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Digital technologies, capability and innovation: Basis for finance sector digitalization framework

Peng, Wang ✉
Graduate School, Lyceum of the Philippines University - Batangas, Philippines (969349058@qq.com)

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Abstract

The finance sector in China is undergoing a transformative journey fueled by rapid advancements in digital technologies, capabilities, and innovations. This transformation is not only reshaping the traditional financial landscape but also setting the stage for a robust digitalization framework that can drive sustainable growth and competitiveness in the global market. This study aimed to assess digital technologies, capability and innovation as basis for developing finance sector digitalization framework in China. A descriptive approach was used in this study to systematically define the conditions, and assess the variables that were examined. Target respondents are 385 customers of five finance companies in China. A survey questionnaire was used for data collection which was subsequently analyzed using the SPSS software. Based on the finding of the study, the respondents disagree on digital technologies in terms of emerging technology, augmented and virtual reality and artificial intelligence. The finance companies possess good digital capability as moderately agreed by the respondents. The respondents moderately agreed on the digital innovation in terms of efficiency, novelty and convergence. There were highly significant relationships that exist between digital technologies, digital capability and digital innovation. A finance sector digitalization framework was proposed emphasizing the integration of digital technologies with robust digital capabilities and a focus on innovation

Keywords: digitalization, digital technologies, capability, innovation, finance sector

Digital technologies, capability and innovation: Basis for finance sector digitalization framework

1. Introduction

The finance sector in China is undergoing a transformative journey fueled by rapid advancements in digital technologies, capabilities, and innovations. This transition is reshaping the conventional financial landscape while establishing a robust digital framework with potential to enable sustainable progress and global competitiveness over time through continuous betterment. The FSB (2017) report provides a thorough overview of artificial intelligence and machine learning assimilation and influences within financial sectors. It underscores the likely capacity of such technologies to bolster proficiency, diminish expenses, and advance risk administration while also identifying sizeable obstacles and hazards necessitating consideration. The insights from this analysis are notably important for economic entities, lawmaking authorities, and regulatory organizations to understand the evolving digitized innovations environment within monetary services. Modernized systems, such as artificial intelligence, huge data analytic, block-chain, cloud computing and financial development, are tangibly reshaping how financial services are provided and utilized in China.

This study will help to fill a gap in the literature on digital performance. While multiple studies have looked at various areas of digital transformation in the banking industry, there is a lack of a complete, unified digital performance framework that incorporates digital technologies, competencies, and innovation indicators. Existing research often focuses on isolated elements without providing a holistic view of how these components interact to drive overall digital performance. Ultimately, digital transformation aims to generate long-term growth in the banking and finance industry. By studying digital technologies, capabilities, and innovations in the Chinese finance sector, this research can provide insights that help financial institutions achieve long-term growth and competitiveness in the digital age. Researching digital technologies, digital capability, and digital innovation in the Chinese finance sector is essential for developing a comprehensive digitalization framework.

As a PhD Management student, the rationale for researching stems from the rising relevance of digital transformation in the global financial sector. The convergence of technological advancements is rapidly reshaping financial institutions and the way they deliver services. This research is motivated by the need to build a comprehensive framework that supports digitalization in the finance sector, providing both theoretical contributions and practical guidance for industry leaders, regulators, and policymakers. As a PhD management student, this study is an opportunity to engage with cutting-edge issues in digital transformation while advancing knowledge in the intersection of management, technology, and finance.

Objectives of the Study - The objective of this study was to examine digital Technologies, capability and innovation as basis for developing finance sector digitalization framework in China. Specifically, it aimed to determine digital technologies in relation to emerging technologies, artificial intelligence (AI), augmented and virtual reality, and capability to acquire significant digital technologies, identify new opportunities for digital transformation, and evaluate innovation in terms of novelty, efficiency, and convergence. Additionally, a digitalization framework for the Chinese financial services industries was built, and the substantial link between digital technology, digital capabilities, and digital innovation was examined.

2. Methods

Research Design - A descriptive methodology was employed to systematically delineate the object, specify the conditions, and evaluate the variables under investigation. The descriptive-correlational study design integrates both descriptive and correlational methodologies. The objective of descriptive research is not to focus on establishing causal linkages or forecasting future consequences. Conversely, it underscores a comprehensive

and accurate representation of the obtained data, which may be beneficial in developing hypotheses and recognizing trends. To achieve the goals of the present study, primary data will be collected using a survey instrument that the researcher developed and had both its validity and reliability evaluated.Chinese respondents receive the questionnaire through online questionnaire distribution software, complete it, and send it back via the same method in order to collect data. The statistical analysis was carried out in SPSS version 28, after data on the weighted mean, standard deviation, and correlations had been collected using the mandatory statistical methods.

Participants of the Study - The research participants are customers of five different Chinese financial institutions: China Construction Bank (CCB), Bank of China (BOC), China Industrial and Commercial Bank (ICBC), and Agricultural Bank of China (ABC). Across all firms, 385 employees have taken the time to provide responses.

Instruments of the Study - The principal data collection tool is a survey questionnaire. This was utilized to assess employees' impressions of digital technologies, capabilities, and innovation. Prior to formulating the research questions, the researchers conducted an extensive review of pertinent literature about the study variables and dimensions, which established a framework and basis for the statements in the research questionnaire. The data gathering method utilized a four-point Likert scale that had been rigorously evaluated with the researcher's mentors and field specialists. In the initial section of the questionnaire, the researcher assessed the respondents' perceptions on digital technology with reference to emerging technologies, augmented reality, virtual reality, and artificial intelligence (AI), The second part of the questionnaire evaluated the digital capability in terms of obtaining significant digital technologies, recognizing new digital advantages, and implementing a digital revolution. The final section in the survey questionnaire assessed digital innovation in relation to efficiency, novelty, and convergence.

This study utilized the Likert scale to evaluate bank client feedback regarding the subjects examined. Responses to inquiries on a four-point Likert scale consist of "Strongly Agree," "Agree," "Disagree," and "Strongly Disagree," with corresponding weights from 1 to 4, where 1 represents the lowest (Strongly Disagree) and 4 signifies the greatest (Strongly Agree). In the present research, the Likert Scale is categorized as follows: 3.5-4 indicates Strongly Agree, 2.5-3.49 signifies Agree, 1.5-2.49 represents Disagree, and 1.00-1.49 denotes Strongly Disagree. To guarantee the reliability and authenticity of the research content and output, the researcher consulted with the school's adviser, and all comments and recommendations from the adviser and panel were integrated into the study. Furthermore, the questionnaire was subjected to a Cronbach Alpha reliability test to ensure dependability. The findings of the Cronbach's alpha reliability were compiled together with the corresponding scores and interpretations.

Table A
Reliability Test Results Summary

Variable	Cronbach's Alpha	Remarks
1A. Emerging Technologies	0.881	Good
1B. Augmented and Virtual Reality	0.820	Good
1C. Artificial Intelligence	0.812	Good
2A. Acquiring Important Digital Technologies	0.839	Good
2B. Identifying New Digital Technologies	0.859	Good
2C. Digital Transformation	0.904	Excellent
3A. Efficiency	0.789	Acceptable
3B. Novelty	0.753	Acceptable
3C. Convergence	0.821	Good

Legend: George and Mallery (2003) provided the ff rule of thumb: ≥0.90 = Excellent; ≥0.80 = Good; ≥0.70 = Acceptable; ≥0.60 = Questionable; ≥0.50 = Poor; <0.50 = Unacceptable

Table A presents Cronbach's Alpha values for various variables, which measure internal consistency and reliability within the research. Cronbach's Alpha assesses how well the items within each variable correlate,

indicating how reliably they measure the intended concept. For Emerging Technologies, the Alpha value is 0.881, indicating good reliability, suggesting that the instruments employed to quantify this variable consistently reflect the concept. Similarly, Augmented and Virtual Reality and Artificial Intelligence exhibit Cronbach's Alpha values of 0.820 and 0.812, accordingly, both classified as good, indicating robust internal consistency. Acquiring of Key Digital Technologies and Recognition of Emerging Digital Technologies show Alpha values of 0.839 and 0.859, also indicating good reliability, meaning the items used to measure these variables consistently capture the concepts they represent. Notably, Digital Transformation has an Alpha value of 0.904, rated as excellent, demonstrating very high internal consistency and reliability. On the other hand, Efficiency and Novelty have Alpha values of 0.789 and 0.753, respectively, falling within the acceptable range. While these variables are reliable, their consistency is not as strong as those rated as good or excellent. Finally, Convergence has a Cronbach's Alpha value of 0.821, showing good reliability. Overall, the variables in the study exhibit strong internal consistency, with most falling in the good to excellent range, indicating that the items are reliable in measuring their respective concepts.

Data Gathering Procedure - The researcher utilized the finalized questionnaires as a data collection instrument following the integration of insights and feedback from the research adviser. Upon a successful completion of this reliability test, the results were encoded and disseminated to the bank's client respondents through a digital survey distributing platform in China. Prior to disseminating the surveys, the researcher engaged with the executives of the companies to obtain authorization for the consumer perception study. Importantly, the consumers' consent had been obtained prior to their participation in the survey. Upon receiving final university authorization for engagement, the questionnaire was distributed online to 385 bank clients via an online portal. The researcher subsequently summarized, assessed, and interpreted the acquired data.

Ethical Considerations - To uphold the research's efficacy and integrity, ethical considerations were addressed throughout the study to ensure that all collected data would be utilized solely for its intended purpose. The researcher's professional judgment, financial, or personal interests were not compromised from the beginning. All requisite licenses were acquired prior to the poll. The author seeks approval from the university's ethics review committee prior to initiating the research. The participants were apprised about the study and its objectives. They were guaranteed that the research would be exclusively academic, ensuring the protection of individual security and privacy. The researcher additionally seeks clearance from client respondents using instant messaging applications and telephone conversations to ensure the selected individuals are willing to provide responses to the survey questions. The poll was conducted anonymously to safeguard the privacy and identify of the participants.

Data Analysis - The weighted mean and rank were employed to evaluate in situ digital technologies concerning emerging technologies, augmented and virtual reality, and artificial intelligence (AI); to ascertain digital capability regarding the acquisition of significant digital technologies, the identification of new digital opportunities, and digital transformation; and to assess digital innovation in terms of efficiency, novelty, and convergence. The Shapiro-Wilk Test results indicated that the p-values for all variables were below 0.05, signifying that the dataset was not normally distributed. Consequently, Spearman's rho was employed as a component of the non-parametric tests to ascertain the significant link. All analyses were conducted with SPSS version 28.

3. Results and discussions

Table 1
Summary Table on Digital Technologies

Key Result Areas	Composite Mean	VI	Rank
Emerging Technologies	1.49	Strongly Disagree	2
Augmented and Virtual Reality	1.29	Strongly Disagree	3
Artificial Intelligence	3.35	Moderately Agree	1
Grand Composite Mean	2.04	Disagree	

Legend:3.50-4.00=Strongly Agree;2.50-3.49=Agree;1.50-2.49=Disagree;1.00-1.49=Strongly Disagree

Table 1 encapsulates the evaluation of digital technologies concerning new technologies, augmented reality, virtual reality, and artificial intelligence. The table reveals that the highest evaluated indicator is artificial intelligence, with a composite mean of 3.35, followed by emerging technologies at an aggregate mean of 1.49, and augmented and virtual reality at an aggregate mean of 1.29. The overall composite mean of 2.04 signifies that the respondents express disagreement over the indicators related to digital technology. There is still needed to improve their adoption to provide better financial services. There is a lack of strong endorsement for the current integration and emphasis on digital technologies within the organization. This suggests that while there might be some level of adoption or interest, it is not sufficiently robust or widespread to be considered a major focus or priority.

This aligns with observations that AR/VR adoption in many sectors, including finance, can be slow due to technical challenges and the need for substantial investment (Zhang et. al.,2021). Despite their potential to transform customer experiences and operational processes, AR/VR remains underutilized, reflecting a cautious or gradual approach to their integration. Conversely, AI shows a composite mean of 3.35, suggesting moderate agreement that AI technologies are somewhat integrated and valued within the organization. This moderate score implies that while AI is recognized and used to some extent, it is not yet fully embedded or central to all operations (Zhang et. al.,2021). The moderate adoption of AI indicates that there is potential for further development and investment in this area to enhance its impact and utility.

Table 2
Summary Table on Digital Capability

Key Result Areas	Composite Mean	VI	Rank
Acquiring Important Digital Technologies	3.36	Moderately Agree	1.5
Identifying New Digital Opportunities	3.32	Moderately Agree	3
Digital Transformation	3.36	Moderately Agree	1.5
Grand Composite Mean	3.35	Moderately Agree	

Legend:3.50-4.00=Strongly Agree;2.50-3.49=Agree;1.50-2.49=Disagree;1.00-1.49=Strongly Disagree

Table 2 encapsulates the evaluation of digital capabilities to obtain novel digital prospects, and the process of digital transformation. As gleaned from the table, the highest assessed indicator is Acquiring Important Digital Technologies and Digital Transformation at 3.29 composite mean, preceded by Identifying New Digital Opportunities, with a composite mean of 3.36, indicating that those surveyed express moderate agreement.

There is a grand composite mean of 3.35 which falls within the range categorized as Moderately Agree, it suggests that respondents generally perceive the organization to be moderately capable or successful in terms of its digital initiatives and strategies across the identified areas. It provides a balanced assessment of the organization's performance in digital transformation efforts. While it's not the highest category (which would be "Strongly Agree"), it indicates that there is a positive sentiment regarding the organization's digital capabilities, with acknowledgment of strengths and areas for potential enhancement. The financial industry should implement measures to progressively adopt sophisticated technologies, therefore enhancing consumer experience. While several financial institutions have adopted some tactics mentioned above, they ought to fully use them to increase client adoption of technology and improve their perception (Magotra et al., 2018).

Table 3
Summary Table on Digital Innovation

Key Result Areas	Composite Mean	VI	Rank
Efficiency	3.36	Moderately Agree	3
Novelty	3.38	Moderately Agree	1.5
Convergence	3.38	Moderately Agree	1.5
Grand Composite Mean	3.37	Moderately Agree	

Legend:3.50-4.00=Strongly Agree;2.50-3.49=Agree;1.50-2.49=Disagree;1.00-1.49=Strongly Disagree

Table 3 encapsulates the evaluation of Digital Innovation. The table indicates that the top-rated indicator is innovation and convergence, with a composite mean of 3.38, followed closely by efficiency at a composite mean

of 3.36, suggesting respondent agreement.

The grand composite mean of 3.37 (Moderately Agree) summarizes the overall perception of digital innovation across all key result areas in the table. It indicates a general consensus among respondents that digital innovation has a positive impact on efficiency, novelty, and convergence within the organization, contributing to its overall effectiveness in leveraging digital technologies. This table underscores the multifaceted benefits of digital innovation, ranging from operational efficiency improvements to fostering novel ideas and enhancing organizational convergence. It highlights the importance of strategically leveraging digital technologies to drive innovation and competitive edge in the contemporary business landscape.

Digital innovation significantly contributes to the enhancement of organizational convergence by integrating disparate systems and processes. Bessen (2019) notes that digital technologies facilitate better collaboration and communication within organizations, leading to more cohesive and coordinated operations. This convergence helps organizations align their strategies and resources to achieve common goals more effectively.

Table 4

Relationship Between Digital Finance Services and Customer Relations

Variables	rho	p-value	Interpretation
Emerging Technologies			
Acquiring Important Digital Technologies	-0.170**	<.001	Highly Significant
Identifying New Digital Opportunities	-0.140**	0.004	Significant
Digital Transformation	-0.157**	0.001	Significant
Augmented and Virtual Reality			
Acquiring Important Digital Technologies	-0.178**	<.001	Highly Significant
Identifying New Digital Opportunities	-0.149**	0.002	Significant
Digital Transformation	-0.161**	0.001	Significant
Artificial Intelligence			
Acquiring Important Digital Technologies	0.792**	<.001	Highly Significant
Identifying New Digital Opportunities	0.791**	<.001	Highly Significant

***. Correlation is significant at the 0.01 level*

The calculated rho-values, spanning from -0.140 to -0.170, suggest a negligible indirect correlation between new technologies and the sub-variables of digital competence. The calculated rho-values, which range from -0.149 to -0.178, suggest a very weak indirect association between augmented and virtual reality and the sub-variables of digital capability. The calculated rho-values, ranging from 0.791 to 0.805, signify a robust to highly robust direct correlation between artificial intelligence and the sub-variables of digital capacity. The results indicate a statistically significant correlation between digital technology and digital capabilities, since the p-values obtained were below 0.01.

Digital technologies enable capability development. Access to and use of digital tools like learning platforms, online courses, or collaboration software can enhance digital skills and knowledge. On the other had, digital capabilities drive technology adoption. Individuals possessing solid digital competencies are more inclined to adopt new technologies, engage in experimentation, and seamlessly incorporate them into their professional tasks. Access to digital tools such as learning platforms, online courses, and collaboration software provides opportunities for individuals and organizations to enhance their digital skills and knowledge. These tools facilitate learning and skill development in various domains of digital literacy, from basic computer skills to advanced data analytics and artificial intelligence. Individuals possessing robust digital competencies are more predisposed to embrace emerging technology. They possess the expertise and assurance to explore innovative tools and platforms, seamlessly incorporating them into their work. This adoption cultivates the environment of innovation and ongoing enhancement inside firms, utilizing technology to attain strategic objectives and competitive superiority. This reciprocal link highlights the significance of investing in both digital technology and the development of digital capabilities. Digital learning platforms and online courses play a significant role in developing digital skills. According to Hargreaves (2019), access to such resources enables individuals to acquire and refine their digital competencies, ranging from basic IT skills to more advanced areas like data

science and AI. This capability development is essential for staying current with technological advancements and meeting the demands of a digital economy. Individuals with strong digital skills are better equipped to adopt and integrate new technologies. As noted by Brynjolfsson et. al.,(2016), individuals who are confident in their digital capabilities are more inclined to experiment with and utilize new tools effectively. This confidence and expertise facilitate smoother adoption of emerging technologies, which can lead to more effective use and greater benefits for the organization.

Table 5
Relationship Between Digital Technologies and Digital Innovation

Variables	Rho	p-value	Interpretation
Emerging Technologies			
Efficiency	-.0157**	0.001	Significant
Novelty	-0.155**	0.001	Significant
Convergence	-0.143**	0.003	Significant
Augmented and Virtual Reality			
Efficiency	-0.164**	0.001	Significant
Novelty	-0.165**	0.001	Significant
Convergence	-0.152**	0.002	Significant
Artificial Intelligence			
Efficiency	0.805**	<.001	Highly Significant
Novelty	0.803**	<.001	Highly Significant
Convergence	0.786**	<.001	Highly Significant

***. Correlation is significant at the 0.01 level*

The calculated rho-values, spanning from -0.143 to -0.157, suggest a negligible indirect correlation between developing technologies and the sub-variables of digital innovation. The calculated rho-values, spanning from -0.152 to -0.165, suggest a very weak indirect correlation between augmented and virtual reality and the sub-variables of digital innovation. The calculated rho-values, ranging from 0.786 to 0.805, signify a robust to highly robust direct correlation between artificial intelligence and the sub-variables of digital innovation.

The results indicate a highly significant relationship between digital technology and digital innovation, since the computed p-values were below 0.01.A high level of correlation between digital technologies and digital innovation indicates that the utilization of digital tools and platforms is intricately associated with the generation of novel and inventive concepts. Digital tools like design software, data visualization platforms, and online collaboration tools can spark new ideas, facilitate brainstorming sessions, and help tackle complex problems from different angles. Digital technologies give access to extensive data and information, which may stimulate new solutions by revealing patterns, unearthing insights, and guiding decision-making.

Organizations need to invest not just in technology, but also in people, by providing training opportunities and fostering a learning environment that encourages digital innovation. The statistically strong correlation between technological advancements and digital innovation underscores the necessity of adopting technology as a fundamental catalyst for advancement. However, it's crucial to remember that technology is a tool, and successful innovation requires a holistic approach that combines the power of digital tools with human creativity, strategic investment, and a culture that fosters innovation. Investing in staff development and training is essential for optimizing the advantages of digital technology. Hargreaves (2019) highlights that providing learning opportunities enables employees to effectively use digital tools and drive innovation within the organization. This investment in human capital guarantees that personnel has the necessary abilities to utilize technology efficiently and enhance organizational effectiveness.

In table 6, the computed rho-values, which range from 0.764 to 0.810, suggest a direct relationship between the sub-variables of digital capability and digital innovation that is strong to very strong. The p-values acquired were less than 0.01; therefore, there was a statistically significant connection between digital innovation and digital capability. This means there's strong evidence to suggest that people with strong digital skills are more likely to participate in or contribute for digital creative thinking. Individuals with strong digital skills have the

technical know-how to utilize digital tools and platforms effectively. This enables them to investigate novel concepts, experiment with technologies, and create inventive solutions.

Table 6
Relationship Between Digital Capability and Digital Innovation

Variables	rho	p-value	Interpretation
Acquiring Important Digital Technologies			
Efficiency	0.779**	<.001	Highly Significant
Novelty	0.797**	<.001	Highly Significant
Convergence	0.773**	<.001	Highly Significant
Identifying New Digital Opportunities			
Efficiency	0.810**	<.001	Highly Significant
Novelty	0.793**	<.001	Highly Significant
Convergence	0.764**	<.001	Highly Significant
Digital Transformation			
Efficiency	0.796**	<.001	Highly Significant
Novelty	0.782**	<.001	Highly Significant
Convergence	0.771**	<.001	Highly Significant

***. Correlation is significant at the 0.01 level*

A strong digital capability equips people to approach challenges from a digital perspective. They can identify opportunities to leverage technology to solve problems in new and innovative ways. Digital skills can help individuals understand user needs and behaviors in the digital world. This information is essential for the creation of novel services and goods that are user-centric and address those requirements. The substantial beneficial impact of digital capacity on digital innovation indicates that it is crucial for companies to improve their digital competencies in the creation of new digital products to satisfy emerging client demands. Given the significance of digital competence, enterprises should use their resources to enhance their intrinsic competencies through training, outsourcing, or forming alliances or joint ventures with more robust entities. Digital competence may be developed via skills, talent, knowledge, and expertise in managing digital technology. Consequently, IT companies must acquire and attract essential digital expertise. They must establish internal programs and digital skill development units to address skill deficiencies in order to retain and recruit digitally proficient professionals (Khin et. al.,2019).

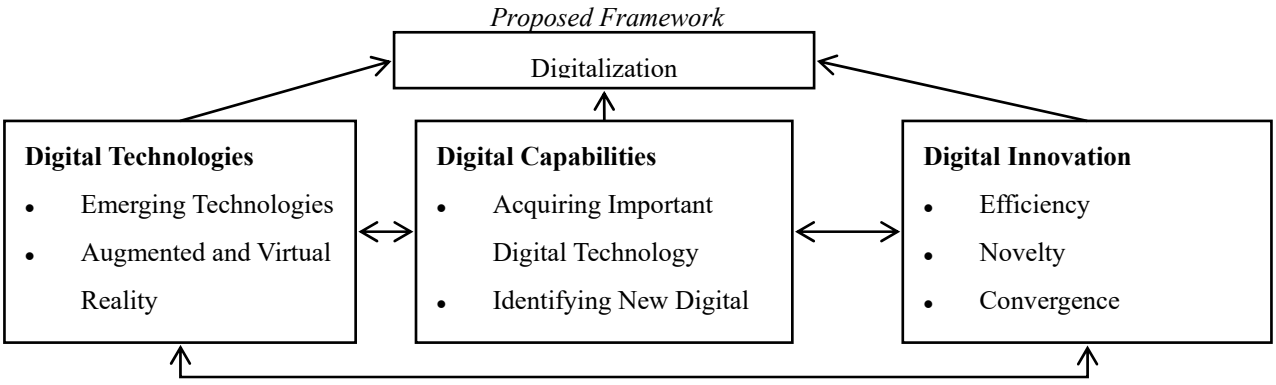

Figure 1: Finance Sector Digitalization Framework

The framework created based on the significant relationships among digital technologies, digital capability, and digital innovation provides a structured approach to understanding how these variables interact and contribute to the digitalization of the finance sector. This framework is crucial for directing the formulation of effective tactics and practices in the finance sector, especially in the context of China's rapidly evolving digital landscape.

Framework Overview

Digital technologies, including emerging technologies like AI, AR/VR, and big data analytics, are fundamental to driving innovation and efficiency in the finance sector. The effective integration of these technologies enhances operational efficiency, customer experience, and competitive advantage Digital competence refers to the organization's capacity to procure and deploy digital technology, recognize new opportunities, and manage digital transformation processes. Strong digital capabilities enable organizations to effectively leverage technology, adapt to new trends, and drive strategic initiatives. Digital innovation denotes the capacity to cultivateand implement novel ideas and technologies that enhance efficiency, novelty, and convergence within the organization. Innovation driven by digital technologies leads to improved business processes, new product offerings, and better alignment with market demands (Bessen, 2019).

The correlation between digital technology and digital capacity is essential for effective digital transformation. Organizations possessing sophisticated digital skills are more adept at integrating and successfully utilizing new technology. This relationship highlights the need for continuous investment in both technology and skills development to stay competitive. Strong digital capabilities support digital innovation by enabling organizations to experiment with and apply new technologies. The capability to manage and leverage digital tools fosters an environment where innovation can thrive. Organizations that spend in developing digital abilities are more inclined to attain substantial breakthroughs and enhancements. The influence of digital technology on inventiveness is apparent. Technologies like AI, AR/VR, and big data analytics drive innovation by providing new tools and methods for improving business processes, customer interactions, and product development

Implications for the Finance Sector

Chinese financial institutions may strategically invest in digital technology and the enhancement of digital capabilities. This joint investment will allow them to leverage the whole capabilities of digital technologies and foster substantial advances. Organizations need to foster a culture that supports digital innovation by encouraging experimentation and continuous learning. This involves aligning organizational practices current digital developments and ensuring that personnel has the requisite skills for adaptation to technological changes. The developed framework emphasizes the integration of digital technologies with robust digital capabilities and a focus on innovation. By doing so, financial institutions can create a comprehensive approach to digital transformation that enhances efficiency, fosters novel solutions, and ensures convergence with market demands.

4. Conclusion and recommendations

Based on the results of the study, the following conclusions were drawn: The respondents disagree on digital technologies in terms of emerging technology, augmented and virtual reality and artificial intelligence. The finance organizations have commendable digital capabilities, as moderately concurred by the respondents. The respondents expressed moderate agreement about digital innovation in relation to efficiency, originality, and convergence. There were highly significant relationships that exist between digital technologies, digital capability and digital innovation. A finance sector digitalization framework was proposed. Chief technology officer may prioritize investments in emerging technologies like AI, AR/VR, and big data analytics. This will help the organization stay competitive and leverage new tools to enhance operational efficiency and customer experience. Given the importance of digital skills for driving innovation, human resource department may develop and expand training programs focused on digital literacy and advanced technological skills. This will provide staff with essential competencies to utilize new technologies and contribute to innovation. Marketing and customer experience teams may use digital tools to enhance customer engagement and satisfaction. The Strategy and Planning department may conduct comprehensive review on he digitalization framework that consolidates the study's results. Future studies ought to look into how company culture and leadership affect the uptake and efficacy of digital technologies. Understanding how culture fosters or hinders innovation might aid in the development of successful digital transformation plans.

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