ANADOLU AKADEMİ SOSYAL BİLİMLER DERGİSİ

SUSTAINABILITY in FINTECHS: EVALUATION of TBL APPROACH

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Abstract

For the last decade, emergence of Fintechs caught the attention of everyone: Individuals working in the financial sector because Fintechs started to become serious competitors, investors and everyone else who received some sort of financial service from a financial institution. With a success this big, it is no surprise that Fintechs were put under a microscope to understand their unique business models, strengths, and weaknesses. While there are certain studies that explore the success of Fintechs, there aren't many that focus on how Fintechs can maintain this success, or how they could achieve it in the first place. In an effort to fill that gap, this article aims at exploring how a Fintech can achieve full sustainability to maintain its success and growth. To provide a framework, this paper takes Elkington's Three Bottom Lines of Sustainability and evaluates Fintechs' ability to fulfill each line. It concludes that due to their business models Fintechs hold certain advantages in the social and environment lines, while they need to pay attention to the value and the quality of their offered insights to fulfill the economic line.

Fintek'lerde Sürdürülebilirlik: TBL Yaklaşımının Değerlendirmesi

Özet

Son on yılda Fintek'lerin ortaya çıkışı herkesin dikkatini çekti: ciddi birer rakibe dönüşmeleri nedeni ile finans sektörü çalışanlarının, yatırımcıların ve herhangi bir finansal servis kullanan herkesin. Bu kadar büyük bir başarı ile, Fintek'lerin benzersiz iş modellerini, güçlü ve zayıf yönlerinii anlamak için mikroskop altına alınması şaşırtıcı değil. Fintek'lerimn başarısını araştıran çeşitli çalışmalar olsa da, Fintek'lerin bu başarıyı nasıl sürdürebileceğine veya ilk etapta nasıl elde edebileceğine odaklanan pek fazla çalışma yok. Bu makale, bu boşluğu doldurmak için, bir Fintek'in başarıyı yakalamak ve büyümesini devam ettirmek için sürdürülebilirliği nasıl sağlayabileceğini keşfetmeyi amaçlamaktadır. Bir çerçeve sağlaması için, bu makale Elkington'un "Sürdürülebilirliğin Üç Temel Çizgisi" teorisini ele almakta ve Fintek'lerin her bir çizgiyi yerine getirme yeteneklerini değerlendirmektedir. Fintek'lerin iş modellleri nedeniyle sosyal ve çevresel alanlarda belirli avantajlara sahip oldukları ve ekonomik çizgiyi yerine getirmek için sundukları içç görülerin değerine ve kalitesine dikkat etmeleri gerektiği sonucuna varmaktadır.

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1. Introduction

With developing technology, as the financial data becomes more and more attainable by external parties, financial services are becoming more and more digitalized as well. Fintechs stand at the center of this transformation. With growing need of digitalization in the finance sector, the demand for Fintechs as well as the number of Fintechs that emerge grow simultaneously. In all parts of the world, there are at least a few of such applications that users have a chance to choose amongst. While some Fintechs are ahead of the race in the finance sector, some go bankrupt soon after they emerge. Despite the popularity of Fintechs, there are very limited sources regarding the success of Fintechs.

Majority of the newly forming literature on Fintechs and sustainability focus on how Fintechs improve sustainability in the finance sector. However, these sources come out as very limited when it comes to achieving sustainability within Fintechs. This article aims to contribute to that limited side of the literature by taking the three pillars of sustainability as a comprehensive definition and examining how a Fintech can fulfill each of them to achieve success. After a short literature review on Fintechs, three-pillars of sustainability will be examined in more detail and Fintechs' ability to fulfill each pillar will be evaluated.

2. Fintechs

According to Forbes, Fintechs have been around for more than 50 years. However, they gained more popularity as they started to provide innovative solutions for financial services (Desai 2015).“Fintech” has various definitions. Despite different wordings and boundaries, all different definitions have certain common characteristics. The simplest definition of a Fintech would be “an organization that combines innovative technologies with financial services”. The word Fintech itself is composed of the words *Fin*-ancial *Tech*-nologies themselves. They are standalone financial applications and show no dependence on any banks whatsoever. They operate on a different business model than of traditional banks, where they do not hold deposits or provide loans (Moro - Visconti, Rambaud, and Pascual 2020). They mainly focus on frictionless customer experience, insightful analyzes and innovation.

There are three different types of digital financial applications that can be easily confused with Fintechs. These are: A traditional bank's mobile application, a digital bank channel and a digital bank subsidiary. The first kind is the mobile application of traditional banks developed almost out of a sense of an obligation as a result of rapid digitalization of the financial sector. A digital bank channel can be described as a more personalized and polished mobile banking application compared to a traditional bank's mobile application. A digital bank subsidiary, appear as a standalone financial services application. However, a digital bank subsidiary still relies on a traditional bank for maintaining its cash flow. All these three types are fundamentally different from Fintechs because they show different levels of dependance on traditional banks (IBM 2015). Fintechs, on the other hand, do not.

The literature on Fintechs is still limited today. There are only a handful of papers that look at Fintechs exclusively. The existing literature focuses primarily on the unique business model structures of Fintechs. In terms of business model, Fintechs operate very differently than traditional banks. As opposed to traditional banks, Fintechs do not collect deposits or lend money. Since they do not deal with actual money as a product, they can function without a certain amount of held capital. This makes Fintechs extremely flexible in terms of the services they may choose to provide, in contrast to labor and capital heavy traditional banks (Moro - Visconti et al. 2020). This flexibility makes room for innovative services that puts the customer satisfaction to the center, rather than forced caution and aggressive sales targets traditional banks must hold in order to maintain capital.

In terms of the positive and negative aspects of Fintechs, the literature agrees that the positive aspects revolve around the Fintech business model where the customer experience and transaction speed is put to the center, while the negative ones refer to the users' hesitation and mistrust. Taking advantage of their flexible business model, Fintechs compete with each other and the traditional banks simultaneously at the front-end by providing innovative solutions for finance management. Their users gain access to faster, better and easier user experience, which enables Fintechs to grow and exploit the market at an accelerating speed (IBM 2015).

Scholars who examine the mobile wallet applications also come to the same conclusion with regards to customer experience they provide is one of the positive aspects of such applications. Despite the fact that they do not fall under the Fintech category, studies on mobile wallet applications are relevant enough to Fintechs to be mentioned in this paper. Bagla and Sancheti, in their study where they explore the customer satisfaction with digital wallets in India conclude that ease of use, lower costs, trust and mobility are the main factors that determine the customer satisfaction (Bagla n.d.). Another article who examines the perceptions of mobile money applications in Nigeria also agree that innovative solutions, security features and efficiency in user experience are crucial elements of a successful Fintech (Iheanachor, David-West, and Umukoro 2021).

Negative aspects of Fintechs appear as a result of having a lower level of entry in contrast to traditional banks (IBM 2015). Without the necessity of accumulating a certain capital, becoming a Fintechs is rather easier than becoming a bank in the traditional sense. This convenience also generates a mistrust for the users. Finctechs rapidly increase in number, with more or less the same exteriors. Uninformed customers feel unsettled to decide whether a new Fintech application is going to be successful, or just fade away in the very competitive financial market. In addition, having a different business model than traditional banks make Fintechs more complicated and less predictable. A fully digitalized financial service provider using brand new technology may confuse a certain customer section, which results in failure to gain their trust for the service provider. Traditional banks appear as far more trustworthy to these customers since they have been on the market for long years, have physical branches and real-human customer services that these users can actually ask for answers if things go wrong (Moro - Visconti et al. 2020). As it is also mentioned by the authors who examine the mobile wallet applications, these hesitations greatly hinder Fintech growth and must be dealt with great care.

3. Sustainability and Fintechs

Sustainability, on the other hand, is another very popular concept for all types of organizations. While its early implications were mainly on the natural resources, the definition of sustainability has gradually shifted. Kuhlman and Farrington define sustainability as “a matter of what resources -natural resources, quality of the environment and capital- we bequeath to coming generations” (Kuhlman and Farrington 2010). This may be one of the simplest, yet most comprehensive definitions of sustainability. However, even though the first approaches to sustainability may date back to more than 130 years ago, one of the most significant contributions to sustainability studies was made by Elkington in 1997 with his definition of “*Three Bottom Layers (TBL)* ” of sustainability (Elkington 1997). TBL appears as a framework for measuring the sustainability performance of the organization using three reference points: economic, social and environment (Bocken et al. 2014; John 1994). Social and environmental layers defined by Elkington are the societal norms and values as well as the natural resources and quality of the environment we hand out to the next generation. Elkington’s traditional profit calculation could be understood as Kuhlman & Farrington’s “capital we leave to the next generation” (Kuhlman and Farrington 2010).

Literature on sustainability and Fintechs extend as far as to the point of agreeing that Fintechs are great mediums for providing sustainability for the finance sector. This argument is supported by many authors (John 1994; Mejiha-Escobar, Gonzalez Ruiz, and Duque 2020; Pizzi, Corbo, and Caputo 2020) as well as United Nations Development Program’s 2030 Sustainability Goals (United Nations 2018). However, besides informative news and blog posts about Fintech valuations (Ahmad 2020; Lele 2018) there are not may scholarly articles that examines how sustainability is achieved for Fintechs. Given that sustainability is considered as the survival of the firm within any market it functions in, the lack of guidance in this area for a rapidly growing market is disappointing. This article aims at contributing to that gap in the literature. In an effort to conceptualize sustainability for Fintechs, this paper will take Elkington’s three-fold definition of sustainability and examine how a Fintech would comply with each of them.

4. Three Bottom Lines of Sustainability and Fintechs

While defining TBL, Elkington determined the main reference points as people, profit and the planet. According to his conceptualization, an organization would be fully sustainable if it can manage to be sustainable in all these three fronts. Deriving from the reference points of people, profit and the planet; the three bottom lines of sustainability became the social, economic and environmental line (Alhaddi 2015). According to this conceptualization, a sustainable Fintech would suffice in all three bottom lines of sustainability.

4.1. Environment

The first line of sustainability, environment, have been associated with the term sustainability long ago and it still holds its ground in sustainability studies. According to TBL model, an organization is obliged to positively contribute to its physical environment (Alhaddi 2015).This would translate in practice as protecting the planet earth by minimizing waste and pollution while improving the overall well being of the nature.

Fintechs are particularly lucky at this front. As they are fully digitalized applications by definition, their major contribution at this line is to reduce waste drastically (IBM 2015). By digitalizing financial services, Fintechs do not require usage of paper for issuing agreements, cheques, money transfers and many other financial transactions that typically require paper when issued in a traditional bank. Secondly, being able to provide all their services through a mobile device, Fintechs also do not require their users to visit physical branches simply because they don't operate any. In addition to saving a tremendous amount of paper, not having operational branches also mean no electricity and water spent on a regular basis.

The emergence and spread of Fintechs also lead to discussions of "cashless future" where future predictions imply that the spread of mobile finance will take over the entire market and humanity won't be using any paper money (Alderman 2020; Alhaddi 2015, Anon 2019). So far, these predictions seem possible as excessive digitalization of financial services continue to hinder physical cash form payments. Credit and debit cards provided by Fintechs are becoming more and more affordable by day. Preference for mobile payment methods increase rapidly since they are seamless, faster and offer promotions like cashback rewards that provide immediate returns to the users. While Fintechs adopt mobile payment technologies in an effort to make their users' lives easier, they also contribute to a "cashless future" where they would remove the element of paper from "money".

When compared to other financial institutions, Fintechs appear as clear winners in this line. Despite the world hasn't achieved a "cashless" status, Fintechs' contribution to the environmental sustainability is undeniable. Even if most banks also carried their services on the mobile platforms, they still have operational headquarters and physical branches, which continue to produce paper waste and consume water and electricity.

4.2. Economic

The economic bottom line of sustainability is maybe the most fundamental one. There is no doubt that an organization, regardless of its business model, must earn more than it spends if it wants to continue its existence in the market. Elkington's TBL, does not disagree. The economic line simply refers to the traditional profit calculation of an organization. Having Fintech giants operating in the financial sector for years indicates that a Fintech business model can satisfy this line of sustainability to remain in business and even grow immensely.

A study conducted amongst Nigerian digital financial service applications revealed that the key component of a digital financial application is delivering good quality value propositions to their selected customer segments. This study also indicated that the profitability increased as the application of Fintechs became increasingly innovative in their value-added services (Iheanachor et al. 2021). IBM, through a white paper they published on economic sustainability of Fintechs, also agreed with the results of this study and stressed that a Fintech must provide convenience and personal touch to its services if it wants to increase its performance (IBM 2015). These findings prove that value added insights are the key for drawing customers to the Fintech platforms, hence, increase profitability and growth.

IBM also pointed out that, in order for a Fintech to provide convenience and value-added personalized services, they required optimization of interactions, products, processes and insights.[3] Unlike traditional banks who have many branches with countess personnel, Fintechs have only their mobile interface to show for themselves. Therefore, user experience provided for that mobile application is immensely important for a Fintech. If the Fintech can't offer a seamless, fast and easy user experience, regardless of the quality of their services, they won't be able to maintain their economic sustainability. Therefore, optimization of user interactions and transaction processes to provide a seamless experience are critical for the economic line of sustainability for Fintechs.

In addition, while quality services do not mean anything to the user if they can't understand the interface, a top-notch user experience is also meaningless if there are no value-added services that provide insights that users can actually benefit from. If Fintechs want to maintain in the market, they must compete with the traditional banks at this front. Through their employed customer representatives, a traditional bank would be able to provide valuable insights and recommendations tailored for their customers' financial needs. This aspect is of critical importance for the customer experience so much so that Fintechs can't afford to fall short at that front if they are to maintain existence in the market. Through optimization of products and processes, a Fintech can bring itself to a point where it can provide personalized financial insights and suggestions for their users at least as good as a customer representative of a traditional bank would. Given the application of emerging technologies like Artificial Intelligence into the financial sector, with a little tinkering and investment, Fintechs can easily win the race at this front by providing insights using AI that would be impossible for a human customer representative to process (Geylan and Memiş 2021). Exceeding the services of traditional banks in providing valuable insights would be followed by a rapid increase in customer numbers and therefore, profits.

4.3.Social

The third line of the TBL, social sustainability, may not seem as immediately important for an organization's existence in the market as economic and environmental sustainability. However, it is a crucial part of TBL. TBL model suggests that an organization also need to contribute to the social well-being of the people while maintaining profitability, if it wants to gain a permanent spot in the market and secure its sustainability.

Similar to the environmental line, Fintechs seem to be triumphant at this line as well. As United Nations also argues, the world is experiencing digitalization at a massive scale, and Fintechs act as lubricants for the financial services (United Nations 2018). By offering fully digitalized financial services, Fintechs can access the masses and provide financial inclusion for the unbanked and underbanked. Financial inclusion can be simply described as "having an account from a formal financial institution" (David-West, Iheanachor, and Umukoro 2019). Since Fintechs are far more accessible than traditional bank branches, the number of people who are introduced to the financial system by owning an account is increased tremendously by Fintechs only. Examples include cases such as spread of Fintechs in Kenya resulting in helping out more than 1 million people during extreme poverty through banking, and underbanked farmers gaining access to valuable insights and investment suggestions (United Nations 2018).

By providing mobile-only financial services at affordable prices, Fintechs have a better chance of penetrating through the underbanked societies. This ability to overreach throughout the world achieved by the application of mobile-only services expands the Fintechs' customer base, while simultaneously increases financial inclusion world-wide.

5. Conclusion

We have reached a point where Fintechs secured a place for themselves in the financial sector years ago. While studies on their structures, secrets of success and business models are necessary, studies that focus on maintenance of this success are also needed. Within this respect, maintaining sustainability for a Fintech also carries the key to the long-term survival within the finance sector. In an effort to provide a framework for sustainability for Fintechs, this paper took Elkington's *Three Bottom Lines of Sustainability* as a comprehensive model and evaluated the Fintech's ability to fulfill each line to achieve full sustainability.

For the environment and social lines of sustainability, Fintechs appear as clear winners solely because of their business models. As a result of their fully digitalized business model, Fintechs automatically obtains certain perks in these lines. For the environment line, Fintechs do not require any paperwork or operate any branches which immensely reduces paper waste as well as usage of water and electricity. Both show immediate effect on the well-being of the environment today. For the social line, as majority of the literature also mentions, Fintechs act as a financial lubricant by being accessible even for the unbanked and the underbanked masses. This penetration massively increases financial inclusion in the global scale, which gives back to the global community.

As for the economic line of sustainability, Fintechs have a few major fronts they need optimized if they want to achieve success in this line. As they are purely digital establishments, their user interface and experience are primary concerns for Fintechs. After providing an easy and unique experience, cultivating the benefits of technology comes next. In other words, Fintechs are expected to provide value-added services that can compete and exceed the ones traditional banks can offer. Recently developed technologies like artificial intelligence or other algorithms appear valuable for Fintechs who need to provide value-added, personalized services.

Of course, their given perks are no reason for Fintechs to pay no attention to these fronts. Their business model may provide them with certain benefits in social and environmental lines that provides enough room for them to focus on their optimization needs. However, as soon as they secure the economic line of sustainability as well, Fintechs should start paying equal attention to their development on all three fronts to achieve sustainable growth.

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