# Factors Influencing the Use of Fintech Payment Services in Indonesia : Literature Review

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*Abstract*—**Fintech payment is a form of financial transformation that develops along with changing in people's lifestyles which are currently dominated by the use of information technology and demand of fast-paced life. Based on data from Bank Indonesia digital payment transactions through fintech, the trend raise to 77.6% on February 2019. This shows the increasing enthusiasm of Indonesian people to use fintech payments. According to the OJK, there are risks of using fintech payment, namely the potential for fraud and data privacy abuse from hackerattacks. This affect the trust of consumers to use fintech services. Furthermore fintech providers in Indonesia need to make efforts to maintain trust and service quality for their consumers. So this research aims to develop a model that affects consumers in Indonesia in using fintech payment. This study offers UTAUT2 development model by adding service quality and trust variables, where both of these variables in previous studies have been shown to increase Behavioral Intention. The results of this study provide recommendations for fintech payment service providers to improve their service users.**

*Keywords—fintech, service quality, trust; UTAUT2, SEM*

## I. INTRODUCTION

The 4.0 industrial revolution had impacts on all industrial sectors including the financial industry. At the present, the financial industry is transforming into fintech. Fintech is a fast moving and dynamic industry where there are many business models [1]. Based on data released by the management business consulting firm McKinsey & Company in its latest report titled Digital Banking in Indonesia: Building Loyalty and Generating Growth, fintech penetration in Indonesia is around 5% in 2017 but predicted to increase 15% in 2019. The fintech competition for digital payments in Indonesia is even more intense as more and more new players emerge. Based on a survey conducted by Snapcart on May 2019, fintech payments are used by consumers in Indonesia such as OVO (58%), Go-Pay (23%), DANA (6%), Link Aja (1%). Fintech payment is used by consumers to make payments such as retail transactions (28%), online transportation (27%), online food delivery (20%), e-commerce transactions (15%), and bill payments (7%). Seeing some of the challenges and aspects of competition are faced by the fintech industry in Indonesia that underlie this research to identify the factors which influence consumer's behavioral intention to use fintech payment services in Indonesia. So they can be insightful and

provide input and recommendations to fintech payment providers in Indonesia.

Fintech payments evolve along with changes in people's lifestyles which are currently dominated by using of information technology and the demanding of fast-paced life. Using fintech payments, it helps the transactions and the financing system be more efficient, economical and effective. In addition to offer several advantages, according to the Financial Services Authority (OJK, 2016), the use of fintech payments also carries several risks, namely data security risks and transaction fraud. Therefore, the fintech payment providers in Indonesia have to pay attention to the aspects of trust and service quality to anticipate the risk which is necessary to protect consumers in using fintech payment services. Service quality is a factor which causes companies to compete in market competition. Service quality has an influence on behavioral intention [3]. For instance, if service quality is high then behavioral intention increases but if service quality is low then behavioral intention decreaces. Service quality is the key to be success in businesses engaged in services including the fintech industry. Service quality has a contribution to company success by influencing behavioral intention and customer loyalty. In addition to service quality, trust is a factor that can influence behavioral intention. Trust can be achieved when sufficient levels of ability, goodness and integrity are found in a specific system [16]. Previous studies have shown that trust variables significantly influence behavioral intention in the use of mobile banking [4]. Trust can be defined as a belief which is associated with the nature or personality of an individual or based on one's experience [5]. However, trust can also be interpreted individual trust in an organization based on norms, regulations, policies, and organizational procedures [6].

There are many factors which are believed having effect on behavioral intention. UTAUT2 model is one of the methods used to study consumer behavioral intention by using technology and information systems. The UTAUT model is formed from the development of eight constructs of previous technology adoption theories. The eight theories forming the UTAUT model are Theory of Reasoned Action (TRA), Theory of Planned Behavior (TPB), Technology Acceptance Model (TAM), The Motivational Model (MM), Combined TAM-TPB (C-TAM-TPB), Model of Personal Computer Utilization (MPCU), Innovation Diffusion Theory

(IDT), and Social Cognitive Theory (SCT). Based on the results of empirical tests, it is known that the UTAUT model has a variance value of 70% in explaining consumer behavior in the tendency to use information technology services, so that UTAUT is the model that has the highest explanatory value compared to eight other technology adoption models that only have a variance value of 17-53 %. UTAUT is used in technology adoption research in an organizational context, so that the price variables are not taken into consideration [7]. Whereas UTAUT2 is used in the use of technology in the context of consumers who have to pay the use of the technology [8]. The strength of the UTAUT 2 model is the background of this study choosing the UTAUT2 model as the basis for establishing the research model framework. Where all the variables used in this study are the basic variables in UTAUT2. For the basic variable UTAUT2 consists of the original construct UTAUT2 and the original predicted construct UTAUT2. The UTAUT2 of original construct includes and consists of performance expectancy, effort expectancy, social influence, hedonic motivation, price value, habit, and facilitating condition, while the original predicted construct UTAUT2 consists of behavioral intention and use behavior. So the development model is the trust and service quality variable.

Taking into account the development of consumer interest in using fintech payment services that have been strengthened by previous researches. They have made a new realm in this study (novelty) for the development of the factor model that affects consumers in using fintech services in Indonesia using UTAUT2 with the addition of trust and service variables quality. Currently, there are not many research on behavioral intention using UTAUT2 with the addition of trust and service quality variables. So this study try to develop a model of factors that influence service consumers in using fintech payment services in Indonesia using the UTAUT2 model with the addition of trust and service quality variables. Laten variable used in this research include : performance expectancy, effort expectancy, social influence, hedonic motivation, price value, habit, facilitating condition, behavioral intention ,use behavior, trust, and service quality. These variables are chosen based on the result from previous studies.
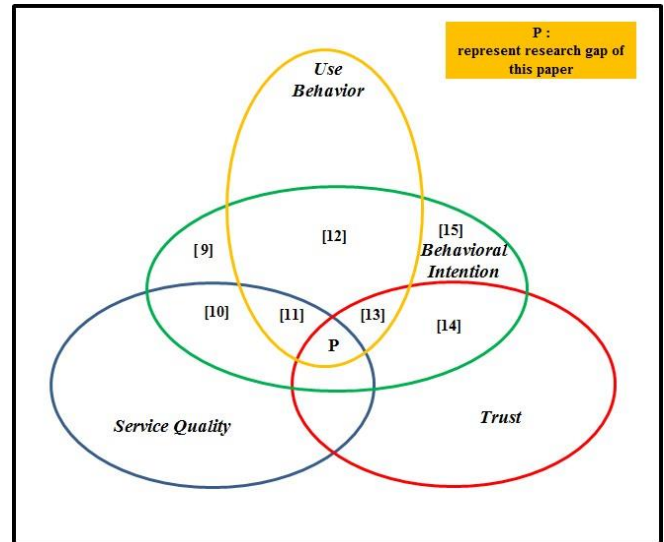


Fig. 1. Diagram Venn of research position

This research is intended to fulfill the gap in this research area. The gaps of reseacrh were identified through a literature review. Current research position is illustrated in Fig.1 where [P] represents the position of this current research.

## II. MATERIALS AND METHODS

The main contribution of this study is to formulate a novelty theoretical model that will explain smartphone shopping application behavioural intention and use behaviour that will extended the basic variables of UTAUT2 model with consideration of the service quality and trust variables. Fig. 2 represent the model proposed in the study named as Fintech Payment Adoption Model (FPAM).
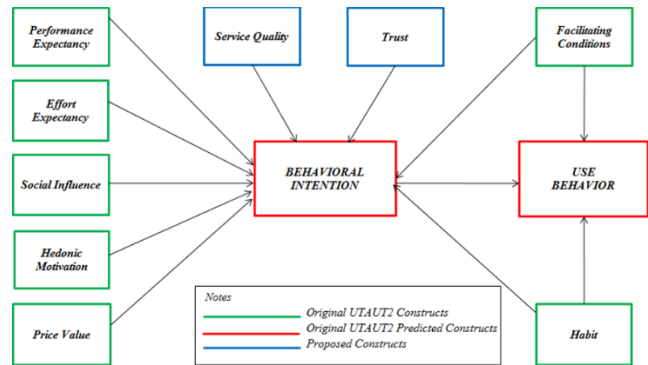


Fig. 2. Fintech Payment Adoption Model (FPAM)

The shown model will be used for the study. Constructs under blue and red color are contextually carried from UTAUT2 while green are the new construct contributed for the model. Table 1, summarizes the operational definition that will be carried for the study. Service quality and trust is the construct that is introduced to FPAM.

Parasuraman, Zeithaml, and Berry in 1996 examined and developed the effect of service quality on behavioral intentions in a model called A Model of the Behavioral Consequences of Service Quality [2]. The conceptual model illustrates the causal relationship between behavioral

intention and service quality. Behavioral intention in this case as an intermediary variable between service quality and financial companies that can cause financial gains or losses for the company. Research conducted by S Sharma and M Sharma proves that service quality and trust are variables that influence behavioral intentions for mobile banking services so as to retain old customers and attract potential new customers [11]. Other research reinforces the influence of trust variables on behavioral intention on the use of mobile banking in Bank Jordan, the approach of using UTAUT2 conducted by Alalwan, Dwivedi, and Rana at 2017 [13]. Based on previous studies which reinforce the importance of service quality and trust aspects to consumer Behavioral Intention in using mobile banking services, this study tries to add service quality and trust variables to examine the behavioral intention and use behavior of fintech payment consumers in Indonesia.

TABLE I. OPERATIONAL DEFINITION OF FINTECH PAYMENT ADOPTION MODEL (FPAM) CONSTRUCTS

| Variable | Operational Definition |
|---|---|
| Performance Expectancy | Consumer's perception on which usage of fintech payment services provides benefits in terms of productivity or time effectiveness [8] |
| Effort Expectancy | Individual evaluation of the effort necesary to use fintech payment services to complete payment task [8] |
| Social Influence | Extent to which the consumer of fintech payment services perceives the degree of approval of a certain behavior or satisfaction by important referents [8] |
| Hedonic Motivation | Degree of amusement or enjoyment dealt by the fintech payment services to its consumers while using it [8] |
| Price Value | Perception of the fintech payment users wherein overall benefits are greather than the associated monetary cost starting from the acquisition up to the usage of fintech payment services [8] |
| Facilitating Condition | Consumer's perception of the availability of resources to help them whenever needed [8] |
| Habit | Extend in which the consumer tends to use the fintech payment services habitually over a course of time or part of a routine [8] |
| Trust | The level of consumer confidence in the integrity, policy and capability of the fintech payment services [16] |
| Service Quality | The perceived difference between the performance and expectations of consumers in using fintech services from aspects of 5 dimensions which include tangibility, assurance, reliability, responsiveness, and empathy [2] |
| Behavioral Intention | Phychological willingness of the fintech payment service users to utilized and adopt the fintech payment services [8] |
| Use Behavior | Frequency of usage of the fimtech payment services [8] |

## III. RESULTS AND DISCUSSION

Variables used in this research are based on research by [2] [8] [16]. These include performance expectancy, effort expectancy, social influence, hedonic motivation, prive value, facilitating condition, habit, behavioral intention, use behavior, service quality and trust. There are twelve hypotheses that were successfully formulated in this study :

Hypothesis 1 (H1)  : Performance Expectancy affect behavioral intention

Hypothesis 2 (H2)  : Effort Expectancy affect behavioral intention

Hypothesis 3 (H3)  : Social Influence affect behavioral intention

Hypothesis 4 (H4)  : Hedonic motivation affect behavioral intention

Hypothesis 5 (H5)  : Price value affect behavioral intention

Hypothesis 6 (H6)  : Habit affect behavioral intention

Hypothesis 7 (H7)  : Habit affect use behavior

Hypothesis 8 (H8)  : Facilitating condition affect behavioral intention

Hypothesis 9 (H9)  : Facilitating condition affect use behavior

Hypothesis 10 (H10) : Service quality affect use behavior

Hypothesis 11 (H11) : Trust affect use behavior

Hypothesis 12 (H12) : Behavioral Intention affect use behavior

In this study the Fintech Payment Adoption Model (FPAM) model consists of 12 variables with indicator variables as follows Fig. 3 :

a.  Performance Expectancy (PE), this variable consists of three indicators such as perceived benefit (PE1), time efficiency (PE2), and productivity (PE3).

b.  Effort Expectancy (EE), this variable consists of three indicators such as easy to use (EE1), user friendly interface (EE2), and fast application (EE3).

c.  Social Influence (SI), this variable consists of three indicators such as persuasive (SI1), the influence of the fintech payment providers (SI2), and advertising (SI3).

d.  Facilitating Condition (FC), this variable consists of three indicators such as resources (FC1), technology (FC2), and people (SI3).

e.  Hedonic Motivation (HM), this variable consists of three indicators such as fun (HM1), enjoyable (HM2), and entertaining (HM3).

f.  Price Value (PV), this variable consists of three indicators such as rational price (PV1), value (PV2), and value conversion (PV3).

g.  Habit (HT), this variable consists of three indicators such as rational habit (HT1), addiction (HT2), and necessity (HT3).
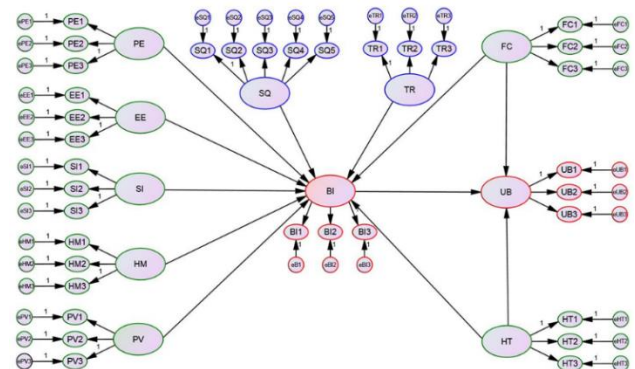


Fig. 3. Indicators of variables Fintech Payment Adoption Model (FPAM)

h.  Trust (TR), this variable consists of three indicators such as rational trust (TR1), security of transaction (TR2), and trust in protection (TR3).

i.  Service quality (SQ), this variable consists of three indicators such as tangibles (SQ1), assurance (SQ2), reliability (SQ3), responsiveness (SQ4), and emphaty (SQ5).

j.  Behavioral intention (BI), this variable consists of

three indicators such as daily use interest (BI1), interest in future use (BI2), and intensity future use (BI3).

k. Use Behavior (UB), this variable consists of three indicators such as frequency of use (UB1), frequency of top-up saldo (UB2), frequency of balances checking (UB3).

## IV. CONCLUSIONS

Based on literature review the factors that influence consumers in using fintech peymant services are performance expectancy, effort expectancy, social influence, hedonic motivation, price value, habit, facilitating condition, service quality, and trust. Finnaly, it important to considering the extended basic variables of UTAUT2 model with consideration of service quality and trust can significantly affect consumers to use fintech payment services in Indonesia.

## ACKNOWLEDGMENT

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