be applied within various programs of the university’s innovation and entrepreneurship program, and thus is able to broaden the scope of discourse concerning social value creation as critiqued across disciplines and time horizons. For example, the program has been deployed within the university’s acceleration and incubation, as well as through internationally-networked entrepreneurship activities. Most teams participating in the program are usually in an early development stage meaning that the product or service is available as a minimum viable product (MVP) or prototype and the teams are preparing go-to-market activities. The core elements of the program encompass a variety of knowledge transfer (e.g., keynote speeches, trainings) and knowledge application (e.g., coachings, exercises, worksheets) activities. Within the first two years of its development, 169 entrepreneurial teams (for a total of 434 founders, of which 26% were women) have participated in the program.

3.2. Futures literacy: programmatic underpinning and dedicated module

While the “Startup Impact Readiness” program is designed as a flexible “workshop suitcase,” the tenets of anticipatory, future-oriented organization building are engendered in all five core modules of the program. These modules can be adapted according to the specifications of the use cases as displayed below in Fig. 2,⁷ allowing for flexible deployment and ordering.

The first module centers on enabling startup teams to discover the *purpose*, or *raison d’être*, of their venture, develop narratives around potential alternative purposes, and imagine different futures based on these, representing a core competency of future-literate startups. Essentially, startup teams are “trying on” different business purposes, which despite potentially being equally viable to justify the envisioned market offering (i.e., product) and their role towards the society, can also embody different implications for strategic decisions and result in substantial variability across envisioned futures for the startup.

⁷ We note here that the program is dynamic and evolving. At the time of writing, the five core modules had been developed and iteratively refined. An additional module on impact communication has been prototyped.



Fig. 2. The “Startup Impact Readiness” Program and its core modules.

Intimately intertwined with purpose is a startup team’s *identity* (both shared at the team level and individually), which the second module focuses on. Identity is central to learning and adaptability in entrepreneurs (Grimes, 2018), as well to passion (Cardon et al., 2013), which can in turn improve creativity and foster the ability to exploit promising opportunities. As startup teams engage in identity work, critical assumptions about “who we are” (e.g., values driving every day decision-making) and “where we are going” (e.g., alternative strategic paths) surface, enabling anticipatory beliefs to emerge regarding the type of impact the startup team and its members envision.

Such envisioning of various future trajectories enable startup teams to critically re-examine their current *business models* in the third module, focusing on how impact (or holistic value) might be created. Tools, such as the Triple Layered Business Model Canvas (Joyce & Paquin, 2016) are deployed to support teams in probing the envisioned futures specifically with regard to social (i.e., societal and the ecological) value created or destroyed and captured by the venture and its stakeholders. Such tools build on the Triple Bottom Line concept (Elkington, 1997, 2018) mandating companies to work on and be held responsible for the full costs of doing business. This means companies need to capture social and environmental effects of their activities next to the economic value and report their performance on the net outcome of all factors, i.e. its impact.

The goal to quickly scale up a business often leads to external financing being sought by entrepreneurs (Kollmann et al., 2020). Due to a lack of knowledge and expertise in finance, many founders only consider a classic equity deal with a venture capital investor. However, these investors usually build their decision-making solely on financial key performance indicators (KPIs). This can ultimately lead to a conflict with the holistic value idea in the impact-mindset and potentially result in a shift of or even an abandonment of the created venture’s purpose in the future (Bertelsmann-Stiftung, 2016). In fact, one critical factor to successfully financing a startup is finding the right investor that shares the startups values, beliefs, and purpose (Izzo, 2013). Therefore, the fourth module of the “Startup Impact Readiness” program is dedicated to exploring possible futures through different forms of investing, and highlighting *impact investment* options as one possible way of embracing the temporal tension from financial and broader social returns.

To move startup teams from exploring alternative startup-focused futures based on different purpose, identity, business modelling, and financing combinations, to envisioning how they might operate in different futures, a dedicated foresight module was developed, which we describe in more detail next.

3.3. The foresight module

In the earliest discussions about the form and content of the program's foresight module, it became clear that conducting a full scenario development cycle would be impossible given startups' limitations of time, team size, and available resources. Instead, we opted to use pre-existing scenarios⁸ in a vision testing activity designed to promote discovery and exploration of long-term uncertainties that might affect their product or business model. Admittedly, this truncated approach has limits with regard to the different knowledge creation processes (Miller, 2018) that are neglected if scanning and research, mapping, and other essential foresight practices are not engaged by the participants themselves. However, given the utility that macroenvironment scenarios have proven within a business context (Duncan & Wack, 1994, 1984),⁹ the successful use of descriptive, exploratory scenarios in broadening organizational awareness and imagination (Bezold, 2010; Schwartz, 2012), we maintain that a scenario-focused process provides an appropriate entry point into organizational foresight and futures.

As an exercise in Futures Literacy, these activities were designed to help participants identify the anticipatory assumptions that were stated or implied within their social, environmental, and economic business models by asking them to reflect on their business' within very different scenario worlds of 2040. Activity prompts asked them to engage with the text and visual representations from two scenarios, imagine their survivability and adaptability under new environmental conditions, and drew prompting questions from the content of preceding modules within the *Impact Readiness Program*. In striving to develop a more human-centered practice for engaging with alternative futures, this process used scenario narratives in conjunction with dialogue driven approach to sensemaking of scenarios between participants.

As a matter of process, the 2.5 h module began with a very brief introduction to foresight, including a visual "time travel" activity (Cuhls, 2017), an introduction to the scenario development method, and a review of the driving factors that informed the creation of the WIRTSCHAFTEN 2040 scenarios that would be at the core of the day's activities (Bertelsmann Stiftung, 2020). After a brief explanation that only four of the six Bertelsmann scenarios would be utilized for the activities, those four scenarios were presented in a "scenario slam" presentation, i.e., 1–2 min oral description accompanied by the graphical scenario representation.¹⁰

Following the scenario overview, participant founders were divided into smaller workgroups for the scenario engagement activities. In this case, participants were pre-assigned to one of two scenarios in each of the two breakout sessions. These activity sessions were structured to accommodate both individual and collective knowledge creation through reading the more in-depth scenario narratives, and engaging with other participants in addressing the prompting questions through dialogue. Prompting questions were created based on the Business Model Canvas (Osterwalder & Pigneur, 2010), the Value Proposition Canvas (Osterwalder et al., 2015), and an abbreviated Strengths-Weaknesses-Opportunities-Threats (SWOT) analysis focusing on the identification of threats and opportunities. Through these activities, participants were asked to reassess their current working business model assumptions and value propositions under the political, economic, and societal conditions of each scenario. All participants conducted these activities within two of the four scenarios, so that anticipatory assumptions could be discovered by testing against at least two alternative futures. At all stages of participant interaction, a facilitator familiar with the scenarios and their underlying driving factors was present to field questions and direct attention to components of the scenario that might be relevant to particular companies.

On the one hand, the foresight module is a meaningful instrument enabling startups to conduct a mental time travel into relevant future scenarios in order to validate current value creation assumptions (i.e., test the robustness of the business model towards economic, social and ecological value creation and engage in purpose an identity work). The WIRTSCHAFTEN 2040 scenarios used here are particularly well suited to this objective because they support a holistic view of social, technological and economic developments with a special emphasis on the societal dimension. These scenarios enable participants to reflect on whether they are sufficiently addressing and meeting the social demands that have become more important in the different scenarios. On the other hand, this module is also a powerful means to identify additional business opportunities (aligned to the commercial logic) and anticipate positive and negative consequences of the current business model on the society and the natural environment (aligned to the social logic). In other words, the program's foresight module eases the temporal tensions of a robust business model for today and tomorrow, and the strategic frames tension of creating entrepreneurial and social value. This easing of temporal and strategic tensions was confirmed during and in a debriefing after the program by participants sharing their experiences.

4. Discussion

Business schools find themselves in a turbulent environment, facing demands to demonstrate that they are creators of long-term social value as well as producers of entrepreneurial wealth. As business becomes recognized as both the central cause of, and

⁸ The *Wirtschaft 2040* scenarios were developed in 2020 in a multiphase process of horizon scanning, factor discovery and prioritization, the identification of alternative factor development pathways, and finally two phases of scenario narrative development. In total six scenarios were published, each describing a different possible future state of the world, with particular attention to the global economy and Germany's social and economic situation therein.

⁹ These references relate to the Royal Dutch Shell scenario development process that has become an accepted model case study for corporate foresight and futures. It is worth noting that continued reviews of these scenarios and their development process present arguments for improving on the process (Jefferson 2012), and situate the scenarios as active shapers of corporate political engagement strategy (Anderson 2020).

¹⁰ For health and safety reasons given the ongoing COVID-19 pandemic, the presentation, activities, and discussions were conducted virtually, deploying breakout rooms, an online whiteboard, and other (interactive) digital materials.

solution to, a range of societal challenges, pressure to reimagine business schools' role in economy and society builds. More specifically, governing bodies exert pressure on economic entities to support societal improvement (i.e., addressing ecological concerns, social disparities, uneven access to various services) through policy. At the same time, new generations of entrepreneurs seek to leverage venture creation as a vehicle for operationalizing social, political, and ecological change. As a result, certain futures are already at play in defining the role that business schools are expected to play in transformational change projects, and these futures create new tensions for business school leaders and faculty. Tension, however, can be productive when accounted for, attenuated, and utilized in an appropriate fashion. In highlighting the tensions at play within the context of business schools and their education offerings, we examined the "Startup Impact Readiness" program and its foresight module to better understand how this tension can be put to use.

Across the design of the program modules, the temporal framing tension has been integrated into the curriculum, to broaden the set of anticipatory assumptions that inform entrepreneurial activities. In exploring and crafting purpose and identity definitions, entrepreneurs are asked to consider the ontological foundations of their evolving business, which are then used to filter anticipatory assumptions into the creation of a business model. In other words, through specification onto a business model, purpose and identity are consolidated into an operational structure. While the business model continues to be the site of experimentation, learning, and adaption, the business's purpose and identity typically remain more resistant to change, and thus more critical to the consideration of the entity's long-term prospects.

The scenario process underpinning the foresight module is implemented so entrepreneurs may assess their anticipatory assumptions in the context of changing environmental conditions. Given that those assumptions emerge, at least in part, from the purpose and identity modules, and will thus go on to inform the entrepreneur's approach to short-term efficiency and sustainable growth, the results of the foresight module can be applied as a holistic capstone to the program itself.

Aspects of this approach align with recent propositions for "identity wind-tunneling" through scenario processes (Fergnani & Sweeney, 2021), though the program's focus on entrepreneurial activities enables a critical approach to organizational design with respect to social value creation, without some of the organizational inertia or institutional memory in incumbent market actors. As entrepreneurs increase their futures literacy during the inception stages of their ventures, the emergent business contains a "genetic" disposition to assessing anticipatory assumptions in a conscious, open way (Miller, 2018). Though there appears to be a paradoxical situation based on temporal and strategic framing tensions, we find that developing futures literacy through different modalities of the "Startup Impact Readiness" program enables entrepreneurs to better account for, and even leverage the uncertainty that long-term perspectives lend our contemporary endeavors.

There are multiple fronts applying pressure for business schools to change: Governing bodies concerned with macro scale challenges, prospective entrepreneurs looking to leverage the market to create change, and (impact) investors looking to effectively deploy their capital to promote sustainable, equitable, and responsible development. Each of these forces has a relationship with alternative futures—recognized and articulated to different degrees—that compels them to look to business schools for creative and appropriate responses. There is every reason that business schools as champions of change, adaptation, and proactive approaches, can take up elements of futures studies and strategic foresight, utilize them for their own transformations, and encourage the next generation of entrepreneurs, leaders, and managers to learn how to "use the future" for their own benefit and the benefit of all. Recent special issues, such as the 2021 *Academy of Management Learning & Education* special issue on the histories (and therefore futures) of business schools provide spaces for dialogue probing the why, who and what of business education:

"For example, what is the why—or the purpose—of a business school? If it is not the amount of financial return that is the accepted measure of success, as Brandeis suggested, what else could it be? Who does the business school serve: a particular elite, or a wider group, or society and the environment more broadly? Who are the students who will graduate from these institutions? We inherited a 19th-century theory of the firm as an efficiency-seeking administrative apparatus, in the 20th century adapted by human relations ideas. But which theories of the firm should we teach now that entrepreneurship, disruption, and innovation dominate our economy?" (McLaren et al., 2021, p. 296).

5. Conclusion

Anticipatory practices and frameworks (such as futures literacy and foresight) appear to hold much promise for the shaping of productive and constructive business schools of the future (see for example Miller, Michel et al., 2018, for a discussion of foresight course benefits at the University of Notre Dame). In this exploratory conceptual article, we proposed that anticipatory practices and frameworks embedded in entrepreneurial programs of business schools could act as a transformative power for shaping future business towards stakeholder and responsible capitalism. A critical domain to address in future research is the question of how to address effectiveness of such programs and initiatives, beyond the typical student evaluations. Programs might be assessed on their ability to empower students to become future-oriented leaders, tracking graduates over the long term and engaging leadership scholars at universities to design appropriate studies. For example, a longitudinal study of MBA education in India on student values suggests that management education increased self-oriented and decreased other-oriented values (Krishnan, 2008). With programs exploring the market and social/environmental logics directly (as the "Startup Impact Readiness" program does), a more nuanced longitudinal assessment might shed light on values underpinning leadership behaviors over the course of the startup development and scaleup.

Furthermore, while we have focused on the potential benefits of integrating futures and foresight in the context of entrepreneurial (and other business) programs, there remain several questions concerning the potential reciprocal ways in which entrepreneurs and business educators might extend futures and foresight practice. Specifically, strategic foresight is increasingly challenged to identify

transformative, sustainable scenarios, and, perhaps more importantly, elucidate the challenges and tensions that arise in the realization of these scenarios. Entrepreneurs, and the educators that mentor them, are at the forefront of realization efforts, and the knowledge and methodological approaches have much to offer futures and foresight practice. The central tensions of this paper provide an initial contribution to the emergent interactions between futures studies and foresight, business schools, and entrepreneurs. However, we view continued experimentation with integrative methodological approaches between the fields as a rich vein for future research, with mutually beneficial discoveries and advances to be made. From our experience, the tensions between demands of the present and futures can be turned into generative engines for sustainable social impact – with continued research we look forward to discovering new approaches to doing so.

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