

A study on User Behaviors for Consulting of Fintech Companies

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Abstract

Background/Objectives: The area that is receiving the most attention today in ICT development is the financial services area. Fintech refers to the convergence of finance and technology and differs from existing electronic finance. **Methods/Statistical Analysis:** The present study used the causal analysis method through multiple linear regression analysis as a statistical analysis method. Multiple linear regression analysis has the advantage of analyzing the isolated influence between variables affecting dependent variables. **Findings:** Different perceptions and responses for dependent variables resulted in the different countries because of the different cultures of users, as well as differences in social perceptions. Thus, companies that aim to enter into the global market via fintech service should establish their entry strategy and customer acquisition and expansion strategy on a country-by-country basis. **Application/Improvements:** The results of the study are expected to be basic data which will be substantially helpful to multiple small-and medium-sized companies, ventures, and startups that aim to enter into the fintech field.

Keywords: Consulting, CSR (Corporate Social Responsibility), CSV (Creating Shared Value), Fintech, Financial Technology, PR (Public Relations)

1. Introduction

1.1 Research Background

Because the development of Information Communication Technology (ICT) has been reflected in a variety of forms throughout the various areas of society, it has a significant impact on the quality of people's lives. Many services that were thought to be impossible in the past actually exist today, and the development of additional services is an ongoing process. ICT has been developed in many areas, including communication, production, and services. Not only has ICT played a crucial role in reducing costs and improving service levels for management, it has also significantly impacted the lifestyle of users. Due to such changes, a higher level and incorporation of ICT in various areas became a necessity for companies as well as users, and in many areas, the expectations for ICT are being met.

The area that is receiving the most attention today in

ICT development is the financial services area. Change began as the financial sector, which previously interfaced with customers and provided services solely through offline bank branches, started to provide diverse and convenient services including internet banking by integrating IT technology. The wave of fintech, which is IT-based financial service, is sweeping the world.

Fintech refers to the convergence of finance and technology and differs from existing electronic finance. While electronic finance has continuously supported the existing financial system by supporting it technically, fintech has a property of disruptive innovation that could change the existing value chain of finance. According to a survey by Venture Scanner, as of June 9, 2015, 1,141 fintech companies in 53 countries around the world are running new businesses that destroy existing financial areas such as personal and corporate banking, payment, asset management, remittance, and insurance ¹.

Today, various types of services are developing in

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the fintech market's initial stage, and users understand fintech simply as mobile payment. Some do not foresee that fintech will be an ongoing topic, although they may see it as an issue of the moment. Nevertheless, the fintech market is continuously growing due to support from each national government and due to market expansion. The ability of fintech to quickly remove inconveniences experienced by users who used financial services in the past, using IT technology, is a big advantage to users. Although the fintech market is increasingly expanding, studies on fintech are still lacking.

1.2 Research Objectives

Although a variety of discourses about fintech exists today, an exact definition is absent and prior research is scarce. As for critical perspectives on fintech, although various problems are being identified in the context of tense disagreements between existing finance camps, which states the advancement of IT technology entails for financial development and IT camp, which claims to separate and define the case in which IT-based company enters into finance only, correct direction is absent.

This study aims to analyze the results of a survey that targeted users of fintech service in key countries, to generate basic data to support the provision of consulting services to fintech companies, including start-up and small- and medium-sized companies.

2. Prior Research

According to survey data from eMarketer, the rate of those who have given up on shopping due to complex payment methods after deciding to purchase a particular product was found to be 68% for PC-based, and 86% for mobile devices². Fintech began with attempts to improve the convenience of financial services, which are not keeping up with the progress of technology. The rapid growth of the fintech industry is due to the rapidly changing financial environment resulting from digital technology, and today, in financial markets, digital technology has become an important factor in competitiveness³.

With England and the US at the head, the fintech industry is growing rapidly. The worldwide scale of investment in fintech is growing sharply each year with approximately 930 million USD in 2008 and 2.97 billion USD in 2013. It has grown by more than 3 times in only about 5 years⁴.

According to UK Trade & Investment, the business areas of fintech are classified largely into four areas, including payment, financial data analysis, financial software, and platform, and the content for each part is as follows⁵.

First, payment is the service area in which general users directly use services such as online payment, currency exchange, and remittance. This is an area in which users can simply use the services and, compared to existing financial services and payment services, do so with relatively low fees.

Second, the financial data analysis area is an area that can create a new service model or add value by analyzing large-scale data that occurs in transactions between individuals, individuals and companies, and companies. It is an area relevant to insurance and corporate credit, and the analysis of big data occurs on a large scale in these applicable areas.

Third, the financial software area is an area that develops software, which can provide more efficient and innovative financial service by utilizing more advanced and intelligent forms of technology than existing IT technology. It is a software development area addressing financial services that include banking service, payment service, and asset management.

Fourth, the platform area is an area in which various types of platforms are developed to provide global service, which is one of fundamental parts of fintech, as opposed to a geographically limited service.

According to IDC, countries including the US, England, Japan, and China are focusing on investment at the national level in fintech projects, and they are concentrating about 70% of their investment in the payment field. Although the platform service and financial software business fields have a relatively small investment rate, investment is being made in a balanced manner in areas including payment (28%), financial data analysis (29%), financial software (29%), and platform (14%), and their investment area expanded along with the fintech area⁶.

According to CB Insight, which is a company providing US venture capital information, 100 fintech start-ups are divided into 7 types including lending, money transfer, payment tech, billing tech, digital currency, personal finance, and institutional tools, through a periodic table of fintech industry announced in ⁷.

By classifying fintech industry in England largely into payment, software, data and analytics, and platforms,

Ernst & Young (2014) analyzes attractiveness based on annual sales market size and growth potential⁸.

Due to the financial market environment changes, start-ups, which have innovative technology, became able to turn promptly their business ideas into services or products, and are changing competition in existing financial markets⁹.

3. Data Collection and Empirical Analysis

3.1 Data Collection

This research study has conducted an investigation as a part of a policy research project run by the Knowledge Service & Consulting Graduate School of Hansung University and its research and development center at the request of the Small and Medium Business Administration of Korea.

As for questionnaire data used in this study, a survey, which targeted users who have experience in directly using fintech services (mobile payment) on smartphones, was conducted for about 2 months from October 2015 to November 2015 in Korea, the US, and China. A total of 784 people (314 for Korea, 212 for the US, and 231 for China) were surveyed. The survey was conducted offline and online, targeting male and female adults over the age of 19.

3.2 Methodology of the Analysis

The present study used the causal analysis method

through multiple linear regression analysis as a statistical analysis method. Multiple linear regression analysis has the advantage of analyzing the isolated influence between variables affecting dependent variables. The control variables used in this study include gender, age, educational level, average monthly household income, and daily smartphone usage time, which can affect respondents' awareness of fintech or perception of it, as well as awareness of fintech terms. Dependent variables include service loyalty and possibility of recommendation to an acquaintance. An explanation of variables is shown in the Table 1.

The reason why the independent variables were selected as shown in Table 1 is to provide users' feelings about fintech and fintech start-ups and existing small- and medium-sized companies relating to fintech. First, by starting with a questionnaire about users' needs for service, the present study analyzed fintech awareness and behavior of respondents who tend to be early adopters among users. Additionally, it analyzed the reliability of fintech service providers and the level of effort that service providers make to promote financial safety and protect users who are at risk of exposing personal information. Then, it formed independent variables through service mobility, which is an advantage of fintech, and perception of cost reduction.

For dependent variables, service loyalty and possibility of recommendation to acquaintance were selected because reliability in securing a user class is needed for sustainable business and the user class needs to grow through the word of mouth of users for business expansion.

Table 1. List of variables for analysis

Category	Questionnaire item		
Service need	I need mobile payment service.		
Disposition of early use of service	I am the first one to use the new mobile payment service among friends.		
Service provider reliability	Mobile payment system provider is reliable.		
Reliability of effort to protect users	When a problem occurs with respect to transaction, applicable service provider will take an effort to protect me.		
Service mobility	Mobile payment can be used anywhere where payment is required.		
Cost reduction	When using mobile payment, cost can be reduced compared to general payment.		
Service loyalty	Even if items that are being paid through general payment change to mobile payment methods, I will continue to use.		
Possibility of recommendation	I would like to recommend to a friend that using mobile payment service has value compared to using general payment service.		
Control variable	Daily usage time	Socio-demographic variable	Gender
	Fintech awareness level		Age
			Education
			Income

As for control variables, daily mobile usage time, which can affect independent variables and dependent variables, the level of understanding of fintech technology, and socio-demographic variables were included. Accordingly, a model was formed in a way that allows one to analyze pure causal relationships between independent and dependent variables.

3.3 Demographic Traits of the Sample

The survey targeted a total of 784 people. Data was classified into entire group, Korean group, US group, and Chinese group. In the case of Korea, male users were greater than female users with 36.7% and in terms of age, those in their 20s were the greatest with 57.2%, followed by those in their 30s with 24.3%. In the case of the US, male users were the largest group with 47.6%, and in terms of age, those in their 20s were the largest with 34.4%, followed by those in their 30s with 33.9%. In the case of China, male users were the largest with 32.9%, and in terms of age, those in their 20s (35.1%) and 30s (33.8%) were the largest.

3.4 Multiple Linear Regression Analysis

In order to analyze loyalty for fintech services and the possibility of recommendation to an acquaintance, multiple linear regression analysis was conducted, focusing on variables relating to perception of users.

As for service loyalty and service recommendation possibility, which were selected as dependent variables, various socio-demographic variables and factors of users' usage pattern can be considered in combination. Accordingly, linear regression analysis was performed in order to control the influence of such variables and analyze the isolated influence of users' perception toward dependent variables.

As shown in Table 2, the variables that have a significant effect on service loyalty include need for service, reliability of service provider, reliability of effort to protect users, service mobility, cost reduction, education, and average monthly income. Among these, the variable that has the most influence was found to be reliability (0.386), followed by service need (0.176), service mobility (0.159), effort to protect users (0.158), and cost reduction (0.062).

For Korea, increasing daily usage time was found to be associated with increasing service loyalty. For the US, fintech awareness level and age showed significant correlation. The variables that had the most influence on the US users were reliability of company (0.450), effort to protect users, service mobility (0.175), and cost reduction (0.114). For China, reliability of company (0.317), service need (0.239), and cost reduction (0.161) were found to be significant.

Table 2. Analysis of loyalty for fintech service

		Dependent	Service loyalty (Standardized coefficients)			
			Total	Korea	US	China
variables Independent variables						
Independent variables	Need for service		.176***	.194***	.060	.239***
	Disposition of early use of service		-.005	-.006	-.040	.099*
	Service provider reliability		.386***	.366***	.450***	.317***
	Reliability of effort to protect users		.158***	.224***	.175***	.053
	Service mobility		.159***	.179***	.175***	.033
	Cost reduction		.062**	-.043	.114**	.161***
	Control variables	Daily usage time		.021	.083**	-.049
	Fintech awareness level		.037	.021	.100**	.014
	Gender		-.002	-.022	-.037	.069
	Age		.035	.034	.112**	.014
	Education		.063**	.048	-.019	.071
	Average monthly income		-.081**	-.015	-.031	-.137**
Statistics	Number of samples		784	341	212	231
	adj R-sq		0.556	0.549	0.619	0.556
	Significance probability of model		0.000	0.000	0.000	0.000

Table 3. Recommendation of fintech service to acquaintance

		Dependent Service recommendation to acquaintance (Standardized coefficients)			
		Total	Korea	US	China
variable Independent variable					
Independent variable	Need for service	.373***	.349***	.346***	.337***
	Disposition of early use of service	.119***	.133***	.100	.089
	Service provider reliability	.177***	.227***	.098	.241***
	Reliability of effort to protect users	.031	.028	.048	.088*
	Service mobility	.083***	.066	.020	.156***
	Cost reduction	.168***	.154***	.323***	.020
Control variable	Daily usage time	-.074***	-.070	-.043	-.038
	Fintech awareness level	.057**	.061	.035	.073
	Gender	.019	.013	.053	.041
	Age	-.022	-.041	-.041	-.024
	Education	-.003	-.035	-.002	.066
	Average monthly income	-.027	-.045	.091	-.095
Statistics	Number of samples	784	341	212	231
	adj R-sq	0.539	0.545	0.556	0.551
	Significance probability of model	0.000	0.000	0.000	0.000

Table 3 illustrates the possibility of recommendation of a fintech service to an acquaintance. For all three countries, service need (0.373), reliability of company (0.177), cost reduction (0.168), disposition of early use of service (0.119), mobility (0.083), daily usage time (-0.074), and fintech awareness level (0.057) were found to be significant.

This implies that users who have a tendency of early adoption, daily mobile usage time, and fintech awareness level have a significant effect. In addition, to strengthen loyalty of mobile payment service users and increase the possibility of recommendation, need for service needs to be emphasized and reliability of service provider needs to be improved.

For Korea, service need, reliability of company, cost reduction, and disposition of early use of service were found to be significant, and for the US, service need and cost reduction were found to be significant. For China, service need, reliability of service provider, reliability of effort to protect users, and service mobility were found to be significant.

These results indicate that different factors act on users in the respective countries for recommendation to acquaintance, and that different marketing strategies should be used in each country.

4. Conclusions

4.1 Implications

Under the premise that competitive surveys and studies are needed, in line with fintech development in the consulting area, in preparation for the “big bang” of financial changes resulting from the convergence of IT and finance, including internet bank establishment, the present study began with the need for support for the establishment of fintech by utilizing the benefits of consulting and considered the analysis of many accumulated business cases.

The development of mobile devices and the advancement of IT technology have developed into fintech, in which finance and mobile are combined in one. This formation of a new market is regarded as a new place of opportunity, and it provides a new growth engine for venture companies with superior technology, as well as to small- and medium-sized companies. As the result of the focus on providing information to venture companies and small- and medium-sized companies, this study drew the following implications in light of existing environmental requirements:

As two dependent variables in common, the affecting variables were reliability of company and need for

service, followed by service mobility and cost reduction. Moreover, in the case of service loyalty, effort to protect users had a significant effect, and in the case of possibility of service recommendation to acquaintance, the tendency of early adopter variable had a significant effect. Such results ultimately imply that business strategy should be established in consideration of the aforementioned significant factors, in order to secure stable service customer class and expand through recommendation.

Different perceptions and responses for dependent variables resulted in the different countries because of the different cultures of users, as well as differences in social perceptions. Thus, companies that aim to enter into the global market via fintech service should establish their entry strategy and customer acquisition and expansion strategy on a country-by-country basis.

According to neoinstitutionalism, enterprises do not request consulting for economic efficiency. Instead, they think of it as an institution, and they decide to participate in consulting based on that notion rather than on economic criteria such as rationalization of management decision making, legitimization of organizations, and diffusion of management concepts and innovations¹⁰.

The results of the study are expected to be basic data which will be substantially helpful to multiple small- and medium-sized companies, ventures, and startups that aim to enter into the finance and IT technology field. And it will be used widely as basic data for the development of consulting industry and policy decisions, including the formation of sub-programs that can support future consulting and implementation of related field consulting.

4.2 Limitations and the Future Prospect of Research

The limitation of this study is the regional limitation of the dataset. Although an effort to increase significance was made by limiting users to those who own a smartphone and have directly used fintech service in Korea, the US, and China, where frequency of use of fintech is relatively

high or population in use is high, the questionnaire was conducted randomly; thus, there may be a limitation on the representativeness. If future resources and conditions allow, more detailed and comprehensive analysis is expected to be possible by increasing the number of samples by country and region.

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6. References

1. Where are fintech innovation happening? Venture Scanner [Internet]. [Cited 2015 Sep 06]. Available from: <http://www.venturescanner.com>.
2. Retailers rethink shopping cart abandonment, eMarketer [Internet]. [Cited 2013 Feb]. Available from: <http://www.emarketers.com/artice/retailers-rethink-shopping-card-abanonment/1009645>.
3. Fintech–The digital (r)evolution in the financial sector, Deutsche Bank Research [Internet]. [Cited 2014]. Available from: <http://www.db.com>.
4. Skan J, Lumb R., Masood S , Conway S K. The boom in global fintech investment, Accenture USA; 2014.
5. Fintech (Financial Technology): The UK's unique environment for growth, UKTI (UK Trade & Investment) [Internet]. [Cited 2015 May]. Available from: <https://www.gov.uk/.../fintech-financial-technology-the-uks-unique-envi>.
6. Fintech Rankings Top 100, IDC [Internet]. [Cited 2014]. Available from: <http://www.idc.com>.
7. Fintech Top 100, CB Insights [Internet]. [Cited 2014]. Available from: <http://www.cinsights.com>.
8. Landscaping UK Fintech, Ernst & Young [Internet]. [Cited 2014]. Available from: <http://www.ey.com>.
9. The future of fintech and banking, Accenture USA [Internet]. [Cited 2015]. Available from: <http://www.accenture.com>.
10. Yoon S, You YY. A study on the effects of small enterprises' motivations to request consulting from the perspective of transaction cost economics and sociological neoinstitutionalism. *Indian Journal of Science and Technology*. 2015 Apr; 8(7):581–89. DOI: 10.17485/ijst/2015/v8iS7/70443.