**EXTENDED ABSTRACT**

# CUSTOMER EXPERI ENCE IN FINTECH: A ST UD Y FROM SRI LANKAN COMMERCIAL BANKS

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**Abstract**

The paper's primary aim is to analyze how customer experience can influence Fintech of banking sectors. Fintech is an innovative and dynamic environment which gathers the benefits from the latest developments in information technology. The customers are the king of every business, and their experience with Fintech is a multi–dimensional concept. So to validate the study stimulus organism– response (S–O–R) model or approach can support fulfilling the objectives of customer experience in Fintech. Moreover, the present study follows the quantitative approach to gathering 500 respondents using a Google Form. Through Exploratory factor analysis, the researcher has tested hypotheses and validated the proposed model. The final results mentioned that customer perceived value, customer support from the banks, assurance from banks, speed of their functions, and perceived firm advance innovativeness are positively associated with customer experience in Fintech. The paper also contributes to identifying the significant determinants of the customer experience in Fintech. Finally, the study would facilitate the management of the companies, especially commercial banks, because, through our research, firms can integrate and put more customer experience into their business models.

**Keywords:** Banks fintech; customer experience; customer satisfaction; financial technology; commercial banks

## 1. Introduction

The Fintech means a set of innovative services offered by financial institutions and supported by advances in information technology. It also the results of merging two significant concepts such as "finance" and "technology" called the "financial technologies" (Abad–Segura, 2020). Fintech services are focused on the different types of business or industries like mobile payments companies, e-commerce sites, portfolio management, risk and uncertainty management, customized consulting services, virtual-based currencies, systems integration so on (Nicoletti,2017). And also, these FinTech advancements contribute conveniently to access the financial services efficiently, which is helpful, especially for financial inclusion in developing markets environments, particularly for banks (Tiron–Tudor, 2019). Moreover, for example, banks may access microloans, thus improving their customers' experience with financial services (Gatto, 2018). Fintech mainly relies on advanced technologies, like the Internet of Things (IoT), Artificial Intelligence (AI), blockchain transactions, near the field communication (NFC), and mobile wallets services (Lim, 2019). And finally, these latest technologies will contribute to the functions of the fintech services via facilitating data, collection of knowledge, the democratized access, more prompt delivery of services (Nakashima, 2019).

The financial area of Sri Lanka is contributing an extensive sum to the monetary development of Sri Lanka. The private area banks are superior to state banks in capital execution, acquiring the resource quality and the board sufficiency of the banks in Sri Lanka (Anojan and Nimalathasan, 2014). From the Sri Lankan point of view, the Studies on customer behavior and Fintech are still in their infancy level. Moreover, why customers adopt or access the bank's fintech services are not yet clearly clarified (Boraty, 2019) and not properly adequately explained within the previous literature. Especially during this pandemic, banks are conducting their majority of an operation via Fintech. Still, many people have trouble accessing their bank accounts due to their lack of experience with Fintech. Moreover, the commercial banks' Fintech is expanding, and their features are growing due to their customer base. To the simplest of the researcher's knowledge, no studies analyze the customer experience in fintech commercial banks. Therefore, this represents a serious research gap, which justifies exploring the antecedents and outcomes of customer experience in the commercial banking's fintech. To support the present research, the researcher underpins the Stimulus-Organism-Response (S-O-R) framework. Moreover, by analyzing the customer experience in the commercial banking's fintech, this paper makes significant contributions for theory and practical perspectives: from a theoretical perspective, the author extends the appliance of the S–O–R approach with new insights from customer experience in the commercial banking's fintech and highlight several factors influencing the customer experience, while from a managerial perspective, the researcher also formulates a series of actionable recommendations for a more relevant customer experience in fintech. Accordingly, this paper aims to identify the determinants of customer experience in the fintech of commercial banks. Hence, the following research questions proposed:

1. What factors influence the commercial bank's customers' fintech experience in the Vavuniya district?
2. Which factor primarily influenced the commercial bank's customers' fintech experience in the Vavuniya district?

## 2. Literature Review

### 2.1 Customer Experience

The latest technologies develop the customer experience by focusing on new valences (Hoyer, 2020). And now massive advancement in mobile technologies, 5G internet facilities, and apps have had a significant impact on consumers' lives. It focuses on the ways of consumers search, buys the products, consumptions, and desire to share information about products with others and makes some positive word of mouth about that product or services (Libai, 2020). To capture the significant benefits from this fintech, fintech companies (fintech), primarily commercial banks, create new value to capture and retain the consumers by concentrating on the latest technology-driven customer experience (Rangaswamy, 2020). Meantime, within the consumer consumption process, the consumers are always not only motivated to utility maximization. Because they also focus on acquiring information relevant to their needs, strengthening their experiences, and finally buying those products and services that are best suited to their needs, desires, and feelings (Holt, 2012). The customer experience mainly focuses on the psychological mindset of customers because that has a subjective nature. Usually, customers have close interaction with respected banks and their brands, function, products, and services (Rose, 2018). And customer experience is also affected by cultural differences (Waqus, 2021). Typically customer experience can be enhanced by attracting and enriching the services (Pine, 1998). Every producer or service provider always tries to improve the customers' buying process and increase the value perceived by customers. But the firm cannot control the customer experience because the customer will influence it to a specific extent through the stimuli (Kranzbühler, 2021).

## 3.    Customer Experience in fintech

According to KPMG (2020), they explained the customer experience is the success factor in the recent Fintech-based services. And the customer experience features have a strong positive relationship with customer satisfaction in that services when customer experience positively impacts customer loyalty (Mbama, 2018). Presently, Fintech comes with the support of the latest technologies to make the customer experience stronger (Palomo, 2019). But even though some of the traditional commercial banks still do not offer convincing services to their customers (Chen, 2019). Meantime, the Fintech innovations continuously contribute to financial markets' effectiveness, efficiency, and customer experience (Vasiljev, 2019). These companies are trying to enhance their customer experience through new products, new services, and new functionality. And also support making blockchain-based markets, cryptocurrencies, global remittances, crowdfunding, online brokerage, cross-border payments, and open banking (Imerman, 2020). Fintechs are improving the firms' existing functionality, such as faster payment settlement, conduct intelligent contracts in trade services and lending, cross-border custody services, higher speed functionality payment cards, and so on (Gomber, 2018).

### 3.1    The Stimulus-Organism-Response (SOR) Model

Several contexts and seral people used The S-O-R model to measure the customer experience in the banks' perspectives (Waqas, 2021; Mosteller, 2014; Lin, 2020). In the S-O-R framework, external stimuli induce an interior reaction of every customer, which also determines a specific response (Chopdar, 2020). Presently, all financial institutions involving Fintech features create more demand for their products and services through various channels such as mass and personalized advertising (Chahal, 2019). The "stimulus" portion refers to the influence that arouses the individual. And the "organism" refers to the customers' affective and cognitive conditions, consisting of the inside processes triggered by the stimuli (De Keyser, 2015). Finally, these processes definitely will create a better customer experience within the "organism." The "response" is that the result of every customer experience with fintech companies. And the outcomes of the customer experience are often positively related to the repurchase intention, customer brand loyalty, positive word-of-mouth, and customer trust in that firm (Pine, 1998; Kranzbühler, 2017). So the researcher prefers to link the S-O-R theory with the customer journey concept. Customer journey refers to the customer interactions with that particular company within the pre-purchase, purchase, post purchases, and repurchase stages (Lemon, 2016; Ameen, 2021). Within the repurchase stage, customers can understand and determine about that company, get to bear with a proposed firm "stimuli." After that, the interaction between the customer and thus the stimuli makes the "organism" produce the customer experience along the customer journey. Starting with the acquisition stage, "responses" build up as results of customer experience: acquisition, word-of-mouth, and loyalty intentions.
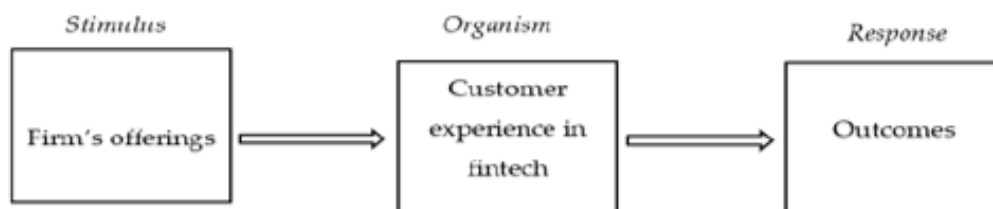


**Figure 1.** Determinant and Consequences of Customer Experiences in Fintech

### 3.2    The influencing factors of customer experience in fintech and Hypothesis development

- Customer support Through customer assistance, associations help the customer when she or he has issues (Parasuraman, 2005), being likewise liable for the pertinent customer experience.

The customer should feel consoled by the help of the fintech in case of a potential issue, kind of a potential misfortune. Another is concern in regards to protection issues and financial contemplations. Fintechs should discover reasonable approaches to beat unfortunate results and to see the value in customers' trust and devotion through fostering a significant encounter. Also, Fintechs are tested to perform with nimbleness in planning the lone creative innovation serious administrations while keeping up with essential customers ventures through the persistent exchange with their customers (Kotarba, 2016; Muthukannan, 2020). The achievement of fintech is also because of unrivaled and customized customer assistance as against the conventional monetary area (Lee, 2015). Along these lines, we conjecture: H1: Customer support is positively associated with customer experience.

- Perceived value Seen esteem is frequently perceived by connecting together the quality and cost of a Service (Johnson, 1996). to the fintech customers, expenses can identify with time and cash. The apparent worth measures the upside of the customer communicated in money related terms (Agarwal, 2001). the upper the apparent worth, the more significant the customer experience (Garg, 2016). Pervasiveness is critical for fintech in light of the fact that it empowers customers to perform monetary tasks anyplace and whenever. Fintechs offer relentless monetary e-administrations, which saves customers important time. Tech-gifted customers will accept new advancements, offered a worked on apparent benefit (Yuvan, 2020). Subsequently, we speculate that: H2: Perceived value is positively associated with customer experience.

- Ease of use Convenience rates how smooth and direct fintech applications are to figure. Straightforward use adds to the apparent control, which, thus, decidedly impacts the emotional component of the customer experience (Paloma, 2018). While getting to a fintech administration, customers don't have to sit around idly figuring out how to utilize the assistance or anticipating the culmination of the help. simple use diminishes the expected pressure of receiving a fintech administration (Chuang, 2016). Fintech organizations favor simple use through a multi-stage component of conscientization, capacitation, boost, advancement, and development (Tan, 2020). Consequently, we hypothesize that: H3: Ease of use is positively associated with customer experience.

- Assurance Confirmation alludes to ensuring customers' close to home and monetary information when taking care of fintech (Swaid, 2009). Customers should realize that activities through fintech are ok for them, which individual information are secured, particularly for e-monetary exchanges. Also, Safety and trust add to the view of a significant customer experience (Zhou, 2013). so on stop such security spills, fintech carries out various security checks: electronic keys, encryption and character confirmation, administration, stage, organization, and gadget security (Mehrban, 2020). the arrangement of protection and security strategies, along with a legit notoriety, ought not be ignored (Jünger, 2020). Where conceivable, fintech may offer accreditations from an outsider, administrative, or affirmation body. These contemplations point towards: H4: Assurance is positively associated with customer experience.

- Speed The Speed assigns the exhibition of the fintech administration on schedule (Garg, 2014). Brief conveyance of the help is likewise a critical component of consumer loyalty. The Internet-based advances are speeding up assistance conveyance (Nicoletti, 2017). The Perceived exchange speed impacts the apparent exertion to interface with fintech, while the apparent exchange speed emphatically impacts the conduct goal to proceed with the relations with fintech (Teo, 2015). upheld the former contentions, we expect to be that: H5: Speed is positively associated with customer experience.

- Perceived Firm innovativeness Seen firm imaginativeness embodies buyers' perspectives in regards to the organization's capacity to convey new items and encounters (Kunz, 2011). Furthermore, Innovation prompts intellectual and emotional reactions from shoppers (Haddad, 2019). the imaginative organization is seen as having mechanical initiative and, simultaneously, can create energy and idealism among customers. By and by, fintech advancement is frequently seen at four

levels, affecting customer experience: item developments, measure advancements, authoritative developments, and plan of action advancements (Nicoletti, 2017). Subsequently, we contend that:
H6: Perceived firm innovativeness is positively associated with customer
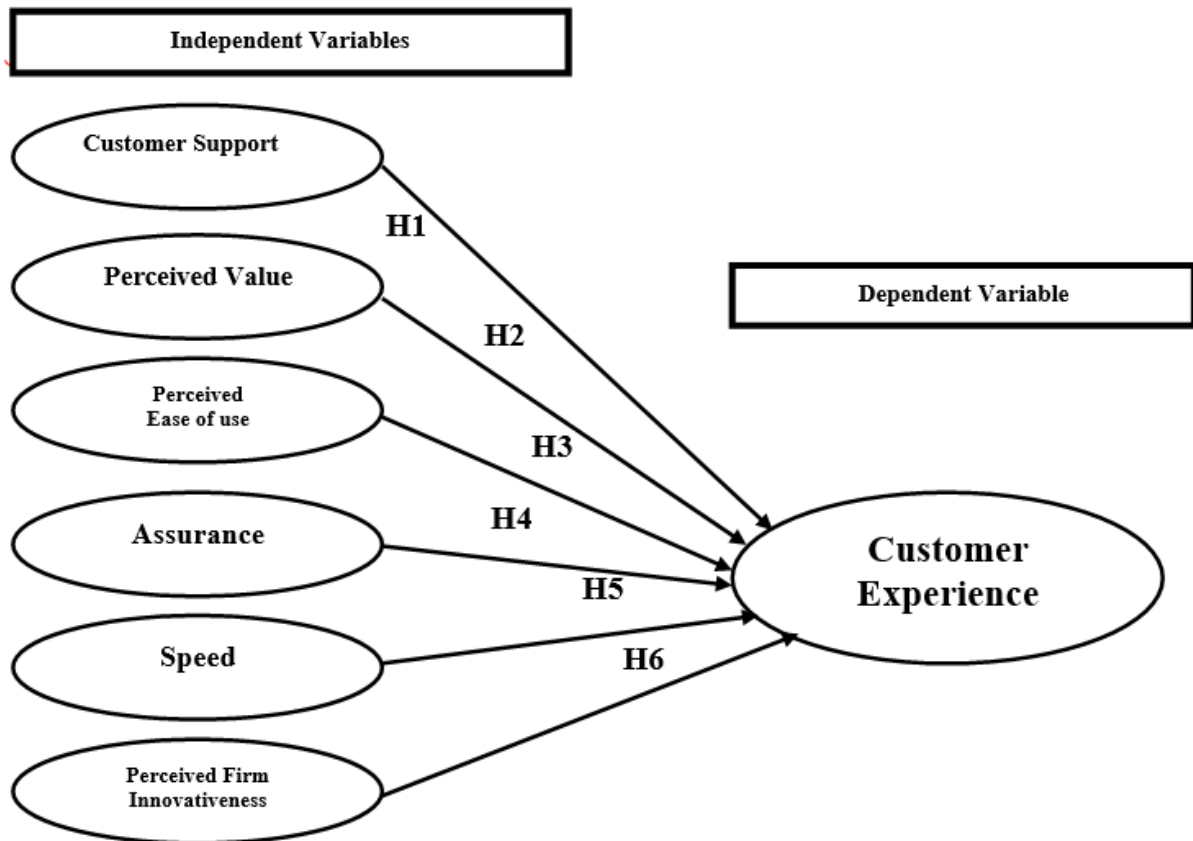
### 3.3 Development of conceptual framework



**Figure 2.** The research model

## 4. Methodology

### 4.1 The study sample survey implementation

A survey method uses to collect data from the customers of Fintech in the sample. This study sample comprised 500 customers of the Fintech of the commercial banks in vavuniya district of Sri Lanka. Further, the data were collected from April to June 2021 through convenience sampling methods. Finally, each completed survey was checked immediately and entered for data analysis. Totally 500 surveys were distributed to users, out of which 500 were completed and returned. A total of 500 usable surveys were considered for further analysis.

### 4.2 Measure and instrument Development

A self-administered questionnaire uses to collect the data. This analysis's survey questionnaire is formulated based on the Stimulus-Organism-Response (SOR) Model (Becker and Jaakkola, 2020). All the measurement items were measured using a five-point Likert scale (i.e., 1= strongly disagree to 5= strongly agree) to express the questionnaire's agreed statement using the English language only. Data was collected via an online survey (i.e., sending Google form link to WhatsApp, Viber, and

email). For this current examination's motivation, 20 arrangements of questionnaires were conveyed to the college understudies to direct a Pilot Study to get remarks and input. The questionnaire was additionally altered to further develop lucidity and fathom ability dependent on the remarks and input got from the respondents.Furthermore, the researcher conducted a Exploratory Factor Analysis as a data analysis technique. The data analysis for this study conduct through Statistical Package for Social Science (SPSS) version 20.0 was used to analyze the data. Initially, the study was calculated Cronbach's Alpha (á) Reliability to measure the measurement's internal consistency. Hair (2010) suggests that the worth of Cronbach's alpha ought to surpass 0.70. Also, the Kaiser-Meyer-Olkin (KMO) Measure for all develops is accounted for to be above 0.5, satisfying the example sufficiency (Heppner and Heppner, 2004).

**Table 1.** Descriptive analysis

| Item | No | Percentage (%) |
|---|---|---|
| 01. Sex | | |
| • Male | 285 | 57.0 |
| • Female | 215 | 43.0 |
| 02. Educational level | | |
| • Ordinary level | 13 | 2.6 |
| • Advanced level | 216 | 43.2 |
| • Diploma | 74 | 14.8 |
| • Undergraduates | 173 | 34.6 |
| • Graduates | 24 | 4.8 |
| 03. Year of usage | | |
| • Less than 1Year | 123 | 124.6 |
| • 1 – 3 years | 272 | 54.4 |
| • 3 – 5 years | 55 | 11.0 |
| • More than 5 years | 50 | 10.0 |
| 04. Type of Commercial Bank | | |
| • BOC | 213 | 42.6 |
| • People's Bank | 195 | 39.0 |
| • Commercial Bank | 49 | 9.8 |
| • HNB | 33 | 6.6 |
| • Sampath Bank | 10 | 2.0 |

## 5. Analysis and discussion

Based on the respondent descriptive information, male (57%) respondents participated more than females (43%). And the majority of the respondents are contained advanced level as their qualification (43.2%). Moreover, based on customer experience with banks fintech, many of them have 1 to 3 years (54.4%) experience with that respected banks. At the same time, most northern people have good practices with BOC bank than other selected banks (42.6%).

### 5.1 Reliability and Validity

To approve the estimation model, we originally settled the develop dependability by computing the Cronbach's and the composite unwavering quality, both having values over the edge of 0.7 for each build (Hair and Chin, 2010). As per Cronbach's Alpha Value the all factor Cronbach alpha worth

is more than 0.7, which is demonstrating the right and great interior consistency among the build and the factors that are considered exceptionally solid (Hair, 2010). Moreover, the Validity test is utilized to evaluate the develop for this exploration concentrate precisely. the Kaiser-Meyer-Olkin proportion of testing sufficiency is 0.865. It shows adequate between connections, while Bartlett's Test of Sphericity is huge (Chi-square = 1237.154, p<0.01). The two outcomes are demonstrating that the builds are legitimate (Heppner and Heppner, 2004).

**Table 2.** Ranking of Factors

| F.No | Factors | Coefficient | Rotated Component | C*r | Ranking factors | Rank |
|------|---------|-------------|-------------------|-----|-----------------|------|
| 1 | Customer support | .440 | .732 | 0.322080 | 0.322080 | 6 |
| 2 | Perceived Value | .506 | .843 | 0.426558 | 0.426558 | 2 |
| 3 | Perceived ease of use | .483 | .872 | 0.421176 | 0.421176 | 3 |
| 4 | Assurance | .568 | .857 | 0.486776 | 0.486776 | 1 |
| 5 | Speed | .475 | .712 | 0.338200 | 0.338200 | 4 |
| 6 | Perceived firm innovativeness | .427 | .764 | 0.326228 | 0.326228 | 5 |

## 5.2 *Exploratory Factor Analysis*

Exploratory factor analysis (EFA) uses to identify the factors under specific circumstances. This study conducted EFA, to exploring the antecedents and outcomes of customer experience in the banking industry's fintech. So research had developed a survey to reach the objective. Through the EFA all survey items were classified into six factors such as customer support, perceived value, and perceived ease of use, assurance, speed and perceived firm innovativeness. All factors ranked according to their higher value. According to ranking of factor analysis, Factor 4 indicates Assurance which is the first rank. Because, in factor 4, Assurance implies highest values of individual score and factor score compare with other factors. According to ranking of factor analysis, Factor 2 indicates Perceived Value which is the second rank. Because, this factor contain second highest value. According to ranking of factor analysis, Factor 3 indicates Perceived ease of use which is the third rank. Because, this factor has higher value than other three factors. According to ranking of factor analysis, Factor 5 indicates Speed which is the 4th rank. Because, this factors contain little higher value than other two factors. According to ranking of factor analysis, Factor 6 indicates Perceived firm innovativeness which is the 4th rank. Because, it has second lowest value than other four variables. According to ranking of factor analysis, Factor 1 indicates Extended Awareness which is the sixth rank. Because, this factor contain lowest value from factor ranking table.

## 6. Discussion and conclusion

As per the exploration discoveries, all examination factors are demonstrated by a few investigations in various organizations' points of view. The apparent worth impacts the ingenuity of customers experience inside the future (Mbama, 2018) in light of the fact that investment funds made are noticeable inside the customers s pocket, which contributes essentially to steadfastness (Prodanova, 2019). The apparent worth of fintech administrations impacts the important customers experience and fulfillment (Kuo, 2009). Through customer's service, the fintech banks can start correspondence with the customers, fortifying the fintech relationship with the customers, bringing about a pertinent customers experience. Affirmation adds to the customers experience by uniting an environment of consolation and security with multistep checking techniques. The advance technological develop-ments should likewise banks further developed security guidelines. Fintech organizations ordinarily carry out multistep control frameworks, converting into secure exchanges and information assurance

(Mehrban, 2020). How confirmation adds to the customers experience is regularly clarified: given the reports of online extortion, the security of fintech exchanges is reflected during an applicable encounter (Bhattacherjee, 2018). Speed emerges in saving customers time, which is a particularly liked advantage in the present economy. Time investment funds, likewise as monetary investment funds, add to an essential and significant customer's experience. To guarantee customers experience for all ages, it's crucial for mix old innovation with new innovation and development (Hoyer, 2020). Fintech development may add to a superior degree to the customer's experience of the most recent customers s, for which advancement is making monetary administrations less expensive (Chen, 2019).

The current paper makes three hypothetical commitments, expanding the S–O–R model. In the first place, we apply the S–O–R system to another area, the fintech. We upgrade our insight into customers experience in the fintech area by considering the association's improvements decidedly connected with customer's experience. The examination additionally carries knowledge into the comprehension of the forerunners of customers experience in fintech. Since study shows that customers experience is decidedly affected by a few saw boosts beginning from the proposal of fintech organizations. Customers experience models ought to think about the apparent worth, customers care, affirmation, speed, and saw firm ingenuity. Firms need to screen the customers experience cautiously. This shows the pertinence of considering customers experience in the investigation of customers dedication models. We additionally discovered the S–O–R approach appropriate to foresee steadfastness aims in the fintech area. The developing significance as fintech organizations think of overhaul benefits that contend with conventional monetary administrations. So the administrators need to test diverse assistance conveyance designs and consistently measure the customer's experience. The firm uses some Traditional estimation techniques, for example, polls that should be supplemented by unique estimations that catch the customers experience at the hour of utilization. 4.1 Limitations and directions for future research Our examination focused on customers experience in fintech at the overall level of the bank's offer. Another constraint is that the current investigation just covers the five banks in the northern region of Sri Lanka. Fintech reception and utilization may vary in other banks' points of view. Potential future exploration bearings may grow customers experience arrangement in the fintech area by means of fusing different factors and conceivable customers experience determinants. Further examinations may likewise zero in on the results of customers experience in fintech to explore expected relationship with factors like trust, responsibility, and positive informal. Subsequently, customers experience can unfurl unmistakable valences. Furthermore, bigger example size and an example structure extended across various customers' gatherings may be advantageous to see better the ramifications of customers experience in the fintech area. Further investigations should seriously mull over other potential invigorating themes, for example, the disadvantages of customers experience in fintech. Counting security issues, trouble to utilize applications on account of less computerized gifted individuals, and dependence on these innovations. With this paper, the scientist added to understanding the idea of customers experience from the bank's fintech viewpoints.

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