

Innovating through startup programs: an investigation of the Italian banking sector

Innovare tramite i programmi per startup: un'analisi del settore bancario italiano

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As a result of a combination of new industrial policies and the digitalization trend, innovative startups are transforming entire industrial sectors. To maintain their competitive advantages, corporates began engaging with startups through dedicated programs as a means to strengthen their competitive positioning. Through a multiple case study analysis focused on the Italian context, the paper identifies how engagement in a particular subset of these programs might be able to facilitate the development of different dynamic capabilities within corporations, linking the theory of dynamic capability development to the theory of startup programs.

La combinazione di nuove politiche industriali e l'accelerato processo di digitalizzazione stanno facilitando la nascita di startup innovative in grado di trasformare velocemente interi settori industriali. Per mantenere i propri vantaggi competitivi, le aziende hanno quindi iniziato a collaborare con le startup attraverso programmi dedicati. Attraverso un case study focalizzato sul contesto bancario italiano, questo articolo vuole fornire una prima indicazione di come il coinvolgimento di grandi aziende nei programmi per startup potrebbe essere in grado di facilitare lo sviluppo di capacità di innovazione all'interno delle aziende stesse, collegando la teoria dello sviluppo delle dynamic capabilities alla teoria dei programmi per startup.

1. Introduction

Corporations historically had a scarce interest in startups, resulting in a lack of engagement with them. During the last decade, however, the increased competition caused by the diffusion of advanced digital technologies, geopolitical instability, and the push of industrial policies toward the development of entrepreneurial ventures is somehow urging big corporations to revise their strategic plans. In this context, corporations started to be involved in initiatives and programs targeting emerging ventures (Kanbach & Stubner, 2016; Micol, 2021; Mocker et al., 2015). On top of more established models such as Corporate Venture Capital (Cvc), strategic alliances, and pilot programs, which require both the startup and the corporation a greater commitment in terms of time and resources (on top of focusing the relationship on a few initiatives), new and complementary «lightweight» programs started to attract the attention of corporations and startups (Weiblen & Chesbrough, 2015). These lightweight programs, on top of being less constraining for all the parties involved, can develop capabilities in both startups and corporates.

Despite these facts, up to now, little research has been done to understand what kind of dynamic capabilities corporates could develop while participating in different typologies of initiatives. Consequently, this paper wants to fill this knowledge gap by replying to the following research question:

«What kind of innovation capabilities corporations could potentially develop throughout the engagement in different typologies of lightweight startup programs?».

Answers to the research question can be of particular interest to the banking sector, which not only feels the urge to innovate itself due to the increased competition in the financial sector (Allen et al., 2020), but has also a prominent and central role in the development of the overall economic activity in the regions in which they operate (Gomber et al., 2018), which is itself evolving. This work aims therefore to create a detailed map of the participation of Italian banks in lightweight startup programs (as defined by Weiblen and Chesbrough), and investigate whether different institutions are positioned differently with respect to the possibility of developing different sets of dynamic capabilities through the engagement in these programs. Building on the literature on dynamic capabilities, the research question is examined through a multiple descriptive case study covering the engagement in startup programs of banks operating across Italy during the period 2018–2022. Findings highlight that in the Italian context, banks are engaged in programs for both two main differentiated purposes and that in both contexts patterns of engagement suggest that these banks might be well positioned in terms of possibilities for developing sensing capabilities and related cognitive processes, either by leveraging internally developed programs (particularly for Ecosystem Development) or on third-party programs. The research process, however, found also that few banks are involved in initiatives that might help corporations strengthen reasoning and decision-making processes (or seizing capabilities) needed to implement strategic actions to maintain competitive advantages. Findings obtained, by linking the theory of dynamic capabilities with the theory of lightweight startup programs, might therefore be of great interest to corporate managers who desire to start collaborating with startups, supporting them in better understanding how participation in different typologies of programs might enable their companies to develop innovation capabilities required to maintain the competitive advantage in their relative industries.

The remainder of the paper is organized as follows. The section starts by discussing why the banking industry was chosen as an interesting setting. The article then continues with a review of the collaborative instruments of startup–corporate relationships, highlighting the benefits of simpler instruments in the development of innovation capabilities, and concludes with a brief description of each of these programs. The method will be briefly described in section 3, followed by the mapping of the Italian banking sector engagement in lightweight programs and the identification of the capabilities that each program may help corporations develop in section 4. Section 5 of the paper highlights the results obtained, and the study ends with a discussion of findings, the limitations of this work, and the contributions of the paper to the literature.

2. Theoretical background

A challenging context. During the last two decades, the economics of a digital start-up improved considerably. The faster diffusion of mobile devices, coupled with technological advancements in computing and the fall of storage costs enabled startups to reduce tremendously set-up costs and multiply both the channels to reach the customers and the possibilities of revenue stream gen-

eration (Miller & Bound, 2011), transforming products, processes, operational activities and organizational structure of entire industries (Matt et al., 2015). In this context, starting from the early 2000s, more and more startups providing financial services started to emerge, creating a new industry commonly referred to as the FinTech industry. The growth of this industry has been supported not only by policymakers through competition-enhancing regulations developed by the European Commission, like Spd2 in 2018 (European Parliament, 2015), but also by private equity investors, which in the past 10 years allocated an estimate of around 39% of the overall startup funding to FinTech initiatives¹. FinTech startups started to compete in the financial industry, providing new financial products and services through improved combinations of innovative processes and business models (Ey, 2019; Nejad, 2016). Moreover, the market started to be populated by tech companies with no previous core focus on providing financial services that are expanding their positioning on different markets, adding additional pressure to the banking sector due to the draining of possible clients and increased competition (Allen et al., 2020; Bank for International Settlements, 2019; Vives, 2019). At the same time, traditional banks' clients faced turbulent periods. A series of exogenous factors like the 2008 financial crisis and Covid-19, and the increasing geopolitical instability coupled with the digitalization trend have made companies (particularly Smes) and retail customers more vulnerable. In this new scenario, the needs of banking clients changed, and FinTech startups started to fill this gap faster than traditional players (Ey, 2019). Despite posing some threats, these trends also present a new set of opportunities for established banks. Even though banks may experience increased margin pressure, a reduction in their customer base, and higher operational risks (Romanova & Kudinska, 2016), banks still possess different advantages in terms of resources available, customer base and reputation, which smaller FinTech companies still cannot compete with (Bank for International Settlements, 2019; Ey, 2019). Banks are therefore forced to rethink their value propositions while developing capabilities to understand shifting customer needs and new technologies. To face these challenges is essential for banks to both address issues such as the internal lack of innovation capabilities (Bank for International Settlements, 2019; Tornjanski et al., 2015) as well as to start collaborating and leverage on other external organizations (Chesbrough, 2004; Kottamäki et al., 2019).

The quest to develop innovation capabilities. Innovation capabilities, commonly known in the literature as dynamic capabilities, refer to a specific set of organizational processes and activities that can create value for firms and sustain their competitiveness in the market (Eisenhardt & Martin, 2000; Teece et al., 1997; Zahra et al., 2006). As opposed to the Resource Based View (Rbv) theory of firms' competitive advantage, which states that the stock of resources available is heterogeneously distributed among firms and that this uneven distribution persists over time and allows companies to achieve sustainable competitive advantages (Amir & Schoemaker, 1993; Barney, 1991; Conner & Prahalad, 1996), the theory of dynamic capabilities better explains what happens in fast-evolving markets where rapid changes in economic structures of an industry may result in making what was once a valuable, rare, inimitable and non-substitutable resource totally irrelevant for emerging industrial paradigms (Eisenhardt & Martin, 2000). In evolving markets, corporate managers are required to address rapidly changing environments by quickly learning how to reconfigure internal

¹ <https://dealroom.co/guides/fintech-guide>.

and external competencies (Eggers & Francis Park, 2018; Teece et al., 1997). In this context, the manipulation of knowledge resources becomes critical and the adaptation of incumbents is transformed into a process of acquiring and organizing technological and complementary resources (Eggers & Francis Park, 2018). Dynamic capabilities are therefore identifiable in organizational and strategic routines through which firms react to (or proactively create) changes in resource configurations that might lead to sustaining (or the development of new) competitive advantages (Eisenhardt & Martin, 2000; Teece, 2006). Even though these «best practices» can be easily duplicated across firms (contrasting openly RBV theory regarding the uniqueness of resources required to obtain competitive advantage), their value lies in the resource configurations that they create, not in the capabilities themselves. Dynamic capabilities are therefore necessary but not sufficient conditions to generate competitive advantages (Eisenhardt & Martin, 2000).

Teece categorizes dynamic capabilities as sensing, seizing, and re-configuring capabilities (Teece, 2007; Teece et al., 1997). *Sensing* capabilities refer to an organization's ability to recognize emerging opportunities and threats. In contrast, *seizing* activities involves structuring effective decision-making processes capable of mobilizing resources to enable business transformation. Last but not least, *re-configuring* capabilities refer to an organization's ability to execute and implement necessary changes to obtain an updated organizational setting that is better aligned with market demands (Teece, 2006). These capabilities can be built through the development of employees' cognitive processes (Adner & Helfat, 2003; Helfat & Peteraf, 2015). The foundations of the development of sensing capabilities lay therefore in the development of employees' perception, alertness, attention, and discovery cognitive processes. Similarly, seizing capabilities are underpinned by cognitive processes such as reasoning and problem-solving. Last but not least, the development of reconfiguring capabilities is directly related to increased perception of social cognition and the development of communication competencies able to steer the organization toward the new configuration (Eggers & Francis Park, 2018). Activities like product development processes and decisions to cooperate/ally with external partners might be therefore considered as activities that might drive the development of cognitive processes just described. The development of dynamic capabilities, however, requires time and a substantial investment of time and resources (Ethiraj et al., 2005; Zollo & Winter, 2002). As a result, the development of these capabilities in organizations is subject to strong path dependence due to technological, organizational, cognitive, and economic barriers (Eggers & Francis Park, 2018). These «adaptational barriers» can be summarized in three main mechanisms: «external barriers that hinder external acquisition of new knowledge and complementary resources, internal barriers that hinder assimilation, and internal barriers that hinder reconfiguration and integration» (Eggers & Francis Park, 2018). These barriers are exacerbated in fast-evolving markets. In these markets, dynamic capabilities rely more on rapidly generated and situation-specific emergent knowledge rather than on the existing stock of knowledge, which in such cases can even become a barrier (Argote et al., 2000). Dynamic capabilities therefore become «simple, experiential, unstable processes» that rely on a quick and iterative generation of situational knowledge (Eisenhardt & Martin, 2000). These processes, relying on the capability to elaborate real-time information, require intensive communication and a high level of collaboration among actors involved in the learning process,



either internal or external to the organization, resembling processes such as the customer discovery and the lean startup method adopted by startup (Blank & Dorf, 2005; Reis, 2011). Due to the fast-changing industrial and competitive context in which financial institutions are immersed, the need for banks to develop «startup-like» dynamic capabilities is an interesting rationale for starting to collaborate with these innovative ventures.

Instruments and reasons to collaborate with startups. The collaboration between banks and startups has several reasons to come into being. On one side, banks might leverage startup resources and capabilities to reach new customers, enter new markets, leverage new technology, facilitate international or territorial expansion, strengthen market positioning, diversify product offerings, and build new capabilities (Glushchenko et al., 2019). On the other side, startups seek out better products and services capable of supporting and accelerating their growth, while owning knowledge regarding markets, evolving customer needs, and rapid decision-making processes required to cope with fast-changing environments. Among startups, FinTech ones look also at established financial institutions for access to new clients, infrastructure, and financial resources, as well as to build reputations (Klus et al., 2019). This novel phenomenon in the financial market, however, received little investigation (Tornjanski et al., 2015), and recent trends in the banking industry point to the necessity for a closer examination of the different forms of collaboration (Drasch et al., 2018). To develop knowledge regarding the entrepreneurial processes, digital innovation and startup needs, corporations rely on different instruments to better engage with the emerging entrepreneurial class. One of the main tools used by banks is the formation of alliances with emergent players. We can refer to alliances when startups and banks sign either a low-institutionalized mid-long-term contract (like customer-supplier relationships or pilot programs) or a highly institutionalized long-term contract (like direct investment in startups through Corporate Venture Capital funds) (Elia et al., 2023). When partners are properly chosen and both sides' motivations are well understood, set, and monitored, allies can capitalize on the talent, competencies, capabilities, and knowledge (or in other terms, resources) of the other party. If the relationship is not properly managed, however, much of the value generated ends up being appropriated by the larger partner, potentially shrinking the possibilities of the startup to grow or even to survive (Alvarez & Barney, 1993; World Economic Forum, 2018). Following the recent finding in corporate-startup alliances literature, the most common reasons why corporate engage with emerging firms however remain quite utilitarian (Laage-Hellman et al., 2018; World Economic Forum, 2018). Learning and the development of new competencies are still not reported as one of the main drivers of the establishment of these alliances (Elia et al., 2023). This fact can be ascribed to the fact that learning processes require many interfaces (Cepeda-Carrion et al., 2012; Navarro & Moya, 2005), and are inherently uncertain in the outcome that will generate. These collaboration tools, consequently, result inadequate for younger startups that are not even on the market, but that however are placed at the forefront of innovation in their respective sectors. To engage with these early-stage companies, corporations in the past decade started to create and be involved in more and more «lightweight» initiatives for startups. These forms of start-up engagement programs differ from alliances since they leverage concurrently on knowledge resources and innovation capabilities of several early-stage ventures through the explicit

and facilitated provision of resources, expertise, assets, and market access, but without any form mid-long-term regulated or personalized commitment (Weiblen & Chesbrough, 2015).

Lightweight startup programs. Entrepreneurial support organization literature suggests that five different typologies of lightweight startup programs exist, distinguishing them based on the activities carried out in each of these initiatives. Incubators, corporate incubators, accelerators, corporate accelerators, and knowledge brokering initiatives can be therefore identified as different initiatives (Crişan et al., 2021; Sohail et al., 2023; Weiblen & Chesbrough, 2015). Inside these programs, corporations can assume two different roles in the organization of the activities, act either as the program provider or as participating partner. The corporation is considered a program provider when the initiative is directly organized by the corporation or organized in exclusivity for them by a specialized party. On the other hand, the corporation is considered a participating party whenever it participates in a program organized by a specialized party that is open not only to them but also to other (potentially competing) corporations. In the banking context, moreover, evidence shows that programs in which banks are involved might differ also in terms of the strategic focus of the program (Micol, 2021). Corporations could therefore be focused either on engaging with startups operating in the financial industry (thus FinTech startups), or more broadly on improving the overall ecosystem within which they operate by engaging in programs targeting startups in any sector. A short review of the main activities carried out by the different organizations involved in these initiatives is provided below.

Knowledge brokering. Knowledge brokering events are thematic events organized to facilitate the interaction of different stakeholders. As nodes in a reference value network, companies acting as brokers provide other firms with access to complementary sources of information. As well as mutual introductions, the intermediary organization plays a critical role in ensuring the effectiveness of the interaction, potentially compensating for the participating firms' lack of connections with stakeholders. The matchmaking activities carried out by brokers can help them develop competencies in scanning and information processing (Bessant & Rush, 1995), knowledge processing and combination/recombination (Howells, 2006; Kodama, 2008), foresight and diagnostic for demand articulation (Howells & Roberts, 2000; Kauffeld-Monz & Fritsch, 2013), providing support in deal-making activities (McEvily & Zaheer, 1999), and facilitation of commercialization of innovations (Gold et al., 2001). Brokerage capabilities are inherently linked to the openness of the instrument: the more companies are involved and connected, the higher the potential for information exchange.

Incubators. Incubators are programs designed to provide information brokering, business development assistance, and a value-enhancing monitoring system to early-stage companies with the objective of reducing their downside risk of market survival (Hackett & Dilts, 2004). With the package of activities offered by incubators, start-ups are assisted in commercializing their products and services and protected from market forces (Hackett & Dilts, 2004; Theodorakopoulos et al., 2014). Designing interactions between incubatees and within incubatees and the overall industrial community of reference is fundamental to the incubation process (Theodorakopoulos et al., 2014). Incubator personnel are therefore required to enhance the coordination of activities within the startup by clar-



ifying objectives and by serving as intermediaries between parties. The help supplied in process structuring, in turn, might increase the chances of startups to survive (Theodorakopoulos et al., 2014). Also in this context, due to the brokering role of incubators, these instruments are open to multiple startups and usually are embedded in local regional ecosystems of firms.

Accelerators. As the name implies, acceleration programs help new ventures speed up their learning processes (Hallen et al., 2020). In contrast to incubators, where startups' knowledge base develops over a longer period of time, accelerators concentrate learning activities in 3-6 month programs and select startups according to strict criteria. Admitted startups are accelerated in batches, entering and exiting the program in groups (Cohen & Hochberg, 2014), and during the acceleration program they operate in a high-pressure environment created by design to foster rapid progress and reduce bounded rationality regarding entrepreneurial competencies, the reference industry and related market functioning (Cohen et al., 2019; Hallen et al., 2020). The mix of training, consultation with management, and access to external knowledge, structured as *Broad, Intensive, and time-paced consulting* is designed to enable start-ups to develop procedural knowledge and decision-making capabilities (Hallen et al., 2020; Hoffman & Radojevič-Kelley, 2012). During this acceleration process, startups are required to interact constantly with partners of the program. These partners usually are corporations that operate in the same industry as startups or investors, which consequently have access to resources and knowledge that would have been difficult to obtain elsewhere. Accelerators therefore have the potential to reduce search and due diligence costs of professional investors and corporations, creating value with the social capital generated among parties (Dempwolf et al., 2014). Accelerators, moreover, typically invest in early-stage start-ups in exchange for equity, providing selected companies with a small amount of money to finance the survival of the firm during the program.

Corporate Incubators. While traditional incubation programs are created to support the ecosystem development of a specific industry or geographical area, corporate incubators are corporate-led instruments created with the intent to engage with potentially strategically interesting technologies and solutions (Branstad & Saetre, 2016; Eshun, 2009). Corporate incubators might engage with startups and ideas developed inside the company, or with ideas coming from the external environment. Depending on the source of the idea, corporate incubators' mission and the type of technologies incubated differ (Becker & Gassmann, 2006). Corporate incubators open to outside ideas assist and stimulate the growth of external early-stage start-ups by providing them with industry and corporate-specific know-how, competencies, and resources, following a standardized approach capable of reducing the organizational burden of external to internal interface communication. Differently from traditional incubators, corporate ones are closed-instruments: no other competing corporation is involved in the incubation process. Consequently, information flows only among incubates and the corporate providing the experience. Working in close contact with several start-ups implies that corporations can explore different technologies and applications simultaneously. Dealing with more start-ups imply also that corporations must learn how to scout, select, work with, and monitor several startups concurrently, requiring therefore faster decision-making process and the need to enhance internal communication channels to capitalize on accrued learning



(Weiblen & Chesbrough, 2015). Solution scouting through corporate incubations could avoid the locking of capital and resources in very risky investments, while at the same time providing growth options to corporates.

Corporate Accelerators. As with accelerators, corporate accelerators are fixed-term, cohort-based programs that offer education and expert mentoring to start-ups in related industries (Cohen & Hochberg, 2014). Similar to corporate incubators, and different from traditional accelerators, corporate accelerators are instruments closed to participation from other competing corporations. Information therefore flows only among accelerated startups and the corporations providing the experience. Startups participating in these programs follow a traditional acceleration path but interact only with internal stakeholders of the sponsoring organization. The main scope of corporate accelerators is thus to scout, assist, and develop start-ups working on innovative products and services from which the corporation could potentially benefit in the future. Creating a strict relationship and common knowledge base with startups since their early days potentially can help the corporation in the medium-long run in assessing and accessing potential suppliers, customers, or commercial partners due to reciprocal knowledge of strategic, tactical, and operative needs (Euchner, 2013; O'Connor & Rice, 2013; Richter et al., 2018). To maintain high engagement and commitment to these types of programs, corporations must develop the capability of treating start-ups as partners, rather than as subcontractors (Jackson & Richter, 2017).

What bank can learn from these programs? The engagement of banks in these lightweight programs saw a growing interest in the past years (Micol, 2021). Even though literature regarding startup programs has previously highlighted that different engagement instruments could lead organizations to develop distinct sets of dynamic capabilities (Steiber & Alänge, 2020; Weiblen & Chesbrough, 2015; Zobel, 2017) little research has been developed to investigate the capabilities that corporations can build via participation in lightweight initiatives. In this context individual start-up solutions become less important to reach result-oriented objectives (Weiblen & Chesbrough, 2015), but the cumulative nature of the interactions enabled might facilitate the development of dynamic capabilities in corporations.

Following this line of reasoning, the following paper wants to shed some light on this phenomenon, trying to provide answers to the following research question: «What kind of innovation capabilities corporations could potentially develop throughout the engagement in different typologies of lightweight startup programs?».

3. Method

To provide an answer to the research question, a multiple case study analysis has been adopted since the method allows to «investigate a contemporary phenomenon within its real-life context» (Yin, 2003). To portray an accurate profile of different capabilities that could be developed, the overall involvement of Italian banks in programs for startups in the period 2018–2022 has been tracked with the research process. Since the empirical phenomenon is still little understood, qualitative research design can contribute to refining existing literature providing a theoretical generalization of



findings (Gioia et al., 2013, Cunningham et al., 2017, Eisenhardt, 1989, Yin, 2003). Case studies have been selected via theoretical sampling, including all cases identified to best support the comparison of different approaches (Yin, 2003).

Data collection and analysis. To identify startup programs in which Italian banks were involved, as a first step, a full list of banks headquartered in Italy has been identified using the European Banking Authority² database. For each of the banks identified, we performed a thorough process of archival research to screen startup programs in which banks were involved. We decided to operate at the program level (and not at the organizational level) to be able to track the involvement of each single bank in the timeframe of the analysis. For each bank, we performed archival research using nine different keywords associated with literature on programs for startups³, and we analyzed the first twenty results provided by the search engine while typing «bank name» + «keyword». The classification of the programs in the relative category was performed based on the analysis of the main characteristics of each program and subsequent comparison with reference academic and sectorial literature through an iterative process of specification and reclassification of the information collected via websites of the programs and other website pages mentioning the initiatives.

4. Results

Results of the analysis show that a total of 10 different banking groups were involved during the past five years in at least one startup program. A total of 22 different programs were identified, and in some of these programs, multiple organizations were involved concurrently, leading to the identification of 27 bank-program pairings⁴. Taking inspiration from Zott and Amit's business model classification method (2010), programs were classified by their three main design elements: *content* (selection of activities to be performed), *structure* (how activities and actions are carried out by participants) and *governance* (who performs and coordinate these actions). In the context of the banking sectors, considering also the platform role that banks cover in society, activities carried out by banks might be performed to improve either the overall economic system in which banks are embedded (Ecosystem Development activities), or more specifically to improve the services offered by the bank itself through FinTech initiatives (FinTech activities). On top of a distinction of content, also a governance distinction must be made. The organization can act as a Program Provider while it is deeply involved in the provision of activities and in the coordination of the program offered, or act as a Participating Party when the organization of the initiative is left in the hand of another organization, which involves the corporate in a subset of activities. Last but not least, the structure parameter refers to the mix of activities carried out during the programs, which as described before are specific and unique for each different typology of lightweight initiative. Among the total of 20 (2 content x 2 governance x 5 different programs) possible configurations, through our research process we identified empirically 7 different configurations. Table 1 and Table 2 summarize the different typologies of cognitive processes related to the development of innovation capabilities that corporations could potentially develop by engaging in identified initiatives, along with adaptational barriers that might be reduced with processes implemented.

² <https://euclid.eba.europa.eu/register/cr/search> For the purpose of the analysis, only Italian Crd credit institutions were analyzed.

³ Keyword list: start-up program, call for start-ups, startup competition, accelerator, incubator, corporate incubator, corporate accelerator, open innovation program, idea competition.

⁴ During the research process a banking group operating in Italy with one program was removed from the sample. Credit Agricole was removed since the strict rules required to participate to the program (at least 5 years old organizations plus a product already on the market) were deemed not aligned to the classic target of companies participating to these programs.

Table 1

Ecosystem development lightweight startup program characteristics, with related dynamic capabilities development elements	
Content: Ecosystem Development	
Governance: Program Provider	
Structure: Knowledge Brokering	<p>The bank, providing the program acts as a node among ventures and potential partners by connecting multiple stakeholders. Being the promoter of the event, the bank controls the information flow and the matchmaking process, with the resulting possibility to develop capabilities of future foresight, improving its capabilities in identifying market evolutions and needs of participating partners while at the same time reducing partners' research costs and thus improving their decision-making processes. These events last for a few days and can be repeated multiple times during the year.</p> <p>Cognitive processes that could be developed: increased perception and alertness of upcoming needs from different stakeholders through the development of reasoning capabilities, developed by interacting with multiple stakeholders and coordinating the flow of information, which in turn can also improve communication capabilities.</p> <p>Barriers that could be lowered: internal barriers that hinder assimilation of information, due to the direct involvement in the matchmaking process; external barriers that hinder external acquisition of new knowledge, due to the attraction of innovative companies (and related stakeholders) toward the corporation through the provision of the program.</p>
Structure: Incubator	<p>The main role of the bank as program organizer of an incubator is to provide a panel of pre-selected early-stage companies opportunities to network with relevant industry actors and business development lecturers, on top of supporting them in structuring internal processes. During the incubation period, usually lasting at least 3 months, startups are presented with different opportunities to interact with potential stakeholders.</p> <p>Cognitive processes that could be developed: the prolonged duration of the program can help companies develop deeper knowledge regarding startups (thus attention and discovery cognitive capabilities), as well as increase perception and alertness by recognizing emerging opportunities and threats as the relationship with the startup unfolds. Potential improvement in communication capabilities due to the multiple-stakeholders relationship structure of the activities.</p> <p>Barriers that could be lowered: internal barriers that hinder assimilation of information, due to the direct involvement in the whole incubation process; external barriers that hinder external acquisition of new knowledge, due to the attraction of innovative companies (and related stakeholders) toward the corporation through the provision of the program.</p>
Structure: Accelerator	<p>Acceleration programs enable the bank providing the program to choose which startups to engage in the initiative. Thanks to its orchestrating role and the structuring of activities usual to accelerators, accelerator managers facilitate and control the flows of information among involved startups and internal and external stakeholders, strictly monitoring the evolution of the learning of selected companies.</p> <p>Cognitive processes that could be developed: the prolonged duration of the program can help companies develop deeper knowledge regarding startups (thus attention and discovery cognitive capabilities), as well as increase perception and alertness by recognizing emerging opportunities and threats (for both startups and stakeholders) as the relationship with the startup unfolds. Potential improvement in communication capabilities due to the multiple-stakeholders relationship structure of the activities.</p> <p>Barriers that could be lowered: internal barriers that hinder assimilation of information, due to the direct involvement in the whole incubation process; external barriers that hinder external acquisition of new knowledge, due to the attraction of innovative companies (and related stakeholders) toward the corporation through the provision of the program.</p>
Governance: Participating Partner	
Structure: Incubator	<p>The provider of the program is an external organization specialized in incubation services. This specialized party could provide a better selection process due to screening capabilities developed over the years. The participating bank thus can reduce its resource commitments and benefit from the selection capabilities of program providers and the benefit of potentially better-targeted matchmaking, creating a useful filter able to reduce research costs for corporations.</p> <p>Cognitive processes that could be developed: increased perception and alertness of upcoming needs from selected partners with which the bank is allowed to interact. Possible development of discovery and attention cognitive processes.</p> <p>Barriers that could be lowered: external barriers that hinder external acquisition of new knowledge, due to the engagement with startups pre-selected by incubator managers.</p>
Structure: Accelerator	<p>The external organization, being specialized in acceleration services, could provide a better selection process due to screening capabilities developed over the years. The bank can potentially be involved several times in interactions with different startups, potentially involving several different business units during different interactions depending on accelerated startup needs.</p> <p>Cognitive processes that could be developed: increased perception and alertness of upcoming needs from selected partners with which the bank is allowed to interact. Possible development of discovery and attention cognitive processes.</p> <p>Barriers that could be lowered: external barriers that hinder external acquisition of new knowledge, due to the engagement with startups pre-selected by accelerator managers.</p>

Table 2
FinTech lightweight startup program characteristics, with related dynamic capabilities development elements

Content: FinTech	
Governance: Program Provider	
Structure: Knowledge Brokering	Banks providing knowledge brokering programs act as nodes among selected ventures and potential partners by connecting multiple stakeholders, in this case not along the full value chains, but within the company's internal business units. The bank thus controls the flow of information and the matchmaking process. <i>Cognitive processes that could be developed:</i> increased perception and alertness of upcoming needs of internal divisions, as well as of threats and opportunities arising from the market. Possible development of discovery and attention cognitive processes due to direct interaction with multiple organizations operating in the financial sector. <i>Barriers that could be lowered:</i> external barriers that hinder the external acquisition of new knowledge and internal barriers that hinder the assimilation of new knowledge due to the engagement with several startups operating in the financial industry.
Governance: Participating Partner	
Structure: Accelerator	The external organization, being specialized in acceleration services, could provide a better selection process due to screening capabilities developed over the years. The participating bank can benefit from faster and pre-filtered matchmaking, with the possibility to access relevant knowledge faster. <i>Cognitive processes that could be developed:</i> increased perception and alertness of upcoming needs from selected partners with which the bank is allowed to interact. Facilitated development of discovery and attention cognitive processes through pre-selection operated by the accelerator managers. <i>Barriers that could be lowered:</i> external barriers that hinder external acquisition of new knowledge, due to the engagement with startups pre-selected by accelerator managers.

Tables 3, 4, and 5 provide detailed descriptive statistics of the classification of programs identified. As clearly visible from Table 3, over time the involvement of banks in startup programs grew for both categories of initiative, suggesting a growing interest of the sector in supporting startups⁵. Regarding participation in programs for Ecosystem Development, it can be observed in Table 4 an increased tendency to engage not as a direct program provider (whose numbers are quite stable), but as a participating partner of the initiative (whose numbers are growing over time). A different picture emerges from the analysis of bank involvement in programs targeting FinTech startups (table 5). In this case, almost all bank relies exclusively on programs organized by third parties in which they participate as partners, usually concurrently with other banks. The analysis of engagement at the bank level provides a differentiated picture: while the engagement of banks in Ecosystem development programs for startups is diversified, their engagement strategies in FinTech development programs are instead very similar. Regarding Ecosystem development initiatives, it has been observed that six Italian banks were involved in some initiatives during the observation period. Tables 6 and 7 provide an overview of the involvement of Italian banks, with related programs. On the other hand, the seven Italian banks engaged in FinTech development programs showed similar behavior, not only in terms of role in the program but also by participating in the same few initiatives⁶. Only one bank, Banca Sella, is also engaged as a program provider in an initiative of brokering.

⁵ Participation in some programs was discontinued during the timeframe under analysis. Detailed information is available in Appendix A.
⁶ More information available in Appendix A.

Table 3

Overview of programs, divided by main objective (content)

	2018	2019	2020	2021	2022
Ecosystem development	7	11	11	10	12
FinTech development	2	6	6	9	9
Total	9	17	17	19	21

Table 4

Involvement in Ecosystem development programs, divided by bank role and program type

	2018	2019	2020	2021	2022
Total Ecosystem development	7	11	11	10	12
Participating Partner	1	4	4	4	6
Accelerator	1	3	2	2	4
Incubator	0	1	2	2	2
Program Provider	6	7	7	7	7
Accelerator	2	2	2	3	2
Incubator	2	2	2	2	2
Knowledge brokerage	2	3	3	2	3

Table 5

Involvement in FinTech development programs, divided by bank role and program type

	2018	2019	2020	2021	2022
Total FinTech development	2	6	6	9	9
Participating Partner	1	5	5	8	8
Accelerator	1	5	5	8	8
Program Provider	1	1	1	1	1
Knowledge brokerage	1	1	1	1	1

Table 6

Involvement of Italian banks into ecosystem development programs over 2018-2022

	Ecosystem Development	
	Provider	Partner
Banca Generali	/	- Incubator (Build it Up)
Banca Sella	- Incubator (D-Pixel) - Accelerator (D-Pixel)	/
Bcc Iccrea	- Incubator (Bcc Innovation Festival)	/
Intesa Sanpaolo	- Knowledge brokering Initiatives (Officine formative, Startup initiative, Up to start) - Accelerator (B-Heroes)	- Accelerators (Torino Cities of the Future, Next Age, Grow it Up)
Mps	- Knowledge brokering Initiative (Officina Mps) ¹	/
UniCredit	- Incubator (Start Lab)	- Accelerators (Motor Valley Accelerator, Plug & Play Food) - Incubator (G-Factor)

¹ Participation of banks in programs in italics (Officina Mps and Plug & Play Food) have been discontinued during the observation period.

Table 7
Involvement of Italian banks in FinTech development programs over 2018-2022

	FinTech Development	
	Provider	Partner
Banca Mediolanum	/	Accelerator (Fin+Tech)
Banca Sella	Knowledge brokering (FinTech District)	Accelerators (Fin+Tech, Startupbootcamp FinTech Amsterdam) ¹
Bper Banca	/	Accelerator (Plug & Play Fintech Milan)
CreDEM	/	Accelerator (Fin+Tech)
Intesa Sanpaolo	/	Accelerators (Fin+Tech, Fintech Innovation Lab London)
Mediobanca	/	Accelerator (Fin+Tech)
UniCredit	/	Accelerators (Plug & Play Fintech Milan, Plug & Play Fintech Frankfurt)

¹ Participation of banks in programs in italics (Startupbootcamp FinTech Amsterdam and Fintech Innovation Lab London) have been discontinued during the observation period.

5. Discussion

Considering programs for Ecosystem Development, different patterns of engagement emerged. From one side, a bank (Banca Generali), engages with startups for ecosystem development purposes exclusively through intermediated programs. These programs might facilitate the reduction of external barriers that hinder the external acquisition of knowledge due to the engagement with startups selected by external incubator managers, thus helping the corporation to improve on cognitive processes underpinning sensing capabilities such as perception and alertness of upcoming needs from selected partners with which the bank is allowed to interact. On the other side, other banks (Banca Sella, Banco di Credito Cooperativo as Mps in the past), engage in Ecosystem Development initiatives exclusively via programs developed internally. This modality of engagement might provide these corporations with the possibility not only to lower external barriers to access to information by directly selecting the startups with which they want to engage but also to lower internal barriers that hinder the assimilation of this information since programs are organized and managed by internal personnel. The direct provision of the programs might therefore facilitate not only the development of sensing capabilities through the enhancement of perception and alertness of upcoming needs from different stakeholders, but also seizing capabilities through the refinement of reasonings and communication capabilities required to scout, engage, and coordinate the flow of information among participants. A third group of banks (comprising Intesa Sanpaolo and UniCredit) leverages both internally developed programs and externally organized initiatives. This modality of engagement can result in developing a comprehensive set of both sensing and seizing capabilities inside organizations, leveraging on the expertise of external partners to increase internal competencies and decision-making processes on top of capabilities to recognize potential.

Strategies adopted by banks while engaging in FinTech programs instead appear to be more standardized: all the banks seem to rely (almost) exclusively on programs provided by third parties. Only one bank (Banca Sella) is also directly engaged in the supply of a knowledge brokering initiative for FinTech startups. By heavily relying on programs organized by third parties, these corporates might give up an important opportunity to develop seizing and re-configuring capabilities, that could be developed when internalizing these FinTech-related initiatives. From one side, the (almost exclusive) engagement in programs organized by third parties may increase perception and alertness of upcoming needs and facilitate the development of discovery and attention cognitive processes (thus sensing capabilities) through the engagement with startups pre-selected by the accelerator managers, lowering external barriers that hinder external acquisition of new knowledge. On the other side, however, this modality of engagement offers few opportunities to develop seizing capabilities useful to mitigate internal barriers that might hinder the assimilation of the new knowledge developed, since the direct engagement of banks' internal employees in externally provided programs is lower than would have been in internally developed programs such as corporate incubators or accelerators. Moreover, interestingly all the banks identified are engaged in the same two FinTech programs (Plug & Play and Fin+Tech). These two programs provided by third parties can be useful tools to stimulate the development of organizational sensing capabilities, but potentially of limited use since multiple local corporations participate in them, thus the pool of knowledge developed can be common to all competitors and of little use for differentiating purposes.

Another element that is common among all the initiatives identified is the fact that all the programs still participated are exclusively located in the Italian context. Considering Entrepreneurial Development programs, this is a positive fact since the dynamic capabilities under development can result in the creation of new services that better match local community needs, following the historical bank mission of supporting local economic development (Cernov & Urbano, 2018).

From the FinTech Development programs point of view, however, the fact that all programs are focused on a single country (combined with the fact that only three different programs have been identified) can restrain the possibility of banking institutions developing strong and useful sensing capabilities due to the limited diversification in the knowledge-pool available locally. Interestingly, no bank was involved in programs capable of developing reconfiguring capabilities in the timeframe under analysis, and also the possibilities to develop seizing capabilities seem to be limited exclusively to the engagement with startups for Ecosystem Development purposes.

6. Limitations and conclusion

Over the last decades, a mix of advancements in technologies and favorable policies enabled a steady growth of the number of startups across Europe. In this emerging context, it seems that from mid-2010 has become of interest for corporations to engage with startups through programs that do not require big upfront capital and resource commitments. These programs, defined by Weiblen and Chesbrough as lightweight programs (2015), can provide the organization involved with different possibilities to develop different dynamic capabilities (Steiber & Alänge, 2020; Weiblen &



Chesbrough, 2015; Zobel, 2017) through the development of underlying cognitive processes (Eggers & Francis Park, 2018; Helfat & Peteraf, 2015). Engaging in multiple programs, consequently, can potentially help corporates in developing and mutually reinforcing different cognitive processes required to strengthen corporate innovation muscles. Our research, through a multiple case study analysis, focused on the Italian context and investigated the involvement of corporates in these programs to better understand what kind of dynamic capabilities these organizations might be capable of developing while leveraging on these initiatives. Findings highlight that in the Italian context, banks are engaged in programs for both Ecosystem Development and FinTech development purposes. In both contexts, patterns of engagement suggest that these banks might be well positioned in terms of possibilities to develop sensing capabilities and related cognitive processes, either leveraging on internally developed programs (especially for Ecosystem Development) or programs supplied by third parties (as in the case of FinTech initiatives). The research process however identified that few banks are involved in initiatives that might help the corporations strengthen the reasoning and decision-making processes (or seizing capabilities) required to implement strategical actions to preserve corporate competitive advantages. This phenomenon has been observed especially regarding the engagement with startups operating in the FinTech sector since only a single bank provides an initiative internally developed, while all the others engage exclusively through third-party initiatives. These programs might be useful to lower external barriers to accessing new knowledge but are not particularly useful for lowering the internal barriers which might prevent the same banks from absorbing the knowledge developed, and consequently develop actions to cope with the fast-evolving market.

The fact that the banks focus of our paper are scarcely involved in programs capable of developing seizing and reconfiguring capabilities, however, does not imply that these organizations are not developing these capabilities via other channels. The main limitation of this paper is, therefore, the fact that even though it provides the theoretical framework to analyze the phenomena of the development of dynamic capabilities through startup programs, it does not investigate empirically whether these capabilities have been developed inside organizations. To overcome this limitation and provide evidence of the theoretical propositions advanced with this paper, further research should be carried out. Multiple interviews with bank personnel from different organizations might provide further clarity on the usefulness of these programs in the development of these capabilities in corporates. Another limitation of this work is the fact that it did not consider bank characteristics (like business model or market capitalization) to discriminate among possible engagement strategies and resulting possibilities of developing dynamic capabilities. Future research might add these qualitative elements into the analysis, which potentially might improve the comprehension of the phenomena by highlighting different patterns of engagement dependent on specific characteristics. The embryonic stage of this typology of engagement of startups from corporates can limit the understanding of the phenomena. Lightweight programs emerged just since few years ago, thus only a limited time span was available for corporations to start engaging with these instruments. Monitoring the future evolution of the engagement of banks in these activities may reveal the emergence of different patterns of engagement. The collection of additional data in future years is therefore



suggested, also because not all typologies of programs have been identified, and thus analyzed, with the current research process. Moreover, our analysis of dynamic capabilities that potentially could be developed through different startup programs is inherently limited due to the exclusive focus on Italian-based banks. It is, in fact, possible that banks operating in other countries, or corporations operating in other fast-evolving industries such as the financial one, might follow different strategies for startup engagement. It is therefore suggested to investigate in the future the activities of corporations operating in other geographies and other industries. Last but not least, the research proposed do not consider whether the corporation is currently involved in (contractual) alliances with startups, such as Corporate Venture Capital investing, pilot programs, or buyers-supplier relationship. A complete overview of the whole range of engagement with startups could complement the overview of the dynamic capabilities that can be potentially developed with the engagement with startups, but it is beyond the scope of the article.

Despite several limitations, this paper provides a first empirical overview of the typologies of dynamic capabilities that corporations might develop while engaging with startup programs, bridging the literature stream of dynamic capabilities development and lightweight startup programs. We are also contributing indirectly to the «make, buy, or ally» literature of corporate strategical innovation strategies (Borah & Tellis, 2014; Jacobides & Billinger, 2006), highlighting the complementary role that lightweight startup programs have in the development of capabilities and knowledge which are usually overlooked by corporates engaging with more mature startups (Weiblen & Chesbrough, 2015). The first findings obtained might be therefore of interest to corporate managers who would like to start engaging in lightweight startup programs to better evaluate what kind of initiative to participate in contextually to the competencies that they desire to build, and consequently choose the best form of engagement. The same reasoning applies to corporate managers already involved in these programs, which might use the findings of this paper to strengthen their positioning in innovation capabilities development by integrating new engagement instruments in their previously developed strategies, providing corporations with an additional tool useful to better understand how competitors may position themselves in the market in the future and related instruments to understand how to react. ■



Appendix A

List of startup programs in which Italian banks were involved between 2018 and 2022

Banca Generali	Build it up ¹ (Incubator for local ecosystem startups) - active since 2020	Build It Up is a non-profit association created to spread the entrepreneurial spirit among young Italian citizens. The incubation program was created in 2012 by a student committee from Escp business school, which continue to manage the initiative. The association select startups that can benefit from consultancy servicer provided by students and Escp alumni, as also from services supplied by partners like the bank itself, Google, legal consultancy firms and venture capital firms, among others.
Banca Mediolanum	Fin+Tech ² (Accelerator for FinTech startups) - active since 2021	Fin+Tech Accelerator is the initiative sponsored the Venture Capital division of Cassa Depositi e Prestiti (Cdp Venture Capital), to stimulate innovation in the FinTech sector in Italy. Launched in 2021 and lasting for three years, the initiative aims to accelerate a total of around 50 startups operating in the FinTech and in the InsureTech sectors. The program is based in Milan FinTech District and is co-managed by Digital Magics and Startupbootcamp, two of the most relevant acceleration program providers operating at European level. Selected startups that will receive an initial investment and constant support from the accelerator partners, to guide them toward the validation of their business model, and the most promising ones will have the possibility to access further investments by the promoters of the initiative. Together with other several Italian Banking institutions, the bank is involved as partners in the program.
Banca Sella	Dpixel ³ (Incubator/Accelerator for local ecosystem startups) - active since 2018	Born in 2009 and subsequently acquired by Banca Sella Holding Group, dpixel is a certified incubator and accelerator with the mission of helping start-ups and corporations to innovate. Dpixel selects high-potential teams to support them along all the steps required for a successful exploitation of their innovation, offering them incubation programs, acceleration programs and matchmaking with corporates for Poc and pilots. The initiative was created to facilitate the growth of the Italian innovation ecosystem, thus applications for the incubator are open to startups operating in a wide range of sectors. Accelerators, on the other hand, are focused on a limited number of verticals, like AgriTech, Metaverse and Retail, even though in the past other verticals were considered (like BioTech, Energy, Mobility, Automotive, Space and Travel).
	FinTech District ⁴ (Networking and Matchmaking for FinTech startups) - active since 2018	Opened in 2017 in Milan following an initiative sponsored by Banca Sella and Copernico ⁵ (a coworking space provider), the FinTech District is the only Italian FinTech innovation hub till these days. The hub, located in the financial district of the city, has the aim of creating and growing the network of stakeholders of the financial industry in order to promote open innovation and the adoption and integration of FinTech based solutions by larger players, promoting and sustaining start-ups along this journey. FinTech start-ups could therefore be hosted in the coworking spaces where they could access easily different actors of the value network in order to scale faster their solution.
	Startupbootcamp ⁶ (Accelerator for FinTech startups) - active in 2019 and 2020	Founded back in 2010 in Copenhagen, Startupbootcamp is an innovation platform part of Rainmaking group offering. The core mission of the program is to support entrepreneurs throughout all the stages of the growth of their startups offering them acceleration programs in more than one hundred cities all around the world. Early stage Start-ups selected for the acceleration program have to sign a shareholders' agreement to participate, selling between 6 to 8% of their equity to obtain 15 thousand euros of investment to cover living expenses, more than 450 thousand euros worth of services and six months of free collaborative office spaces in the location of the events. Start-ups during the program get mentoring and connections with industry leaders, great exposure to international investors, media and the local start-up ecosystem. Banca Sella is partnering with Startupbootcamp in the FinTech & Cybersecurity program held in Amsterdam.
	Fin+Tech ² (Accelerator for FinTech startups) - active since 2021	Fin+Tech Accelerator is the initiative sponsored the Venture Capital division of Cassa Depositi e Prestiti (Cdp Venture Capital), to stimulate innovation in the FinTech sector in Italy. Launched in 2021 and lasting for three years, the initiative aims to accelerate a total of around 50 startups operating in the FinTech and in the InsureTech sectors. The program is based in Milan FinTech District and is co-managed by Digital Magics and Startupbootcamp, two of the most relevant acceleration program providers operating at European level. Selected startups that will receive an initial investment and constant support from the accelerator partners, to guide them toward the validation of their business model, and the most promising ones will have the possibility to access further investments by the promoters of the initiative. Together with other several Italian Banking institutions, the bank is involved as partners in the program.
Bcc Iccrea	Innovation Festival ⁷ (Incubator for local ecosystem startups) - active since 2021	Bcc Innovation Festival is the incubation program launched at the end of 2021 to facilitate the growth of Italian startups operating in different industrial fields. After a first screening phase, selected startups are followed for an entire year on themes regarding idea development, business modelling and financial planning, with various opportunities to network also with the network of corporates and investors of the bank.

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Bper Banca	Bper Banca Plug & Play FinTech Milano ⁸ (Accelerator for FinTech startups) - active since 2019	Established in 2006 in Sunnyvale California, Plug & Play is an accelerator, a venture capital and a corporate innovation consultancy provider operating all around the world. They organize industry specific programs where start-ups, selected to match a pool of sponsoring industry player's needs, are accelerated for 12 (twelve) weeks. These programs do not require to start-ups to sell part of their equity to participate but Plug & Play strategic aim is to invest in some them after the completion of the course. Since 2015 Plug & Play is providing a platform to corporate partners to find valuable start-ups through the vertical program dedicated to FinTech. The goal of the program is to connect promising early and growth stage start-ups to the biggest financial institution to facilitate the launch of pilot projects, the financing of Pocs and to provide valuable business development and investment opportunities to both parties. Bper Banca has joined Plug & Play FinTech Milano as a partner since 2019.
Credem (Credito Emiliano)	Fin+Tech ² (Accelerator for FinTech startups) - active since 2021	Fin+Tech Accelerator is the initiative sponsored the Venture Capital division of Cassa Depositi e Prestiti (Cdp Venture Capital), to stimulate innovation in the FinTech sector in Italy. Launched in 2021 and lasting for three years, the initiative aims to accelerate a total of around 50 start-ups operating in the FinTech and in the InsureTech sectors. The program is based in Milan FinTech District and is co-managed by Digital Magics and Startupbootcamp, two of the most relevant acceleration program providers operating at European level. Selected startups that will receive an initial investment and constant support from the accelerator partners, to guide them toward the validation of their business model, and the most promising ones will have the possibility to access further investments by the promoters of the initiative. Credem is the only Italian bank involved as promoter of the initiative, while several other Italian Banking institutions are involved just as partners.
Intesa Sanpaolo	Officine formative ⁹ (Networking and Matchmaking for local ecosystem startups) - active since 2018	Officine Formative is the web-portal in which early stage entrepreneurs could learn basics of entrepreneurship through online video courses, created with the objective of helping future business-owners to refine their ideas. Start-ups at the end of the course can pitch their ideas in front of the committee that will decide if they are sufficiently refined to participate to the physical acceleration course provided by Intesa Sanpaolo experts and partners.
	Startup initiative ¹⁰ (Networking and Matchmaking for local ecosystem startups) - active since 2018	Is a format of events organized by Intesa Sanpaolo Innovation Center born with the aim of matching promising start-ups with corporate partners. These initiatives have been organized different times since 2009, and each meeting was focused on a vertical industry (like BioTech, AgriTech, Circular Economy). In these meetings start-ups had the possibility to pitch their ideas in front of a panel of potentially interested parties and to network with value network partners.
	Up2Start ¹¹ (Networking and Matchmaking for local ecosystem startups) - active since 2022	Born from the collaboration between Intesa Sanpaolo, Intesa Sanpaolo Innovation Center, and with the support of Gellify innovation platform, Up2Start programs provide to selected start-ups with a free personalized one-month acceleration program focused on providing opportunities for networking and increasing visibility towards investors, venture capital and other entrepreneurs, alongside a formative program provided by go-to market experts.
	Fin+Tech ² (Accelerator for FinTech startups) - active since 2021	Fin+Tech Accelerator is the initiative sponsored the Venture Capital division of Cassa Depositi e Prestiti (Cdp Venture Capital), to stimulate innovation in the FinTech sector in Italy. Launched in 2021 and lasting for three years, the initiative aims to accelerate a total of around 50 start-ups operating in the FinTech and in the InsureTech sectors. The program is based in Milan FinTech District and is co-managed by Digital Magics and Startupbootcamp, two of the most relevant acceleration program providers operating at European level. Selected startups that will receive an initial investment and constant support from the accelerator partners, to guide them toward the validation of their business model, and the most promising ones will have the possibility to access further investments by the promoters of the initiative. Together with other several Italian Banking institutions, the bank is involved as partners in the program.
	B-Heroes ¹² (Accelerator for local ecosystem startups) - active until 2021	The program, launched in 2018 by Im foundation and Boost Heroes ¹³ in collaboration with Intesa Sanpaolo and Endeavour Italia ¹⁴ , is an acceleration initiative for start-ups. Start-ups that apply to the program are screened by Boost Heroes, a Venture Capital firm that invests in early stage initiatives, and if selected they receive a first seed investment to participate to the program. During the acceleration program, start-ups receive formative courses regarding entrepreneurial topic, tailored consulting provided by experts, investors and industry corporations, that could even engage most promising solutions in open innovation initiatives. At the end of the acceleration period, a final demo-day is organized, and one start-up is awarded as the overall winner of the competition, getting the opportunity to sign a deal for a 500.000€ investment from Boost Heroes.
	Grow It Up ¹⁵ (Networking and Matchmaking for local ecosystem startups) - active since 2018	Born as an initiative of Cariplo Foundation ¹⁶ and Microsoft Italia in 2016, Grow It Up is a open innovation platform created to grow the investments in digital start-ups in Italy. The platform aims therefore to match promising start-ups with corporates in order to build open innovation projects and is trying to achieve this objective supporting them along all the process. First of all the staff collects the requirements provided by corporations, then it makes

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		<p>technological scouting to identify suitable start-ups in collaboration with Italian incubators and accelerators. Identified start-ups are then invited to attend a workshop event in which corporations present their challenges and based on the result and feedback collected a decision is made upon which start-up better fits corporate needs. After that decision, start-ups and corporations could start working together, supported both by consulting firms and industry associations and by Grow It Up mentors found in the spaces available to the parties inside Cariplo's Centro di Open Innovation in the city of Milan. Intesa San Paolo is participating to the initiative as a corporate partner, therefore is likely that they are scouting for digital solutions that could help them innovate their products and services.</p>
	<p>Techstars Torino cities of the future¹⁷ (Incubator for local ecosystem startups) - active since 2019</p>	<p>The initiative was created in 2019 as a joint initiative between techstars, Intesa Sanpaolo Innovation Center, Compagnia di Sanpaolo foundation and Crt foundation. Techstars is an american innovation platform that organizes sector specific-accelerators all around the world in collaboration with proposing corporations and organizations that want to innovate. Corporations therefore let techstars perform technology and start-up scouting and during the program they can mentor participating businesses providing coaches from their pool of employees. Techstars is also a Venture Capital firm, requiring to participant start-ups to sell part of their equity (6% for 20 cash + 100k€ convertible loan) to access the program and receive mentorship, perquisites and access to a wider network of investors and corporations that could help their company scale faster. Open to growth stage start-ups from all over the world, this accelerator is focused on smart mobility technologies, smart infrastructure and smart cities.</p>
	<p>FinTech Innovation Lab London¹⁸ (Accelerator for FinTech startups) - active until 2020</p>	<p>Launched in 2012 by Accenture, the Innovation Lab is a three months acceleration program for early and growth-stage start-ups with a beta of the technology or the product already available. Applications can be submitted by everywhere around the world and each year 20 start-ups are selected. The equity-free accelerator program provides start-ups with access to stakeholders from more than 40 financial institution partners (like Deutsche bank, Ing, Hsbce, Intesa Sanpaolo, Lloyds, Natwest group, Nordea, Op-Pohjola, Otp, Rabobank and Societe Generale) who can provide mentoring and advices to refine the start-ups value proposition and opportunities of drafting POC and pilots connecting them with the right decision makers inside their corporations. The mentoring services are not just offered by the financial institutions, since Accenture provides the start-ups with their own know how and also investors, alumni entrepreneurs and legal experts are involved to provide start-ups an acceleration experience able to speed-up the development of their businesses.</p>
	<p>Next Age¹⁹ (Accelerator for local ecosystem startups) - active since 2022</p>	<p>NextAge is the first acceleration program in Europe targeting startups that develop solutions dedicated to the Silver Economy, the sector of products and services dedicated to the over 50 population. The program is an initiative of Cdp Venture Capital, together with the bank and several others actors of the innovation and industrial ecosystem such as Ac75 Startup Accelerator, the international venture capital company Sosv, the National Institute for Elderly Hospitalization and Care (Inrca), the Marche Polytechnic University and the UK National Innovation Center for Aging. Next Age is a three-year program which select and accelerate around 10 startups in the seed and pre-seed phases each year. These startups, if selected, will access to a 4-months structured program and receive a seed investment plus possibilities of follow-ons provided directly by partners of the initiative.</p>
Mediobanca	<p>Fin+Tech² (Accelerator for FinTech startups) - active since 2021</p>	<p>Fin+Tech Accelerator is the initiative sponsored the Venture Capital division of Cassa di Risparmio di Firenze (Cdp Venture Capital), to stimulate innovation in the FinTech sector in Italy. Launched in 2021 and lasting for three years, the initiative aims to accelerate a total of around 50 startups operating in the FinTech and in the InsureTech sectors. The program is based in Milan FinTech District and is co-managed by Digital Magics and Startupbootcamp, two of the most relevant acceleration program providers operating at European level. Selected startups that will receive an initial investment and constant support from the accelerator partners, to guide them toward the validation of their business model, and the most promising ones will have the possibility to access further investments by the promoters of the initiative. Together with other several Italian Banking institutions, the bank is involved as partners in the program.</p>
Monte dei Paschi di Siena	<p>Officina Mps²⁰ (Networking and Matchmaking for local ecosystem startups) - active in 2019 and 2020</p>	<p>Born in 2018, Officina Mps is the innovation branch of Monte dei Paschi di Siena created and run in collaboration with Accenture. Structured as a branch of the bank, this organization has been established to help local entrepreneurs to develop their ideas and their business and to establish fruitful partnership for both parties in a context of open innovation. Regarding the initiatives for start-ups, since 2018 the bank is organizing different vertical idea contests, named «idee per crescere», awarding the best businesses ideas after a business plan and pitch evaluation. Cash prizes are awarded to winning start-ups along with opportunities to collaborate with Mps in order to access new markets, customers and opportunities of funding.</p>
Unicredit Group	<p>Start Lab²¹ (Incubator for local ecosystem startups) - active since 2018</p>	<p>Organized since 2009, Start Lab is an acceleration program of 12 months provided by Unicredit directed to Italian early stage start-ups working in the fields of Digital, Life Science, Clean Tech and Innovative Made in Italy, category comprising AgriFood, Fashion, Robotics, Mechanics, Tourism and Nano technologies. Each year 40 start-ups get selected (10 per category) after an evaluation performed not only from banks experts but also from external consultants like successful entrepreneurs and professionals from the network. During these months these teams receive mentoring from experts, get introduced to incubators and accelerators that could help them, participate to formative and networking events and are guided in the creation of a sound business in order to attract funding from investors. At the end of a competition a demo day is organized and, after a pitching session, one start-up from each category receives a grant of 10.000€ as prize for the best start-up of the year in their field.</p>

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<p>Unicredit Group</p>	<p>Plug & Play FinTech Milano¹ (Accelerator for FinTech startups) - active since 2019</p>	<p>Established in 2006 in Sunnyvale California, Plug & Play is an accelerator, a venture capital and a corporate innovation consultancy provider operating all around the world. They organize industry specific programs where start-ups, selected to match a pool of sponsoring industry player's needs, are accelerated for 12 (twelve) weeks. These programs do not require to start-ups to sell part of their equity to participate but Plug & Play strategic aim is to invest in some them after the completion of the course. Since 2015 Plug & Play is providing a platform to corporate partners to find valuable start-ups through the vertical program dedicated to FinTech. The goal of the program is to connect promising early and growth stage start-ups to the biggest financial institution to facilitate the launch of pilot projects, the financing of Pocs and to provide valuable business development and investment opportunities to both parties. Unicredit has joined Plug & Play FinTech Milano as a main sponsoring partner since 2019.</p>
	<p>Plug & Play FinTech Frankfurt²² (Accelerator for FinTech startups) - active since 2019</p>	<p>Similarly to the Plug & Play program provided in Milan, UniCredit has joined Plug & Play FinTech Frankfurt as a main sponsoring partner since 2019.</p>
	<p>Plug & Play Food Milano²³ (Accelerator for FinTech startups) - active in 2019</p>	<p>As stated in the previous program description, Plug & Play organizes acceleration programs not only for FinTech but also in other verticals, like in this case on Food innovation. UniCredit joined the program as corporate partner in 2019 along Lavazza coffee producers and Esselunga supermarket retail among others, to find innovative solutions regarding personalized nutrition, food freshness and safety, asset tracking, waste reduction and distribution. The goals of the program are still to connect promising early and growth stage start-ups to relevant stakeholders to facilitate the launch of pilot projects, the financing of Pocs and to provide valuable business development and investment opportunities to all the parties.</p>
	<p>G-Factor²⁴ (Incubator for local ecosystem startups) - active since 2019</p>	<p>G-Factor is the incubator-accelerator created by Fondazione Golinelli in 2018. Open to start-ups operating into different industry verticals, selected teams will have access to an incubation program lasting for four months. The program includes a first phase of intensive matchmaking activities lasting 2 months, and subsequent mentoring and follow-ups to accompany the teams in introducing themselves to investors. Unicredit is partner of the initiative since the first edition of the program, which started in 2019.</p>
	<p>MotorValley Accelerator²⁵ (Accelerator for local ecosystem startups) - active since 2022</p>	<p>MotorValley Accelerator is the startup Italian accelerator in the mobility sector. The program is located in Modena and was created from an initiative of Cdp Venture Capital Sgr in collaboration with the Modena Foundation and UniCredit. Other partners are Crit, a technology broker with twenty years of experience in research, and Plug and Play, who is running the program. The overall goal of the program is to support at least 30 startups operating in the car/mobility and motor related sectors across the 3 years in which the programs will be held. During the acceleration process, startups will have the opportunity to present their projects to leading companies in the automotive and mobility sector to nurture collaboration opportunities.</p>

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| <p>1 https://www.buildup.it/
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