

FINTECH VS TECHFIN: A NEW FORM OF COOPETITION, DETAILED COMPARISON BETWEEN FINANCIAL TECHNOLOGY FIRMS

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Abstract

Nowadays, digital transformation is experienced in many areas of business life. The digitization process has accelerated especially after the Covid-19 pandemic. Digitalization has covered all functions of an enterprise as of today. Finance comes first among these areas. Huge advances in technology have also affected the financial world, and today a new business model called financial technologies has emerged. Although financial technology companies are relatively new, competition in this area is extremely destructive. In the field of financial technologies, banks currently providing classical banking services and fintech and techfin companies that produce customized solutions for their customers are in competition. Each actor has a different strength and weakness in the competition.

For instance, fintech companies meet customer needs better than banks because they provide customized service areas, but since they are relatively small organizations, customers may hesitate to involve with large amount of transactions. Although Techfin companies are larger and have more reputable brand value than fintech companies, they may also be insufficient to produce innovative solutions in the financial field when compared to fintechs. Banks, which are the most established players in the sector, fall behind in producing innovative services compared to fintech and techfin companies despite of their relatively larger asset structure and strong brand values.

In this study, the digitalization process in the sector is examined in detail and these 3 actors in the financial technologies sector and their relations are analyzed in detail. As a result of the analysis, the survival of companies operating in the field of financial technologies in the future depends on their successful cooperation to complement each other's shortcomings instead of competing with each other harshly.

Keywords: Fintech, Techfin, Digitalization, Financial Technologies, Coopetition, Banking System.

JEL Codes: G20, G21, G29

FINTECH VS TECHFIN: YENİ BİR İŞBİRLİĞİ ŞEKLİ, FİNANSAL TEKNOLOJİ ŞİRKETLERİ ARASINDA AYRINTILI BİR KARŞILAŞTIRMA

Özet

Günümüzde dijital dönüşüm, iş hayatının birçok alanında gözlemlenmektedir. Dijitalleşme süreci, özellikle Covid-19 salgınından sonra giderek hız kazanmıştır. Dijitalleşme, bugün itibarıyla bir işletmenin tüm işlevlerini kapsamış durumdadır. Finans alanı da bu alanların başında gelmektedir. Teknolojideki büyük gelişmeler finans dünyasını da yakında etkilemiştir ve bugün finansal teknolojiler adı verilen yeni bir iş modelini ortaya çıkarmıştır. Finansal teknoloji şirketleri nispeten yeni olmalarına

rağmen, bu alandaki rekabet son derece yıkıcı olarak ifade edilebilir. Finansal teknolojiler alanında şu anda klasik bankacılık hizmetleri veren bankalar ile müşterileri için özel çözümler üreten fintech ve techfin şirketleri rekabet içindedir. Yarışmada her bir oyuncunun farklı bir güçlü ve zayıf yönü bulunmaktadır.

Örneğin, fintech şirketleri, özelleştirilmiş hizmet alanları sağladıkları için müşteri ihtiyaçlarını bankalardan daha iyi karşılarlar, ancak nispeten küçük kuruluşlar oldukları için müşteriler onlarla büyük montanlı işlem yapmaktan çekinebilmektedirler. Techfin şirketleri, fintech şirketlerinden daha büyük ve itibarlı marka değerine sahip olsalar da, fintech'lere kıyasla finans alanında yenilikçi çözümler üretmek konusunda yetersiz kalabilmektedirler. Sektörün en köklü oyuncuları olan bankalar, görece daha büyük varlık yapıları ve güçlü marka değerlerine rağmen, fintech ve techfin şirketlerine göre yenilikçi hizmetler üretmede geride kalmaktadır.

Bu çalışmada sektördeki dijitalleşme süreci detaylı bir şekilde incelenerek finansal teknolojiler sektöründeki bu 3 aktör ve ilişkileri detaylı bir şekilde analiz edilmiştir. Analiz sonucunda finansal teknolojiler alanında faaliyet gösteren firmaların gelecekte hayatta kalabilmeleri, birbirleriyle yıkıcı bir şekilde rekabet etmek yerine birbirlerinin eksikliklerini tamamlayacak başarılı işbirliğine bağlıdır.

Anahtar Kelimeler: Fintech, Techfin, Dijitalleşme, Finansal Teknolojiler, İşbirliği, Bankacılık Sistemi.

1. Introduction

Incredible changes are taking place in the finance world in 3 major fields: Expectations, Regulation and Technology. Consumers want to be able to access customized services whenever and wherever they need them. There are 3 important determinants of customer-specific service. Continuity of Service, Flexible and Customization, and Providing Service Customer's location oriented. An example of customer expectations is the ability of customers to make EFT even at night, and the use of mobile banking in business intelligence.

The change in the regulatory environment is in a way that will support the diversification of financial institutions and the spread of transparent and open structures.

Innovations and opportunities brought by technology reveal models that deeply affect business life and ways of doing business. It is possible to consider technology under 3 parts. These are Traditional Technologies (Mobile, Cloud, Internet of Things), Decentralization (Cryptocurrencies, Blockchain, P2P, API) and Artificial Intelligence (Chatbot, Speech recognition, Machine learning, Robo-consultant). As a result of this rapid changes occurred in technologies environment, currently there is a significant interest to these companies that engage in financial technology. Particularly, in cryptocurrencies, the investors are placing their funds to these companies through the Initial Coin Offerings (ICOs). As a type of crowdfunding ICO is a funding and donation mechanism used by ventures through Bitcoin and Ether to fund new and structured venture projects (Ozyesil, 2020: 286).

Nowadays it has been noticed that technology has entered strongly to many sectors, it includes industry, education, finance, health... etc. and the

engagement of these sectors and technology has known a huge increasing after the appearance of Covid-19 pandemic. The Ministry of Development focuses on 2 main topics in the 10th and 11th Development Plan. The first is the expansion of the financial services all over Turkey (nation wide), and the second is increasing the number of companies will promote these financial services. There are one of the main motivations to make this research about fintech and techfin comparison.

In this study, about fintech and techfin concepts following subject will be discussed: In second part, digital transformation and finance, history of transformation, legal framework of transformation and the advantages vs. disadvantages of digital transformation will be explained. In part 3, recent studies and their suggestions included in the literature also will be discussed. In part 4, a comprehensive Techfin and Fintech compassion is made with indicating the services that they do and their importance. Basic different and common points are clarified under the comparison of fintech and techfin. In conclusion part, it is found that fintech and techfin firms are not competitor to each other rather they are completing each other.

2. Basic concepts

2.1 History of progress of transformation

The world is changing faster than ever. The Internet of Things (IoT), mobility, cloud, big data, augmented reality, block chain, and social media are driving companies to the next level of digital customer engagement and IT-enabled business processes, products, and services. In virtually every industry, digital technologies are bringing about unprecedented transformation and changing our work and lives in ways, we have never anticipated.

Digital transformation is an actively discussed topic these days, but this was also true in the late 1990s and again in the mid-2000s. We started to computerize processes almost 30 years ago, and we have already implemented digital activities in our organizations.

First, digital channels, or websites, connected companies and their customers. After that, digital processes emerged to support customer interactions. As companies' digital ambitions quickly grew, they soon needed dedicated digital teams to manage new social and mobile channels. This enabled organizations to leverage digital data on their own activities and interactions. Connected to customers, suppliers, and other stakeholders, companies realized that they operated in digital networks.

To make better use of the vast amounts of information, companies started to connect all processes and devices into networks. Seeing potential in connectivity, organizations focused on digital platforms connecting all system players rather than the traditional method of doing business through intermediaries. Companies began to experiment with new digital ways of doing business, trying to leverage data more effectively, create greater agility, and retain talent.

2.2 Legal framework of digital transformation

Practically all digital transformation initiatives of today are being built on so-called 3rd Platform technologies and solutions, including mobile, cloud,

big data/analytics, and social technologies. Innovation Accelerators—IoT, robotics, 3D printing, next-generation security, and others—depend on the 3rd Platform and expand its capabilities. In the rapidly scaling digital marketplace, they have become the key growth drivers for many companies.

Digital technology is integrated into every aspect of today's companies, and those businesses that fail to set an efficient digital strategy and maximize the impact of digitalization risk being left behind. The Russell Reynolds Associates survey shows that media, telecom, and consumer financial services were the most disrupted sectors in 2015, with retail and technology close behind.

Digital technologies transform industries in completely new ways, offering fundamental improvements in personalization, efficiency, and safety. However, we have only started exploring the digital opportunities, and this digital transformation has only just begun. In the near future, digital innovations and initiatives will take us into new transformation phases, bringing exciting changes to our lives and reshaping the global economy.

Clearly, all of the digital transformation predictions have one thing in common: change. Digitalization is creating more opportunities than ever before, but at the same time, it requires a new mindset and readiness to embrace change. Both companies and individuals need to accept the new reality of constant change to find a place in the developing digital world.

2.3 Advantages and disadvantages of digital transformation

Advantages of the digital transformation are outline in below as follows

- **Makes Your Business More Competitive:**

According to the IDG's 2018 Digital Business research, 44% of enterprises already implement a digital-first business strategy.

This means your competitors have probably already adopted new technologies.

In addition, every new player in the market is focused on successful digital adoption in order to put their start-up at the forefront of their niche. More conservative competitors will get left behind.

Well-suited technologies allow your business to be more flexible, efficient, and productive, improving ROI. As far as digital transformation pros & cons go, this is a compelling argument for making technology adoption a priority.

- **Makes Your Employees More Productive**

Digital transformation begins with your employees; if their performance is improved by effective use of technology, the performance of the overall enterprise improves.

For both white and blue collar workers, automatization of production has historically yielded positive results. Assembly lines, robotization of processes, and AI have all freed up time for more intellectual work for humans.

Modern technology is designed to optimize office processes. For instance, CRMs were originally created to combine and facilitate accounting and client management, while minimizing repetitive tasks in marketing and sales.

These accelerators exist to give employees the ability to fulfill their potential. Even simple programs like messengers or cloud services can boost workers' performance just by facilitating access to information.

In fact, according to The McKinsey Global Institute, the average productivity of employees increases by 25%.

- Allows You to Provide A Better Customer Experience

One of the fundamental principles of business management is to deliver an exceptional customer experience (CX).

The average US citizen spends about 12 hours a day in the digital space. Mining information, getting entertainment, and spending money are just a few of their activities.

The obvious answer is to be there in that space for your clients, facilitating their path to purchase with a seamless user experience of your digital platforms.

Digital transformation allows organizations to meet their customers' needs better through clever use of technology.

Whether it's through a better website, new app, or other digital offering, smart technology coupled with rapid customer adoption is the key to CX success.

Advantages of the digital transformation are outline in below as follows

- Never-Ending Change

As far as the negatives of our digital transformation pros & cons goes, this one is unavoidable. Technological progress is, for the foreseeable future, unending. That means your digital transformation must be an ongoing process. The digital market is fast and furious in its evolution. According to Forbes, the governing trend in 2019 is steep growth in the IT industry. This should come as no surprise to anyone.

When new solutions based on scientific breakthroughs invade the market you have to be ready quickly for further digital transformation.

- Effective Implementation of New Technologies Takes Time

While most of us already know how to use smartphones or send emails, adopting new enterprise management solutions takes a little more time and effort.

The Telegraph reports that one of the most pressing issues for entrepreneurs is finding the right technology. Indeed, implementing too many optimizing platforms can result in chaos.

Finding the most suitable tools for your business takes research and testing time. There is the adoption time it takes to train employees how to use them effectively. For this, a Digital Adoption Platform (DAP) is highly recommended to accelerate time to competency.

- Can Cause Upheaval & Uncertainty for Employees

The burden of constant digital changes falls onto the shoulders of your employees. While 87% of employees claim they are ready to learn new skills, every person has a different tolerance for stress factors.

This is why a personalized approach is required when training employees to use digital tools.

Using traditional training methods, this is prohibitively expensive and a logistical nightmare. However, using a DAP, employees can receive personalized training in real-time, without leaving the system they are using.

In this age of constant digital upheaval, it is important to provide workers with the support they need to feel motivated to give 100% and feel secure in their jobs.

3. Literature Review

Susan Moore (2017), banks have subjected to lots of noise caused by fintechs whether they are going to deplete all traditional financial institutions or not. Time showed that fintechs were not as talented and threatening as expected. They are lack of some key elements like experience, capital and customer base to challenge traditional financial institutions.

Fintechs competitive advantage mostly comes from their agile structure, customer centric approach and loose regulation environment around them. Despite their competitive advantages, most fintechs face serious challenges to scale up their businesses. Lack of customer trust, low number of customers, low brand recognition, weak capital and ineligibility to handle regulatory issues are some of them. On the other hand, banks have all the necessary skills that fintechs do not have but banks have some shortcomings too. Mutually complementary lack of skills and advantages make them perfect candidate for collaboration. Banks close the gap of capital and experience of the fintechs, and the fintechs close the gap of lacking customer centric perspective of banks. Cooperation will give both parties chance to overcome their weaknesses and strengthen their position.

According to PwC, 82% of the financial services expect to make partnership with fintechs within the next three to five years. Financial institutions understand the fact that disruption is inevitable and fintechs provide great opportunity to cope with this inevitability.

A new kind of threat started to emerge from the technological world: techfins (or in some cases bigtechs). Techfin is a combination of two words: technology and finance. Techfins are companies that produce technology as their core businesses. Alternatively, they use their technologies to provide financial services. Unlike fintechs, they have capital, enough experience and customer base. Moreover, the vast customer data and the ability to analyze this data give them a great advantage over fintechs and financial institutions. Even though there are plenty of techfins exist in the sector, biggest techfins are named as GAFA (Google, Apple, Facebook and Amazon).

Appearance of techfins in financial world is not just a threat for traditional financial institutions, it is also posing threat for fintechs. They have the ability to combine the advantages of both fintechs and traditional financial institutions. Fintechs and banks have no other choice than making collaboration. If non-traditional fintechs and traditional financial institutions can unite their strength together, they can find chance to survive from techfin invasion of financial world.

Despite general trend is through collaboration direction, there is no clear guideline how to evaluate and integrate fintechs in banking services.

Desai (2015), the Evolution of Fintech he mention that the word fintech is formed from the abbreviations of two words, namely financial and technology. Officially, World Economic Forum defines fintechs as “companies that provide or facilitate financial services by using technology. In its current form, fintech is marked by technology companies that disintermediate formal financial institutions and provide direct products and services to end users, often through online and mobile channels. Another definition for fintech by PwC (2016a) is “a dynamic segment at the intersection of the financial services and technology sectors where technology-focused start-ups and new market

entrants innovate the products and services currently provided by the traditional financial services industry. As such, fintech is gaining significant momentum and causing disruption to the traditional value chain". Further Gartner defines as "fintechs are startup technology providers that deliver emerging digital technologies that approach financial services in innovative ways or can fundamentally change the way bank products and services are created and distributed, and generate revenue. The term may also refer to the technologies these providers offer. Other definitions such as fintech integrates finance and technology together, traditional financial structures combined with today's technology-based processes and simple one fintech refers to the application of technology in financial service.

Philippon (2016), discussed the potential effects of the fintechs in financial environment. He found that financial services become expensive so that new entrants should enter the market to reduce cost of the services. He also stated that current regulations are under the pressure of political economy and coordination costs. He concluded that fintechs will bring deep and big changes to the financial markets but some structural regulations should be made.

Puschmann (2017), analyzed fintechs detailed. He defined fintechs as a level of the evolution observed in digitization process. He discussed driver of this evolution and concluded that changing role of IT, changing consumer behavior, changing ecosystems and changing regulations are determinants of this evolution. He considered fintech's role as strategic as reducing the cost of IT in financial services which consist of %20 of all costs and become largest cost after labor costs. He emphasized that focus has shifted from intra-organizational solutions to customer-oriented business-to-customer (B2C), customer-to-customer (C2C) and provider-oriented business-to-business (B2B) inter-organizational approaches.

Anne (2019), stated that fintech has disruptive impact on traditional banking system thanks their cheaper, better and faster business models. She pointed out that fintechs nowadays are beginning to offer some traditional services such as payment services and loan allocation which are provided by the traditional banks. This finding suggests that fintechs are becoming an alternative to classic banking system. She defines fintechs are smaller but more agile firms and claims that fintechs are support a wider diversity of products and providers as well being better at providing more transparency and advanced risk management system. She emphasized that thanks to all these strength sides of fintechs, conventional financial institutions are more interested to fintech's growth process. She said that banks have already been taking an active role in this process. Huge banks in traditional banking system have been placing money to the sector. She found out that enormous banks like Goldman Sachs, Citi, and JP Morgan Chase have a remarkable investments in fintech offerings.

4. Fintechs

Fintech, which is a combination of the abbreviations of finance and technology in English, are companies that produce technological solutions in the financial sector as can be understood from its name.

Although solutions such as online banking, which combines classical banking with the internet, are among the first examples of fintech, in recent years solutions and innovations have become more complex and bring practical expansions to life. Our ability to pay online is also gathered under the fintech umbrella, as well as cryptocurrency. So it makes no sense to draw a strict boundary around fintech startups and the fintech ecosystem.

But wherever you put the start, fintech goes where modern technologies take finance. We see the impact of these developments from individual finance to high-level corporate application areas. For example, investment banking also has a close relationship with fintech. In the near future, even fintech will be able to provide investment advice with technologies that can analyze extremely quickly and process data that cannot be processed by a human.

In figure 1. The most important examples of the fintechs are shown as follows:

Figure 1. Fintechs around the World



Source: (Elgin, 2019).

The common features of Fintechs can be summarized as follows:

- 1- Offering many services offered by traditional banks in one dimension,
- 2- Having an innovation approach,
- 3- Being Agile,
- 4- Customer focused & oriented
- 5- Having a significant digital infrastructure

Fintechs, who are close to customers, gradually begin to offer customized financial services to their customers thanks to the fact that they get to know their customers very closely and move towards being a rival to classical banking. One of the companies with this success story is Square. While Square is a fintech company that starts with POS payment, it meets the other needs of SMEs step-by-step including providing loans after reaching the SME market.

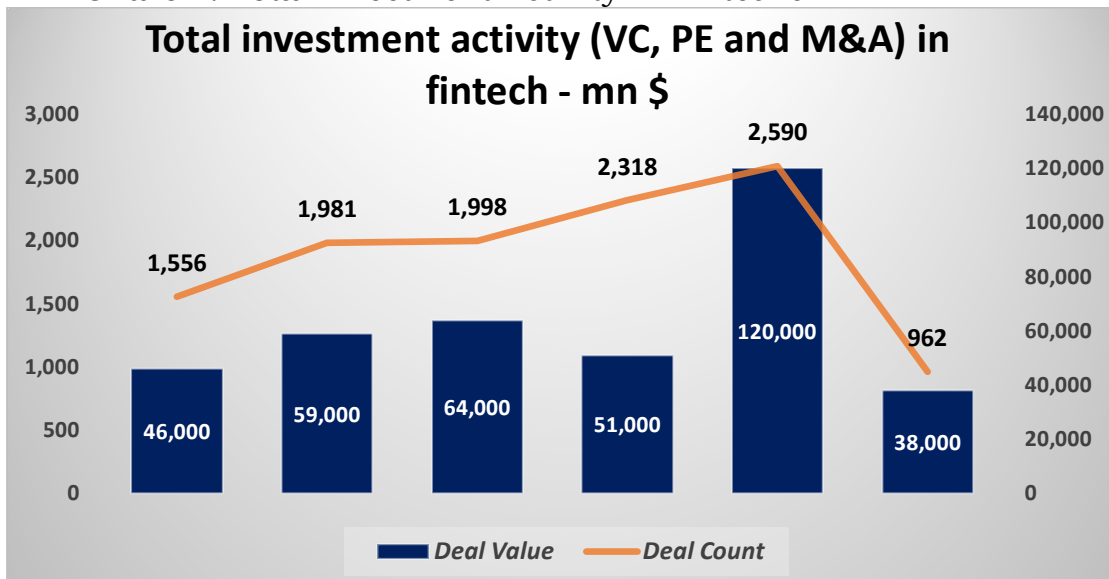
It is possible to summarize the basic capabilities of the Square company, the services it provides and the results it receives as shown in Figure 2 below.

Figure 2. Square at a Glance

<i>Competencies and Collaborations</i>	<i>Value Proposition Products and Services</i>	<i>Value Proposition Products and Services</i>
Payment technology	Square POS System	+2 mn Retailers
AI-supported credit assessment (Credibility Analysis)	Square for Retail	+7 mn Individual Users (Square Cash)
Broad SME Client Network	Square Payroll	2018 3. Quarter Adjusted Revenue : \$ 431 mn Adjusted EBIDTA : \$ 71 mn Payment Volume : \$ 22,5 bn \$ 431 mn Loan to 49K Customers Average loan amount is \$ 6,5K
Fintech Collaborations	Square Capital	
SimplyInsured, Guideline 401(k), Alice and AP Intego etc.	Square Installment	
	Square Cash	

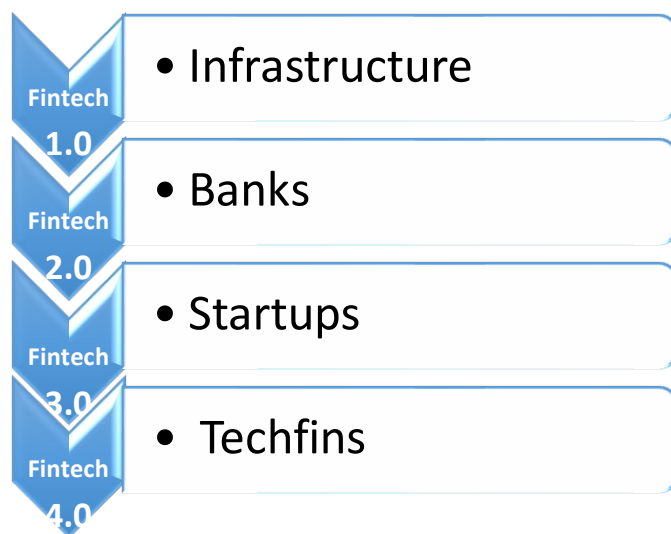
Fintechs attract startup investments worldwide due to their technological infrastructure and customer focused services. Chart 1 shows the investment amounts raised by fintechs in the last 5 years.

Chart 1: Total Investment Activity in Fintechs



Source: (Kpmg, 2019)

The steps followed by fintechs in their historical development process are shown in Figure 3 as below.

Figure 3. The Evolution of the Fintechs

Source: (Elgin, 2019).

According to many academics and market experts, nowadays when you mention about fintech, in fact you mean fintech 3.0.

Although fintechs are growing so fast, there is a big problem they are facing. These organizations are small organizations that accelerate existing banking services. Therefore, customers have a trust problem in entrusting their large sums of money. According to a research, only 7% of the participants accepted to deposit their money in a fintech. This shows the trust problem that fintechs have since they are relatively small organizations. Because of this trust problem, fintechs act with the mentality of less money, more customer. In other words, instead of receiving large amounts of money from their large-volume customers, they are implementing a strategy of receiving smaller-volume money from many relatively small customers.

Unlike traditional banking, Challenger banks are banks that offer limited but specialist customer service in certain areas. The market share of these banks has a growth potential. Seeing this potential, classical banks have become investors of challenger banks. Also, challenger banks, which are another alternative to classical banks, have a problem of accessing large customer channels.

There is another player group in the industry that has the talent to solve these two big problems, called Techfin.

5. Techfin

The concept called TechFin emerges with the attack of companies that focus on technology, not companies with finance. Technology is very important for finance, whether you are a small fintech venture or the ruler of a huge bank, one of the most important things you need to do is invest in technology. Obviously, bankers are good at running business and making money. However, recently, technology companies have been successful.

Amazon, Alibaba, Apple, Facebook, Google, Baidu, Tencent ... All of these companies are considered to have become TechFins. Although TechFins are

not going to be substitute to the banks, they play a more serious and profound role in customers' relationships with money.

Techfins come to the fore with the following features:

- Digital capabilities,
- Wide customer network,
- Focused on improving customer experience,
- Opportunities to expand their brands to banking

In figure 4. The most important examples of the techfins are shown as follows:

Figure 4. Techfins around the World



The concept we call TechFin may be a new concept, but for example, the digital bank MYbank established by Alibaba has been operating since 2015.

It is not a new decision for Alibaba to invest in this area as an e-commerce firm. With a history that is almost as old as FinTech startups, technology companies have an interest in finance. Or it is possible to give an example to AliPay of Alibaba in the payment area.

Techfins' strengths can be summarized as follows:

- Customer confidence, amazon and paypal have been considered as reliable and trustable institutions as much as banks.

- Access to mass customers,

Techfins collaborated with banks. Since techfins are naturally rivals of retail banking, the banks they cooperate with are investment banks.

However, as the weakness of the techfins; as these organizations focus heavily on customer experience, they don't have enough financial knowledge on innovative financial products. Therefore, they need to establish some cooperation with banks or fintechs.

6. Fintech vs Techfin

Fintech, which is short form of financial technology. and it is the integration of the financial system with technology and it aims to improve the financial operations and process, it helps business and companies owners and also consumers to follow their financial movement carefully , and the following process happens by using some software's and devices as phones ,laptops and some other smart devices Techfin, which is the short term of

technology finance and it, refers to technology firms who aim to deliver financial product with existing solutions, and famous example of Techfin companies are amazon, Facebook, Google. FinTechs take the risk and have been welcomed by millennial and customers who are ready to explore and experience innovation. People who are 'on the go' and use the mobile platform embrace transformation.

FinTechs are ready to disrupt existing processes and financial services ecosystems with use of emerging technology. The limitations of FinTechs are different as compared to TechFins.

Unlike TechFins, who have the limitation of huge credit risk, FinTechs face the challenge of regulators. The global economic ecosystem has still not completely accepted the way FinTechs work. There are rules and regulations which they need to adhere to remain operational.

Another most critical hazard, which they are greatly exposed to, is Safety. The chances of privacy risk and hacking always haunt them.

As there is a huge similarity between fintech and techfin, one thin line makes a different between them, which we can explain fintech by taking process to technology, but techfin has been explained as taking technology to process

We can summarize the difference between fintech and techfin :

TechFin:

1. Process first approach.
2. The incumbent, usually large banks participate.
3. Improve the existing process
4. Do not take the risk
5. Customers prefer legacy and trust
6. Enhance the proficiency of staff for the betterment of process using

technology

7. Huge credit risks

Fintech

1. Technology first is the approach.
2. Start-ups, usually participate
3. Follow transformation in the process
4. Do not hesitate in disrupting the existing process.
5. Youngsters, millennial and professionals appreciate them.
6. Eliminate the millennial for faster and superior experience.
7. Limitations of privacy, safety, and regulators.

7. Conclusion and recommendation

Both fintechs and techfins have strengths and weaknesses. Fintech are good at meeting financial needs through customized solutions while they are failing for public trust to attract huge money. They can work only minor amount of money from a wider range of customers. In techfin side it is observed that they are suffering to make innovative financial solutions but thanks to their existing brand power and popularity, they can access to target customer easier than fintechs.

Since they operate in the same sector, cooperation should be established between these organizations instead of competition. By combining their strengths they can obviously create mode added value for their target

customers. In this respect, these organizations should not be seen as competitors of each other, but as complementary organizations. Not only between fintechs and techfins but also between these firms and traditional banks, similar collaboration should be established. Traditional banks, based on their significant reputation, huge accumulated capital power and huge customer experiences, they can support fintechs and techfins. For this reason, the relationship between these organizations is called co-competition in the literature. In other words, it means to grow in a more balanced way by cooperating with a competitor and thus being able to respond to customer requests faster and more successfully. It can be concluded that in next future, the firms which can survive from harsh and destructive competition will be firms that are applying sustainable collaboration between fintechs, techfins and traditional banks.

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