Challenges of the Financial Industry - An Analysis of Critical Success Factors for FinTechs

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Abstract

FinTechs are attracting ongoing interest in both academia and practice. With the use of techniques borrowed from grounded theory, we analyze material from 10 interviews with managers and Chief Executive Officers at FinTechs and 8 interviews with venture capitalists (VCs). We examined 15 critical success factors (CSFs) for FinTech ventures. These are divided into 9 factors that generally apply to general ventures: (1) team, (2) entrepreneur, (3) capital, (4) product/market fit, (5) idea and execution, (6) pivoting and continuous learning, (7) customer acquisition, (8) internationalization, and (9) networking. In addition, we examine 6 factors that have specific relevance to FinTech venture success, namely, (10) technological advantage, (11) regulatory knowledge, (12) B2B focus, (13) incumbent partnerships, (14) growth potential, and (15) exit options for VCs. Our study expands the literature on CSFs for FinTechs and provides recommendations for entrepreneurs to be more successful.

Keywords

FinTechs, Critical Success Factors, Grounded Theory, Venture Capital Success

Introduction

The term FinTech, "a neologism of which originates from the words "financial" and "technology"" (Gomber et al., 2017: 540), has become a counterword for the successful integration of innovation in the financial sector. A worldwide investment value in the FinTech market of 10 billion US dollars (USD) in 2008 will increase to a predicted investment value of 46 billion USD in 2020 (Deloitte, 2019). Despite this remarkable outlook, 9 out of 10 FinTech start-ups still fail (Finextra, 2018). Practitioners and researchers have investigated the reasons why certain businesses fail and others are successful. A vast amount of academic literature describes, in a general sense, critical business model success factors. As Boynton and Zmud (1984: 17) state, "Critical success factors are those few things that must go well to ensure success for a manager and an organization [...]". Previous researchers have highlighted the importance of, e.g., product value and innovation (Groenwegen & Langen, 2012) or product/market fit (Ries, 2011) as critical to the success of a business. Nevertheless, a gap in comprehensive FinTech-specific success factor investigations exists in the

literature. While some approaches have highlighted success factors for FinTechs in single areas (e.g., Röder et al., 2018), there is no differentiation of critical success factors (CSFs) for business models in general and FinTechs specifically. Moreover, the fast paced and highly changing environment naturally demands a continuous observation of the critical factors. Eickhoff et al. (2017: 15) state that "the dynamic development of the FinTech field creates a need for future investigations".

In addition to these mentioned CSFs and arguments, one major ingredient that fuels the enormous growth of the FinTech industry is venture capital (VC), which provides a jump start for many FinTech start-ups. VC is an important driver of innovation, not only in the financial service industry, but also in the overall economy. For many entrepreneurs, VC is often the only source of the equity needed to transform ambitious ideas into disruptive solutions for today's customers' demands and for the survival of the business (Fried & Hisrich, 1994; Cumming & Groh, 2018). Acting as a catalyst for innovation (Franke et al., 2006), VC is widely recognized as beneficial to the whole economy (Cherif & Gazdar, 2011). The combination of the ample field of VC research and novel phenomena emerging from the rising FinTech industry leads to a variety of open questions with regard to CSFs. In particular, the FinTech sector's uniqueness in terms of the strongly regulated environment and the vast competition in the shape of large market-dominating enterprises, such as established banks, create an operating environment that promises many insights that are not only interesting for theoretical research but also have immense practical relevance. More well-grounded knowledge about FinTechs as an investment opportunity can support successful funding rounds and therefore help the FinTech community develop and grow (Röder et al., 2018). The current study aims to contribute to existing research on FinTechs in the financial ecosystem by conducting interviews with practitioners to identify and compare relevant CSFs that have specific relevance for FinTechs compared to general ventures. Such an analysis can demonstrate key concepts and reveal implications for research and practice. Building on the above discussion, we are answering the following research question:

What are the distinctive CSFs for FinTechs and general ventures?

Our paper is structured as follows: Section 2 provides an overview of the related work in the CSF literature for business models in general, with a specific look at already provided FinTech CSFs, and at already examined venture capitalist's decision criteria. A description of our research methodology and data collection procedure is presented in section 3. We summarize and discuss our findings in the fourth section; in section five we present implications for researchers and practitioners. Limitations, future research directions, and concluding remarks are given in the last section.

Related Literature on CSFs and Venture Capitalists' Decision Criteria

The literature on business model success in general is very diverse. One of the most comprehensive qualitative works on CSFs, comes from Finger and Samwer (1998). In their qualitative paper, the authors interviewed a total of 90 entrepreneurs, VC firms, banks and law firms in Silicon Valley and Massachusetts regarding the critical characteristics of a successful 21st century start-up. Their research resulted in a large collection of the different opinions and recommendations regarding what people perceive as the crucial lessons for entrepreneurs building a start-up (Finger & Samwer 1998). Beside from this interconnected concept for success (for other examples see Nicoletti et al., 2017 or Wilson, 2017), most of the literature addresses specific parts of the general business model, such as the entrepreneur as a person and their relationships to investors (Drover et al., 2017) or product value (Shafer et al., 2005, Buddelmeyer, 2009).

Taking a closer look at FinTechs and their business models, these start-ups operate within complex and regulated markets, where trust is of primary importance and, therefore, a CSF (Mackenzie, 2015). On the one hand, it is important and critical for FinTechs to be able to handle regulatory requirements (Gulamhuseinwala, 2016); on the other hand, regulation can be an advantage for FinTechs because it makes it more difficult for new competitors to enter the market. From an economic point of view, with regard to customer acquisition as a CSF, FinTechs are unique in that they have relatively low costs of operation (e.g., through the use of existing structures such as internet phone messaging services) but have high customer acquisition costs (Nicoletti, 2017). Accordingly, partnerships can leverage existing FinTech business models and help FinTechs overcome entry hurdles (Allayannis & Cartwright, 2017). Another characteristic of FinTechs is the focus on actual customer demands, as they can significantly differentiate their products from incumbent structures (Dietz et al., 2015, Mackenzie, 2015). A requirement for this customer centricity is the CSF of intelligently using and monetizing data to better understand customer behavior (Dietz et al.,

2015). This strategy helps FinTechs offer better products and services. FinTechs also depend heavily on the use of technology to create innovation (Bharadwaj et al. 2013). Thus, technology is a CSF because it helps to create innovation, improves product offerings and fosters agility and flexibility of the firm (Chesbrough & Rosenbloom, 2002). The literature on CSFs for FinTechs offers far fewer results than for business model success in general (Gomber et al. 2017). While the literature's findings on general business model success date back to 1980, most FinTech-related elaborations are not older than 2-4 years.

While keeping an eye on VC, the existing literature in the field of VC decision criteria provides a broad range of studies that address venture capitalists' (VCs) behavior and focus especially on the criteria they use to evaluate their investments (e.g., Hall & Hofer, 1993; Zacharakis & Meyer, 2000; Franke et al., 2008). Despite the multitude of existing research approaches, findings differ among studies, and the question of the most crucial criteria still remains an attractive starting point for further investigations. Many authors identify specific criteria first on a granular level and then subsequently group or classify them into major categories. While the number of granular characteristics found in the literature ranges from 15 (Fried & Hisrich, 1994) up to 23 (Tyebjee & Bruno, 1984) or 27 (MacMillan et al., 1985), the number of identified main categories spans from three (e.g., fund's lending guidelines, long-term growth, profitability of the industry the business will operate (Hall & Hofer, 1993)) to 6 (e.g., entrepreneurs' desire for success, creativity/ingenuity, tenacity/courage, enthusiasm/capacity for work, competence in field of endeavor, uniqueness of product or service relative to competition (Khan, 1987)). Usually, a venture investor does not consider all aspects as equally important, and thus they are not all subject to the same scrutiny during the decision-making process (Zacharakis & Meyer, 1998). These individual factor weights reveal one major challenge faced by research, on VCs decision-making. Because the investor's decision is the outcome of a subjective cognitive process, creating a general categorization appears to be a deeply involved endeavor. While the existing literature's findings are heterogeneous in terms of the exact appearance and definition of the criteria, the majority of studies suggest ranking the team-related criteria as among the most important aspects of the VCs evaluation procedure (Franke et al., 2008; Jin et al., 2017). Studies suggest that VCs prefer teams of multiple founders over single founders (e.g., Roure & Maidique, 1986). The capabilities of the specific team members matter as much as the completeness of their abilities and having a balanced distribution of skills (e.g., Jin et al., 2017). The more information about the proposed venture, e.g., about the product, that is available to the investor, the more importance is shifted away from the criteria pertaining to the management or founders' team (individual factors) and towards the market conditions (e.g., macroeconomic factors) (Zacharakis & Meyer, 1998). Looking at the financial aspects of CSFs, solid financial planning with exponential growth may be considered a standard requirement and therefore might not be perceived as a particularly important decision criterion (Hall & Hofer, 1993). Additionally, close monitoring and constant interaction with the founders' team as well as an additional board membership throughout the entire investment process help to prevent problems and to handle uncertainties (e.g., Guler, 2007). Table 1 gives an overview of the related literature of CSFs for FinTechs and VCs decision criteria (in alphabetical order), presented in this section:

CSFs for Fintechs	Decision Criteria for Venture Capitalists
Customer Centricity (Dietz et al., 2015)	**Close Monitoring and Constant Interaction** (Guler, 2007)
Partnerships (Allayannis & Cartwright, 2017)	**Market Conditions** (Zacharakis & Meyer, 1998)
Regulatory Knowledge (Gulamhuseinwala, 2016)	**Solid Financial Planning & Profitability** (Hall & Hofer, 1993)
Technology (Chesbrough & Rosenbloom, 2002)	**Team-Related Criteria** (Roure & Maidique 1986; Khan 1987; Franke et al., 2008; Jin et al., 2017)
Trust (Mackenzie, 2015)	**Uniqueness of the Product** (Khan, 1987)

Table 1. Overview of the Related Literature

Research Methodology and Data Collection

Philosophical and behavioral perspectives as well as different trends in IS research have led to greater diversity in research topics and research methods and ultimately to the emergence of qualitative research methods in IS research (Benbasat et al., 1987; Dubé & Paré, 2003). Therefore, keeping in mind the diverse set of related literature for FinTechs as well as VCs decision criteria presented before which lays the foundation for our investigation, we used a qualitative approach to obtain insights about CSFs from a

practitioner's point of view. We were able to conduct 10 (n=10) semi-structured interviews with managers or Chief Executive Officers (CEOs) of FinTechs; the interviews focused on CSFs for the survival of a FinTech venture. The business models, with regard to the classification proposed by Striapunina (2018), of the FinTechs range from personal finance (e.g., direct bank), digital payments (e.g., cryptocurrency payment provider and alternative lending) to financing (e.g., banking-as-a-platform). Funding ranges range from below than 1 million Euros to up to 200 million Euros. In addition, we conducted 8 (n=8) semi-structured interviews with VCs, where 7 had already experienced investing in FinTechs. The investment activities of these VCs range from 0.05 million Euros to 20 million Euros.

Our underlying assumption for analyzing our interview transcripts was the interpretivist perspective (Klein & Myers, 1999). Given that our study aims to produce an understanding of the influences (the CSFs) on FinTech venture success, we used our qualitative data to construct a holistic view of the CSFs for the success of a FinTech venture from an entrepreneur's and VC's point of view. To ensure the reliability of our qualitative approach (Silverman, 2016), two separate interview guidelines for FinTechs and VCs were prepared and discussed within the researcher team. We ask starting questions about the FinTechs, the financial ecosystem and the VC market in general, followed by questions regarding CSFs for FinTechs and their comparison to CSFs for general business models. Closing and feedback questions concluded our interviews. We refined and added some questions of our used interview guidelines for FinTechs and VCs after the first interviews in response to interviewees' individual feedback. All changes to interview guidelines were discussed and protocoled within the researcher's team. The interviews took place from April to September 2018 and lasted from approximately 25 to 60 minutes and where conducted by the third and fourth author. All of them were recorded, transcribed and coded with MAXQDA 2018.

The analysis of the data set is based on techniques, borrowed from the grounded theory method (GTM) by Glaser and Strauss (1967). The GTM is defined as the discovery of theory from data (Glaser & Strauss, 1967; Corbin & Strauss, 2015). In information systems (IS) research the GTM can be used for two things: (1) a coding method or (2) a method of theory generation (Charmaz, 2006). GTM studies in IS are often criticized for having a weak theoretical foundation (Urquhart et al., 2010), but "[…] the bottom-up approach gives grounded theory its strength. The subjectivity of the observer provides a *way* of viewing. Instead of arresting analysis at the coding stage, researchers can raise their main categories to concepts." (Charmaz, 2006: 139). Therefore, the elaboration of GTM is used in such a way that the coding method is applied, and CSFs for FinTechs are presented in comparison to general factors of venture success. The coding procedure, which is a process that "gets the analyst off the empirical level by fracturing the data, then conceptually grouping it into codes that then become the theory which explains what is happening with the data" (Glaser 1978, p. 55), occurred in 4 steps: (1) open coding, which is the initial line-by-line coding of all data (Wiesche et al., 2017) in order to identify first labels and patterns in the interview transcripts. This process was considered complete when no new findings emerged from the data. In a second step, (2) axial coding helped us to further understand the mentioned relationships between the first identified labels and to determine further major patterns (CSFs). In a third step, (3) selective coding was used to determine only those concepts and content that relate to the previously emerged major patterns in the data. The fourth step (4) entailed theoretical coding to some extent. Theoretical coding is the process of conceptualizing how common codes relate to each other and can be used as a hypothesis for theory integration (Charmaz, 2006). This is the last step of the coding in which CSFs pertinent to the research question were identified. The entire coding process was accompanied by constant comparison, which is the process of data comparison between categories to ensure the best fit between the analysis and the data (Wiesche et al., 2017).

Analysis and Comparison of CSFs for FinTechs

The qualitative data obtained from interviews with FinTech CEOs and (potential) VCs identified 15 CSFs for FinTech venture success, divided into 9 factors that generally apply to general ventures, namely, (1) team, (2) entrepreneur, (3) capital, (4) product/market fit, (5) idea and execution, (6) pivoting and continuous learning, (7) customer acquisition, (8) internationalization, and (9) networking. In addition, we examine 6 factors that have specific relevance to FinTech venture success, namely, (10) technological advantage, (11) regulatory knowledge, (12) B2B focus, (13) incumbent partnerships, (14) growth potential, and (15) exit options for VCs. We visualized the examined CSFs in the following figure:

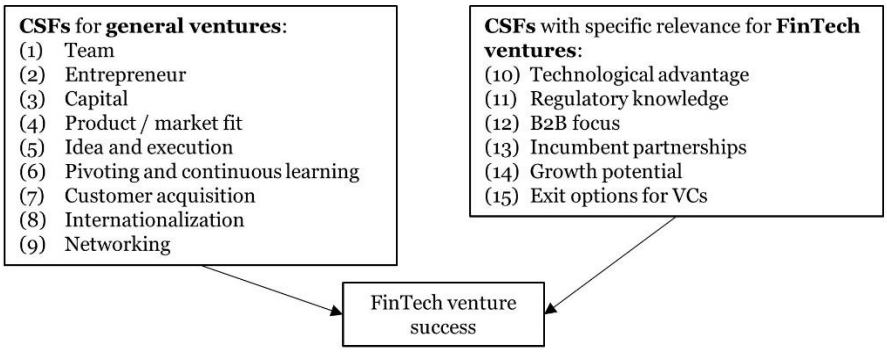

Figure 1. CSFs for general ventures (1-9) and with specific relevance to FinTech ventures (10-15)

Beginning with CSF for general ventures, one CSF that was often mentioned by both VCs and FinTechs was the **team**. The word "team" in this context represents the employees of the firm and not the founder itself. One venture capitalist stated the following: "*After that, if you still think the idea is good, the team is good, the market is ready, you are taking a closer look.",* continuing with*: "So if this agreed by all the stakeholders, the venture fund starts the due diligence which covers the market, financials, legal and tech […]"*. An interviewee from a FinTech answers: "*First and most important thing for us is getting the right people on board. You need to have the mix of culture, experienced bank people but also great product people with great ideas, developers of course.*" Across different concepts, evaluation criteria related to the founders team itself are most frequently mentioned in prior research. A broad range of studies agrees that the team is the most important, predominant criterion in regard to a venture proposal's evaluation (e.g., Tyebjee & Bruno, 1984; Franke et al., 2006; Bernstein et al., 2017). Looking on other individual aspects, respectively the characteristics of the **entrepreneur**, interviewees mostly described characteristics such as being flexible and optimistic and having the ability to react quickly to changes. In general, one could see that the trade-off for entrepreneurs is between having a proactive approach to all parts of the business and being able to delegate certain responsibilities and tasks to employees. FinTech founders who experienced rapid growth in recent years stated that delegating tasks is one of the hardest things to do. As one venture capitalist stated, the founders' managerial skills are an important driver of the final investment decision. Although such skills are desired by VCs for every venture, it is highlighted that their role is also important in the FinTech context because goal-oriented management is needed to orchestrate the other introduced characteristics. Another factor highlighted by interviewees that applies to all early-stage business models is **capital**. There are several reasons why capital is crucial for FinTechs. From the interviewees' statements it is clear that this factor is useful for more than one purpose. Capital itself is existential for early-stage business models when financing daily operations and funding future expansions (Holtz-Eakin et al., 1994; Bertoni et al., 2011). Among all the interviewed FinTechs, not one had financed its operations with self-generated cash flows. Besides from capital aspects, another factor for FinTech venture success that was identified during the interviews is the **product/market fit**. In general, this factor applies not only to FinTechs but also to all early stage business models. In all cases, this process starts with a specific customer-centric problem that the FinTech (or another business) must solve. Without identifying problems that can be solved, the company is risking spending too much time creating a product that no one needs. In reference to the product/market fit, many interviewees also highlighted the importance of being marketable and being able to **execute ideas**. During the interviews, it became clear that an idea itself is worth nothing without the right execution. Naturally, the idea is the first step in launching a business, but as highlighted above, finding the appropriate product/market fit is a continuous journey by which the FinTech explores its customer demands. Interviewees stated that having a good idea is not enough to make a FinTech successful. Again, the specific FinTech environment, with its major trust issues and regulations, demands a strong execution of all parts of the business. When asked about the right way to execute a business idea, several interviewees stated the importance of **pivoting and continuous learning**. Already known from the lean start-up approach (e.g., Blank, 2013) in the literature, this approach seems to be very common in practice. As start-ups usually do not have a lot of time to bring out new products due to their limited budgets and small teams, interviewees stated that the process of executing the business idea is a continuous task and cannot be described as one single action. An approach that should generally apply to all early stage ventures, is captured by one interviewee (FinTech): *"I would like to fail faster and have more speed when*

it comes to pivots. To turn your company around. This took us sometimes too long." Another aspect mentioned in various interviews was the **acquisition of new customers**. Although relevant to all businesses, this is one of the most crucial factors for FinTechs, and something the founding team needs to care about in its early days of operation: *"We also touched the other one which is more about customer acquisition. You should early on think about the distribution strategy of your product. Will you build up channel sale with a market player like a bank in the future, or do you do direct sales. I know some companies outside in the market which have really good products from what I would say, but they underestimated how long it takes to do B2B sales, that there is a really long sales cycle. You would probably be running out of money, even with a good product. So early on think about how to get customers."* Another FinTech interviewee explained this CSF with regard to the incumbent players in the market "*And usually a bank has around 100 euros acquisition cost for their customers. […] the incumbents are really powerful and have a great war chest and really want to hinder those disruptors from getting anywhere with that money."* Related to strategies for gaining new customers, many interviewees also talked about the concept of **internationalization,** or global-oriented (FinTech) business models. To increase market share and profit from economies of scale, some FinTechs consider expanding to several countries. The financial market incumbents in banking usually have branches in every country, but in every market, the highest market share usually belongs to local banks. With the benefits of digital services, which can quickly be distributed in several markets, FinTechs do not have the problem of the time-consuming creation of branches in every market they want to enter. Nevertheless, interviewees also mentioned examples where a global expansion did not work out as expected, as one FinTech interviewee stated: "*I've seen a lot of FinTechs trying to enter other European markets, very quickly. Which I think. I mean in contrast to e-commerce you have to go much slower and really cross all the ties and adopt the eyes. To make sure that you really land in a properly start in a new country. And you can currently see that in N26[1]. They are postponing their US start quarter by quarter. Initially it was mid-2018 and then they said by the end of 2018. And the latest interview talked about 2019. And it really takes time."* Another often-mentioned CSF was the importance of creating a network and doing **networking** activities. While this factor clearly applies to all types of business models, there is a specific characteristic for FinTechs. Being in the right (financial) ecosystem and having a solid network can help with finding talent and industry experts. Compared to the team factor, interviewees state that FinTech hubs in Germany, especially in cities such as Frankfurt (see Fintech hub (2019), as an example) or Berlin, have the great benefit of access to a wide range of talent and networking events.

Our interviews suggest that there are also CSFs that have a specific relevance for FinTechs in addition to the relevance of CSFs for general ventures, which we now outline. A venture capitalist emphasizes the importance of a clear **technological advantage**. This could be especially important for FinTech start-ups, as the competition - in the shape form of large established players - usually has the monetary capacity to invest large amounts of money into the actual development of new technological solutions. To cope with the incumbents in the financial service industry, FinTechs need to have the asset of highly advanced technology. When asked about FinTechs' characteristics, barriers or challenges, nearly all interviewees mentioned the regulated landscape and the **regulatory knowledge** of FinTechs. An example came from a FinTech interviewee: *"FinTech start-ups are affected by regulatory requirements. And I think that is one of the biggest problems they have to face and one of the biggest differences compared to other start-ups. The scope is always different depending of the business model of the FinTech. And this definitely increases complexity when building these kinds of ventures"*. Adding to the list of strategies on how to gain customers (CSF7), interviewees also specified a shift from business-to-customer (B2C) to business-to-business (**B2B**) marketing strategies as one CSF. In the early years, FinTech business models were mainly focused on B2C services, which are most prominent to the public; these services include payments, savings accounts or wealth management. Financial institutions in general earn more money with business clients than with private individuals. Moreover, many businesses in B2B services have mature organizational structures and need to improve their digitalization and innovation. When concentrating on these new opportunities, FinTechs are able to significantly increase their margins compared to retail customers. A FinTech interviewee noted this CSF: *"Probably not B2C. More B2B. So those people who worked in banking [see the opportunity] and for me as a retail customer, I only see innovations in the world of FinTech. It is obvious for example with N26, it is easy to understand what they are doing, but on the other hand as a banking outsider you would not have good notions of how big the market for working-capital financing*

[1] N26 is a direct bank, founded 2013 in Germany (https://n26.com/en-de/about-n26, accessed April 23, 2019)

for SME in Germany is. And I bet that could be, a real large amount." Mentioned with positive arguments on CSF9, the view of **partnerships with incumbents** is controversial among the interviewed VCs. Indeed, partnerships have a positive relationship with FinTech venture success, but the opinions of the interviewees diverge. An interviewee (venture capitalist), for example, appreciates partnerships between start-ups and, for example, incumbent banks. According to this venture capitalist, such partnerships are more important for start-ups in the short-term and in the middle-term, but in the long-term he predicts increasing importance of partnerships on the established players' side. In contrast, another venture capitalist states that cooperation is more important *"[…] for the traditional industries […]", since the traditional companies are "[…] not so fast […]" and they will need to acquire innovation brought from the outside of the institution.* Furthermore, other interviewees (both FinTech interviewees and VCs) even see a danger for young start-up firms in cooperation contracts with larger organizations because such contracts often restrict start-ups in their freedom-to-operate and thus may hamper their growth. With regard to the widespread appearance of mobile app solutions for end customers within the FinTech area, and therefore connected to CSF7, a venture capitalist argued that high **growth potential** and fast go-to-market approaches are especially important in the FinTech industry. Due to the characteristics of the FinTech market, growth potential may demand more attention during the VCs evaluation compared to other branches because the products in FinTech are often very similar and interchangeable. Furthermore, customers do not need much education regarding these products, as most are already known and are just being offered in a more convenient way. Due to the wide range of established enterprises, the financial industry may offer more **exit opportunities for VCs** than other industries. Because the relationships between FinTechs and incumbents are currently often vacillating between competition and cooperation, the evaluation of exit options should be executed more thoroughly, with a focus on a clear positioning for possible acquirers.

Implications for Practitioners and Theory

Our study has several implications for practitioners and for research. The success or failure of FinTech ventures is not purely coincidental. Rather, several factors critically impact the ventures' success. Therefore, examining CSFs for FinTech venture success compared to general venture success factors has a high degree of practical relevance. From a practitioner's point of view, FinTechs must meet all the criteria of traditional business models in addition to those of their own FinTech environment, e.g., regulatory knowledge. FinTech entrepreneurs can use our study to avoid failures in their business activities and will be able to obtain more VC from venture capitalists, which are essential for their survival. The examined CSFs should help practitioners to evaluate their business models, their own skills and those of their employees. In addition, when CSFs of FinTechs are compared to the CSFs of general ventures, our study aid in understanding the structures behind businesses and might enable better communication between general and FinTech ventures and foster cooperation's.

Previous research has highlighted the scarcity of studies focusing on CSFs for FinTech business models (e.g., Gomber et al. 2017). Therefore, there is a stated need for future investigations in this field (Eickhoff et al., 2017, Roeder et al., 2018). From an academic point of view, we use a qualitative approach to expand the existing literature about CSFs and analyzed the distinctions to those CSFs with specific relevance to FinTech venture success. GTM proposed appropriate guidelines in analyzing the interview material in a FinTech and VC context and lead to a meaningful research contribution of our data. These contributions to the literature are made in first reviewing the relevant literature on CSFs and in investigating a holistic view on FinTech CSFs from a state-of-the art perspective. A broader field of factors has been examined from interviews with practitioners receiving up-to-date information and statements. Previous research either focused only on specific FinTech success factors or failed to provide a detailed explanation of the broader picture (e.g., Allayannis & Cartwright, 2017, Eickhoff et al., 2017).

Limitations, Future Research Directions, and Conclusion

Our elaboration focused on the examination and analysis of CSFs for FinTechs. We compared them with CSFs for general ventures and generalized them to FinTech business models. Generalizability is a major concern in IS research (Lee & Baskersville, 2003) and in qualitative research studies (Sarker et al., 2013). A limitation of our study is the generalization of the CSFs to the FinTech-specific context. One could argue that our proposed FinTech-specific CSFs are suitable for every start-up operating in strongly regulated

markets with enormously large incumbent players. Various industries experience the same number of regulations imposed on their business models, if not even more (e.g., the pharmaceutical industry, see Holburn & Vanden Bergh, 2008 for an examination). Of course, identifying CSFs for FinTechs does not necessarily mean that these are uniquely applicable to FinTech ventures. A possible avenue for future research would be an examination and comparison of (qualitative) findings from ventures in business environments comparable to that of FinTechs. Businesses from similar environments could learn from the strategies applied by FinTechs, such as the acquisition of partnerships. Early-stage companies in these areas might find it useful to apply similar strategies to create competitive advantages or develop more successful partnerships with market incumbents.

We have only interviewed FinTechs from Germany. Therefore, FinTechs in other countries beyond the scope of the analysis, and the transferability of the findings of our study to other countries is slightly limited. Second, the dataset consisted of 10 FinTech companies with mainly three different business models. Larger samples with more diverse business models could yield to better conclusions. However, the overlapping results from FinTech representatives with different business models lead to the need for an extension of the interviewee sample size. Interviews with FinTechs, which have more homogeneous business models (like robo-advisors (for an explanation, see Jung et al., 2018)), could lead to more business-model-specific CSFs. Future research can also synthesize new qualitative findings from FinTechs to construct a decision-support model for entrepreneurs in highly regulated environments, such as the FinTech environment. Practitioners can use this model to identify and focus on relevant CSFs that are most important to them in the different stages of their venture (for an example see Khefacha & Belkacem, 2015).

Whether FinTechs will seek partnerships, are acquired by market incumbents or are replaced by them, much space exists for future investigations to offer a better understanding of the CSFs for FinTech ventures. There is still a need to obtain theoretical and empirical insights into CSFs for FinTech partnerships which are relevant to both market entrants and incumbents. Currently, the first FinTech start-ups are slowly starting to become established players themselves, there is a first bunch of FinTech ventures that can be examined over a full lifecycle from foundation through current market establishment. Follow-up research can be oriented toward, and focused on, existing life-cycle theories (e.g., Mintzberg, 1984) and provide insights about the behavior of FinTechs over time.

Several studies show that VCs often rely on intuition and gut feelings during their proposal assessments (e.g., Khan, 1987). For academic research, this reliance on gut feelings and intuition is a strong limitation because it impedes objective and replicable analyses and hampers the derivation of valid generalizations (Zacharakis & Meyer, 1998). These subjective decisions are derived from VCs' personal intuition and contribute to a lack of understanding of the investor's own decisions. VCs usually do not formalize their decision processes. Therefore, it is difficult to discern the actual investment drivers (Zacharakis & Meyer, 2000). Furthermore, the intuition-driven approach applied by VCs may lead to an inconsistent application of their own decision criteria (Zacharakis & Meyer, 2000), which in turn negatively affects the validity and replicability of the presented study. Petty and Gruber (2011) note that interview respondents tend to report information that they expect to be desirable. Concerning the field of VCs decision-making, Petty and Gruber (2011) further argue that investors also tend to exaggerate the number of criteria when assessing a proposal. Although both the interviews and the subsequent analysis have been conducted in a systematic manner, there is no guarantee that the obtained results do not suffer from such biases.

We interviewed 10 CEOs of FinTechs and 8 VCs with two semi-structured interview guidelines. We used GTM techniques in order to analyze our findings. Our examination and analyzation serves as a starting point for an ongoing discussion about the success of FinTech ventures. FinTechs, in general, are expected to remain an interesting topic for research and practice, with particular focus on the area of venture investments within this space, as VC is the actual foundation for the fast growth of the whole (financial) industry.

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