Absorptive Capacity in the Context of Accelerators – Gaining Competitive Advantages through Knowledge Absorption

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Abstract

Accelerator programs are essential to develop new ecosystems and to foster the innovativeness of the community. Accelerator influences the local startup ecosystem through knowledge transfer within and across the community. It is essential for the accelerator program to gain a competitive advantage to compete with other accelerator programs. The knowledge transfer within the program facilitates a competitive advantage. To fill these research gaps, this study seeks to understand the process of knowledge absorption in the accelerator. Thus, it underlines two research questions: 1) How do accelerators absorb knowledge to gain a competitive advantage? Which factors influence the knowledge absorption of accelerators? Drawing upon the concept of absorptive capacity, the authors develop a set of research propositions regarding the absorptive capacity of accelerators.

Keywords: Accelerators, Absorptive capacity, learning

1 Introduction

1.1 Practical and Research Relevance

Since the first accelerator program was established in 2005, the phenomenon of startup accelerators has become more and more important within the economic and scientific world (Hochberg, 2016; Lall, Bowles, & Baird, 2013). Accelerators became a global phenomenon and influence the local startup ecosystem through knowledge transfer within and across the community (Drori & Wright, 2018) because of their first practical experiences, they also continually gain attention and prestige. Furthermore, they are developing new ecosystems and fostering communities of innovation (Drori & Wright, 2018).

Due to the increasing number of accelerator programs, it is becoming more and more important for accelerators to differentiate themselves from other programs and to gain a competitive advantage over other accelerator programs. As accelerators are unique in their structure and knowledge, it is essential to identify the most relevant points for achieving a competitive advantage. The knowledge transfer within the program can be seen as a competitive advantage (Frimodig & Torkkeli, 2013).

In the literature, incubators and accelerators often used as synonyms (Cohen & Hochberg, 2014). However, their process of absorbing external knowledge differs between these two contexts. Extant literature has investigated knowledge absorption predominantly in the context of incubators (Patton, 2014). Since there is only little empirical evidence on how accelerators absorb knowledge, it is essential to conduct further research to better understand the process of knowledge absorption of accelerators and how this can lead to a competitive advantage. Similarly, understanding which factors the process of knowledge absorption influence is worth investigating.

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1.2 Research Questions

Considering the existing state of research regarding the process of knowledge absorption of accelerators and the practical relevance described in Section 1.1, the underlying research questions are as follows:

How do accelerators absorb knowledge to gain a competitive advantage?

Which factors influence the knowledge absorption of accelerators?

These two research questions deal with the process of knowledge absorption that accelerators run through. The aim is to find out how accelerators absorb knowledge and thereby gain a competitive advantage towards other accelerator programs. This is done by incorporating important characteristics that are specific to accelerators. Besides, factors that influence the process of knowledge absorption of accelerators will be identified and considered.

1.3 Report Structure

To systematically answer the two research questions, this study is divided into four chapters. The following chapter, Chapter 2, deals with the theoretical and conceptual background of this study. A distinction can be made between the topic of accelerators and the theoretical lens, the absorptive capacity. First, the topic of accelerators is explained in detail. For this purpose, we on the recent development accelerators. The chapter also provides a definition of accelerators, as well as their organizational characteristics of accelerators. In addition, research are highlighted and addressed. After considering the topic of accelerators, this chapter introduces the theoretical lens for this study, absorptive capacity. This is followed by a definition and the reasons why absorptive capacity is suitable for explaining the knowledge absorption process of accelerators. In addition, we also summarize the development of the concept of absorptive capacity. Lastly, the consideration of a selected theoretical construct and the development of a modified framework follows. Chapter 3 contains the development of the assumptions. This is followed by arguments for the development of the assumptions and, finally, the set of research propositions for this study. In the fourth and final chapter, the expected contributions and future perspectives are examined.

2 Conceptual Backgrounds

2.1 Accelerators

Accelerators can be defined in different ways. Cohen (2013) one of the leading scholars in the research field of accelerators, defines them as teaching programs where startups are tutored in cohorts to define their core value and shape a coherent business model around it. Accelerators

differ from other entrepreneurial support organizations, such as incubators, because the program takes place within a fixed-term, limited timeframe of only a few months and is therefore highly intensive (Cohen & Hochberg, 2014).

While most of the different support organizations share similar goals to accelerators, which generally focus on boosting successful venture creation, the main objective of accelerators is to build investment-ready businesses (Pauwels et al., 2016). Within the programs, this is realized through educational components, the exchange with experts, and intensive mentoring sessions (Cohen & Hochberg, 2014). Additionally, accelerators offer networking opportunities and a supportive, entrepreneurial peer-to-peer environment in which startups can learn from each other (Pauwels et al., 2016). The end of the program is commonly marked by a pitch event or so-called "demo day", where the participants pitch their ventures to investors and a large interested audience (Cohen & Hochberg, 2014). This event is not only a chance for the startups to demonstrate their business idea and entrepreneurial capacity but also an important opportunity for the accelerator itself to strengthen and extend its network and to position themselves within the ecosystem since it competes with other programs (Drori & Wright, 2018).

Even though the phenomenon is rather young and research is still patchy, the recent dramatic increase of accelerator programs worldwide shows its strong relevance to the today's startup world (Bone, Allen, & Haley, 2017; Drori & Wright, 2018). Despite of these highly growing numbers, however, the research on competitive advantages of accelerators remains still poor. With one major factor being the absorption of knowledge to improve the program's output, it is essential to clarify how this internal process works and what specific factors influence it. One theoretical concept that engages in this topic is absorptive capacity.

2.2 Organizational Characteristic of Accelerators

Since the theory of absorptive capacity is often used in the context of organizations, it is essential to determine whether or not accelerators themselves can be seen as such or how they are different from conventional ones.

In most cases, accelerators are associated with different types of organizations, which can be either public or private, and the ownership leads them to have different organizational aims (Drori & Wright, 2018). Those organizations are usually viewed as permanent, while accelerators have a rather temporary character (Drori & Wright, 2018). Burke & Morley (2016) define temporary organizations as "a temporally bounded group of interdependent organizational actors, formed to complete a complex task" (p. 1237). From the perspective of an accelerator, it can be assumed that the organizational actors are represented through the participating startups, the experts, mentors, and the accelerator's management, while the program's goal can be seen as a complex task.

Therefore, the detailed functionality of an accelerator is highly influenced by the exact composition of the program, in terms of people who are involved, to a certain point in time (Drori & Wright, 2018). Due to the high fluctuation of the programs caused by their short timeframes and the uniqueness of every cohort, the way people work together in accelerators is different from in permanent organizations. While in permanent organizations, teams usually work on achieving multiple goals in the long term, temporary teams, as they exist within accelerators, engage in a precise and finite task (Saunders & Ahuja, 2006). Work is usually structured and done in workshops. with each having its dedicated subject (Drori & Wright, 2018). The overall efficiency of temporary organizations is therefore focused on achievement of the individual task ahead, whereas in permanent organizations it is primarily aimed at the ongoing processes (Saunders & Ahuja, 2006).

In conclusion, accelerators can be seen as organizations with temporary characteristics.

2.3 Absorptive Capacity

To answer the proposed research questions, the concept of absorptive capacity is used in the following to analyse the process of knowledge absorption and its contingent factors. The model of absorptive capacity was firstly developed in 1990 by Cohen and Levinthal. They defined absorptive capacity as a firms' "ability to recognize the value of new information, assimilate it, and apply it to

commercial ends" (Cohen & Levinthal, 1990, p. 128). The authors argue that absorptive capacity has a significant influence on organizations' ability to innovate. According to Cohen and Levinthal (1990) absorptive capacity on an organizational level depends on the absorption ability of its members, and it also depends on knowledge transfer within the organization and beyond its borders. Throughout the years, several researchers have applied and adapted the original model to different organizational contexts in further discussions. One prominent example reconceptualization by Zahra and George (2002) who developed a modified model of absorptive capacity and firstly argued that absorptive capacity influences organization's competitive advantage.

Considering the phenomenon of accelerators and our proposed research questions, we regard a more recent but also well-known model of absorptive capacity by Todorova and Durisin (2007), which is developed based on the concept by Zahra and George (2002) and further empirical studies. This model differs from the original by Cohen and Levinthal (1990) mainly in the assumption that knowledge absorption leads to competitive advantage and the involvement of several contingent factors that influence the process of knowledge absorption (Todorova & Durisin, 2007). In the following, we extend the concept of absorptive by considering the unique contextual characteristics of accelerators.

The fact that accelerators became a global phenomenon results in the creation of numerous acceleration programs that compete entrepreneurial talent (Drori & Wright, 2018). Therefore, a competitive advantage is particularly essential to the survival of accelerators today. To stand out from competitors, more and more accelerators specialize in their program by focussing on particular industries or branches. Drori and Wright (2018) pointed out that more specialized accelerators were founded in the past vears. This fact indicates that it has becoming increasingly important for accelerators to gain specialized knowledge.

Furthermore, the absorption of tacit knowledge can lead to an important competitive advantage (Howells, 1996). Explicit knowledge is the form of knowledge, which is documented, and easy to copy

and transfer, whereas copying and transferring tacit knowledge, which is the form of knowledge that is firmly embedded in person and developed from experiences and actions, is very difficult and nearly impossible (Frimodig & Torkkeli, 2013). Within accelerator programs, tacit knowledge is a crucial point with which each program can stand out from others and differentiate itself in the growing market of accelerators (Frimodig & Torkkeli, 2013). Therefore, we argue that the absorption of knowledge, especially tacit knowledge, and the specialization in one industry or branch can result in a competitive advantage for accelerators.

At the beginning of each accelerator program, there is a selection process in which the batch has to be chosen (Pauwels et al., 2016). Furthermore, mentors and experts for the program's educational purpose must be selected and acquired (Hochberg, 2016). Considering the model of absorptive capacity and the argument that knowledge, especially tacit knowledge, is mainly absorbed through people involved in the program, we assume that this step equals Todorova and Durisin (2007) step of "recognizing the value" since information is filtered and the most important experts and mentors to the accelerator are selected. In contrast to the original concept, we assume that this step happens before the actual knowledge absorption within the accelerator.

Similarly to the notion of Todorova and Durisin (2007) we proposed that the selection process is influenced by power relationships, in this case by the accelerator management. The authors argue that this contingent factor of power relationships justifies why an organization absorbs only certain information. Accelerators can be managed in different ways. Mainly, it can be distinguished between either public or private accelerators (Drori & Wright, 2018). The degree of autonomy which the parent organization offers to the accelerator management varies from type to type (Drori & Wright, 2018).

The starting point for the process of absorptive capacity of accelerators is, on the one hand, the chosen batch, mentors, and experts involved in the program and, on the other hand, the prior knowledge which has already been absorbed before. This knowledge base is a precondition for absorptive capacity successful Levinthal, 1990). In the next step, organizations acquire new knowledge that is assimilated and incorporated in the existing cognitive schemas, or if not possible, cognitive structures must be assimilate the new transformed to Eventually, the newly acquired knowledge must be exploited to develop competitive advantage (Todorova & Durisin, 2007).

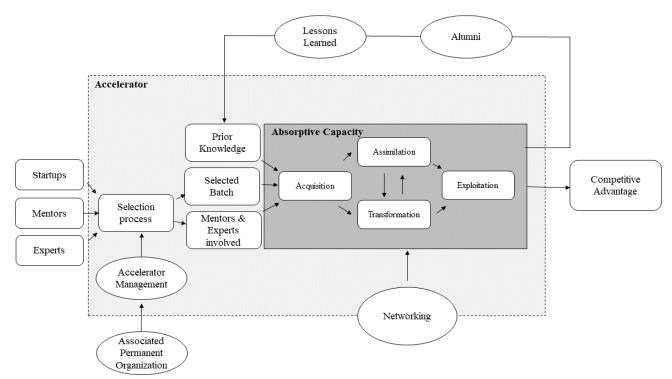


Figure 1: A modified Model of Absorptive Capacity in the Context of Accelerators **Source:** Own Visualization based on Todorova and Durisin (2007)

According to Todorova and Durisin (2007) the process of absorptive capacity is influenced by some factors. One influential factor considered in the model, which plays an important role in the context of accelerators, is social integration mechanisms since they lead to a higher connection within the organization and, thus, influence the process of knowledge absorption by changing knowledge-seeking behaviour among members of the organization (Todorova & Durisin, 2007). Within accelerator programs, networking is one of the most crucial aspects. Networking happens within the program between the participating startups among themselves or with mentors within the program, which can lead to strong connections and support. Networks of accelerators do not limit to the internal ones but also the connections with external actors and stakeholders (Cohen. 2013).

Through the development of networks within workshops, co-working spaces, or other components of an accelerator program, knowledge is transferred within the accelerator, which in turn contributes to the organization's absorptive capacity (Cohen & Levinthal, 1990).

To represent the dynamic character of the absorptive capacity model, Todorova and Durisin (2007) enhanced the concept by feedback loops that emphasize that an organization's future absorptive capacity is determined by recent knowledge absorption and the development of organizational routines and processes. Looking at accelerators, besides the general lessons learned, alumni are an important source of feedback and additionally, an essential source for new mentors (Pauwels et al., 2016). People who successfully graduated from an accelerator program are likely to participate in future batches as mentors, and they can interact in the program based on accumulated experience (Chang, 2013; Pauwels et al., 2016). Alumni are thus an essential source of knowledge and contribute significantly to the development of tacit knowledge through experience.

Considering the points mentioned, we extend the model of absorptive capacity adapted to the characteristics of accelerator. It is shown in Figure 1.

3 Development of Assumptions

Based on research on the accelerator about theoretical lenses outlined above, we will discuss how do accelerator absorb new knowledge and which factors are influencing it.

Accelerators often support startups in the early stages of the foundation. In this phase, startups have equity and knowledge gaps (Frimodig & Torkkeli, 2013). To close these gaps, startups join accelerators. Their main task is to close the knowledge gaps through mentoring networking (Pauwels et al., 2016). Accelerators select specific mentors who will continuously provide startups with feedback on how to develop their business model with their expertise and experience (Frimodig & Torkkeli, 2013; Pauwels et al., 2016). Besides, mentors close the knowledge gap of startups by connecting them to their network. This allows startups to get into direct contact with potential customers or investors and receive feedback on the business idea (Pauwels et al., 2016). Both mentoring and networking are based on the mentor's tacit knowledge and experience and, as such, are perpetual and nonreplicable.

The participating startups are also selected using special selection procedures from different stakeholders, both externally and internally. The main focus here is on the founding team or the individual founders as persons (Pauwels et al... 2016). According to Frimodig and Torkkeli (2013) the selection process of the founding personalities and their quality is one of the success factors for accelerators. Both the willingness to learn and the will to act are essential characteristics of the selected founders, to implement the given feedback, and to use the conditions of the program (Frimodig & Torkkeli, 2013; Goswami, Mitchell, & Bhagavatula, 2018). Mutual exchange of their knowledge and experience develops the startups' human capital and their business model, and this knowledge exchange mechanism differs in each cohort. The participating founders are a critical factor, which decide the knowledge base and the success of an acceleration program. If startups have built a successful business model after participating in the accelerator, they can remain as alumni in the accelerator network. Some accelerators make extensive efforts to organize events to connect alumni and new founders. This networking can also be done through mentoring, to which alumni can also be selected. Accelerators lie a lot of value in alumni engagement. The alumni use the accelerator as a reference to how successful founders can become by participating in the program (Pauwels et al., 2016).

The mentors, the founders, and the alumni help to shape the accelerator program each time they start. Through personal experience, network, and expertise, the new founders are provided with essential knowledge that makes their business idea successful. The discussions above illuminate that accelerators benefit from the knowledge of the participants, and the entire knowledge base is considered to be the competitive advantage of accelerators. Therefore, startups select acceleration programs to join based on the quality of the knowledge possessed by the mentors and alumni involved in the accelerator's network. Consequently, a cycle is created: the more successful startups in the accelerator are helped to succeed after the accelerator, and they are bound as alumni. The greater the reputation, the more mentors and startups will apply to the accelerator. Accordingly, more suitable mentors and startups can be selected, which can help startups even more. This upward cycle of personal knowledge drives the success and competitive advantage of accelerators. Therefore, we propose:

RP-1: Through the selection of experienced mentors, startups, and guest speakers, accelerators generate the strong knowledge base. This selection creates a vicious cycle to attract more stakeholders and startups, who possess valuable knowledge, to the accelerator.

There are three different types of accelerators: university accelerators, corporate accelerators and (Dempwolf, private accelerators D'Ippolito, 2015). These differ regarding the funding structures and consequently, also with different strategic interests (Dempwolf et al., 2015; Frimodig & Torkkeli, 2013). For instance, university accelerators specialize in the promotion student startup teams without affiliate participation. The interest is in addition to the promotion of students, also on increasing the innovative ability of the university. Corporate accelerators work with one or a limited number of primary sponsors, often large companies. The

interest here is to promote startups that fit the business model or could form another business model. For participation, the corporate accelerator received equity. Innovation accelerators are privately organized and profit-oriented. Their interest in promoting fast-growing and promising startups in return for equity (Dempwolf et al., 2015). Their clearly different strategic goals indicate that the goals and interests will affect the program design of the accelerator (Dempwolf et al., 2015; Pauwels et al., 2016). Since accelerator management is responsible for program design, every level tries to assert its interests. For example, in the selection process of startups, mentors, and external experts, who form the knowledge base of the accelerator or in the program design. These power relationships and interests naturally results in the selection of a particular group of startups and stakeholders, who fulfil the strategic goals, and this will affect the diversity and knowledge base. Thus, the proper benefits of accelerator management and its power in exercising may have an impact on knowledge absorption. Therefore, we propose:

RP-2: The type of accelerator determines power relationships which leads them to select particular startups and stakeholders, who are favourable to fulfil its strategic goal. This power relationship determines the type of knowledge that the accelerator can absorb.

Bosch, Volberda, and Boer (1999) emphasize that the characteristics of a startup's absorptive capacity are related to the nature of the knowledge in its environment. They support the argument of Cohen & Levinthal (1990), "Absorptive capacity is more likely to be developed and maintained as a byproduct of routine activity when the knowledge domain that the firm wishes to exploit is closely related to its current knowledge base" (p. 150). However, they show that knowledge embedded in the organizational form, as well as the startup's combinative capabilities, influence the absorptive capacity of a startup. From an internal network development perspective. the of strategic opportunities increased is by internal communication between business units, clearly establishing the relevance of knowledge transfer and absorptive capacity within multi-unit startups (Andersen & Foss, 2005).

Moreover, accelerator programs are strongly related to a learning concept since their main goal is to educate early-stage startups (Cohen, 2013). The existing literature describes accelerator programs educational programs entrepreneurs (Cohen & Hochberg, 2014). Intense mentorship, as well as working in a cohort, enables participating startups to learn from others in accelerator programs by observing the experience of others. In accelerator programs, the knowledge base comes from participants, mentors, and guest speakers (Frimodig & Torkkeli, 2013). With each cohort, the external participants, such as startups' transformations over time. In this changing dynamic environment, accelerators can still adapt to market conditions but have to consider their image and function as an accelerator. Thus, knowledge is embedded in individuals, and the capability of an accelerator depends on the integration of individual knowledge into its organizational context. For these reasons, we propose the next research proposition:

RP-3: Due to the short time frame of accelerator programs and the associated often changing influences (startups), accelerators are not hampered by their embedded knowledge base so that they can easily identify and absorb valuable new external knowledge.

Cohen and Levinthal (1990) posit that distinct organizational mechanisms can influence the level of absorptive capacity, such as the transfer of knowledge across and within units. communication structure between the external environment and the startup, a broad and active network of internal and external relations. However, their main argument is that the learning potential for absorptive capacity is mainly determined by previous related knowledge, research and development investments. Many empirical studies support this notion of absorptive capacity (Ahuja, 2000; Cockburn & Henderson, 2003; Shane & Venkataraman, 2000; Tsai, 2001). Besides, Reagans and McEvily (2003) support the concept of knowledge accumulation by showing that people absorb knowledge more easily when they already have common knowledge in terms of experience or background characteristics. People can learn more efficiently when learning objects are related to their prior knowledge. Along with prior knowledge, the diversity of the background plays a significant role in one's learning. When uncertainty exists regarding the knowledge sphere where potentially useful information might emerge, possessing a diverse background increases the possibility that incoming information will be related to a part of their knowledge. This enhances the efficiency of learning.

The knowledge-based view considers knowledge to be the most crucial resource of the startups and the main determinant of competitive advantage (Matusik & Heeley, 2005). This view strongly influences the relevance of the construct of absorptive capacity, as it is the key to developing and increasing a startup's knowledge base. Also, the ability to transfer knowledge from the accelerators to startups has significant importance, because the value of knowledge is formed in a knowledge transfer in which the existing business competence is transferred practically to startups. In this case, we argue that it is important to mention the role of alumni. They have a positive impact on the next round because they can share their experience and knowledge with the participants. They also can give helpful advice to improve the quality of an accelerator program, which can be attractive for startups (Frimodig & Torkkeli, 2013). The existing literature highlights that accelerators are time-limited programs (Miller & Bound, 2011), whereas they emphasize the importance of cohort presence and knowledge transferability in accelerator programs (Cohen, 2013). The technological solutions and other lessons learned regarding growing startups accumulated by the accelerators are usually disseminated from cohort to cohort. This leads us to say that such accessibility of knowledge, makes the accelerator accumulates experience and knowledge, to operate more effectively. Therefore, we propose:

RP-4: By accumulating lessons learned and other valuable, specialized knowledge from previous cohorts, the quality of accelerator programs and its efficiency improve with time, which can be attractive for startups and contributes to the accelerator's competitive advantages.

4 Expected Contributions & Future Perspectives

4.1 Expected Contributions

In this paper, we identified a research gap on how accelerators gain competitive advantage. Based on our literature review, this study argues that absorptive capacity and the absorption of external knowledge can lead to competitive advantage. We identified a second research gap on how accelerators absorb such new knowledge and what primarily influences this process in the context of accelerator programs. The research on accelerators' absorptive capacity and the way they gain a competitive advantage by absorbing knowledge is currently lacking.

Based on our literature review on the topics of accelerators and absorptive capacity, we provided the first approach on this topic. By creating a modified model of absorptive capacity adapted to the uniqueness and structure of accelerator programs, we firstly provided a conceptual base for further research.

We proposed that knowledge is mainly absorbed by the people involved in the process of the accelerator program. Through participants, mentors, and guest speakers, the new external knowledge is coming into the program with each new batch, and each run through. Moreover, we argued that the accelerator management and, if existing, the associated parent organization has a significant influence on the accelerator's absorptive capacity since, on the one hand, they are strongly integrated into the selection process of participants and mentors. On the other hand, due to different accelerator types, the aims and objectives of the accelerator and its management differ.

We also proposed that because of the short-term of the program and its temporary character, the knowledge base differs from the knowledge base of permanent organizations, which contributes from the absorptive capacity. New influences and thus, new external knowledge come to the program every few months. Finally, we discussed that feedback loops consisting of alumni and lessons learned have an influence on the process of knowledge absorption and therefore contribute to the accelerator's absorptive capacity and, thus, to its competitive advantage.

4.2 Future Perspectives

Since the topic of accelerators is guite new and corresponding literature is rare, many questions remain open. With this paper, we provided a first basic understanding of accelerator's absorptive capacity and its contribution to competitive advantage, but further research is needed to examine the different components of the model of absorptive capacity. Future research is required to identify if more factors influence the process of knowledge absorption and in what way they influence it. It has to be examined if there is a difference in contingent factors in different accelerator programs. Further research is also needed to clarify how an accelerator can maintain its knowledge base despite its short-term nature and the changing components to ensure lasting quality. Moreover, the explicit role of power relationships and social integration mechanisms need to be pointed out. What is the explicit role of accelerator management? How is decision-making fulfilled within the program, and what is the explicit role of associated parent organizations? Regarding the other ingredients of an accelerator, the importance of knowledge transfer between accelerator and startups would also be interesting to look to enhance the understanding of knowledge processes within the program.

Reference

Ahuja, G. (2000). The duality of collaboration: Inducements and opportunities in the formation of interfirm linkages. *Strategic Management Journal*, 21(3), 317–343. https://doi.org/10.1002/(SICI)1097-0266(200003)21:3<317::AID-SMJ90>3.0.CO;2-B

Andersen, T. J., & Foss, N. J. (2005). Strategic opportunity and economic performance in multinational enterprises: The role and effects of information and communication technology. *Journal of International Management*, 11(2), 293–310. https://doi.org/10.1016/j.intman.2005.03.008

Bone, J., Allen, O., & Haley, C. (2017). Business incubators and accelerators: The national picture. *Department for Business, Energy & Industrial Strategy* (Vol. 7). Retrieved from https://www.econstor.eu/handle/10419/196202

Bosch, F. A. J. Van den, Volberda, H. W., & Boer, M. de. (1999). Coevolution of firm absorptive capacity and knowledge environment: Organizational forms and combinative capabilities. *Organization Science*, 10(5), 551–

- 568. Retrieved from http://ejournals.ebsco.com/direct.asp?ArticleID= 4F1491F13B3CF84C272F
- Burke, C. M., & Morley, M. J. (2016). On temporary organizations: A review, synthesis and research agenda. *Human Relations*, 69(6), 1235–1258. https://doi.org/10.1177/0018726715610809
- Cockburn, I. M., & Henderson, R. M. (2003). Absorptive capacity, coauthoring behavior, and the organization of research in drug discovery. *The Journal of Industrial Economics*, 46(2), 157–182. https://doi.org/10.1111/1467-6451.00067
- Cohen, W. M., & Levinthal, D. A. (1990). Absorptive capacity: A new perspective on learning and innovation. *Administrative Science Quarterly*, 35(1), 128–152. https://doi.org/10.2307/2393553
- Cohen, S. (2013). What do accelerators do? Insights from incubators and angels. *Innovations: Technology, Governance, Globalization, 8*(3–4), 19–25. https://doi.org/10.1162/inov a 00184
- Cohen, S., & Hochberg, Y. V. (2014). Accelerating startups: The seed accelerator phenomenon. *SSRN Electronic Journal*, 1–16. https://doi.org/10.2139/ssrn.2418000
- Drori, I. and Wright, M. (2018). Accelerators:
 Characteristics, trends and the new entrepreneurial ecosystem. In M. Wright & I. Drori (Eds.),
 Accelerators Successful Venture Creation and Growth. Edward Elgar Publishing, Cheltenham, UK, (pp. 1-20).
- Bosch, F. A. J. Van den, Volberda, H. W., & Boer, M. de. (1999). Coevolution of firm absorptive capacity and knowledge environment: Organizational forms and combinative capabilities. *Organization Science*, 10(5), 551–568. Retrieved from http://ejournals.ebsco.com/direct.asp?ArticleID=4F1491F13B3CF84C272F
- Frimodig, L., & Torkkeli, M. (2013). Success factors of accelerators in new venture creation. *ISPIM Conference Proceedings, Finland on 16-19 June 2013*, 1–16.
- Goswami, K., Mitchell, J. R., & Bhagavatula, S. (2018). Accelerator expertise: Understanding the intermediary role of accelerators in the development of the Bangalore entrepreneurial ecosystem. *Strategic Entrepreneurship Journal*, 12(1), 117–150. https://doi.org/10.1002/sej.1281
- Hochberg, Y. V. (2016). Accelerating entrepreneurs and ecosystems: The seed accelerator model. *Innovation Policy and the Economy*, *16*(1), 25–51. https://doi.org/10.1086/684985
- Howells, J. (1996). Tacit knowledge, innovation and technology transfer. *Technology Analysis and Strategic Management*, 8(2), 91–106.

- https://doi.org/10.1080/09537329608524237
- Lall, S., Bowles, L., & Baird, R. (2013). Bridging the pioneer gap_the role of accelarators. *Innovations Quarterly Journal by MIT Press*, 8(3), 105–137.
- Matusik, S. F., & Heeley, M. B. (2005). Absorptive capacity in the software industry: Identifying dimensions that affect knowledge and knowledge creation activities. *Journal of Management*, *31*(4), 549–572.
 - https://doi.org/10.1177/0149206304272293
- Miller, P., & Bound, K. (2011). The startup factories: The rise of accelerator programmes to support new technology ventures. *Making Innovation Flourish*.
- Patton, D. (2014). Realising potential: The impact of business incubation on the absorptive capacity of new technology-based firms. *International Small Business Journal: Researching Entrepreneurship*, 32(8), 897–917. https://doi.org/10.1177/0266242613482134
- Pauwels, C., Clarysse, B., Wright, M., & Van Hove, J. (2016). Understanding a new generation incubation model: The accelerator. *Technovation*, 50–51, 13–24. https://doi.org/10.1016/j.technovation.2015.09.00
- Reagans, R., & McEvily, B. (2003). Network structure and knowledge transfer: The effects of cohesion and range. *Administrative Science Quarterly*, 48, 240–267. https://doi.org/10.1002/ciuz.200690031
- Saunders, C. S., & Ahuja, M. K. (2006). Are all distributed teams the same? Differentiating between temporary and ongoing distributed teams. *Small Group Research*, *37*(6), 662–700. https://doi.org/10.1177/1046496406294323
- Shane, S., & Venkataraman, S. (2000). The promise of entrepreneurship as a field of research. In *Source: The Academy of Management Review*, 25(1), 217–226. Retrieved from http://www3.uma.pt/filipejmsousa/emp/Shane and Venkataraman, 2000.pdf
- Todorova, G., & Durisin, B. (2007). Absorptive capacity: Valuing a reconceptualization. *Academy of Management Review*, 32(3), 774–786.
- Tsai, W. (2001). Knowledge transfer in intraorganizational networks: Effects of network position and absorptive capacity on business unit innovation and performance. *Academic of Management Journal*, 44(5), 996–1004.
- Zahra, shaker A., & George, G. (2002). Absorptive capacity. A review, reconcetualization, and extension. *Academy of Management*, 27(2), 185–203.

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