



**Research Exposé:**  
**FinTech and Banking industry: Changes Brought by**  
**Deposit and Lending Business Model**

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## **Abstract**

**Title:** FinTech and Banking industry: Changes Brought by Deposit and Lending Business Model

**Background:** The internet revolution transformed the face of the financial services industry, and financial innovations created in banking have implications for Financial Technology (FinTech) advancements. The concept of FinTech refers to the use of financial technology in a wide range of activities for businesses and organizations, with the primary goal of improving service quality via the use of information technology. Different authors underline that FinTechs are generally considered as a threat for conventional financial institutions (for example commercial banks), nevertheless significant changes are expected to continue, especially for what concerns the FinTech's business models, and further researches are needed.

**Aim:** For these reasons, the purpose of this paper is to deeper understand the relationship among the industries and to analyze the impact of digital deposit and lending business model on traditional banks' services. The entire work is based on two different levels of analysis: a wider perspective on the disruptive innovation and its impact on the two industries' relation and then, a second specific level, on deposit and lending services.

**Methodology:** Since the research problem is explanatory, the study will adopt the semi-structured interviews as the main method to collect data and content analysis to sustain and strengthen the information. The sample will be composed by technical experts and managers belonging to the FinTech as well as the Financial industry, in order to study the phenomenon from the different points of view.

**Contributions:** This paper contributes to the current theoretical framework by defining whether FinTech technologies can be considered disruptive or sustaining technologies for the traditional financial industry and, at the same time, giving an implementation of the Disruptive Innovation Theory and the Fintech Model Disruption. Moreover, the research shows which elements and circumstances influence the possible future direction of the industries.

**Keywords:** FinTech, Banking Industry, Business Models, Ecosystems, Deposit, Digital Lending.

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## List of Abbreviations

BM	Business Model
FinTechs	Financial Technologies
FinTech	Financial Technology
FTP	Financial Technology Products
P2P	Peer to Peer

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## 1. Introduction

In recent years, technological developments fueled by the internet revolution have transformed the financial services industry (Lee & Shin, 2018) and the technological change that creates financial breakthroughs in banking has implications for FinTech advances (Thakor, 2020). As an emerging technical term, FinTech (Financial Technology) describes the financial technology sectors in a wide range of operations for enterprises or organizations, which mainly addresses the improvement of the service quality by using Information Technology (IT) applications (Gai et al., 2018). The concept of FinTech can be defined either as a service: the use of technology to provide new and improved financial services (Thakor, 2020); or as a need: traditional financial markets needs FinTech to provide new profit, increase regulatory efficiency and meet customers' demands (Liu et al., 2020). From another perspective, Senyo et al. (2020) defined it as the technological innovation that has emerged to solve the inaccessibility of financial services.

Given its definition, it is important to underline that developments enabled through FinTech have already had a substantial impact and will in the future have an even stronger one on the financial services industry, leading to a fundamental reorganization of the whole sector (Puschmann, 2017) and to a substantial transformation of the traditional players (Milian et al., 2019). Furthermore, one of the main challenges, in analyzing FinTechs, arises from the diverse nature of their activities and the rapid development of the field (Laidroo et al., 2021). The sector is characterized by diverse and innovative business models that individuate multiple activities (Liu et al., 2020). For this reason, FinTech business model research has emerged in response to the pressing needs of the industry and the academic world and is now fast growing (Liu et al., 2020). For example, Laidroo et al. (2021) distinguish seven types of business models (payments, deposit and lending, insurance, investment management, analytics, distributed ledger technology, and banking infrastructure) where, in particular, the deposit and lending model consists in platform-based financing services, crowdfunding, peer-to-peer lending, consumer financing, leasing, factoring, and microlending (Laidroo et al., 2021).

All these services provided by FinTech companies determine a problem for conventional financial institutions and banks and they are generally considered as a threat for the latter (Lee & Shin, 2018). Bollaert et al., (2021) underline that understanding how the traditional and alternative financial channels will interact in the future and how they can build bridges remains an unexplored area of research. In addition, Laidroo et al. (2021) emphasises that further



research is needed into more qualitative aspects of the functioning of FinTech ecosystems and how that influences the development of business models over time. More in the specific, deposit, digital lending and crowdfunding services have been proposed by authors as possible future research topics, indeed Thakor (2020) highlights that previous research conclusions for lending activities are somehow tentative since they are at an early stage.

Since FinTech's business model is not equivalent to its main activity (Lee and Shin, 2018; Liu et al., 2020, Laidroo et al., 2021) and significant changes are expected to continue, further research is needed into the gradually evolving attributes of FinTech services (Laidroo et al., 2021). What is more, FinTech innovations could lead, on a micro economic point of view, to a transformation of banks and insurers towards more decentralized, networked entities, each of them focusing on single task bringing to possible future organizational forms (Puschmann, 2017). Also, Chen et al. (2021) stress on the fact that FinTech covers many aspects of these industries (for example blockchain, bitcoin and P2P business operation modes) and so future studies may consider their impacts on organizational performances.

The main contributions of this paper are characterized by two different perspectives: the scholarly impact and the implications for business and society. From an academic point of view, the research will contribute by resolving some open questions in the FinTech literature. In this case, following Chen et al. (2021), instead of using the proxies (e.g., ROA, ROE, and net interest margin) traditionally considered in the empirical studies on banking literature, this study used a survey and measured bank performance from a non-financial perspective to explore the impact of one specific business model on traditional institutions. From a generic point of view, the research will contribute to the current theoretical framework by defining whether FinTech technologies can be considered disruptive or sustaining technologies giving an implementation of the Disruptive Innovation Theory. Then, more specifically, the analysis of deposit and lending model will investigate the impact on commercial bank's services. Firms and institutions belonging to the two sectors will have a better level of understanding of their market position and of the competition or cooperation level currently existing across the industries. This will help them to increase the knowledge in order to anticipate their future path. Moreover, from the society point of view, the results will contribute to implement the information for policy makers about their future protocols, legislations, decisions and investments.

The research will make a contribution to the FinTech literature by answering the following

research questions: are traditional financial institutions going to collaborate with digital lending platforms or to compete with them? How will conventional financial institutions evolve to satisfy the changing needs of the industry? How will the value chain be transformed by this relationship? In fact, the final aim of this paper is to deeper understand the impact of FinTech deposit and lending services on the traditional banking system, understanding how the latter will adapt and change to the innovation brought by the FinTech revolution, illustrating the impact along the value chain and foreseeing their possible future path. In order to investigate the research gaps, the whole study is based on two levels of analysis: a broader view on disruptive innovation and its influence on the relationship between the two industries, and a second, more particular level on deposit and lending services. The same structure characterizes also the following chapters.

For what concerns the theoretical background, the effect of FinTech firms on traditional banks can be explained, from a general perspective, by the Disruptive Innovation Theory (Christensen, 1997), from a more detailed point of view, by the FinTech Model Disruption Theory (Snihur et al. 2018) and by other alternative theories present in the literature. For example, Palmiè et al. (2020) consider an alternative approach on the ecosystems. Indeed, starting from the disruptive innovation theory, which emphasizes the potential of a disruptive innovation to grow into a position of dominance in the market, they underline that when the disruptive innovation is not developed by a lone company but is embedded in an ecosystem, this effect is likely to be strengthened.

After this introductory part which represents a summary of the Exposé, the other parts are the following. Firstly, the theoretical framework is described, it focuses on the description and the definitions of the theories used to create the research model and to define the research propositions. It is divided in different paragraphs, each one describing on specific approach. Secondly, the literature review paragraph will explain the procedures adopted and the databases used to research the information and the literature review table provides the most relevant papers for the research. Later on, the research propositions are illustrated, underling the core part of the entire work. A brief description of the methodology follows, it describes the sample characteristics, the collection procedures and the analysis that will be execute in the following months. After the methodology part, the expected contributions are underlined distinguishing between the academic impact and the implications for business and society. Further technical information is provided in the end by the chapter overview, the work plan and the references.

## **2. Theoretical Framing**

The following section defines the concepts and the scholarly discussion about the main theories which support the research; they are presented in a logic order, from a wider perspective into a more specific one. Indeed, in order to give a generic perspective, the concept of innovation and the disruptive innovation theory are described. Thereafter, the FinTech revolution and the FinTech business models are defined more in detail. After the description of the FinTech contest, the FinTech Model Disruption, which applies the traditional disruptive innovation theory to the FinTech ecosystem, is described. What is more, alternative theories which illustrate the possible impact, that deposit and lending activities may have on the banking sector, are illustrated and a final description of the banking system point of view is presented in the last paragraph.

### **2.1 The concept of Innovation and the Disruptive Innovation Theory**

For the Schumpeterian approach, the concept of innovation can be described as: “the truly dynamic element in the economy, the source of credit, interest, and profit as well as of business fluctuation” (Solo, 1951). Schumpeter identified innovation as an essential function of the entrepreneur, making the innovator and its process one of the three elements, along with credit and profit maximization, out of which he constructed a theory of economic development (Ruttan, 1959). In opinion of Schumpeter (1976), the capitalism world was a kind of evolutionary process, a form or method of economic change that not only never is but never remain stationary. The only way for firms to survive in the capitalistic market was to compete one against each other; the strongest abilities they had, to create new forms of industrial organization, the highest possibilities they had to grow.<sup>[L]<sub>SEP</sub>]</sup> Schumpeter identified two major patterns of innovative activities: SchumpeterMark I and SchumpeterMark II (Malerba and Orsenigo, 1995). The first one is characterized by the “creative destruction”, it consists in an innovation base that is always expanding due to the admission of new innovators and the loss of incumbent businesses' competitive and technological advantages. On the other hand, the second one is characterized by “creative accumulation”, a scenario characterized by the dominance of a few businesses that are always inventive as a result of the accumulation of technology and innovative skills through time (Malerba and Orsenigo, 1995b). It is possible that, at an early stage of the evolution of an industry, innovative activities are more similar to the first model described, while in a mature industry, the patterns of innovative activities become more alike the second model of innovation (Malerba and Orsenigo, 1995). In general,

the idea of innovation as a key dis-equilibrating factor has not only remained fundamental to Schumpeter's theory, but it may still impact current company development analyses (Hagedoorn, 1996). The introduction of new products and processes plays an important role in reshaping competition in the domestic as well as in the international marketplace (Hagedoorn, 1996). It has both short and long-term consequences on consumers, businesses, and nations by creating and redistributing economic benefit in a continually increasing economic space. (Hagedoorn, 1996).

In the more recent years, other authors have analyzed the impact of innovation on the economic industry and its impact on competitive advantage and competition. Abernathy et Clark. (1984) developed a framework for analyzing the competitive implications of innovation. They assess innovation in terms of its consequences for the success (or failure) of the innovative company in its competition with rivals, in order to determine how, and to what degree, innovation changes the relative advantages of existing and potential competitors. Abernathy et Clark. (1984) classified four main types of innovation based on the concept of transilience, which can be defined as “the capacity to influence the firm's existing resources, skills and knowledge”. In fact, the combination of two main dimensions (the market transilience scale and the technology resilience scale) generates four different categories of innovation: architectural innovation (when a new technology departs from traditional production processes and, as a result, opens up new links to markets and customers, establishes a new industry or reforms an old one); innovation in the market niche (when an existing technology creates new market prospects while preserving and enhancing current designs); regular innovation (when changes occur on existing markets and consumers based on proven technological and manufacturing capability); revolutionary innovation (when technology disrupts and renders traditional technical and manufacturing expertise outdated). Each category represents a different kind of innovation, and tends to be associated with a different competitive environment.

Another definition of Innovation is provided by Christensen (2013): “it refers to all changes of processes by which an organization transforms labor, capital, materials and information into products or services of greater value”. In this situation, the concept of innovation is directly connected to the concept of disruptive innovation, which is used to describe any breakthrough that revolutionizes an industry and significantly affects its competitive patterns (Palmiè et al., 2020). More specifically, Christensen et al. (2018) denote an innovation as “disruptive” when it does not improve performance along the established customer preference trajectory, but rather introduces an “unique constellation of attributes”. From his study, Christensen induced an account of disruptive innovation (represented in Figure 1) that consists of three principal

components (Christensen et al., 2018). First of all, in many industries, the rate of technical advancement surpasses customer demand for higher-performing technology. As a result, incumbents might overserve the market by manufacturing more modern, feature-rich products than buyers require. As a result, a gap is created at the bottom of the market between the requirements of customers and the performance supplied by businesses, and this gap creates an opportunity for new entrants. Second, there is a distinction to be made between sustaining innovation (which improves goods and services along performance parameters) and disruptive innovation (which completely destroy the existing products with new ones characterized by new technologies). Finally, the third component of Christensen’s model was that existing customers and established business models limit established firms’ investments in new technologies; consequently, investments that are unappealing to incumbents may be appealing to newcomers who lack many (or any) customers and have fewer competing investment possibilities. As a result, incumbents are usually uninspired to create disruptive technologies that promise lower profits, target smaller markets, and provide inferior products and services that their existing consumers are unable to use. (Christensen et al., 2018).

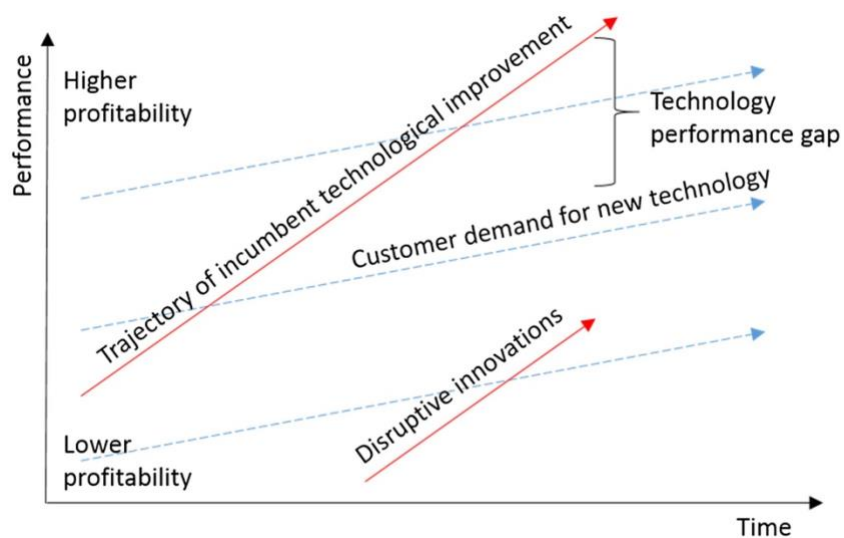


Figure 1: Disruptive Innovation Model. Source: Christensen et al., 2018.

According to Christensen’s theory of disruptive innovation, FinTechs are divided into two types: “Sustainable FinTechs,” which are established financial service providers that use IT to protect their market positions through incremental innovations, and “Disruptive FinTechs”, which are new companies and start-ups that challenge established providers by offering new products and services (Milian et al., 2019).

Traditional players in banking and financial services (as for example commercial banks or lending institutions) are facing a substantial transformation with the rise of “sustainable” and “disruptive” FinTechs and for this reason it is important to deeper analyze the phenomenon of the FinTech revolution.

## **2.2 The FinTech Revolution**

FinTech is the recognized descriptor for an emergent and diverse sector of digital retail monetary and financial services (Langley<sup>[1]</sup> and Leyshon, 2021). These can be either start-ups or established companies with different capacities for disrupting or adding to the delivery of traditional financial services (Laidroo et al., 2021), in other words, they redefine the ways in which people store, save, borrow, invest, move, spend, and protect money (Shin and Lee (2018). Gai et al. (2018) stated that the purpose of the FinTech is to enhance service quality and work efficiency of financial services by using information technology applications and its ability to bypass traditional intermediaries to offer financial services is the reason why FinTech is generating so much excitement and research interest now (Thakor, 2019). What is more, FinTech companies attract enormous venture capital investment worldwide to develop and create new products and because of valuable investments, the FinTech sector has developed significantly in recent years (Shin and Lee, 2018). In the first quarter of 2016, the global investment in FinTech rose to \$5.3 billion, which is a 62% increase from the same period in 2015 (Accenture, 2016). Then, according to the FinTech Regulatory Tower data report (Chen et al., 2021), \$130 billion was invested in 12,000 FinTech businesses worldwide in 2017.

## **2.3 The FinTech Business Models: Deposits and Digital Lending**

Business models have risen in importance in recent years, particularly since they are related to gaining and developing competitive advantage (Wirtz et al., 2016). In terms of the FinTech business models, the literature remains highly scattered with no common understanding of their attributes (Laidroo et al., 2021). Some authors consider FinTech business model almost equivalent to the type of product or service provided by the company (Lee and Shin, 2018; Liu et al., 2020), while others acknowledge that it is based on a more diverse set of features (Laidroo et al., 2021). The literature review, by Wirtz et al. (2016), concludes that the business model should capture the relevant activities of a company, how it creates value-added, and how this value creation evolves. This implies that the business model is a broader and more complicated phenomenon than merely the company's core activity, and seven general business

models may be distinguished: payments, deposit and lending, insurance, investment management, analytics, distributed ledger technology, and banking infrastructure (Laidroo et al., 2021). More in the specific, deposit and lending include platform-based financing services cover crowdfunding, peer-to-peer lending, consumer financing, leasing, factoring, and micro-lending (Laidroo et al., 2021). Anyway, companies in this category provide also personal finance and investment management services. These firms offer tools and guidance to clients to help them manage their accounts, as well as other financial planning and investing services (Palmiè et al., 2020). The deposit and lending is one of the most growing business models; for example, the P2P lending will grow from a little over \$50 billion in 2016 to almost \$300 billion by 2022<sup>[1]</sup> (Thakor, 2019). More in details, P2P lending is the loaning of money to people and businesses using internet platforms that directly link lenders with borrowers without the need of an intermediary bank. (Thakor, 2019). A minor but crucial contrast between FinTechs and banks is that the former are not officially involved in lending themselves, but just linking lenders with borrowers and collecting fees from consumers (Lee and Shin, 2018). Anyway, the use of FinTech in lending is not limited to P2P platforms, there are also shadow banks which are financial intermediaries that provide maturity transformation services like depository institutions, but do not fund themselves with deposits. Shadow banks provide essentially the same lending services as commercial banks, but do not finance with deposits<sup>[1]</sup> (Takor, 2019). Thakor (2019) emphasizes in his study that P2P lenders will not be able to replace banks anytime soon, but they will steal some market share away from banks when banks are capital-constrained and for borrowers who do not have collateral to provide for secured loans. Furthermore, if marketplace lenders make substantial inroads, banks are likely to create their own platforms. Anyway, this conclusion is somewhat tentative since research on this topic is at an early stage (Thakor, 2019). More in the specific for what regards the deposit and lending business model, Thakor and Merton (2019) have developed a theory of bank and non-bank lending in which banks have an endogenous advantage over non-bank lenders (including P2P lending platforms) when it comes to being trusted to make good loans. Their theory suggests that, while problems in banks may be more numerous and complex than in P2P platforms, banks possess an advantage in developing investor trust thanks to their unique access to low cost deposit funding. Figure 2 below shows all the FinTech Services divided by sector.

Sectoral innovations				
Credit, deposit, and capital-raising services	Payments, clearing and settlement services		Investment management services	Insurance
Crowdfunding	Retail	Wholesale	High-frequency trading	Link to mobile devices
Lending marketplaces	Mobile wallets	B2B point of sale	Copy trading	Big data
Mobile banks	Peer-to-peer transfers	FX wholesale	E-trading	Improved risk pricing
Credit scoring	Digital currencies	Digital exchange platforms	Robo-advice	New contracts
Portal and data aggregators				
Ecosystems (infrastructure, open source, APIs)				
Data applications (big data analysis, machine learning, predictive modeling)				
Distributed ledger technology (blockchain, smart contracts)				
Security (customer identification and authentication)				
Cloud computing				
Internet of things / mobile technology				
Artificial intelligence (bots, automation in finance, algorithms)				

Figure 2: FinTech Services by Sector: Thakor, 2019.

## 2.4 Disruptive Innovation in the FinTech Ecosystem

Academics have taken a significant interest in disruptive technologies and have attempted to understand how they influence businesses and sectors (Christensen et al., 2018). We live in an age with an increasing number of disruptions that impact how organizations and ecosystems operate (Snihur et al., 2018) anyway, many disruptive innovations are developed and commercialized in and by ecosystems rather than lone firms (Palmiè et al., 2020). It is worth noting that just a few studies have looked the creation of new ecosystems around disruptive technologies and their influence on established sectors (Palmiè et al., 2020). For this reason, to understand the competitive and collaborative dynamics in FinTech innovation, we must first analyze its ecosystem (Shin and Lee, 2018). Indeed, an ecosystem can be defined as: “the alignment structure of the multilateral set of partners that need to interact in order for a focal value proposition to materialize” (Adner, 2017). Shin and Lee (2018) individuate five elements of the FinTech ecosystem: start-ups, technology developers, government, financial customers, traditional financial institutions. All of these aspects work together to foster innovation, boost the economy, enable collaboration and competition in the financial industry, and ultimately benefit financial consumers (Shin and Lee, 2018). The emergence of FinTech represents a system-level shift in the industry that has resulted in the establishment of new players and the convergence of competencies; consequently, the FinTech ecosystem provides a valuable research setting for the study of disruptive innovation (Palmiè et al., 2020).



According to Palmiè et al. (2020), incumbents may confront somewhat different possibilities and difficulties when disruptive technologies are generated through ecosystems rather than individual entrants. In fact, since an ecosystem tends to be more resource rich than a lone firm, higher resource endowments may restrict the efficacy of incumbents to reduce disruption, as well as incumbents' capacity to purchase the disruptor or license its technology. Furthermore, in opinion of Palmiè et al. (2020), mapping technological innovations in financial technology and banking applications, there is evidence that, as a FinTech ecosystem emerges, it has a major systemic impact on incumbents. This is described by Figure 3 which shows the transformation of the financial ecosystem given the evolution of financial technologies and applications.

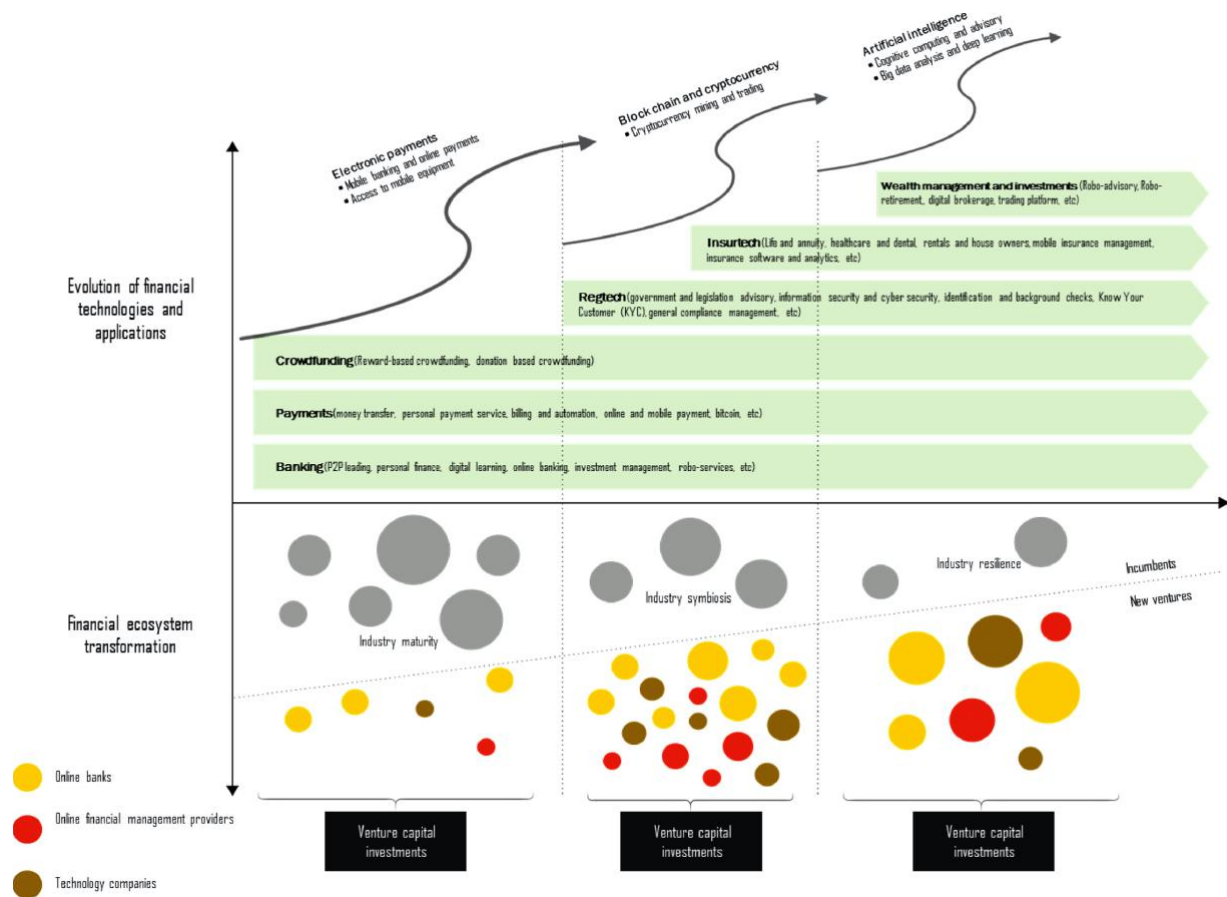


Figure 3: FinTech Ecosystem Roadmap. Source: Palmiè et al., 2020.

Palmiè et al. (2020) classify ecosystem development into three stages. The first stage is the industry maturity, in which incumbent businesses dominate and seek assistance from new ventures to improve their capacity to capitalize on future technical breakthroughs. The second step is the symbiotic stage, in which these technologies are primarily driven by the adaption

and exploitation of new financial and transactional activities of new businesses. Existing incumbent firms attempt to coexist with new ventures that begin to acquire market share due to a lack of prior lock-in investments. The third stage is industry resilience, with new entrants taking control and reshaping the sector while incumbents face the danger of being displaced. Few incumbents are able to cope with the requirement to innovate and change their business models at this stage. As a result, the majority of incumbents are struggling to survive.

The model proposed by Palmiè et al. (2020) describes how disruptive innovation ecosystems contribute to disruptive innovation theory and the growing stream of ecosystem research, but at the same time, as it is underlined by the authors, it requires further in-depth research.

### 2.5 FinTech Business Model Disruption

Sources of disruption may include innovative technologies as well as new business models (Snihur et al., 2018). Snihur et al. (2018) offer a particular theory based on the influence of Business Models (BM) in the current ecosystem, thereby tying the disruptive innovation theory to specific FinTech business models in their study. The theory is based on the idea that the disruptor (e.g. a FinTech company) lunches a strategic gambit, revealing its disruptive intentions, through sequences of distinctiveness and leadership frames, while it is continuously adapting its BM to the needs of the ecosystem (Snihur et al., 2018). For the disruptor, this method creates a virtuous framing-adaptation cycle, whereas the incumbent's strategic neglect of the disruptor results in a vicious framing maladaptation loop. Figure 4 illustrates the Business Model Disruption by illustrating the major structures and their relationships.

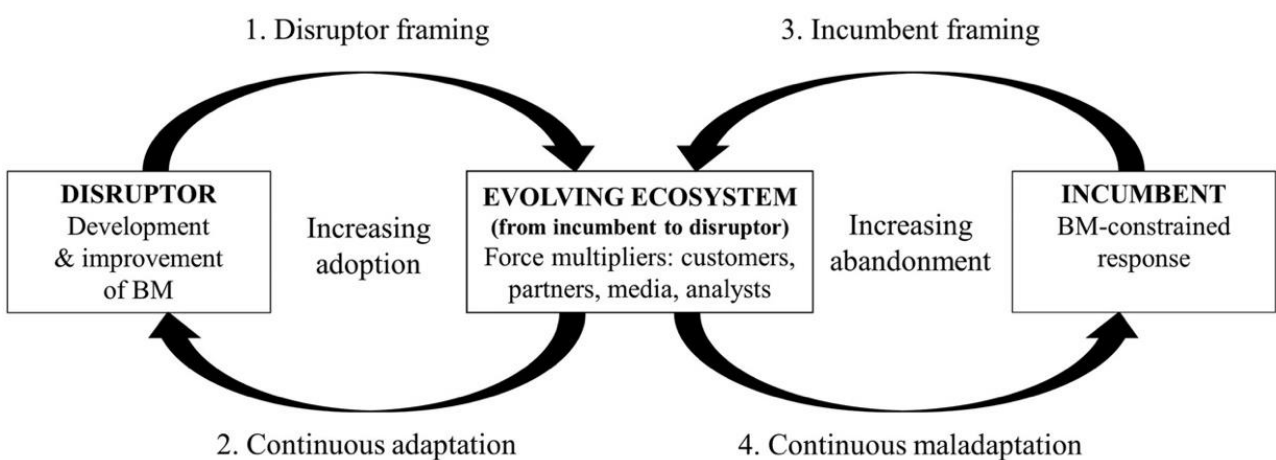


Figure 4: Business Model Disruption Virtuous Cycle. Source: Snihur et al., 2018.

It is characterized by three main structures (disruptor's business model; industry ecosystem; incumbent's business model) connected through four different links (disruptor framing; continuous adaption; incumbent framing; continuous maladaptation). The first link defines the disruptor's framing. It connects disruptor's original BM to the evolving ecosystem which is characterized by multiple forces (customers, partners, media and analysts). The second link represents the feedback relationship between the new ecosystem response to the disruptor's model and the adaption of the latter to the ecosystem needs. The third link outlines the incumbent's framing. It connects the incumbent BM to the ecosystem. The fourth and final connection highlights the incumbent's maladaptation to changing ecosystem demands as a result of restrictions imposed by the incumbent's (previously successful) business strategy.

The model developed by Snihur et al. (2018) shows how the inventor aligns the structure and the adaption of its BM during the disruption process, underling the importance and the relevance of this virtuous cycle for the disruptor success.

## **2.6 Bank's perspective**

One distinguishing aspect of FinTech businesses is that they use cutting-edge technology to handle functions formerly reserved for banks, such as lending, payments, and investing (Puschmann, 2017). They have brought significant changes in the financial industry with new services that can change the way traditional firms operate as well as the way consumers transfer, borrow, and manage their wealth and assets (Palmiè et al., 2020). Anyway, even though technological changes in the financial industry are accelerating and incumbents face disruption from innovative start-ups and large technology firms, some limiting factors emerge (Boot et al., 2021). First and foremost, banks will seek to strengthen their communication and information processing capacities through substantial IT expenditure. Additionally, banks may absorb or collaborate with specialist FinTech businesses in order to obtain expertise for the digitization of critical operations (Boot et al., 2021). Another limiting factor, to the disintegration of bank business models, is that banks may further try to intensify trust as their distinctive asset (Boot et al., 2021). Indeed, trust allows lenders to have guaranteed access to funding, but a loss of investor confidence renders this access dependent on market conditions and lender repute; and for what concerns this aspect banks endogenously have stronger incentives to maintain trust (Boot et al., 2021; Merton and Thakor, 2018). In fact, when borrower defaults erode trust in lenders, banks are able to survive the erosion of trust while lenders of all-equity financed FinTech do not (Merton and Thakor, 2018; Philippon, 2016).

Specifically, depositors at a bank are seen as customers who get important liquidity services and are protected from the bank's credit risk by a combination of deposit insurance and the bank's actions, whereas all-equity FinTech lenders do not have such relationship with their funders (Merton 1995; Merton and Thakor, 2018). This provides banks with a possible funding cost advantage over FinTech lenders, as well as an endogenous economic incentive to invest their capital in a more trustworthy manner (Merton and Thakor, 2018).

However, these limiting factors may weaken over time and for this reason banks may no longer be able to exert market power and lose part of their funding advantage (Boot et al., 2021). Because FinTech firms are already having a substantial influence on the financial industry, every financial business must develop skills to utilize and/or invest in FinTech in order to remain competitive (Lee and Shin, 2018). Nonetheless, researchers' perspectives on the future relationship between conventional financial institutions and FinTechs varies, and in some cases, diverge. In opinion of Chen et al., FinTech products are an example of FinTech leading the financial sector towards digital banking and suppressing the traditional banks; on the other hand, according to Thakor (2019), if FinTech is the new paradigm for financial services, it remains to be seen if this would pose a challenge to existing financial intermediaries. This second method is supported by Lee and Shin (2018), who emphasize that because FinTech is such a new phenomenon, there are currently few research on the social, regulatory, technological, and managerial elements of FinTech.

For all these reasons, the scope of this research is to understand how the traditional institutions, such as the commercial banks, will evolve to the changing needs of the industry; understanding whether FinTech innovations are disruptive or sustaining to the conventional financial industry and providing an implementation of the Disruptive Innovation Theory and the Fintech Business Model Disruption.

### 3. Literature Review

The sources referenced in the research and utilized to support the overall structure of the work are the result of a lengthy literature evaluation procedure. To begin, topic-related articles were found using several databases (ACM Digital Library; ScienceDirect; IEEE Xplore; JSTOR; Web of Science; EBSCOHost; ProQuest) and the program Publish or Perish. The queries executed in the Publish or Perish program and in the database advanced research were identical, and they contained the following keywords: Fintech, Banking, Business Models, Ecosystems, Deposit, and Digital Lending. In addition, exclusion criteria such as the year of publication, the number of citations and the type of document were used to get appropriate results. When an appropriate article, related to the research subject, was discovered, the quality of the publishing journal was evaluated using the Scimago Journal & Country Rank and only publications with an index higher than one were chosen as references for the study. As a result, all of the articles cited in the references have an index larger than one, and the total number of papers evaluated is greater than thirty.

Topic	Title	Author(s)	Year	Journal	SJR Index (2020)
<b>FinTech</b>	Fintechs: A literature review and research agenda	Milian E., Z., Spinola, M., Carvalho, M.	2019	Electronic Commerce Research and Applications	1.18
	Fintech: what's old, what's new?	Boot, A., Hoffmann, P., Laeven, L., & Ratnovski, L.	2021	Journal of Corporate Finance	1.89
	FinTech and commercial banks' performance in China: A leap forward or survival of the fittest?	Chen, X., You, X., & Chang, V.	2021	Technological Forecasting and Social Change	2.83
	Fintech and banking: What do we know?	Thakor, A. V.	2020	Journal of Financial Intermediation	5.45

	What have we learnt from 10 years of fintech research?	Liu J., Li X., Wang S.	2020	Technological Forecasting and Social Change	2.83
<b>Innovation</b>	Innovation: Mapping the winds of creative destruction	Abernathy, W. J., & Clark, K. B.	1985	Research Policy	3.67
	Disruptive innovation: An intellectual history and directions for future research	Christensen, C. M., McDonald, R., Altman, E. J., & Palmer, J. E.	2018	Journal of Management Studies	4.4
	Schumpeterian patterns of innovation are technology-specific	Malerba, F., Orsenigo, L.	1996	Research Policy	3.67
<b>Fintech Ecosystem and Business Models</b>	The evolution of the financial technology ecosystem: An introduction and agenda for future research on disruptive innovations in ecosystems	Palmié, M., Wincent, J., Parida, V., & Caglar, U	2020	Technological Forecasting and Social Change	2.83
	Fintech: Ecosystem, business models, investment decisions, and challenges	Lee, I., & Shin, Y. J.	2018	Business Horizons	2.17
	An ecosystem-level process model of business model disruption: the disruptor's gambit	Snihur, Y., Thomas, L.D.W., Burgelman, R. A.	2018	Journal of Management Studies	4.4
	Business models of FinTechs– Difference in similarity?	Laidroo, L., Koroleva, E., Kliber, A., Rupeika-Apoga, R., & Grigaliuniene, Z.	2021	Electronic Commerce Research and Applications	1.18

Table 1: Literature Review. Own source.

## 4. Research Propositions

As emerged in the Theoretical Framing, the FinTech services identify an issue for traditional financial institutions and banks and they are typically regarded as a treat for the latter (Lee & Shin, 2018; Puschmann, 2017). However, understanding how traditional and alternative financial channels will interact in the future and how they may construct bridges is a study topic that has yet to be studied and further research are needed (Bollaert et al., 2021; Laidroo et al, 2021; Thakor, 2020; Chen et al., 2021). As it is described in the previous paragraphs, the whole study is based on a two-level analysis: a broader view on disruptive innovation and its influence on the relationship between the two industries, and a second, more particular level on deposit and loan services. Figure 5 below, shows this structure.

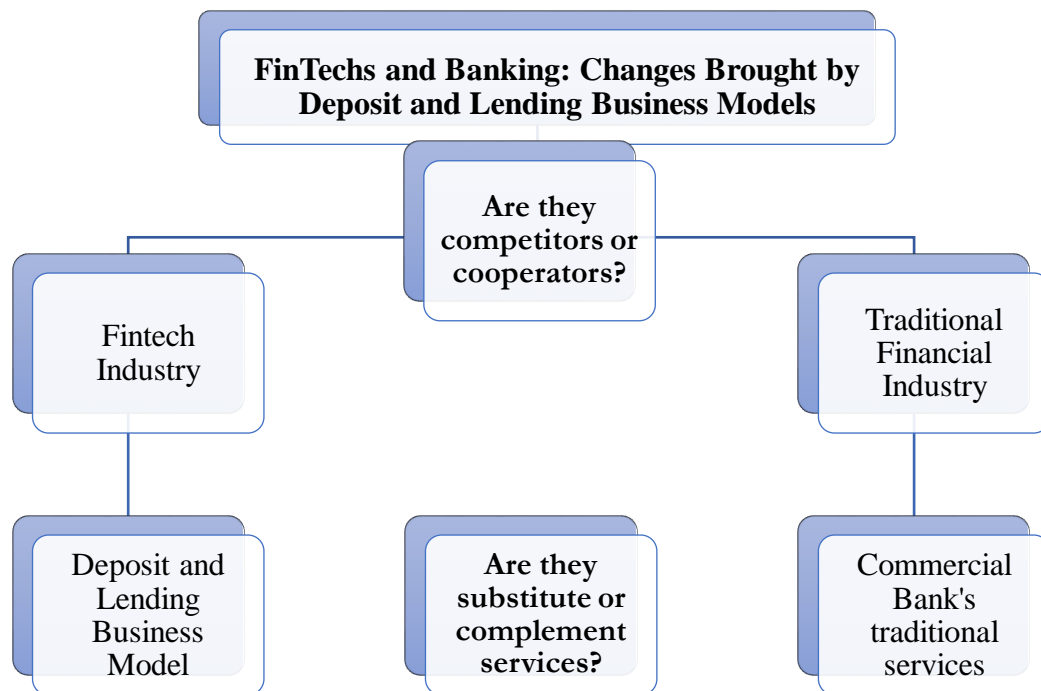


Figure 5: Purpose Statement. Own Source.

In line with the research structure showed in the figure, this paragraph explains the research's propositions, which are based on the theoretical foundations and follow the two-level analysis. The first propositions consider the wider perspective of the Disruptive Innovation Theory and its application to the FinTech ecosystem (Christensen, 1997; Palmiè et al., 2020; Snihur et al., 2018):

**Proposition 1: FinTech's disruptive innovation is restructuring the conventional financial sector, requiring traditional existing institutions to adapt to the changing system in order to determine their future course.**

While the first proposition is related to the definition of the connection between FinTechs and traditional institutions, as well as their potential results and orientations, the second proposition concerned focuses on banks' perception of the FinTech sector.

**Proposition 2: The perception and knowledge of banking industry's managers about Fintech services and technologies will have an influence on the future relationship among the industries.**

These propositions illustrate the first level of analysis of the figure. Indeed, they are finalized to underline the connection among the two industries highlighting the impact and the current situation of the FinTech companies on the banking system, with the final scope of defining the relationship of the industries as competitive or cooperative.

On the other hand, the third proposition is connected to the second part of the theoretical framing and the second level of analysis. More in the specific, it refers to the impact of the FinTech business model (specifically, the deposit and digital lending business model) on commercial banks services and the application of the FinTech Model Disruption.

**Proposition 3: Deposit and digital lending business model has an influence on traditional commercial banks' services, causing them to become increasingly decentralized.**

As cited by Puschmann (2017), FinTech enabled developments will result in a fundamental reorganization of the whole sector. For this reason, this proposition is finalized to understand the impact of FinTech companies on the specific service of deposit and digital lending. Furthermore, since these services are generally provided by commercial banks, the competition brought by the FinTech revolution may lead to increasingly decentralized, networked entities, each focused on a specific job, resulting in future organizational forms (Puschmann, 2017).



## **5. Methodology**

The final focus of this article is to gain a better understanding of the impact of the FinTech industry on traditional financial institutions, since the research problem is explanatory and few studies have been done in this new field or research (Thakor, 2020; Bollaert et al., 2021; Laidroo et al., 2021) the paper will follow a qualitative approach. More in the specific, the paper will adopt the semi-structured interviews as the main method to collect information and content analysis to sustain and strengthen the information. Following Chen et al. (2021), Instead of the conventional proxies (e.g., ROA, ROE, and net interest margin) used in empirical research on banking literature, this study assesses bank performance from a non-financial standpoint to investigate the influence of one specific business model on traditional institutions.

Participants will be chosen in order to well-suit the study's goal. The sample will be composed by employees of companies that provide lending services, such as commercial and investments banks, startups or crowdfunding platforms and so belonging to both the FinTech and the Financial industry. In this way, the phenomenon will be studied from both perspectives. The employment position inside the company is an essential consideration when selecting responders (examples for a commercial bank are market analysts, strategic managers or employees specialized in the granting of credit), but, in general, all persons judged to have enough skill and experience in the study's relevant domains will be interviewed. The number of interviews will depend on the achievement of the theoretical saturation. The theoretical saturation is defined as data adequacy and operationalized as collecting data until new information is obtained (Morse, 1995).

The interviews will be characterized by two different sections following the two-level analysis of the entire research. First of all, the sample will be interviewed in order to have a deeper understanding of the innovation brought by FinTechs and their ecosystem. Secondly, specific questions will follow. They will try to perceive the impact of the deposit and lending business model on traditional institutions; how the financial industry will adapt to the changing needs of the market and which are the strategies and methods adopted by the companies. Finally, both sets of interviews (i.e. conducted in the FinTech industry as well as in the banking sector) will be merged to uncover useful insights that will provide answers to the study questions. Furthermore, for the purpose of exploring the existing situation and anticipate future changes and difficulties, the interviews will take both short- and long-term perspectives.

The data collected will be analyzed with the Maxqda program. As a result, the information gathered from the interviews will be entered into Maxqda, they will then be coded and evaluated to serve as the foundation for theoretical development and integration framework.

## **6. Expected Contributions**

### **6.1 Scholarly Contributions**

From an academic point of view, the research will make a contribution to the FinTech literature by answering the following research questions: are traditional financial institutions going to collaborate with digital lending platforms or to compete with them? How will conventional financial institutions evolve to satisfy the changing needs of the industry? How will the value chain be transformed by this relationship? Since the disruptive innovation in the FinTech ecosystem requires more attention (Palmiè et al., 2020), this study will contribute to the current theoretical framework by defining whether FinTech technologies are disruptive or sustaining technologies, as well as providing an implementation of the Disruptive Innovation Theory and the FinTEch Business Model Disruption. Further research gaps, concerning the deposit and lending business model, will be analyzed. Indeed, despite the numerous research efforts within the context of business models, it is evident that many problems have not been solved yet (Wirtz et al., 2016). Consequently, this work will investigate the impact of the deposit and lending business model on the traditional services offered by the commercial banks.

### **6.2 Implications for Business and Society**

The survey will focus on commercial bank managers' and employees' perceptions of the FinTech ecosystem, as well as their base knowledge and understanding of the industry. For example, they will know if they need to invest in new technologies and initiatives, or in services and technical implementations. Furthermore, the research will show which components and circumstances obstruct prospective company integration or cooperation. Furthermore, for what concerns the impact on society, an increasing knowledge about the topic will help policy makers in the definition of specific regulations.

## 7. Chapters Overview

**Abstract:** concise summary of the study subject and its scope

**List of abbreviations**

**List of figures**

**List of tables**

- 1. Introduction:** research problem, context and background; scholarly discussion about the topic; research gaps; expected contributions; research aim and questions; theory, and overview of the upcoming chapters.
- 2. Theoretical Framing:** outline of the most essential concepts utilized to develop a sound theoretical foundation and study's suggestion.
- 3. Literature Review:** explanation of the literature review procedures and presentation of the ten most influent articles.
- 4. Research Propositions:** description and contextualization of the proposition that support the research.
- 5. Methodology:** explanation of the qualitative approach together with the description of the interviewing procedure and sample characteristics.
- 6. Data analysis:** analysis of the results through the software Maxqda.
- 7. Results:** the major discoveries will be described.
- 8. Discussion:** the results will contribute to the definition of final propositions and model.
- 9. Contributions:** scholarly contribution of the work and implications for business and society.
- 10. Conclusion:** final conclusions, limitations and future researches.

## 8. Work Plan

PLAN OF WORK – MASTER TEHSIS – EUROPEAN MASTER IN BUSINESS STUDIES																					
ACTIVITIES		2020																2021			
		September				October				November				December				January			
		36	37	38	39	40	41	42	43	44	45	46	47	48	49	50	51	52	1	2	3
READING	Topic Definition																				
	Research Literature																				
	Reading literature																				
METHODOLOGY	Research Definition																				
	Interview Design																				
	Gathering Contacts																				
	Interviewing																				
WRITING	Coding																				
	Analysis or Results																				
	Discussion																				
	Review																				
DEADLINE	Topic Presentation																				
	Exposé Submission																				
	Thesis Submission																				
	Thesis Presentation																				
TIMELINE	ACTIVITIES																				

Table 2: Work plan. Own source.

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