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ROLE OF DISRUPTIVE TECHNOLOGY IN MAKING FINANCIAL SERVICES EFFECTIVE: A QUANTITATIVE INVESTIGATION OF EXPERT'S OPINION

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Abstract
The financial sector is undergoing a vast transformation. It used to be physical, and now it uses I.T. and big data techniques and unique human capital. Before the transformation started, the financial sector started becoming intertwined with a high proportion of the intermediary activities and started getting market-based. For instance, banks face higher competition from the other intermediaries and increased digital services in core businesses like advisory and payment services. Many changes in using technology for developing new business models and services have been emerging with a rise in FinTech services. This can be easily understood as modern-day innovative information technology in the financial sector increases day by day. The speed with which different types of new digital innovations are being adopted and the acquisition of the users has increased markedly.
Keywords: Fintech, Fintech services, banking, insurance

Introduction

The financial sector is speeding up rapidly, and financial technologies are considered the change's core. The market's influence from financial technology and FinTech services is growing, and the market's long-term capabilities are becoming significant. For example, mobile banking and finance services are pretty efficient for financial inclusion amongst the unbanked. As the departure of the traditional decision making is happening, it is being expected that the wealth managers and the bankers would suggest their customers take the appropriate financial decision based on a combination of transactions, artificial intelligence, and contextual data. Most financial institutions fear missing out on the business to the standalone FinTech giants. According to a recent report, financial institutions are at risk of missing out on business to the Fintech innovators. Many financial sector incumbents quickly adopt this disruptive technology and explore potential FinTech partnerships (**Senyo et L., 2021**).

With such collaborations, the financial institutions plan to offer a wholesome personal experience to the customers that cause efficient user engagement. The innovations in the FinTech industry have gradually become a global phenomenon that is not bound by

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location. The two main areas have driven the adoption of FinTech services to great heights in the past couple of years. These are adopting the data at the core of the FinTech model and adopting the open banking and insurance regulations. In the next couple of years, it would not be surprising if increased participation would be found from non-finance service sectors like power, retail, and telecom in the financial services since they will stand for leveraging on the extensive open database.

According to a survey, the business entities that might disrupt the financial sector are ICT, E-retailers, and giant tech companies: Internet and social media platforms, financial infra companies, and traditional financial institutions. Every player will be disrupting the financial sector mainly by capitalizing on I.T. assets. The E-retailers would be disrupted using a large data set, ICT and tech companies would be innovating more quickly than incumbents. Internet and social media would be disrupted by leveraging the large client's outreach to provide the new customer service channels. Start-up has been considered the primary disrupters that would slowly move to the B2B model and offer platforms for the financial infra and financial institutions to enable innovations in the financial and banking sector **(Svetlošák, Carvalho, Calabrese, 2021)**.

Literature Review

Disruptive technologies groundbreakingly affect social orders and economies, just as on the manners in which that mechanical advancement advances and spreads through developing business sectors, which will, in general, take on and adjust advances grew somewhere else. Additionally, it is unavoidable that some developing business sectors will tackle interruption more quickly than others. Additionally, private firms have particular dangers and openings concerning mechanical advancement in developing business sectors (**Theiri and Bahaaeddin, 2021)**.

However, mechanical advancement and disturbance do not occur in a vacuum regarding genuine countries and their administrative structures. A few significant issues—protection, information security, and contest among them—should concentrate public and worldwide controllers if the current rush of interruption is to help all. IFC and the World Bank will assume an essential part in making and carrying outfitting guidelines.

Problematic innovations result in a critical change in the expense of, or admittance to, items or administrations, or significantly change how we accumulate data, make items, or interface. The emotional expansions greatly empower them to figure limit and Internet data transfer capacity, making their dissemination dramatically quicker (**Soohyun et al., 2021)**.

The widespread and increasing accessibility of hazardous innovations to residents, purchasers, and businesses has been a defining feature of recent years, with new administrations and marketplaces emerging and rapidly expanding throughout populations and enterprises. Moreover, keeping in mind that such mechanical advancement is not new to the monetary turn of events, the latest flood of innovations is upsetting plans of action quicker and drastically changing shoppers' assumptions and state-run administrations' arrangements. This innovation leap forwards, joined with expanded availability, affect how

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people, organizations, and states produce information and connect to make markets, open financial exchanges, activate action, and convey administrations (**Hua and Huang, 2021)**.

The customary pathway to financial development for arising economies—that of progressing from farming to send out drove fabricating that accomplishes higher economic development and financial specialization—is by and large drastically changed. Likewise, the reception of troublesome advancements will turn out to be progressively significant in shutting the "computerized partition" among nations and assisting with meeting the United Nations' Sustainable Development Goals (SDGs). Non-industrial nations face twin difficulties (**Li and Hong, Zhang,2021)**.

The first is how to accept the chances presented to close the computerized split between nations while guaranteeing a comprehensive methodology that tries not to make new advanced partitions inside and between nations. The subsequent test is how to profit from the changes while dealing with the disadvantage hazards (T**apscott et al., 2017)**. These incorporate dangers to online protection and security, lease extraction, deceptive conduct by new syndications, just as the danger of an extending partition in case innovation is not created comprehensively. All nations confront these extraordinary difficulties, so non-industrial nations have little freedom to gain from somewhere else (**Mikalef and Krogstie, 2020)**.

Additionally, using broadband Internet, advancements join, frequently through the help of computerized stages, which can compound their ground-breaking effect. Such innovations incorporate sunlight-based chargers and batteries, 3D (three-dimensional) printing, appropriated production, the robotization of information work through computerized reasoning (A.I.), and utilization of distributed computing and the Internet of Things (IoT). These can convey improved administrations, self-driving vehicles and drones, and the formation of effective materials (**Spender et al., 2017)**.

Troublesome advancements are testing plans of action too in manners that include: resource proprietorship, cost structure, administration configuration, work the executives, and ways to deal with the guideline. These progressions in how individuals work and the Disruptive innovations are not just a driver of development and opportunity—they are generally changing the worldwide economy and how firms gain the upper hand. A web-based business stage can all the while be a multi-area retailer, a coordinations organization, a media organization, a wellbeing administrations supplier, and an information foundation organization (**Olusegun and Olaniyi, 2019)**.

Different stages have arisen that work a FinTech (financial innovation) organization, a multi-area retailer, a coordinations organization, and a commercial center. Nonetheless, unlike past multinationals, their center capabilities are fixated less on their capacity to effectively raise and convey capital or foster a unit of worldwide chiefs (**Chanias et al., 2019)**.

All things being equal, their principal wellspring of the upper hand is their capacity to record and use the information to associate buyers and providers, make new business sectors, and construct new plans of action. Advanced advances often have solid organizational impacts, which favor the rise of a syndication supplier, except if unofficial law forestalls this. While syndication may provide a low-cost, widespread stage that elevates competition and creates new opportunities, an imposing business model can also negatively impact society, for example, eliminating rents, restricting access to the business sector, and preventing further

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mechanical development (**Grover et al. 2019**). Troublesome advancements hold the guarantee of boundless reception in developing business sectors, which could essentially expand the speed of mechanical catchup and enhancements in friendly government assistance. In low-pay nations, a critical test is a way to raise usefulness, which the restricted dispersion of innovation has recently obstructed. Previously, these countries' acceptance of innovation was constrained by the lack of a robust climate. Notwithstanding, troublesome advancements offer a few provisions that can jump these longstanding imperatives and change developing business sectors (**Wolf and Dana, 2019)**.

The ascent of troublesome advancements and changes to customary plans of action make organizations and financial backers vulnerable. For instance, ride-hailing organizations own no vehicles, computerized retailers have no stock, online convenience suppliers own no land, and web-based media organizations own restricted substance. While the effects of problematic advancements have been considered in more detail in created economies where these innovations commonly start, more noteworthy vulnerability wins in developing business sectors **(Das et al., 2018).**

While there is more risk in the latter, there is also a more significant opportunity for innovation to establish models and arrangements that are more ground-breaking than in developed countries, as shown more than a decade ago with mobile phones portable installations. This report shows that the number of private ventures in developing business sectors is profoundly modifying their plans of action in light of inappropriate advances and patterns. Nonetheless, more investigation is needed to completely handle the ramifications of these interruptions for the two organizations and financial backers (**Beck et al., 2016)**.

The principal targets of these examinations are to:

• Discuss what problematic advancements mean for plans of action in the private area in developing business sectors;

• Share a progression of sectoral patterns that IFC has distinguished in this space; and

• Invite further discussion about the degree and capability of this disturbance.

One factor that builds the dispersion of troublesome advances is their capacity to decrease costs. Large numbers of the present troublesome advances are not capital concentrated, bringing new firms' obstructions down to the passage. Digitalization upholds resource-light plans of action, bringing about lower forthright expenses and lower working costs. FinTech's web-based adaptability and low fixed-cost structure have permitted it to, in a general sense, challenge—and eventually upset—conventional financial models. Monetary administrations have customarily been packaged to empower the cross-appropriation of item benefits (**Christensen, Raynor, and McDonald, 2015)**.

Interestingly, FinTech's strategy enables disintermediation by focusing only on specific components of the value chain. Regardless of the impediments to a passage that have kept capital business sectors from experiencing similar disruption, mechanical advancements such as artificial intelligence (A.I.), blockchain, and the cloud continue to reduce the cost of entry into this market while delivering development that was previously difficult to achieve. One of the significant innovative patterns bringing down fixed expenses is the shift to shared assets. Distributed computing wipes out substantial capital consumption requirements on the data innovation framework. Administration rentals—from ridesharing administrations like Uber to

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farming gear and home planetary groups—additionally lower costs, permitting a change in buyer and firm practices from buying an item to mentioning a help. The disturbance is compounded and intensified when numerous innovations are utilized and upheld by computerized stages (**Donnelly, 2016)**.

For instance, the critical experiences from IoT sensor information must be gotten using A.I. innovation, which is expected to investigate the information. Performing support on a 3D printed resource is substantially proficient when joined with increased reality goggles, which empower the computerized rendition of the resource to be superimposed onto the actual climate. Moreover, troublesome advances are making the limits between businesses obscure (**Nagano, Stefanovitz, and Guimaraes, 2016)**.

Transport suppliers presently rival innovation firms (and the other way around), online retailers have started trying different things with drone conveyance frameworks, and vehicle makers might become fundamental partners in building underground travel frameworks. At long last, the combination of problematic advancements with arising worldwide patterns enhances their potential for disturbance (**Frizzo-Barker et al. 2020)**.

Urbanization, shifting socioeconomics, and environmental change, to name a few, all contribute to a more rapid acceptance of harmful technologies. For instance, the confluence of various developments has exacerbated disruption in the force area, including the decline in the cost of environmentally friendly power innovation. The growing acceptance of severe acquisition components, and the commoditization of renewable energy financing, all of which have occurred alongside mechanical advancements such as battery storage, electric vehicles, and new models of circulated power age (for example, roof-based photovoltaic and micro). Furthermore, the conventional detachment between energy makers and customers keeps on obscuring as the energy framework becomes more disseminated and digitalized. The union of these advancements, every problematic without help from anyone else, enhances openings for change (**Kshetri, 2016)**.

The union of troublesome advancements, changing expense structures, and the worldwide powers depicted above can prompt and build up the ascent of digitalization stages. The expanded network has prodded the ascent of computerized stages that associate people, foundations, and undertakings, both of all shapes and sizes, intensifying their scope and effect in totally new ways. Stages do not possess the method for creation, but instead, the association method, making financial and social worth by empowering clients to share or offer information, work, or advanced and actual resources over an internet-based organization. These stages work with interoperability, making markets and associations direct where they did not exist due to financial disappointments. Progressively, stages are molding networks following customary conviction frameworks or shared financial necessities instead of conventional country states (**Tatiana and Toufaily, 2017).**

Objectives of the Study:

1. To find the role of disruptive technology in making financial services effective
2. To ascertain the significance of the role of disruptive technology in making financial services effective

Research Methodology:

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The present study is descriptive wherein the factors determining the role of disruptive technology in making financial services effective were analyzed. The sample taken for the study is 130. The data were collected using a structured poll on a five-point scale and analyzed using the mean characteristics and t-test.

Table1 Demographic profile of the respondents

Variables	**Number of respondents**	**% age**
Gender		
Males	67	52%
Females	63	48%
Total	**130**	**100%**
FinTech is an integral part of every business now		
Yes	98	75%
No	32	25%
Total	**130**	**100%**
Sectors that have benefitted the most from FinTech services are		
Banking	42	32%
Finance	32	25%
Retailers	34	26%
Education	11	8%
Healthcare	11	8%
Total	**130**	**100%**
FinTech has made business processes easy		
Yes	97	75%
No	33	25%

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Total	**130**	**100%**

Table 1 presents the demographic profile of the respondents on the role of disruptive technology in making financial services effective. There are 52% males and 48% females in the study. Among the respondents, 75% believe that FinTech is an integral part of every business now, and 25% believe that FinTech is not an integral part of every business. The 32% of the respondents think that the banking sector has been benefitted the most from FinTech services, 25% thinks that the finance sector has been benefitted the most from FinTech services, 26% thinks that the retail sector has been benefitted the most from FinTech services, 8% thinks that education sector has been benefitted the most from FinTech services and 8%% thinks that healthcare sector has been benefitted the most from FinTech services. The percentage of respondents who think that FinTech has made business processes easy is 75%, and 25% think it has not.

Table 2 Mean Value of the role of disruptive technology in making financial services effective

Sr. No.	Role of disruptive technology in making financial services effective	Mean Score
1.	FinTech has wholly revolutionized the financial sector	4.17
2.	FinTech services help businesses in increasing their profit	4.10
3.	FinTech services make business model user friendly	4.12
4.	Adoption of FinTech services in businesses help them in increasing their user base	4.11
5.	FinTech services help businesses in keeping up with the latest trends of the market	4.16
6.	Technological innovations help in generating new ideas	4.09
7.	Adoption of FinTech services increases healthy competition	4.02
8.	FinTech in the financial sector has made it safe	4.04
9.	Customers can comfortably use the financial sector services with the help of FinTech services	4.06
10.	FinTech services reduce the chances of error	4.08

Table 2 shows the opinions of the respondents. It is observed that FinTech has wholly revolutionized the financial sector with a mean value of 4.17. FinTech services follow it help businesses in keeping up with the latest trends of the market (4.16), FinTech services make business model user friendly (4.12), Adoption of FinTech services in businesses help them in

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increasing their user base (4.11). Further FinTech services help businesses in increasing their profit (4.10), Technological innovations help in generating new ideas (4.09), FinTech services reduce the chances of error (4.08), Customers can comfortably use the financial sector services with the help of FinTech services (4.06), and FinTech in the financial sector has made it safe (4.04) were also considered essential. Reasons like the Adoption of FinTech services increase healthy competition (4.02) were also viewed as necessary.

Table 3

Sr. No.	Role of disruptive technology in making financial services effective	Mean Score	t-Value	Sig
1.	FinTech has wholly revolutionized the financial sector	4.17	8.294	0.000
2.	FinTech services help businesses in increasing their profit	4.10	6.986	0.000
3.	FinTech services make business model user friendly	4.12	7.040	0.000
4.	Adoption of FinTech services in businesses help them in increasing their user base	4.11	5.916	0.000
5.	FinTech services help businesses in keeping up with the latest trends of the market	4.16	6.717	0.000
6.	Technological innovations help in generating new ideas	4.09	6.772	0.000
7.	Adoption of FinTech services increases healthy competition	4.02	6.201	0.000
8.	FinTech in the financial sector has made it safe	4.04	7.122	0.000
9.	Customers can comfortably use the financial sector services with the help of FinTech services	4.06	6.713	0.000
10.	FinTech services reduce the chances of error	4.08	6.997	0.000

Table 3 shows the results of the t-test. It is found from the table that the significance value for all the statements is below 0.05; hence all the statements regarding the role of disruptive technology in making financial services effective are significant.

Conclusion

To stay ahead of the FinTech disruption curve, most financial sector companies attempt to innovate and adopt FinTech services to expand and change their businesses. They are trying to expand into different products and services, improving retention of consumers and leveraging the current data and the analytics platform efficiently.

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