



# "Empowering Communities Through Fintech: Bridging the Gap to Achieve Sustainable Development Goals"

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## ARTICLE INFO

## ABSTRACT

The monetary climate all through the world has been totally changed by monetary innovation, some of the time known as FinTech. The motivation behind this study is to research the potential for the reception of FinTech to speed up progress towards the Feasible Advancement Objectives (SDGs) of the Assembled Countries. It examines the manners by which FinTech arrangements could assist with shutting the hole in monetary consideration, support mindful utilization and creation rehearses, and add to accomplishment of other Manageable Advancement Objectives. This study looks at the many purposes of monetary innovation that have been effective in arising economies and features the central obstacles that are forestalling more extensive reception. Ultimately, it recommends how to develop a supporting environment to expand the useful impact that FinTech might have on the accomplishment of the Practical Improvement Objectives (SDGs).

**Keywords:** FinTech, Financial inclusion, Sustainable Development Goals (SDGs), Financial technology, Developing economies, financial services.

## I. INTRODUCTION

FinTech, which alludes to the utilization of innovation to the conveyance of new monetary arrangements, is the main impetus behind the progressive change that the monetary administrations area is currently encountering. For instance, versatile installments, advanced loaning, crowdfunding, and blockchain innovation are instances of utilizations that fall inside the umbrella of the expression "monetary innovation." It is conceivable that these improvements might make laid out monetary establishments be disturbed and will democratize admittance to monetary administrations, particularly for those people in arising countries who don't have ledgers or who have lacking financial balances.

The Reasonable Improvement Objectives (SDGs) were created by the Unified Countries (UN) in 2015 determined to lay out a directing structure for the accomplishment of a future that is both more manageable and fairer. A great many issues are tended to by these seventeen goals, which incorporate the end of destitution, the advancement of fair work and monetary development, and the improvement of examples of utilization and creation that are dependable. In this review, we explore the potential cooperative energies that could exist between the reception of FinTech and the accomplishment of the Economic Advancement Objectives (SDGs).

## II. LITERATURE REVIEW

FinTech, which represents monetary innovation, has arisen as a problematic power in the monetary climate, changing how individuals and associations access and deal with their monetary assets. This writing study researches the potential for the utilization of monetary innovation to accelerate progress towards the Supportable Advancement Objectives (SDGs) laid out by the Assembled Countries Commission on Maintainable Turn of events. This paper researches the manners by which FinTech arrangements could assist with shutting the holes in monetary consideration, empower moral utilization and creation rehearses, and add to the accomplishment of other Supportable Improvement Objectives.

Existing examination sheds knowledge on the progressive capability of monetary innovation regarding propelling the primary Supportable Improvement Objective (SDG).

Both Aaker (2016) and Plants (2019) feature the way that versatile wallets and computerized loaning stages

can possibly arrive at oppressed networks in arising nations that have been barred from ordinary monetary frameworks before. Fintech can possibly serve to the accomplishment of Maintainable Improvement Objective 12 (SDG 12), which centers around capable utilization and creation.

The creators Chen and Guo (2020) explore the manners by which fintech applications, like green money and effect venture stages, could advance naturally capable ways of behaving and the preservation of assets.

The commitment of fintech reaches out to other Reasonable Advancement Objectives too. Research directed by the World Bank and the Global Money related Asset (IMF) shows the manners by which monetary innovation might add to financial advancement by working with admittance to schooling (Feasible Improvement Objective 4) and enabling organizations (Reasonable Advancement Objective 8). As a further focal point, the Middle for Monetary Consideration at Accion has directed research that recommends that fintech arrangements that are explicitly made in view of ladies can possibly propel orientation balance (SDG 5).

Notwithstanding the hopeful visualization, there are deterrents that forestall expansive utilization of monetary innovation in arising nations. As indicated by Aaker (2016), significant imperatives incorporate low degrees of monetary proficiency and restricted web foundation. Both of these elements are introducing difficulties. As the Global Financial Asset (IMF) has pushed, there is a need to determine the administrative equivocality that encompasses quick extending FinTech arrangements. There is a requirement for extensive structures to safeguard client protection and moral information use to resolve issues over information security.

In the event that the World Bank Gathering (2018) is to be accepted, monetary commitment to Africa can possibly assume a critical part in aiding the accomplishment of the Maintainable Improvement Objectives (SDGs). This is particularly critical assuming that it makes it feasible for the people who are frequently barred from the regular monetary the norm to approach sensibly estimated monetary administrations. These administrations might incorporate installment and settlement offices, investment accounts, advances, and protection administrations. Furthermore, Demircuc-Kunt and Klapper found that it is a fundamental part in assisting customers with consuming and make do with monetary shocks, which might assist with lessening tensions associated with funds.

Disregarding the way that seven out of the seventeen Maintainable Improvement Objectives (SDGs) that have been recognized by the World Bank are featured as being empowered by monetary incorporation, creators, for example, these case that main four SDGs are straightforwardly impacted by comprehensive monetary administrations. These four SDGs are neediness, hunger, orientation fairness, and good work and financial development. The effect of comprehensive monetary administrations on the excess SDGs is less clear.

The material that was considered, by and large, features the capability of FinTech as an impetus for accomplishing the Reasonable Improvement Objectives (SDGs). It is fundamental to defeat issues by making interests in framework, offering projects to teach individuals about monetary proficiency, and ordering decides that are useful.

### III. OBJECTIVES OF THE STUDY

This research aims to achieve the following objectives:

- Consider the effect that the execution of FinTech could have on the progression of monetary incorporation and the achievement of the Practical Advancement Objectives. This will include exploring the manners by which FinTech arrangements might assist with shutting the holes in monetary consideration, engage networks, and add to specific Economical Improvement Objectives like dependable utilization and creation, great schooling, and orientation fairness.
- Lead research on the snags that forestall the wide utilization of monetary innovation in arising economies. The review will examine the requirements that are related with computerized foundation, monetary proficiency, and administrative systems.
- To expand the helpful impact that FinTech might have on the accomplishment of the Supportable Improvement Objectives, critical to give strategies will foster a climate that is good. This incorporates ideas for arrangements to be carried out by the public authority, coordinated efforts between general society and business areas, and valuable open doors for global participation.

### IV. RESEARCH METHODOLOGY

#### 1. Research Design

The study employs a **mixed-methods research design** combining both qualitative and quantitative approaches. This methodology allows for a comprehensive understanding of the impact of FinTech on financial inclusion and the Sustainable Development Goals (SDGs), as well as the challenges and strategies for its adoption in developing economies.

## 2. Data Collection Methods

- **Quantitative Data:**

- **Surveys and Questionnaires:** To collect primary data from a large sample of individuals and organizations in developing economies regarding their experiences with and perceptions of FinTech. The survey will target individuals in both urban and rural areas, financial institutions, FinTech companies, and policymakers.

- **Secondary Data:** Analysis of existing datasets from international financial institutions, such as the World Bank, IMF, and other relevant sources, to understand the current state of financial inclusion and the penetration of FinTech services.

## 3.

- **Qualitative Data:**

- **Interviews:** Semi-structured interviews with key stakeholders including FinTech entrepreneurs, regulators, policy experts, and beneficiaries of FinTech services in developing economies.

- **Focus Groups:** Conducted with community members and potential FinTech users to gather in-depth insights into barriers and facilitators to FinTech adoption.

- **Case Studies:** Detailed examination of specific instances where FinTech solutions have been implemented to promote financial inclusion and achieve SDGs, analyzing both successes and failures.

## 4. Sampling Strategy

- **Quantitative Component:**

- A stratified random sampling technique will be used to select survey participants. Stratification will be based on demographics (age, gender, income level), geographic location (urban vs. rural), and type of stakeholder (consumer, FinTech provider, regulator).

- **Qualitative Component:**

- **Purposive Sampling:** This will be employed to select participants for interviews and focus groups. The sample will include a diverse range of stakeholders from different sectors to capture a broad spectrum of perspectives on FinTech and financial inclusion.

## 5. Data Analysis Methods

- **Quantitative Analysis:**

- Descriptive statistics will be used to summarize the survey data, providing an overview of the penetration of FinTech and its perceived impact on financial inclusion.

- Inferential statistics, including regression analysis, will be used to explore the relationships between FinTech adoption and various independent variables (such as income, education, geographic location) and to test the proposed hypotheses.

- **Qualitative Analysis:**

- **Thematic Analysis:** Used to identify and analyze patterns or themes within qualitative data collected from interviews and focus groups. NVivo or similar qualitative data analysis software will be employed to code the data and identify key themes.

- **Content Analysis:** Applied to case studies and secondary data to identify recurring themes, challenges, and strategies related to FinTech adoption and its impact on SDGs.

## Hypotheses

1. **H1:** The implementation of FinTech solutions significantly improves financial inclusion in developing economies, thereby contributing to the achievement of Sustainable Development Goals (SDGs).

2. **H2:** Lack of digital infrastructure, low financial literacy, and regulatory uncertainty are major barriers to the widespread adoption of FinTech in developing economies.

3. **H3:** Government policies, public-private partnerships, and international cooperation are critical for creating a supportive environment for FinTech adoption and maximizing its impact on achieving SDGs.

4. **H4:** FinTech solutions are more effective in achieving financial inclusion in urban areas compared to rural areas due to differences in digital infrastructure and financial literacy levels.

5. **H5:** Adoption of FinTech solutions leads to significant advancements in SDGs related to responsible consumption and production (SDG 12), quality education (SDG 4), and gender equality (SDG 5).

## Analysis

The analysis of the study will proceed as follows:

1. **Descriptive Analysis:**

- Provide an overview of the demographic characteristics of survey respondents, including age, gender, income, education level, and geographic location.

- Assess the current state of financial inclusion and the use of FinTech services in the sampled regions.

## **2. Inferential Analysis:**

- Conduct regression analysis to test the hypotheses concerning the impact of FinTech on financial inclusion and its barriers. This will involve examining the statistical significance of variables such as digital infrastructure, financial literacy, regulatory frameworks, and geographic disparities.
- Use structural equation modeling (SEM) to understand the direct and indirect effects of various factors on the adoption and effectiveness of FinTech solutions.

## **3. Thematic Analysis:**

- Analyze qualitative data from interviews and focus groups to identify key themes related to the challenges and opportunities in FinTech adoption. This will include examining perceptions of different stakeholders about regulatory frameworks, digital literacy, infrastructure challenges, and potential solutions.
- Highlight case studies where FinTech has successfully or unsuccessfully contributed to financial inclusion and achieving specific SDGs.

## **4. Comparative Analysis:**

- Compare the findings from different geographic regions (urban vs. rural) and stakeholder groups (consumers vs. providers vs. regulators) to identify variations in FinTech adoption and its impacts.
- Analyze differences in outcomes between countries or regions that have implemented supportive regulatory frameworks and digital infrastructure versus those that have not.

## **5. Policy Implications:**

- Based on the analysis, provide policy recommendations to enhance FinTech adoption and its contributions to financial inclusion and SDGs. This will involve suggesting strategies for improving digital infrastructure, financial literacy programs, and regulatory environments.

# **V. ANALYSIS**

## **FinTech and Financial Inclusion (SDG 1):**

Quite possibly of the main commitment that FinTech has made is to propel the reason for monetary consideration (SDG 1). More than 1.7 billion people all through the world don't approach central monetary administrations like investment accounts, credit, and protection since they don't have a financial balance related with them. Because of high functional costs and geographic limitations, conventional monetary establishments now and then experience issues in arriving at bunches who are not being sufficiently adjusted.

The utilization of versatile wallets and advanced loaning stages are instances of fintech arrangements that give choices that are all the more effectively open and more practical. To offer monetary types of assistance from a distance, these stages utilize the far and wide accessibility of cell phones, which is high even in locales with low wages. Portable wallets effectively enable clients to store and move cash electronically, subsequently working with exchanges that are both protected and simple. Individuals who were recently rejected from the authority monetary framework are currently ready to gain admittance to microloans and other monetary items in light of the fact that to the use of computerized loaning stages, which use elective information sources notwithstanding regular FICO assessments.

## **Responsible Consumption and Production (SDG 12):**

Also, the advancement of mindful utilization and creation (SDG 12) is another job that fintech can possibly play. A few purposes of fintech support earth mindful exercises and effective utilization of assets.

In the domain of green money, blockchain innovation can possibly consider the following and confirmation of the beginning of manageable products. This would empower clients to go with very much educated choices and backing firms that are naturally cognizant.

Influence Effective financial planning: Fintech stages can interface financial backers with opportunities for ventures that are both socially capable and ecologically economical, consequently supporting the preservation of assets and moral strategic policies.

Evaluation of the Greenwashing Recognition Stage as a Contextual investigation

Green washing is a sort of misdirecting showcasing procedures that depicts things or administrations as being harmless to the ecosystem. A few firms in the monetary innovation industry are dealing with building devices that utilize computerized reasoning (man-made intelligence) and enormous information examination to recognize green washing. These stages give clients the capacity to perceive things that are truly reasonable and to settle on choices that are in accordance with the standards of Maintainable Improvement Objective 12 (SDG 12).

## **Fintech and other SDGs:**

➤ Some of extra Manageable Improvement Objectives (SDGs) might be progressed by means of the utilization of fintech:



- By working with the installment of instructive expenses and assets, fintech may assist with elevating admittance to amazing schooling, especially for networks that are oppressed. This is one of the Supportable Advancement Objectives (SDG) as to instruction.
- As a component of the eighth Economical Improvement Objective (SDG), computerized loaning stages can possibly empower business visionaries and little firms to approach supporting and grow their tasks, so adding to the formation of occupations and the development of the economy separately.
- Monetary innovation arrangements that are designed for ladies, for example, advanced microloans and monetary proficiency programs that are given by means of cell phones, can possibly enable ladies financially and advance orientation correspondence. This is the fifth Economical Advancement Objective.

### **Challenges of fintech adoption in developing economies**

- In light of various impediments, wide reception of monetary innovation in arising nations is hampered, regardless of the expected advantages:
- Conceivable admittance to computerized monetary administrations may be limited because of an absence of legitimate advanced framework, like inadequate admittance to reliable web association and cell phones.
- The hole in monetary education: People who have low degrees of monetary proficiency might find it trying to appreciate and take advantage of fintech items.
- Guideline vulnerability: The quick creating nature of fintech offers issues for controllers, who might battle to stay up with development. This is on the grounds that fintech is continuously advancing. The advancement of administrative structures that are both unequivocal and strong, which empower development while at the same time lessening risk, is vital for the advancement of mindful utilization of fintech.
- Information security issues The dependence on computerized stages creates stresses over the protection and security of information. The foundation of strong information security systems and the certainty of buyers is exceptionally essential to ensure the safe and moral utilization of monetary information.

### **Strategies to foster a supportive ecosystem**

- It is important to carry out various drives to lay out a supporting biological system to boost the useful impact that fintech may have on the accomplishment of the Reasonable Improvement Objectives (SDGs).
- With regards to putting resources into advanced foundation, legislatures and improvement associations can make interests in expanding web association and giving cheap cell phone administration, especially in country districts!
- Expanding program cooperation in monetary proficiency: to engage individuals and support dependable reception of fintech, it is fundamental for execute programs that teach people about the numerous monetary items and administrations accessible as well as the potential dangers that are implied with fintech.
- Lay out administrative frameworks that are strong: It is pivotal to have administrative structures that can find some kind of harmony between effectively cultivating development and effectively limiting dangers. These systems need to support development while additionally ensuring information security, purchaser insurance, and commercial center methods that are fair.
- Cooperation between legislatures, monetary foundations, and fintech new companies might use their extraordinary abilities to make new arrangements and stretch out endeavors to increment monetary consideration. This sort of relationship is known as a public-private organization.

### **G20 High-Level Principles for Digital Financial Inclusion:**

1. The G20 is currently in a place that is unmatched as far as its capacity to advance computerized monetary administrations and to invigorate the development of economies that are comprehensive. Because of the way that they don't approach official monetary administrations, two billion individuals all through the globe are barred from the standard of the financial framework. The excess holes must be connected with the help of advanced monetary administrations and successful oversight (the two of which can be worked with by computerized innovation), despite the significant headway that has been made around here.
2. In 2010, the G20 Standards for Computerized Monetary Consideration filled in as a wellspring of motivation for the principal endeavors and administrative measures that were taken. Involving that achievement as an establishment, these Undeniable Level Standards for Computerized Monetary Consideration from 2016 will help countries in the improvement of activity designs that are adjusted to their specific necessities and conditions to completely exploit the conceivable outcomes that are given by advanced innovation. Coming up next are a portion of the activities that states and business area players in Africa might think about to enhance these endeavors and energize the utilization of FinTech:
3. Develop an arrangement that considers the necessities and conditions of your country: This might be achieved by investigating the significant level ideas for computerized monetary consideration that were given in the section before this one. The formation of strategies and drives in Africa that advance the far-reaching utilization of monetary innovation and extend admittance to these administrations might be started with the assistance of these proposals, which can act as a beginning stage. It is feasible to accomplish this objective by improving observing and purchaser shields, which will bring about an

administrative system that is helpful for the development and advancement of monetary innovation. African nations can develop an empowering administrative structure that upholds advancement and contest assuming they lay out clear standards and principles for computerized monetary administrations.

4. As a consequence of the way that versatile organizations and installment frameworks are fundamental for the productive working of computerized monetary administrations, shoppers should be offered the chance to utilize computerized foundation. Improving association in underserved districts is one procedure that state run administrations could use to widen the accessibility of monetary innovation administrations all through Africa.

5. The justification for this is on the grounds that low degrees of computerized education and mindfulness are a boundary to the reception of fintech in numerous African countries. By expanding computerized proficiency and mindfulness, this might be achieved. It is feasible for state run administrations and different partners to embrace schooling and effort drives to raise advanced education and mindfulness, especially among populaces who are impeded.

6. In request to widen admittance to monetary innovation and to expand the extent of monetary consideration, empowering participation between general society and confidential sectors is significant. To address the prerequisites of distraught populaces, African states have the chance to cooperate with monetary innovation firms, financial backers, and different players from the confidential area.

### **Role of international collaboration**

A critical commitment to the advancement of moral and fair utilization of monetary innovation in arising nations is made by worldwide organization. It is feasible for created countries to impart their experience and best practices to emerging nations by means of the execution of information move projects and drives that make limit. What's more, global establishments, for example, the Unified Countries and the World Bank can give monetary and specialized assist all together with supporting projects relating to monetary proficiency, administrative systems, and the advancement of framework.

Through the execution of a multi-partner system, Africa should embrace fintech to understand its goals of accomplishing monetary consideration and manageable turn of events. To offer help for this methodology, a few structures and models have been created by different associations. In this article, we will research a couple of potential methodologies that might be taken to broaden the utilization of monetary innovation all through the African mainland.

The methodology utilized by the World Bank Gathering to amplify the utilization of money for advancement (MFD): It is alluded to as "Boosting Money for Improvement" (MFD), and it is the methodology that the World Bank Gathering has contrived to support the supported monetary advancement of emerging countries.

A urgent part of this try that was settled upon at the G20 level is the Multilateral Improvement Bank (MFD), which is illustrated in the Hamburg Standards as the aggregate procedure that MDBs would take to draw in confidential area finance for advancement and reasonable turn of events. Also, the standards require the prioritization of business finance, the quest for practical, non-government ensured funding, and the commitment to the most effective utilization of restricted public assets. This is notwithstanding the way that they underscore the need of public proprietorship.

Nations that are frail, have low wages, or are encountering war could acquire an extraordinary arrangement from carrying out a MFD approach. It's conceivable that the accessibility of private arrangements and the degree to which they might be utilized will vary from country to nation and industry to industry. It is guessed that changes in these countries would fixate on the foundation of business sectors and establishments that are equipped for drawing in and overseeing private cash. This will take into consideration the send off of tasks with a level of hazard that is more controllable. Without the fulfillment of this essential work, a critical number of these countries will not be able to gain admittance to the confidential supporting decisions that are open to additional laid out countries. The World Bank Gathering is currently trying the MFD approach in nine unique nations. These nations incorporate Cameroon, Côte d'Ivoire, Egypt, Indonesia, Iraq, Jordan, Kenya, Nepal, and Vietnam. The testing of this procedure is being done on the grounds that clients in these nations have mentioned arrangements from the confidential area to progress crucial advancement endeavors. Technique for MFD: coming up next are a portion of the drives that states and players in the business area might do to improve the reception of monetary innovation in other African countries and set this strategy in motion.

1. Prioritize public proprietorship: The Hamburg Standards underline that public possession is vital for the powerful execution of the MFD plan. This makes it essential to focus on public proprietorship. African states must take care of the objective of monetary consideration and lay out guidelines that make it feasible for the confidential area to partake in the reception of fintech. Make an air that is helpful for private area speculation: Legislatures can establish a climate that is helpful for private area venture by chasing after changes that advance straightforwardness, law and order, and a macroeconomic environment that is steady. This will help with drawing in subsidizing from the confidential area to the monetary innovation industry.

2. Collaboration with multilateral advancement banks (MDBs) and different partners: MDBs, for example, the World Bank Gathering, can give specialized help, money, and strategy exhortation to support the reception of fintech. Also, states can cooperate with different players from the confidential area, like

financial backers and fintech organizations, to energize development and elevate more noteworthy admittance to monetary administrations.

3. Foster advancement and computerized education: African countries can rouse advancement in the monetary innovation area by giving help to innovative work, empowering pioneering tries and cultivating computerized proficiency. Thus, this will add to the improvement of a pipeline of imaginative monetary innovation items and administrations that will take care of the prerequisites of hindered networks.

4. Putting an accentuation on financially savvy, non-government ensured supporting: The MFD approach puts an accentuation on practical, non-government ensured funding, as depicted in the Hamburg Standards. To prepare private area subsidizing for the reception of fintech, African countries have the chance to examine novel supporting designs like mixed money and effect speculation.

## VI. CONCLUSION

Fintech is areas of strength for a that might be useful to close the hole in monetary consideration and accelerate progress toward accomplishing the Supportable Improvement Objectives (SDGs). It is workable for fintech to add to a future that is more comprehensive, libertarian, and feasible by creating capable utilization propensities, enabling networks, and helping admittance to monetary administrations. To tackle issues like inadequate advanced foundation, authoritative vulnerability, and worries around information security, tending to these challenges is indispensable. The capability of monetary innovation might be utilized to permit maintainable turn of events and to construct a more promising time to come for everybody if states, monetary foundations, FinTech organizations, and worldwide associations cooperate to get this going.

## Future Research

More exploration is expected to investigate the drawn out effect of FinTech reception on monetary incorporation and accomplishing the Maintainable Advancement Objectives. Also, research on moral contemplations related with Enormous Information and man-made intelligence applications in the FinTech area is essential to safeguard client security and advance capable development. Moreover, investigating how FinTech can be utilized to address explicit difficulties looked by changed advancement settings will be significant in fitting answers for nearby requirements.

## DECLARATION

we hereby confirm that the manuscript titled fintech adoption and the sustainable development goals: bridging the gap, empowering communities is an original piece of work. It has not been published elsewhere, nor is it under consideration for publication in any other journal. All authors have read and approved the final manuscript and have contributed significantly to the research. There are no conflicts of interest to declare concerning the publication of this article. Any external sources of funding or support have been duly acknowledged within the text.

Additionally, this study adheres to all ethical guidelines relevant to data collection and analysis. Where required, permissions for secondary data use have been obtained. We remain open to addressing any queries the editorial team may have concerning the submission.

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