



Analyzing The Impact of Digital Innovation, Organizational Culture on Corporate Performance of Fintech Enterprises in Shanghai

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Abstract

With the rapid development of information technology, the financial technology industry in China and even the whole world has shown a remarkable growth momentum. The purpose of this study is to analyze the influence of digital innovation and organizational culture on the performance of Shanghai Financial Technology Company. Through the questionnaire survey, the decision makers, managers and core employees of 386 financial technology companies in Shanghai, China were investigated. The data comes from the "questionnaire" WeChat survey. Descriptive statistics and multiple regression analysis are used in the analysis. It was found through research that Fintech $Y = 0.61 + 0.476 \cdot X_1 + 0.361 \cdot X_2$. X_1 stands for digital innovation, x_2 stands for cultural organization, and Y stands for enterprise performance. The results show that digital innovation and cultural organization can positively affect the performance of financial technology enterprises. Through empirical analysis, this study not only obtains the dynamic innovation of enterprise performance development with multiple dimensions, but also promotes the development of academic theory and creates a management tool that can be landed, which has significant exemplary innovation value in the digital economy era. Here are many application scenarios, such as being the CEO of a financial technology enterprise, carrying out value innovation during cultural transformation and digital portfolio optimization; At the same time, it can also add value to academic influence and form a sustainable knowledge spillover effect.

Keywords: Digital Innovation, Cultural Organization, Enterprise Performance

Introduction

In recent years, countries have adopted policies to promote the development and adoption of innovative digital technologies and develop their entrepreneurial ecosystems (Zahra et al., 2023). The world is embracing the wave of digital economy, and China is no exception. Digital transformation has become a necessary condition for enterprises to



survive in high competition (Luo et al., 2023). Therefore, after understanding the trend of the times and the current situation of the development of financial technology enterprises at home and abroad, we want to explore the influence of digital innovation and cultural organization on the performance of financial technology enterprises. As the financial capital of China, Shanghai is a gathering place of financial technology enterprises, so we focus on the influence of Shanghai's financial technology enterprises. From the two dimensions of digital innovation and cultural organization, this is not only the requirement of digital technology innovation, but also the adaptation to the changes of the times. There are 2,931,099 enterprises in Shanghai, among which the number of fintech companies is 10,931 (Data source: National Customer Resource Information Platform). Most of them want to break the traditional customer acquisition mode and marketing mode and give customers the best service experience, but they need value advocates and professional skills as a bridge and guidance, so it is urgent for everyone to explore digital innovation, and corporate culture organization is also an indispensable and important part.

Objectives

1. To analyze digital innovation of Shanghai Financial Technology Company, affect the enterprise performance.
2. To analyze cultural organization of Shanghai Financial Technology Company, affect the enterprise performance.

Research Hypothesis

Hypothesis 1: Digital innovation of financial technology enterprises in Shanghai has a positive impact on enterprise performance.

Hypothesis 2: The cultural organization of Shanghai financial technology enterprises has a positive impact on enterprise performance.

Concept Theory Framework

1. The theory of Digital Innovations (DI)

Globally, the fintech industry is becoming increasingly important in keeping pace with advances and developments in the financial sector (Al-Matari et al., 2022). These findings especially highlight the links between innovation and sustainability, revealing that digital transformation tools contribute over the long-term to the value creation process (Di Vario et al., 2020). Digital innovation refers to products, services, processes, etc. that trigger or realize value based on digital technologies (Nambisan et al., 2017). With the rapid development of digital economy, the improvement of digital level has become the key focus of the core competitiveness of enterprises and an important engine to achieve high-quality development of enterprises and society.

2. The theory of Cultural organizations (CO)

Organizational culture influences the ability of fintech companies to embrace and effectively implement digital transformation. For companies to remain competitive in the fintech space, they must foster a culture of continuous learning and development. This includes regular training, seminars, and exposure to the latest digital trends and technologies (Chesbrough & Crowther, 2006), implementing a digital-first culture. A strong organizational culture encourages innovation and adaptability, supporting employees to try original approaches, embrace change, and learn from failure.

Cultural organization and organizational culture are two similar concepts with completely different connotations. Organizational culture is the "soft rules" such as shared values and behavior patterns within the organization whose core goal is cultural production/dissemination, and values, behavior norms and work habits that members of the organization follow together. Cultural organizations are entities whose main functions are the creation, preservation, and dissemination of cultural products, focusing on cultural policies, capital operation, audience service and the social influence and public welfare of cultural products. Focus on how culture affects employee behavior, decision-making and performance, and the role of culture in organizational change and team cohesion.

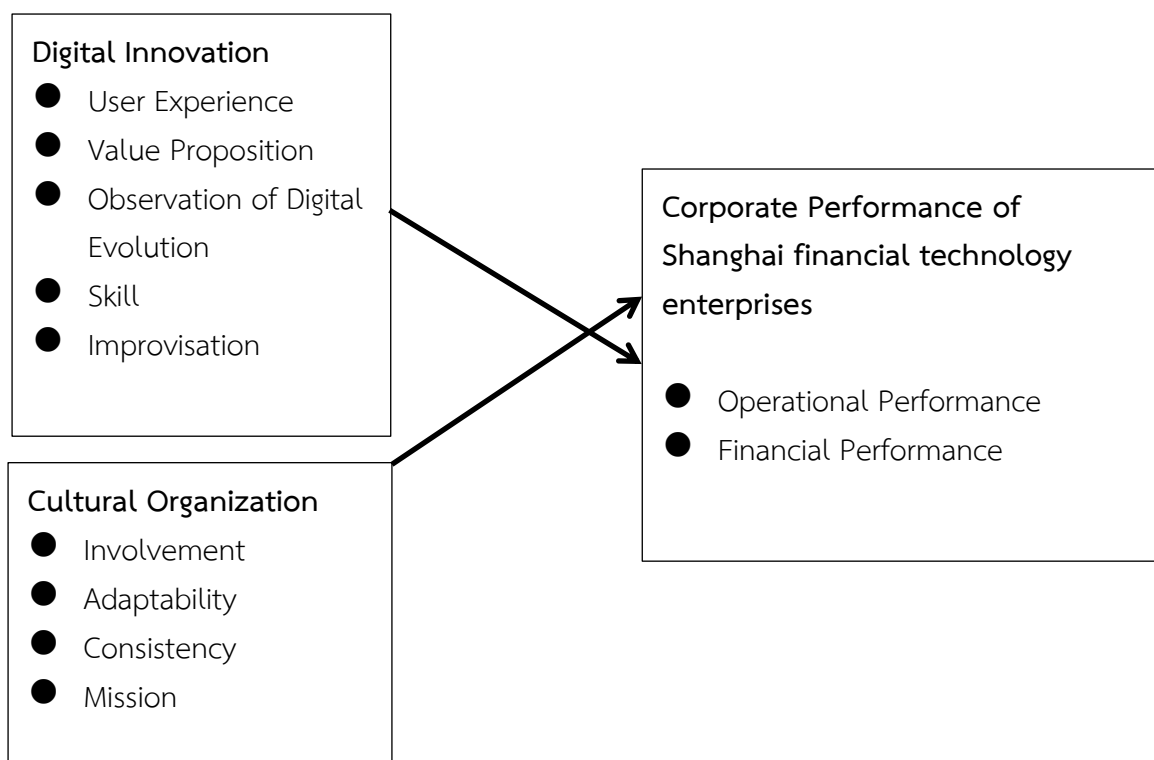


Figure 1



Materials and Methods

William G. put forward Cochran's theorem in 1954, which is an important statistical theorem, and provided a method to assess the difference between two independent samples. Through this formula, we got 386 samples and then used SPSS data analysis software for empirical analysis. Descriptive statistics and multiple linear regression equations are used to examine the relationship between variables and their influence patterns. The function of descriptive statistics is to systematically summarize the characteristics of data through quantitative indicators and visual means and lay the foundation for data understanding and subsequent multiple linear regression. Multiple regression analysis plays the role of prediction and estimation in this study, and multi-dimensional relationship processing can provide a more comprehensive perspective. The confidence level adopted in this study is 95% and the error is 5%.

Results

In this study, the Likert scale is used for numerical processing by dividing the options into 1-5 points and calculating statistics such as mean and standard deviation. At the same time, classification analysis is conducted. The options are combined into three categories (such as "negative/neutral/positive") for data statistics.

The empirical results show that the level of digital innovation, the factor Mean values below are all greater than 3, Cultural organization of financial technology enterprises in Shanghai is in the middle.

Table1: Mean and Standard Deviation of Digital Innovation

Digital Innovation	Mean	Standard Deviation	Definition of Level
User Experience	3.29	1.063	Middle
Value Proposition	3.20	1.043	Middle
Observation of Digital Evolution	3.22	1.060	Middle
Skill	3.28	1.072	Middle
Improvisation	3.26	1.059	Middle



Table 2: Mean and Standard Deviation of Cultural Organization

Quality of Live Marketing	Mean	Standard Deviation	Definition of Level
Involvement	3.34	1.078	Middle
Adaptability	3.34	1.067	Middle
Consistency	3.33	1.055	Middle
Mission	3.34	1.067	Middle

Table 3: Multiple regression analysis was used to assess the hypotheses.

Coefficients^a

Variable	Unstandardized Coefficients B	Standardized Coefficients Beta	t	Sig.
Constant	0.061		0.477	0.633
Digital Innovation	0.585	0.476	8.808	0.000
Cultural Organization	0.404	0.361	6.693	0.000

As can be seen from the above table and Table 3, as shown in the table, with digital innovation and cultural organization as independent variables and the performance of tech companies as the dependent variable, the model F-value is 356.744, $P=0.000$, indicating that the model holds true. Moreover, digital innovation ($\beta=0.476$, $P=0.000$) positively influences the performance of tech companies; cultural organization ($\beta=0.361$, $P=0.000$) also positively influences the performance of tech companies.

The equation is: $Y=0.61+0.476*X_1+0.361*X_2$

Conclusions and Discussion

1. Conclusions

The results show that digital innovation and organizational culture of financial technology enterprises in Shanghai, and there is a significant positive correlation with enterprise performance. Research results show that the adoption of financial technology has a positive impact on financial performance. The results also show that financial technology has a positive significant effect on the performance of small and medium-size enterprise.



2. Discussion

This study evaluates all aspects of digital innovation, such as user experience, value proposition, improvisation, so that customers can directly participate in the development process to ensure meaningful interaction; At the same time, the company constantly updates and improves its products/services according to user interaction and feedback to enhance the overall user experience. It is found that the digital innovation and cultural organization of financial technology enterprises in Shanghai are in the middle, and they have a positive and important impact on the performance of financial technology enterprises in Shanghai. Through reading the literature, it is found that many scholars at home and abroad have studied the influence of digital innovation and cultural organization on enterprise performance. For example, Liu et al. (2021) finally pointed out that financial technology has a significant positive impact on ROE and NIMP and has a significant positive impact on ROE research in linear and nonlinear models. Digitalization has a profound impact on organizational performance, especially in the financial industry, which provides new opportunities for value creation by breaking the existing business model (Shah et al., 2024). The research results of Wang et al. (2023) show that the sustainable commitment of an enterprise is beneficial to its business growth and will not increase its risk finance industry. The financial industry can report the growth of financial technology news that highlights business, while companies with high capital adequacy ratio can better manage the risks related to innovation commitments. He suggested that financial companies conduct sustainable innovation to improve their profitability.

3. Limitation and future study

Only 386 samples were investigated in this study, and the sample data is limited. This study is biased towards the economically developed areas in eastern China, with Shanghai, China as the representative area, so it has regional and quantitative limitations. Sun et al. (2022) research results show the scale and vitality of digital technology innovation show obvious spatial differentiation, and form a pattern of agglomeration distribution in Shanghai, southern Jiangsu, northeastern Zhejiang and central Anhui, and the agglomeration degree is decreasing. It is suggested that we should increase the research samples, invest in empirical research, expand the data caliber, and break the regional restrictions.

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