Knowledge Absorptive Capacity in Fintechs: Evidence From Latin America

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Abstract: Fintechs use technologies to offer financial services in a different way than traditional ones. The Fintech sector has seen rapid growth in the global economy and has expanded access to financial services to a wide variety of users; consequently, it has drawn the attention of academics around the world. Being knowledge-intensive organisations, Fintechs can absorb knowledge as a key competence. Absorptive capacity – which includes practices to acquire, assimilate, transform, and apply knowledge - has been analysed in previous studies as a factor that can influence organisational performance. However, most studies have used data from developed countries. The objective of this ongoing study is to analyse the knowledge management (KM) practices used by a Latin American Fintech to absorb knowledge. For this, a case study with a qualitative approach will be presented, using data from an international company of Peruvian origin, specializing in leasing. Data was collected through interviews. The information collected was transcribed and categorized for analysis. The analysis will include content analysis and narrative analysis techniques, supported by Atlas.ti software. The results contribute to the KM literature in two ways: First, by describing how knowledge absorption occurs in Fintechs. Second, by systematizing evidence on how KM practices act in organisations in emerging contexts, to support absorption capacity, and consequently, contribute to organisational results. On the empirical side, this study provides specific insights to managers of companies in the financial and technological sectors in emerging contexts, on how and which practices implementing to improve KM in their organisations.

Keywords: Knowledge absorptive capacity, KM practices, Fintech, Peru

1. Introduction

In the last decade, the world has witnessed strong growth in digital innovation, especially in activities that focus on the design and delivery of FinTech financial services. According to Gomber, Koch, and Siering (2017), the term Fintech is a neologism that comes from the words “finance” and “technology” and is defined as financial companies that use technology to offer innovative financial services. Arner et al. (2015) in their article on the evolution of FinTech, described the historical development of FinTech as a continuous process of financial service and technology evolving together. As a result, investments in technology are doubling. In 2022, global Fintech investments are on par with the same period last year, at over USD 22 billion (Venture Scanner, 2023). By 2025, the size of the global Fintech market is estimated to be approximately US$305 billion, at a compound annual growth rate of around 20% over the coming years (Ng and Pan, 2022). The literature shows the entrepreneurial and adaptive capacity of FinTechs and implies that these companies continuously detect industry, market, and technological opportunities to renew their products and business models (Kazan et al. 2018). Therefore, Fintech is considered a key driver of knowledge and experts predict a very promising future (Gimpel, Rau, and Röglinger, 2018).

Most innovations result from acquiring, transforming and applying knowledge and not only from invention (Zahra and George, 2002; Leal-Rodriguez et al., 2014). In this context, it has been shown that the creation of heterogeneous firms is not only due to the diversity of inputs but also to the heterogeneous knowledge of entrepreneurs and their ability to coordinate disparate knowledge about technology, people, and processes (Alvarez and Busenitz, 2001). Furthermore, it has been shown that fintech growth is explained by founders’ knowledge, founders’ social ties with other founders whose knowledge domains are different from their own, and employees with different knowledge (Sako, Qian, and Verhagen, 2022). Eidjen et al. (2022) make a similar point in their study, mentioning that the use of external sources of knowledge is fundamental to the innovation process in organisations. In addition, bank—Fintech cooperation has been studied which allows for identifying cooperation patterns (Drasch, Schweizer, and Urbach, 2018). However, there is a lack of studies that shows how knowledge is managed in firms from emerging countries (Dávila, Dos Anjos, 2021). Most studies have used data from developed countries, and it is still unclear what KM practices are used by Fintechs.
In this context, the purpose of this research is to analyse the KM practices used by a Latin American Fintech to absorb knowledge and to present evidence of its contribution to organisational performance. To do so, we analyse a case of an international company specialising in leasing. It is considered one of the first Fintech companies registered in the new registry of leasing companies in Peru. The results are expected to contribute to the literature on KM in two ways: first, by describing how knowledge absorption occurs in Fintechs. Second, by systematizing the evidence on how KM practices work in organisations in emerging contexts to support ACAP and, consequently, contribute to organisational outcomes. On the empirical side, it aims to provide specific and novel insights to managers of companies in the financial and technology sectors from an emerging country context, on how and what practices to implement to improve KM in their organisations. Elidjen et al. (2022) note that startups suffer from the ability to innovate, which increases their propensity to fail and overcome this failure by increasing the absorptive capacity of the founding team to improve their ability to innovate.

2. KM Practices for ACAP in FinTech

The term “Fintech” is a contraction of “financial technology” and was first mentioned in the early 1990s by Citicorp CEO John Reed (Puschmann, 2017). The term is used to denote those companies that provide innovative financial products and services, through the use of technology (Dorfleitner et al., 2017). These companies use cutting-edge technologies to increase efficiency and quality of work (Sharbek, 2022). In addition, they are associated with innovation where companies develop new products, business models and processes (Puschmann, 2017).

Fintech success requires financial industry insight to identify and evaluate potential opportunities and technological know-how to develop new products and services that deliver value (Harris, 2021). Moreover, it has been identified that Fintech entrepreneurs observe opportunities and then incorporate individuals with technology and finance expertise into their senior management team, which helps address gaps in founder expertise (Spigel, 2022). In addition, the creation of new knowledge affects both new entrants and the financing of new Fintechs (Cojoianu et al., 2021). Therefore, research pays special attention to investigating the importance of studying knowledge domains in founding teams, their social networks and early employees in Fintechs (Sako, Qian, and Verhagen, 2022).

Knowledge identification is a valuable resource in an organisation. The literature shows that Fintech ecosystems are not just specialized technology or finance clusters, but remain the most generic forms of managerial knowledge for Fintech innovation and growth (Spigel, 2022). Fintech growth is explained by founding teams with similar expertise, founders’ social ties with other founders whose knowledge domains are different from their own, and employees with different expertise (Sako, Qian, and Verhagen, 2022). In this context, the literature mentions that different types of knowledge can be extracted using different techniques such as personality type in the knowledge acquisition process and evaluation techniques (Dehghani and Akhavan, 2017). Arguing that today’s businesses require the ability to capture, manage and use knowledge and information to improve efficiency and better serve customers (Gupta, Sharma, and Hsu, 2004).

In this context, this article focuses on the absorptive capacity (ACAP) of Fintechs. ACAP is the organisation’s ability to recognize the value of new external information, assimilate it, and apply it for business purposes (Muthukannan and Ozman, 2019). Therefore, ACAP refers not only to an organisation’s acquisition or assimilation of information, but also to the organisation’s ability to exploit it (Cohen and Levinthal, 1990; Dávila, Durst, and Varvakis, 2018). That is, to understand what are the sources of a firm’s ACAP, one should focus on “how communications between the firm and the external environment are organised,” and also on the “nature of knowledge and expertise within the firm” (Liao et al., 2009). The practices included are to acquire, assimilate, transform and apply knowledge.

Digital startups must rely on their ability to explore external knowledge and exploit it in rapid innovation (Elidjen et al., 2022). Therefore, the diffusion of knowledge in the organisation is to transfer tangible or intangible knowledge to members who lack it. (Huang, Wei and Chang, 2007). That is, diffusion involves the behaviour of sharing acquired knowledge, experience, and skills with other members of the organisation (Liao et al., 2009). Different means can be used to disseminate knowledge in an organisation, for instance, training, mentoring, project discussion, and team meeting (Manohar and Gupta, 2014). Factors affecting knowledge sharing can be individual and cultural (Huang, Wei and Chang, 2007). In summary, reducing the distance between members or organisations can improve mutual interaction, and thus enrich the improvement of knowledge sharing.
3. Methodology

As it is well known, KM has been a crucial issue for companies for a long time (Nonaka et al., 1995). In this ongoing research, we used a qualitative approach and the analysis of preliminary results is complemented by multiple sources of information such as documents and observations.

The company to be evaluated was selected by accessibility. We also considered its geographical representativeness in emerging markets, its size and stage of development, and its diversity of business models. The company is a specialist in laptop rental. It operates under an immediate delivery model through a monitoring and management application. It is a financial company that uses technology to offer financial services specifically for leasing. It is the only laptop rental startup featured in Forbes magazine's ranking of the best Peruvian startups. They serve more than 2,500 companies and have expanded to Mexico and Colombia. They recently achieved their first placement of private bonds to institutional investors for almost $2 million. The company defines itself as the fastest, simplest and most digital laptop rental and leasing financial solution on the market and has digital service systems of less than 24 hours that include unique requests for change, replacement and technical assistance.

Semi-structured interviews were used in this study, as it is an appropriate technique (Patton, 2014) to obtain detailed information about the absorptive capacity in the company (Rubin and Rubin, 2011), how companies work (Yin, 2017; Creswell, 2017), and how they use it to improve their performance (Denzin and Lincoln, 2011). The key issues and questions to be explored were designed, using a semi-flexible guide that allows adapting to possible emerging issues and taking into account that a relationship of trust will be established and that it will allow some aspects to be deepened during the development of the interview. The interview guide included three questions for the acquisition dimension, three for assimilation, three for transformation, and three for exploitation. The question guide was developed using questions from other previously validated instruments such as those of Inkinnen et al. (2015), Su et al. (2016), Cepeda, and Leon (2019) and Flattan et al. (2011), which increases the validity and reliability of the data obtained (See Appendix A). For the research, managers and senior strategic decision-makers in the organisation who play a key role in the assimilation of information were interviewed. The participants were selected considering the relevance of their experience, the diversity of their perspectives, their systematic knowledge of the organisation, their availability, and their accessibility. The initial 4 selected participants were willing to participate in the study upon informed consent. An informed consent form was developed that described the objectives and procedure and ensured that the participants understood and signed the consent before the interviews. The interviews were carried out in a conducive environment using the designed protocol. Each interview lasted ca. 2 two hours, they were recorded on the Zoom platform while they were in the company's offices.

The interviews were transcribed with the support of the Sonix software before the authors performed a peer review of transcriptions, and the analysis process was based on content analysis techniques. The data were analysed with the support of Atlas.ti 8 software, which is in line with this study (Charmaz, 2014). Transcribed data was organised to identify relevant themes and patterns. It was coded and categorized starting with the acquisition dimension, assimilation, transformation, and exploitation. Emerging themes and ideas were identified. Codes of key concepts were created and grouped into thematic groups. The categories and subcategories found were examined, as well as relationships, similarities and differences between the answers. Data were interpreted by contrasting them with the reviewed literature.

4. Results and Discussion

4.1 Practices for Knowledge Acquisition

Knowledge acquisition is directly related to innovation performance (Papa et al., 2018). Besides, knowledge acquisition influences the efficiency of other knowledge processes, such as dissemination and application (Darroch, 2005). In line with this, in the analysed organisation, knowledge acquisition is not merely the responsibility of specialized units, but a shared responsibility among all members. This idea is confirmed by Interviewee 1, who posits that every worker initiates their pursuit of knowledge, reflecting on their day-to-day roles and responsibilities. The organisation encourages all staff, regardless of their roles, to contribute creative ideas. As Interviewee 1 explains, when a team member conceives an innovative idea, it is documented and presented to the project leader for consideration. Certain departments within the organisation, such as the commercial division, have specific responsibilities that include the acquisition of essential knowledge. This is achieved by monitoring trends, gathering information, and obtaining customer feedback to inform decision-
making processes. Previous literature posited that the gathering of market knowledge is a key practice for knowledge assimilation (Darroch, 2005).

The organisation emphasizes the importance of research, and this is a critical skill that the firm use to see when it looks for potential employees. The recruitment process plays a pivotal role in fostering the organisation’s knowledge base. Interviewee 1 emphasized that new hires are selected based on their existing expertise or their eagerness to learn techniques that can spur product development. Research is part of the organisation’s culture. Interviewee 2 further elucidates this, by highlighting that the organisation’s culture is focused on nurturing individuals with a strong predilection for research, an attribute that drives them to continuously seek new knowledge, skills, or methodologies that can enhance their current process automation capabilities.

In terms of knowledge sources, Interviewee 2 posited that knowledge is not exclusively obtained internally; it emerges from a multitude of sources. An assistant or analyst, for instance, may identify a market need that propels knowledge acquisition. The organisation, therefore, does not strictly enforce a prescriptive approach to knowledge acquisition but encourages it to arise organically from all quarters. The organisation predominantly taps into external sources of knowledge, such as blogs, online courses, YouTube, and industry-specific newspapers and magazines, to stay abreast of current and potential market trends.

A distinct aspect of the knowledge acquisition process in the organisation under examination is the consistent identification of knowledge gaps, particularly about employees’ technical and social competencies. As per Interviewee 1, the deficits are less in the realm of technical numerical skills, but more in soft skills such as presentation techniques and the effective articulation of viewpoints. Post-performance evaluations, as Interviewee 2 explains, are instrumental in assessing the effectiveness of the acquired knowledge, identifying areas for improvement, and validating the success of the approach.

In conclusion, the evidence suggests that the organisation adopts a multi-faceted strategy for knowledge acquisition. The process, while overseen by designated units, is a collective endeavour involving all employees. The focus is on self-learning, research, creativity, the identification of knowledge gaps, and benchmarking. The recruitment process is also leveraged as a conduit to acquire new or specialized knowledge.

4.2 Practices for Knowledge Assimilation

In the examined Fintech, employees are strategically utilized to incorporate acquired knowledge, as mentioned by Interviewee 2. Employees are encouraged to document, disseminate among their teams, and integrate the knowledge acquired from various training and development programs into their daily work. To assimilate this knowledge, the organisation employs practices such as formal and informal interdepartmental meetings, which are a key source for promoting knowledge sharing, and ultimately, innovation in knowledge-intensive firms (Taminiau et al., 2009).

Interviewee 2 highlighted the role of formal meetings, mentioning committees involving all managers to ensure alignment with organisational objectives. These committees also serve as platforms to integrate new knowledge with existing organisational memory, enabling appropriate action. For instance, the Risk Committee was reported as a critical unit in identifying customers who might potentially present problems for the organisation.

Informal meetings are also crucial to the knowledge assimilation process. They are like communities of practice, which are posited as key enablers of organisational innovations (Pattinson, Preece, 2014). Interviewee 1 cited the adoption of “Daily Scrum” meetings across different departments, which are daily discussions focusing on brainstorming solutions for day-to-day problems. These meetings, held in small groups with common interests or facing shared problems, are often interdepartmental, and they are aligned with the organisation’s beliefs of cross-functional collaboration. As Interviewee 2 noted, these meetings can include individuals from different departments, particularly when an issue hinders the achievement of a goal. Promoting knowledge sharing across departments and individuals with different skills is in line with previous research that posited that firms with top managers that have different academic and employer backgrounds are most likely to be successful (Spigel, 2022).

Certain departments show primary responsibility for knowledge assimilation, as illustrated by Interviewee 1. The Business Management Digital Solutions and Insights departments were spotlighted as key units for processing externally generated data to understand external customer needs and for driving efficiency in the organisation’s processes, respectively.

The primary objective of assimilating new knowledge, as the evidence suggests, is to adapt methods to suit the organisation’s context and requirements. Interviewee 1 further elaborated on this, referring to the adoption of
the SCRUM methodology, which they do not necessarily apply in a literal sense but adapt to the organisation’s needs using the best tools or criteria. Interviewees 1 and 2 also spoke about how they adapt external methods, such as a scoring system from an American company, and create their version to serve their purposes. This instance demonstrates a blend of existing technical knowledge and external information that the organisation previously lacked but sought to implement.

The collected evidence indicates that the organisation fosters a culture focused on continuously accepting new knowledge, with employees playing a pivotal role in accumulating and integrating this acquired knowledge. Formal and informal interdepartmental meetings are the most prevalent practices used by the organisation for knowledge assimilation.

4.3 Practices for Knowledge Transformation

Knowledge transformation within the examined organisation primarily hinges on the acquisition of novel technical knowledge, which is subsequently integrated to modify organisational systems or processes. Sometimes the transformation of knowledge is performed by people (Davila et al., 2016) and sometimes it is performed by ICT tools, for instance, artificial intelligence (Avdeenko et al., 2016). As illustrated by Interviewee 1’s statements, the organisation seeks to merge pre-existing technical knowledge with external insights, enabling employees to identify and present potential improvements, such as software enhancements.

Interviewee 2 mentioned that this process also extends to refining the final product offered to customers, wherein new customer-related information is assimilated and applied. Interviewee 1 stresses this point by mentioning an example where the organisation successfully anticipated a customer’s default, leading to a brainstorming focused on the solution, and a presentation of the benefits, efficiencies, and cost savings that the proposed platform could provide. Upon approval, the proposed changes were implemented.

Interviewee 1 further emphasizes that during the knowledge transformation process, the organisation assesses the impact of proposed new practices on the overall process. This involves prioritizing initiatives that can significantly impact processes and system applications, especially since these initiatives compete for the same resources. Upon prioritization, the projects are launched with consistent monitoring from the relevant departments. It was noted that enhancing organisational systems connected to the customer service process is the primary focus of these transformation initiatives, with technical knowledge serving as the primary input.

4.4 Practices for Knowledge Application

The analysed Fintech significantly leverages the concept of minimum viable products (MVPs), which originate from small internal projects, as a mechanism for applying the acquired, assimilated, and transformed knowledge (referenced by Interviewee 1 and Interviewee 2). MVP has been described as a critical practice for knowledge management in startups (Duc & Abrahamsson, 2016), and specifically, for applying knowledge (Bandera et al, 2020). Interviewee 1 posited that these initiatives typically start internally, with the entire workforce’s participation. If the concept demonstrates effective results, it is then introduced to select external customers as a pilot project, and if continued success is observed, a broader rollout is initiated.

According to Interviewee 2, the company’s application of MVPs does not strictly adhere to the traditional methodology but is rather a customized adaptation that best suits the organisation’s unique circumstances. This adaptation of the MVPs technique is exactly one of the results of knowledge transformation processes inside the firm. These small-scale projects within the company primarily utilize fresh customer data as inputs, which are carefully examined by several departments before implementation. As Interviewee 1 notes, there is a particular emphasis on insights that might indirectly reflect customer requests or needs. Previous literature acknowledges the importance of MVP for closing the knowledge gaps between internal units and external customers and stakeholders (Duc & Abrahamsson, 2016).

In conclusion, it can be inferred that the MVP approach is the principal technique employed by the analysed Fintech to apply new knowledge. This approach is primarily customer-focused, with customer-derived information serving as the primary input in this knowledge application process.

5. Conclusion

The analysed company employs a variety of practices for knowledge acquisition. The company defines research as a key competence of its employees and encourages self-learning and creativity, which are embedded in its organisational culture. The recruitment process is designed to acquire people with self-learning capabilities, and in some cases, to acquire new knowledge from the know-how of new hires. External sources of information and knowledge are also used, such as blogs, internet courses, YouTube, and specialized newspapers and magazines.
The company identifies gaps in workers’ knowledge and addresses them through training and development programs. The practices for knowledge assimilation include formal and informal meetings, interdepartmental committees, and the incorporation of new knowledge into the organisational memory. Technical knowledge is the main input of knowledge transformations, a dimension which is mainly focused on customers. An adapted version of the Minimum Viable Product is the main technique that the analysed Fintech use for applying the absorbed knowledge. The findings suggest that the company views its employees as a strategic resource for managing knowledge and that knowledge is shared and incorporated into daily activities. Theoretically, this study contributes to the knowledge-based view by providing evidence that may be useful for the development of an ACAP framework for firms that operate in emerging countries. As a practical implication, we can posit that organisations can use a variety of practices to enhance absorptive capacity and that these practices can be embedded in the organisational culture to create a learning culture.

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References


Appendix A: Interview Guide

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<th>Acquisition</th>
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<tr>
<td>A1</td>
<td>How does the organisation actively seek new and relevant knowledge from external sources?</td>
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<td><strong>Interview guide</strong></td>
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<td><strong>A2</strong></td>
<td>How does the organisation ensure that the knowledge acquired is of high quality and relevant to its needs?</td>
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<td><strong>A3</strong></td>
<td>How does the organisation understand what is happening outside the company, is there a responsible unit, how many units, how do they do it and what are the sources used?</td>
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<td><strong>Assimilation</strong></td>
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<tr>
<td><strong>AS1</strong></td>
<td>How does the organisation ensure that the combination of internal and external knowledge is effective and efficient?</td>
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<td><strong>AS2</strong></td>
<td>Are there practices such as formal or informal meetings between departments to discuss problems or opportunities, or to provide support? How do they do them?</td>
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<td><strong>AS3</strong></td>
<td>How does the organisation disseminate the knowledge acquired among its units, and ensure that it reaches who it should reach?</td>
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<td><strong>Transformation</strong></td>
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<tr>
<td><strong>T1</strong></td>
<td>What are the processes that the organisation uses to transform acquired knowledge into applicable knowledge?</td>
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<td><strong>T2</strong></td>
<td>How do employees structure the acquired knowledge, to apply it in their practical work or to make it available for a future purpose?</td>
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<td><strong>T3</strong></td>
<td>What do you do so that your employees are able to link new knowledge to existing knowledge in the organisation?</td>
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<td><strong>Exploitation</strong></td>
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<tr>
<td><strong>E1</strong></td>
<td>What does the organisation do to apply the transformed knowledge in practice?</td>
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<td><strong>E2</strong></td>
<td>How does the organisation support the development of prototypes of new products or processes?</td>
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<tr>
<td><strong>E3</strong></td>
<td>Who directs the application of the new knowledge? How does an area or several areas or departments participate?</td>
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<td><strong>Complementary guide</strong></td>
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<td><strong>Innovation</strong></td>
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<td>Interview guide</td>
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<td><strong>I1</strong></td>
<td>Describe some recent innovation (to have the necessary depth and link it to previous ones, for example, consider: what knowledge they had, what they did not have, in which areas the idea arose, who approved it, which areas participated in the conceptualization, execution, who validated the launch to the market, what adjustments had to be made and what results other companies participated in the development of that product and service brought)</td>
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<td><strong>I2</strong></td>
<td>Think about the last product launched or improved process: What was the process followed, from the conception of the idea to the market launch?</td>
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