

PAOLO SIRONI

**DISRUPTIVE & SUSTAINABLE
INNOVATION AND COOPETITION
ON
FINTECH**

Findings and Recommendations
for Traditional Structures

Created by: AHMET USTA

PAOLO SIRONI

**DISRUPTIVE & SUSTAINABLE
INNOVATION AND COOPETITION**

ON

FINTECH

Findings and Recommendations
for Traditional Structures

Created by: AHMET USTA

Disruptive & Sustainable Innovation and Coopetition on FinTech



The report you are about to read is based on Paolo Sironi's book "FinTech Innovation" and provides a summary of why, faced by the development of the disruptive technology of the FinTech world, sustainable innovation is important and how this process occurred.*

After providing a historical overview of FinTech and its basic concepts, it discusses the relationship between Innovation Theory and disruptive technology and sustainable innovation and offers suggestions for the application of five different strategies based on the concept of coopetition.

** This study summarizes the first part of the book "FinTech Innovation" by Paolo Sironi. In the FinTech Innovation book, Sironi examines all of the details of the concepts and unravels step by step the DNA of the specific concept of disruptive innovation.*

Although the history of banking in Anatolia can be traced back to BCE 12,500, banking in the modern sense of the word began to take shape in the 12th century and developed rapidly during the Renaissance as a means of wealthy families in major cities managing their wealth. During the 17th and 18th centuries, the emergence of systematic innovations, such as central banking, resulted in Amsterdam and London emerging as financial centres for the countries of northern Europe. By the 20th century, although London remained the leader in this respect, it had now been joined by New York. However, by the beginning of the 21st century, banks had grown on an international scale and been transformed into independent giants with the potential to endanger the global economic system, as can be clearly seen during the eruption of the global economic crisis in 2008.

After the 2001 crisis, which affected Turkey specifically, and the global economic crisis of 2008, the regulatory authorities introduced very important measures in order to protect individual consumers as much as large economic institutions. Compliance with these measures became one of the most important responsibilities of the financial ecosystem.

* *Coopetition* is defined as collaboration between business competitors for mutually beneficial results.

“More investments in IT for more savings”

Banks, which needed to manage operations that grew rapidly in the shadow of the strict regulatory measures, established themselves as the unrivalled leaders in terms of their investments in **Information Technology (IT)**. In addition, fierce competition and the pressure to become more efficient meant that banks adopted the statement **“More investments in IT for more savings”** as their motto. These investments in technology broke traditional structures’ resistance to change. But the industry found itself faced with an unexpected new concept: **FinTech**.

The financial technologies that have become known as FinTechs have transformed rapidly growing institutions that enter the market with very low investments and produce financial solutions using digital technology that challenge traditional models. What FinTechs do is use technology to create innovative products which, in financial terms, resolve customer problems swifter and more effectively. This approach has meant that FinTechs, which utilize digital models rather than more traditional models, are able to enter markets with lower investments and to grow very rapidly. The flexible approaches adopted by FinTechs enable them to create an infrastructure almost instantly, compared with the more cumbersome traditional institutions which grow incrementally over a period of many years.

Today, as banks continue to increase their IT spending on the digital revolution, they are facing difficulties in terms of continually declining profitability and access to capital. The increase in the cost of funding has forced many institutions to reduce investments and manage their operations more efficiently. On the other hand, the opportunity to transform a traditional industry has today facilitated the emergence of many new FinTechs and created new possibilities for cooperation with banks.

Today the regulatory authorities do not just set the rules. They also develop strategies to transform the areas that they oversee and make them more attractive

On the other hand, technology is not the only factor transforming the traditional financial world. **Regulation** is the second component which accompanies technology everywhere that it is not the locomotive of this change. As they apply pressure for a greater focus on transparency and efficiency, local and global regulatory authorities are also concentrating more on protecting the rights of the consumer. The regulatory authorities have learned from the mistakes made in the past and, in order not to repeat them, they are rapidly taking preventative measures, while also encouraging innovation and competition. In addition to stating what needs to be done and how, today's regulatory authorities also adopt modern concepts of management in order to make the areas for which they are responsible attractive. This approach emboldens and strengthens FinTechs.

Disruption is inevitable but will be different to what we imagine

Given all of these developments, the question that has to be asked is whether FinTechs are disruptive or supportive for banks. It needs to be said that **disruption is inevitable** but that, rather than completely excluding banks, it can be realized in a way that incorporates them into the transformation. It is impossible to predict the future for an individual firm or for an entire sector but what we can say for certain is that there will be **winners and losers**. The purpose of this study is to analyze the role of FinTechs during this period of disruption in order to better understand their role.

The Vibrant FinTech Ecosystem

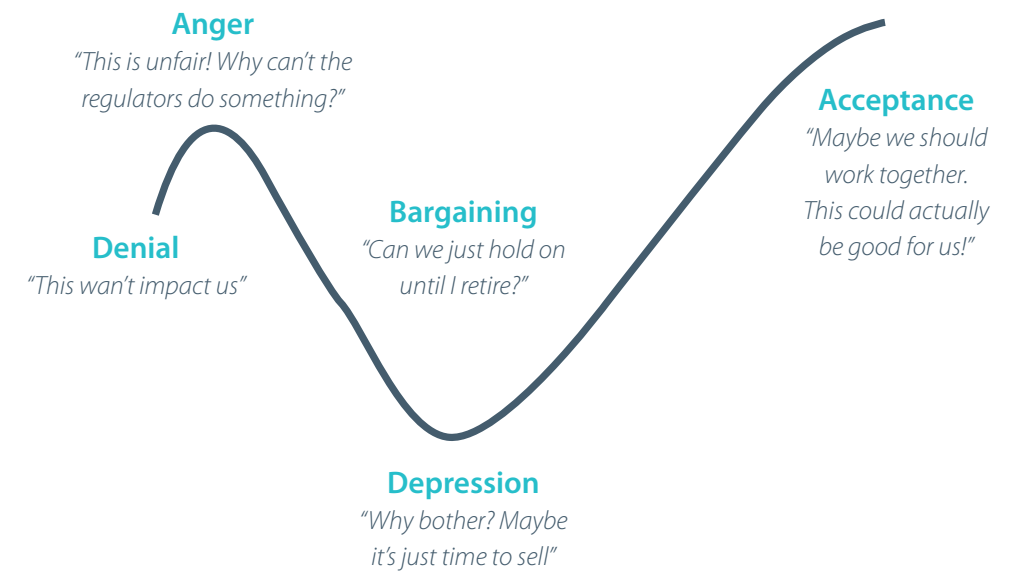
Even though these new companies which were responsible for the emergence of the concept of FinTech in 2008 and 2010 were mainly American, they were not confined to Silicon Valley but spread rapidly to other areas, such as the East Coast of the US, Europe, Hong Kong, Singapore, Australasia and Asia. They entered our lives with active solutions in areas such P2P Lending, digital payments and Big Data Analytics. FinTechs became a global phenomenon, occupying the space between financial institutions and technology suppliers and transforming financial services with their digital solutions.

Directly or indirectly, the cheaper services provided by FinTechs bring into the system those consumers who were having difficulties accessing major institutions.

For FinTechs, in addition to providing a great customer experience, digital tools also enable companies to overcome the high requirements necessary to enter the financial markets. Directly or indirectly, the cheaper services provided by FinTechs now enable those consumers who were having difficulties accessing major institutions to enter the system. New FinTech ideas appear every few months and this transformation is also attracting the attention of other customer segments. For this reason, it is impossible to talk of a specific FinTech profile, because the profile is constantly changing.

On the other hand, companies such as **Alibaba, Apple, Google and Facebook**, which utilize other business models, have also discovered that they can use consumer relations for financial services. Technology and media giants have turned to FinTechs, which have the ability to instantaneously provide considerable capital strength. Every day brings a clearer understanding that they can use them to bridge finance and technology much faster than banks, and they are turning to these applications.

The Bankers' Fintech Grief Cycle



Banking's Grief Cycle

JP Nicols, who has many years of experience in the financial sector, describes bankers' relationship with FinTech as a "Grief Cycle". "In the beginning they were in denial," he says, adding that this was immediately followed by anger and they began to lower their sails. Nicols says that bankers who tried to bargain the problem away ended up falling into depression before realizing and accepting "the disruptive innovation that will change habits" and looking for means of cooperation.

Towards A Better Understanding Of FinTechs

In order to understand why FinTechs have become a disruptive force for traditional institutions, we can cite the examples, which Paolo Sironi examines in detail in his book, of gamification and **Robo-Advisor solutions**, which provide investment consulting services for individuals.

Robo-Advisors are tools which use digital instruments to offer automatic investment solutions for individuals. Robo-advisors make it possible to manage financial investments through gamification and goal-based investing methodologies which use algorithms to completely eliminate the risk of individuals rapidly abandoning their goals. This innovative approach also eliminates the need for traditional personal expert investment advisors and allows financial services to be provided to a broader range of customers, while enabling FinTechs providing such solutions to grow rapidly and generate significant turnovers.

One of the most important factors in the success of these innovative FinTechs is personalization.

Paolo Sironi's book focuses on the gamification of Robo-Advisors and how they are used for goal-based investing decisions.

For Sironi, who addresses in detail each of these issues in a chapter, there are a host of great opportunities in this field, as much for FinTech enterprises as for the traditional banking sector.

The Importance of Personalization

The asymmetric structure of the flow of information between professional bankers and private or corporate customers provides financial institutions with an unrivalled pricing advantage. The global economic crisis demonstrated that this was not forward-oriented behaviour. The change in approach required for the shift from asset management centralization to a customer-focused vision is not an easy one. Firms should review their incentive schemes, institutions, business models and old systems which are not currently appropriate for their goals. However, when digitalization becomes a necessity, the current technology enables us to make important progress.

Regulatory changes and new customer behaviour (particularly by the millennium generation) aim to increase the flexibility of final investors by making the need for banking relationship synergy less common.

Big Data Analytics, which have been strengthened by the development of cognitive technologies, and behavioural analysis provide FinTechs and banking institutions with the chance to reshape their business processes throughout these analyses. However, in an industry such as banking, which is subject to intensive regulation, there are also different psychological repercussions. For these reasons, analytical data must be meticulously adjusted to incorporate findings about behavioural risks.

This happens to bring us to innovation theory, which include the concepts of disruptive innovation and sustainable innovation.

Innovation theory

Technology is a process which evolves over time inside and outside companies. At this point, one should ask “What is technology?” There can be several different answers to this question. Paolo Sironi defines technology as: “The process by which a firm transforms information and data, human labour or economic capital into products or services with a greater value.”

Innovation lies at the foundation of technology and innovation occurs in two different ways: “Disruptive Innovation” and “Sustainable Innovation.”

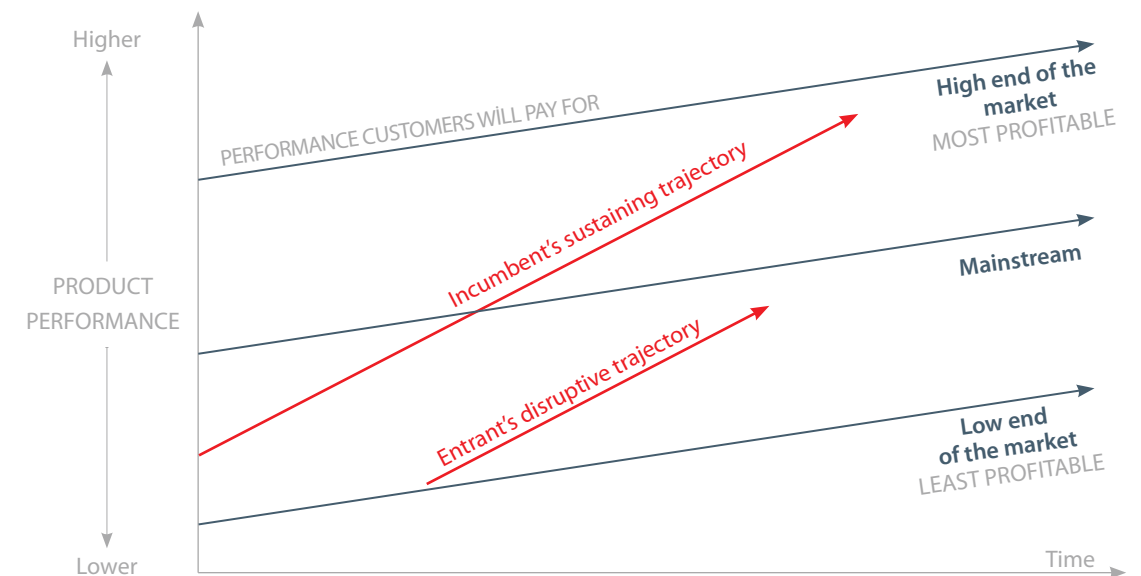
Disruptive Innovation usually offers a cheaper, simpler or more convincing solution in order to gain new customers or attract existing customers.

Here, disruption is not something that happens overnight.

Sustainable Innovation means the continuous development of an existing company’s products in a manner that will meet the customers’ technological expectations.

At this point, we can take the concepts of Disruptive Innovation and Sustainable and define them as “**Innovation Theory**”. Innovation Theory can enable us to better understand the impact of FinTechs on the traditional banking and finance industry.

Graph: Innovation Theory



The above graphic is taken from the article by Clayton M. Christensen, Michael Raynor and Rory McDonald entitled “What is Disruptive Innovation?” and visualizes Innovation Theory in the simplest manner.

The performance of a product can be evaluated over time in three different curves, low profitability, mainstream and high profitability. While **Sustainable Innovation** can ensure healthy development for existing companies, **Disruptive Innovation** can enable new companies to enter markets and grow very rapidly. The vast majority of existing companies which use **Sustainable Innovation** and new companies which use **Disruptive Innovation** are successful.

Because the FinTech world offers Robo-Advisors, which are cheaper than traditional financial advisers and are easier to access, they address new customers and create new needs for existing customers and can be categorized as disruptive innovation.

How much should be invested in order to continue innovation? **Disruptive innovation** can be a leading cause of failure for established brands. On the other hand, the resources necessary to sustain **disruptive innovation** will swiftly become costly. Banks are not exempt from having to find an answer to this dilemma.

In the face of sustainable and disruptive innovation, what should the banking industry do to shape its future?

As disruptive innovation can begin to persuade customers to opt for new solutions and incline them en masse towards new offers, it can result in changes in a product's paradigm on a global scale and in changes between markets and classes. This leads to inevitable consequences for players who do not have the time to adjust their traditional business flows and business models. As examples, it is possible to cite **Apple** and **Nokia**.

An Example of Disruptive Innovation: the iPod

The first Compact Disc (CD) player was sold in Japan by Sony in 1982. The CD is an excellent example of an industry growing healthily by setting higher standards for the music industry and by sustaining innovation. A single development resulted in many more consumers buying new appliances that offered a higher levels of innovation.

In the late 1990s, the pace of marginal developments in music quality started a continuous decline. Consumers were no longer willing to pay more money for less technological innovation. **Steve Jobs** seized this chance and, six years after **MP3s** had appeared on the market, in 2001 the **Macintosh** version of **iTunes** and the first **Apple iPod** appeared on the market. The secret of the mass sales of iPods was not a higher quality of music than existing CD players.

Apple changed the traditional methods of buying and listening to music, but in a way that was innovative rather than offering higher quality. Most importantly, **Apple's** dependence on iPod sales for revenue is today very limited

because, instead of relying on just one product, throughout the intervening years it has launched a stream of innovations, each one of them revolutionary, on the market, such as the iPhone, iPad and Apple Watch.

Digital trends are a combination of the technologies created by new enterprises and changes in consumer behaviour

Industry is rapidly changing and solutions with disruptive innovations are transforming the business world. For this reason, FinTechs will spell the end for traditional companies that do not want to change or cannot embrace change and are left behind.

How should one respond to FinTch innovation?

The most important problem for banks is that, as they struggle with digitalization barriers in banking, that are being simultaneously squeezed by having to keep pace with changes in customer behaviour. Some companies create subsidiary FinTech businesses in order to encourage innovations outside mainstream banking, while others aggressively turn their business models inside out. Even though doing nothing is not a choice going forward, some still hesitate to embrace digital change.

The industry does not only need to change its IT structures. The transformation from a “financial products distribution channel” to a “financial consulting distribution channel” means that financial institutions need to change all of their business models.

There is currently no definite solution. In order to survive, firms should develop a long-term strategy to encourage new and unexpected ideas.

It is here that the concept of “copetition” emerges as the only solution. In order to be able to survive disruptive innovation, traditional companies need to ensure sustainable innovation, but they do not each need to should this burden on their own. Cooperation in pursuit of their shared interests between companies who are engaged in cutthroat competition with each other has today become the norm. But is it easy to recommend that they should do this? Of course not. For this reason, in his book, Paolo Sironi encourages decision-makers to focus on five principles and he provides recommendations for each, namely: resource dependence, market irrelevance, discovery-based planning, capabilities versus disabilities and the supply-demand gap.

A study published in 2016 by the global consulting company McKinsey and entitled “**A Brave New World for Banking**” reached the following conclusion: “Over time, large technology companies can assume the leading role in customer relations by positioning themselves between banks and their customers, and can constitute a threat to the existence of traditional banks.”

The report says that banks which wish to overcome this problem need to review their business models, establish close ties with FinTech enterprises, aggressively form links with platform providers and other banks, reduce their costs through shared platforms and make their customers happy by providing them with innovative digital services.

The principle of **resource dependence** states that companies ultimately allocate resources to customers and investors. Leading companies find it very difficult to invest in these disruptive technologies as they have not completely eradicated their main fields of operation because of the lower margins provided by products which best meet the existing needs of customers and investors. But this situation represents a dilemma which can be understood when customer behaviour changes and it is too late to embrace change. Our recommendation for banks and asset managers is to establish autonomous companies outside their main fields of operation, to look for solutions around disruptive technologies and ensure that they create them. In addition, they can form partnerships with venture capitalists (VCs) in order to finance external instruments and provide them with sufficient material resources and sufficient operational independence to enable them to be successful.

The principle of **market irrelevance** states that small markets do not meet large companies' needs and that existing business models are not compatible with specific markets. But disruptive innovation may appear on markets which are far from being, or appear to be far from being, attractive for dominant institutions. For example, Robo-Advisors use innovative methods to address retail consumers who are regarded by major players as having very "small" potential in terms of revenue. Our recommendation is that large firms should form partnerships with small organizations -- at least until the market grows to a size that is regarded as acceptable by the fully-fledged main organization -- and research and provide new services on this type of market.

The principle of **discovery-based planning** demonstrates that unmeasurable markets cannot be managed. Firms have learned to use market intelligence mechanisms to manage their decision-making processes. Planning departments utilize Big Data Analytics in order to research market trends and make decisions about new services and products. But Disruptive Innovation can occur in areas where there are few statistical data. In order to fill this gap, our recommendation is that decision-makers make plans which include specific hypotheses and estimated data, while bearing in mind that the strategies which are chosen as a result may be flawed. This methodology can be overhauled with fresh hypotheses and financial institutions can learn what needs to be known and thus more effectively prevent disruptive changes.

The principle of **capabilities versus disabilities** occurs when abiding by an organization's processes and values creates an obstacle. When a company is faced with change, it may assign its most talented personnel to directly study and manage the change. But, as a result of the corporate culture, these talented personnel may apply corporate values and processes which contradict what is really required by the disruptive innovation. Consequently, instead of making a positive contribution, existing talents may create obstacles to new business connections. Our recommendation is that new skills need to be defined (for example, professional profiles which blur the line between technology and basic finance) and enriched in a manner which is compatible with the company's values (for example, allowing shorter budget-related decision-making processes).

Finally, the principle of the **supply-demand gap** states that there may be an imbalance between the supply of technology and market demand. In general, sustaining innovation may exceed consumers' capacity to accept it. For this reason, products which comply with market demand today may become meaningless tomorrow, and products which perform poorly today (disruptive products such as Robo-Advisors) may demonstrate the greatest potential for sustaining innovation. Our recommendation is that companies review their analyses in order to better measure the trends in how their customers consume products and how to swiftly keep pace with them when there is competition.

What is important is to understand the basic concepts and the transformation process and be ready to comply with them

No firm is equal to another. Some are active on more traditional markets, others have already created their own tools in order to encourage innovation. Many companies embark on global tours, flying in their private jets to visit FinTech hubs in order to find out what will change.

What is important is to understand the basic concepts addressed in this report and the transformation process and be ready to comply with them. Otherwise, just making efforts to find disruptive innovations will never be sufficient on its own.



ABOUT PAOLO SIRONI

Paolo Sironi is the well-known author of books about portfolio management and **FinTech Innovation**. He is currently IBM thought leader for Wealth Management and FinTech Analytics, providing global advisory services for FinTech, which brings together the concepts of finance and technology, in a number of innovative areas, including Asset Management, Risk Management and Financial Technology.

Prior to IBM, Sironi founded a FinTech in 2008 to provide Goal Based Investing solutions for wealth managers. The FinTech became a part of IBM in 2012, following the acquisition of funding partner Algorithmics, a world leader in risk management solutions.

Sironi has more than ten years of expertise in risk management.

Sironi's posts can be read on his LinkedIn and Twitter accounts and his personal website, theptions.com, which is continually updated.

BKM PUBLISHING

To get our valuable e-books,
you need to make a donation to NGOs
through BKM Express

URL Address:

<http://bkm.com.tr/raporlar-ve-yayinlar/yayinlar/fintech-yayinlari/>



B K M
BANKALARARASI
KART MERKEZİ

“Today, for the members of the business community, whichever sector they are in, innovation is no longer a luxury but a necessity. I believe that this study, which examines the need for innovation in the highly competitive financial sector, will provide insight and illumination for all sectors.”

Dr. SONER CANKO

BKM CEO

“Even though the concept of ‘Innovation Theory’ is one that is simple and easy for companies to understand, if they do not apply the right strategies they may find themselves in difficulties and struggling with insurmountable problems. This concise analytical study provides us with the roadmap that we need during this process.”

CELAL CÜNDOĞLU

BKM EVP



BANKALARARASI
KART MERKEZİ