

Digital transformation, organizational culture and strategic leadership: Basis to improve customer experience framework

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Abstract

This study investigated the relationship between digital transformation, organizational culture, and strategic leadership in IT enterprises, and provided a foundation for developing improved customer experience frameworks. It employed descriptive research methods, utilizing questionnaire surveys as primary data collection tool. Statistical analyses, including regression analysis and analysis of variance, were conducted to examine the correlations and relationships among the three variables. These methods allowed for a detailed and systematic exploration of the characteristics and realities of a specific population, ensuring accurate and efficient data collection. By administering surveys, the researcher captured a wide range of perspectives and responses, resulting in a rich and diverse dataset for analysis. The use of standardized questions in the questionnaire ensured the comparability and reliability of the data collected. The study highlighted the interrelated and influential roles of digital transformation, organizational culture, and strategic leadership in constructing an effective customer experience framework. Digital transformation provided the necessary technological tools and capabilities for enterprises to better understand customer needs and market changes; Organizational culture offered intrinsic motivation and support, encouraging employees to actively participate and drive digital change. Strategic leadership, in turn, guided organizations by formulating and implementing strategic plans to ensure effective execution of initiatives aimed at enhancing customer experiences. Through an in-depth analysis of the roles and interrelationships of the three variables, the study provided both theoretical support and practical guidance for enterprises to develop effective customer experience improvement strategies. The findings enabled enterprises to better understand the mechanism through which digital transformation impacts customer experience and how organizational and strategic leadership can be leveraged to optimize and enhance these experiences. Additionally, the research contributed to the enrichment and development of the theoretical framework for customer experience management. It offered targeted strategies and actionable plans to help enterprises achieve sustainable growth, improve market competitiveness, and promote long-term development

Keywords: digital transformation, organizational culture, strategic leadership, digital product and service innovation, innovation, customer experience

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1. Introduction

As information technology evolves rapidly, digital transformation has become an imperative for IT enterprises, driving growth and innovation within the industry (Bhattacharjee et al., 2017). This profound shift presents IT enterprises with challenges that extend beyond technological upgrades to encompass the reshaping of organizational culture and redefinition of strategic leadership. Both exceptional technology applications and excellent service quality require a foundation rooted in the enterprise's internal culture and strategic vision of its leaders. This paper analyzes the interplay of digital transformation and strategic leadership in building an excellent customer experience framework. It examines the interconnectedness of these factors at both macro and micro levels, offering valuable insights and practical recommendations for enterprises seeking to improve customer experience and secure competitive advantages in the market.

Chinese IT companies have increased their efforts at digital transformation in response to market competitiveness and shifting consumer needs due to technological advancements. Strategies such as service innovation, and the development of digital products have emerged as critical tools for improving customer experience (Smith, 2022). These initiatives aim to deliver personalized, efficient, and convenient services to customers, thereby aligning with modern expectations.

First, digital transformation represents an inevitable trend in contemporary enterprise development. It requires enterprises not only to keep up with the pace of technology, but also to promote profound changes in organizational processes and business models through the power of technology. This kind of change is not limited to the surface, but also requires enterprises to realize real digitalization in thinking mode and management mode. In this process, the role of organizational culture cannot be ignored. As Cameron et al. (2011) highlighted innovative approaches to organizational culture are integral to successful digital transformation. Second, strategic leadership plays a pivotal role in the success of digital transformation efforts (Bharadwaj et al., 2013). Effective leaders must possess a forward-looking strategic vision, enabling them to anticipate industry trends and develop digital transformation strategies that meet the actual situation of the enterprise. It is also necessary to have excellent leadership skills to lead the team to overcome various difficulties in the transformation process. Besides, leaders should be good at creating an organizational atmosphere conducive to digital transformation, and influence employees through their own words and deeds, so that they become active participants and promoters of transformation (Johnson et al., 2021).

In building a framework for customer experience excellence, digital transformation, organizational culture and strategic leadership interact to form the cornerstones of corporate success. Digital transformation provides enterprises with technical means to enhance customer experience; Organizational culture provides the motivation and support for employees to pursue excellence (Mahal, 2012). Strategic leadership ensures that the organization is on the right track and moving toward the goal of superior customer experience. Chen et al. (2017) defined digital transformation as the process by which companies use digital technologies to change business models, optimize operational processes, innovate services, empower and engage employees to enhance customer experience. In terms of customer experience, digital transformation achieves accurate insight and rapid response to customer needs through data analysis, cloud computing, artificial intelligence and other technical means (Nambisan et al., 2019). Businesses may provide more intelligent and individualized goods and services by gaining a greater understanding of the preferences, wants, and behaviors of their consumers through digital transformation. Additionally, digital transformation may increase customer happiness and loyalty by streamlining service procedures, increasing service efficiency, and cutting down on needless hassles and waiting times.

A positive, open, and innovative organizational culture stimulates creativity and collaboration among employees and drives their active participation in efforts to improve the experience of customers. Organizational culture is more prominent. First, organizational culture can influence employees' perceptions and attitudes toward digital transformation. A positive culture can stimulate employees' interest and enthusiasm for new technologies and models, making them more willing to experiment and innovate. Secondly, organizational culture can shape employees' service consciousness and service behavior. Customer-centric, risk-taking, collaboration and innovation to determine the organizational culture, so that employees can focus on customers, to provide more intimate and professional services. Li et al. (2010) explained that in a company, strategic leadership takes charge of corporate strategy, and they need to be visionary and innovative, able to identify changes in market trends and customer needs, and develop strategic planning and implementation plans accordingly. First, strategic leadership needs to identify the strategic position of customer experience in the development of the enterprise and integrate it into the core strategic system of the enterprise. Second, strategic leadership needs to develop specific customer experience improvement goals and action plans that define the responsibilities and tasks of each department. At the same time, strategic leaders also need to guide employees to actively participate in improving customer experience through effective communication and incentive means, from the perspective of decisive, empowered and flexible strategic leadership, and form a good atmosphere for all employees to participate in and jointly improve.

Digital transformation, organizational culture, and strategic leadership are key variables that play an interconnected and mutually influencing role in building a framework for customer experience excellence. Digital transformation provides technical support and tool support, so that enterprises can more accurately grasp customer needs and market changes; Organizational culture provides intrinsic motivation and spiritual support for digital transformation, enabling employees to participate and drive change more actively. Strategic leadership leads the organization in the right direction by developing a strategic plan and implementation plan to ensure effective implementation of customer experience improvement efforts. However, in the current market environment, many businesses face several challenges when building a framework for excellence of customer experience (Lemon et al., 2016). First of all, digital transformation is not an overnight process and requires enterprises to make comprehensive investment and long-term accumulation in technology, talent, capital and other aspects. Secondly, the change of organizational culture is also a complicated and lengthy process, which requires the patient guidance of enterprise managers and the active participation of employees. Finally, strategic leadership needs to be highly sensitive and forward-looking, able to accurately grasp the changes in market trends and customer needs and timely adjust the strategic direction and action plan.

In this study, there are some analyses on the roles and interrelationships of digital transformation, organizational culture and strategic leadership in the construction of excellent customer experience framework and provides theoretical support and practical guidance for enterprises to formulate effective customer experience improvement strategies. Through this study, enterprises can understand digital transformation on customer experience, and how to optimize and improve customer experience through organizational culture change and strategic leadership. Furthermore, this study focuses on the optimization of strategic leadership and the rebuilding of corporate culture. Companies can encourage employees' creativity and teamwork by fostering a positive organizational culture and exercising strategic leadership. This creates a strong internal drive to support ongoing innovation (Nambisan et al., 2013). Simultaneously, this research may offer businesses specific strategies and execution plans for improving customer experience, which can help them get greater market share and consumer trust.

In conclusion, this investigation is both theoretically and practically significant. In addition to offering businesses focused on improvement strategies and implementation plans to support their sustainable growth and market competitiveness, it also contributes to the enhancement and enrichment of customer experience.

Objectives of the Study - This study aimed to enhance customer experience by investigating the interplay between digital transformation, organizational culture, and strategic IT leadership within IT firms in Zhejiang

Province. Specifically, assessed the company's digital transformation in terms of customer experience, staff empowerment and engagement, digital product and service innovation, process automation and optimization, and business model change; determined the organizational culture in terms of risk taking, collaboration and innovation; described the strategic leadership in terms of decisiveness, empowerment and resiliency; tested the significant relationship between digital transformation and organizational culture and strategic leadership; and developed an improve customer experience framework.

2. Methods

Research Design - According to Rahi (2017), descriptive research involves gathering relevant facts and figures to provide a precise picture of certain circumstances, people, or events. Additionally, it was highlighted by Suparno (2017) that descriptive research is important in understanding the nature of a phenomenon. Polit et al. (2014) emphasized that descriptive research investigates new feelings that are difficult to classify as objective factors. This approach essentially provides a thorough grasp of the topic, enabling more in-depth comprehension and analysis. In pursuit of accurate and insightful information, the researcher embarked on a comprehensive data-gathering effort. This involved careful distribution and subsequent collection of survey questionnaires from the respondents. This descriptive approach to research not only ensured the systematic collection of data but also enhanced its efficiency. By administering surveys, the researcher was able to capture a wide range of perspectives and responses. Questionnaires allowed for the standardization of questions and responses, ensuring that the collected data is comparable and reliable. Moreover, this descriptive research design facilitated a thorough understanding of the respondents' viewpoints, opinions, and behaviors. Overall, the researcher's meticulous approach to data collection, through the distribution and collection of survey questionnaires, contributed significantly to the accuracy and reliability of the research findings.

Participants of the Study - The participants of the study were middle and senior management, employees from five purposefully selected outstanding Information Technology (IT) enterprises in Zhejiang Province. The researcher contacted these enterprises to obtain the total number of middle and senior management employees and a partial list of customers. Data were subsequently collected from human resource management departments of these IT enterprises. The sample included middle and senior leaders from five information technology enterprises in Zhejiang Province, ranging from 60 to more than 200 people. Among 488 middle and senior management employees and 100 partial enterprise customers across the five IT enterprises, a sample of 400 participants was selected for the study.

Table 1

List of Sample of the Study

No	The name of an information technology company	Middle and Senior leaders	Customers	Total Number
1	H3C Technology Co., LTD	75	24	99
2	Zhejiang Huawei Communication Technology Co., LTD	56	23	79
3	Hangzhou Hikvision Digital Technology Co., Ltd.	75	22	97
4	Zhejiang Dahua Technology Co., Ltd.	51	18	69
5	Aliyun Computing Co. LTD	43	13	56
	Total	300	100	400

Data Gathering Instrument - The questionnaire comprised 25 items, grouped into five factors. Cronbach's alpha coefficients for these factors were as follows: business model transformation (5 items) = 0.918; process automation and optimization (5 items) = 0.919; digital product and service innovation (5 items) = 0.920; employee empowerment and engagement (5 items) = 0.953; and customer experience (5 items) = 0.950, indicating high internal consistency reliability for each factor. The verbal interpretation of the Likert scale was as follows: 3.50 to 4.00 indicated strong agreement; 2.50 to 3.49 indicated agreement; 1.50 to 2.49 indicated disagreement; and 1.00 to 1.49 indicated strong disagreement. Similarly, Kurumlarinda (2017) employed a questionnaire to measure organizational culture, focusing on risk taking, collaboration and innovation. This study

identified a three-factor model of organizational culture, including decision-making attitude (5 items, Cronbach's alpha = 0.936) and team relationships (5 items, Cronbach's alpha = 0.922). Zhang (2021) utilized standardized evaluation tools to assess strategic leadership, categorizing 15 survey items into three dimensions: resilience, weighing, and decisiveness.

Table 2
Reliability Test Result

Variable	Cronbach's Alpha	Remarks
Digital Transformation, Organizational Culture and Strategic Leadership: Basis to Improve Customer Experience Framework		
1A. Business Model Transformation	0.918	Excellent
1B. Process Automation and Optimization	0.919	Excellent
1C. Digital Product and Service Innovation	0.920	Excellent
1D. Employee Empowerment and Engagement	0.953	Excellent
1E. Customer Experience	0.950	Excellent
2A. Risk Taking	0.936	Excellent
2B. Collaboration	0.922	Excellent
2C. Innovation	0.914	Excellent
3A. Decisiveness	0.912	Excellent
3B. Empowerment	0.923	Excellent
3C. Resiliency	0.942	Excellent

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

To ensure data accuracy and confidentiality, the researcher administered the questionnaires either physically or through Google Forms, after consulting with staff from private Higher Education Institutions (HEIs) to schedule a mutually agreeable date for dissemination and retrieval.

Data Gathering Procedure - This study required authorization from the consultant and approval from the information supplier, prior to data collection. The researchers submitted a letter to the chairman of the information technology business requesting permission to conduct the research. A list of clients and the number of middle- and senior-level employees in the firm were also created by the researcher and sent to the HRM department of the IT company. The Committee stated that the survey will only be administered in writing for scholarly reasons and that all data gathered will be kept private. The study started distributing the questionnaire to middle and senior executives of five (5) IT firms in Zhejiang Province as well as certain clients after receiving consent from the consultants and IT enterprise leaders. The researcher established a timeline on a date that was mutually agreed upon after discussing the dates for distributing and retrieving the questionnaires with the head of the IT company's human resources department. To guarantee the accuracy and privacy of the findings, the researchers either used Google Forms or conducted the questions themselves.

Data Analysis - These included weighted means to calculate the average importance of components and frequency distributions to evaluate the prevalence of variables. Furthermore, prediction models were established using regression analysis, and significant differences between groups were identified using ANOVA. The goals of the study served as a guide for the selection of these statistical measures, guaranteeing that the analysis was customized to successfully answer the research questions. Constructing frequency distribution is one popular technique for data organization. Therefore, the researcher employed frequency distribution to simply look at all the data. Additionally, the precise amount by which each number was ascertained in this study using the weighted mean (Mesiar et al., 2014). One common method for organizing data is to create frequency distribution. This study utilized frequency distributions to examine the data and demonstrate how individual observations were distributed on the measuring scale (Britannica, 2013). The primary objective of this study was to investigate the significant connections among organizational culture, strategic leadership, and digital transformation within IT companies in Zhejiang Province. To explore these relationships, the study focused on IT companies located in Zhejiang Province as its research subjects.

Ethical Consideration - The institution granted approval for this study, prior to commencement. To uphold the study's quality and integrity, ethical issues were carefully addressed. All adopted questionnaires were

appropriately cited. Moreover, the participants were provided with consent for the study through correspondence. To ensure participant confidentiality and anonymity, respondents were not required to disclose their identities during survey completion. Finally, respondents' privacy and dignity were safeguarded by preventing verbal or physical abuse and by offering them opportunities for interpersonal interactions rather than treating them like research subjects.

3. Results and discussion

Table 3
Summary Table on Digital Transformation

Key Result Areas	Composite Mean	VI	Rank
Business Model Transformation	2.64	Agree	4
Process Automation and Optimization	2.67	Agree	1.5
Digital Product and Service Innovation	2.64	Agree	4
Employee Empowerment and Engagement	2.67	Agree	1.5
Customer Experience	2.64	Agree	4
Grand Composite Mean	2.65	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 presents a thorough assessment of digital transformation across several important outcome domains, demonstrating that most respondents concur that firms have benefited from digital transformation. This covers customer experience, employee empowerment and engagement, digital product and service innovation, process automation and optimization, and business model change. Enhancements in these areas are seen to be crucial in motivating businesses to become more competitive and adjust to the digital era.

The weighted average values of "Employee Empowerment and Engagement" and "Process Automation and Optimization" are both 2.67, tied for the highest. The corresponding language interpretation is Agree. The high weighted average values for "Employee Empowerment and Engagement" and "Process Automation and Optimization" suggest that respondents perceive these areas as highly significant drivers of successful digital transformation. This finding aligns with existing research. Brynjolfsson et al. (2014), for example, emphasized the critical role of employee empowerment in fostering organizational innovation and adaptability. Similarly, numerous studies have demonstrated the potential of process automation to enhance operational efficiency and reduce costs for enterprises.

These results underscore the importance of investing in employee development and implementing robust automation strategies to effectively navigate the challenges and capitalize on the opportunities presented by digital transformation. The weighted average values of Business Model Transformation, Digital Product and Service Innovation, and Customer Experience are all 2.64, tied for the lowest, and the corresponding language interpretation is Agree. While the weighted average for these areas does not represent the lowest score, they rank last in the rankings. This suggests that respondents may perceive these areas as important but slightly less influential or recognized in digital transformation compared to other aspects. This finding aligns with previous research. For instance, Li (2019) explored the challenges and opportunities associated with business model transformation in the digital age. Zhao et al. (2020) analyzed the importance and implementation difficulties of digital products and service innovation in meeting customer needs. Furthermore, Kane et al. (2020) discussed strategies for enhancing customer experience and the obstacles encountered in implementing these strategies within the context of digital transformation.

Table 4
Summary Table on Organizational Culture

Key Result Areas	Composite Mean	VI	Rank
Risk Taking	2.68	Agree	2
Collaboration	2.67	Agree	3
Innovation	2.69	Agree	1
Grand Composite Mean	2.68	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 4 indicates that respondents generally agree that these cultural traits have a positive impact on the organization. "Innovation" has the highest weighted average in Table 4, at 2.69. Since innovation is seen as a critical component of long-term organizational development and change adaptation, the linguistic interpretation of "Agree" suggests that respondents have placed a high value on innovation in corporate culture. Batugal et al. (2019) may have explored the concept of how a creative culture facilitates an organization's ability to adapt to dynamic technological and market landscapes. Additionally, the study examined the influence of innovation on improving market position and organizational competitiveness.

The weighted average value of "Collaboration" is 2.67, which is the lowest in the table. The corresponding language explanation is "Agree". Although the weighted average value of collaboration is slightly lower than other fields, respondents generally agree that collaboration culture has a positive effect on organizations. Suparno (2017) suggested that while organizations may have made progress in fostering collaboration, significant room for improvement remains. Reiman et al. (2012) explored the role of collaboration culture in promoting knowledge sharing and enhancing team effectiveness, while also analyzing the challenges and opportunities organizations face in improving collaboration efficiency and effectiveness.

Table 5
Summary Table on Strategic Leadership

Key Result Areas	Composite Mean	VI	Rank
Decisiveness	2.71	Agree	1
Empowerment	2.70	Agree	2
Resiliency	2.70	Agree	2
Grand Composite Mean	2.70	Agree	

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

Decisiveness has the highest weighted average value of 2.71 in strategic leadership, which is interpreted as agreement in language, indicating that respondents particularly value the leader's speed and firmness in the decision-making process. Decisive leaders possess the ability to respond swiftly and effectively to market changes and challenges, providing clear direction and motivating their teams. As Zhang (2021) highlighted, decisiveness is a crucial leadership trait, enabling organizations to navigate complex and uncertain environments. It further analyzed how decisive leadership impacts the speed and quality of organizational decision-making.

The weighted average (Composite Mean) of Authorization and Resilience is 2.70, which is interpreted as Agree in language. Although the weighted average of authorization and resilience are tied for the lowest, they are still within the range of 'consent'. This indicates that respondents also recognize the importance of empowerment and resilience, although they may not be as strongly valued as decisiveness. Previous research has highlighted the significance of authorization and resilience in organizational success. Yu (2019) explored the impact of employee empowerment on engagement and organizational performance, emphasizing the role of authorization in fostering creativity and innovation. Similarly, Huang (2023) investigated the crucial role of resilience in leadership, particularly in navigating crises and challenges. These studies suggest that organizational effectiveness is contingent upon fostering an environment that empowers employees and cultivates the capacity to adapt and thrive in the face of adversity.

Table 6 displays the connection between organizational culture and digital transformation. It may be deduced from the examination of rho and p-values that different facets of organizational culture and digital transformation have differing degrees of connection. Several facets of digital transformation, such as business model transformation, process automation and optimization, digital product and service innovation, employee empowerment and participation, and customer experience, are substantially positively connected with the essential organizational culture elements of risk-taking, collaboration, and innovation. This suggests that organizational culture is essential to the success of digital transformation and that the process may be accelerated and made more successful with cultural support and flexibility. Organizational culture should be shaped and modified by researchers and practitioners to better promote the adoption of digital transformation.

Risks are related to digital transformation, such as changing the business model, automating and optimizing processes, empowering and involving employees, and improving customer experience. With the largest association to customer experience ($\rho=0.671$), in particular, it suggests that it may have a direct impact on its ability to innovate and enhance the customer experience. An organization's ability to innovate, adapt to changes in the market, and embrace new technologies are all impacted by risk-taking, which is a crucial component of digital transformation. An organizational culture that is willing to take risks is more likely to encourage experimentation. This culture can promote faster decision-making processes, thus maintaining a leading position in highly competitive markets. Yan et al. (2020) discussed in detail how risk-taking promotes organizational innovation, especially in rapidly changing technological fields. And analyzed risk management in digital projects, as well as how to balance risk and return.

Table 6
Relationship Between Digital Transformation and Organizational Culture

Variables	rho	p-value	Interpretation
Business Model Transformation			
Risk Taking	0.264**	<.001	Highly Significant
Collaboration	0.165**	0.001	Significant
Innovation	0.104*	0.038	Significant
Process Automation and Optimization			
Risk Taking	0.344**	< .001	Highly Significant
Collaboration	0.239**	< .001	Highly Significant
Innovation	0.204**	< .001	Highly Significant
Digital Product and Service Innovation			
Risk Taking	0.486**	< .001	Highly Significant
Collaboration	0.383**	< .001	Highly Significant
Innovation	0.303**	< .001	Highly Significant
Employee Empowerment and Engagement			
Risk Taking	0.573**	< .001	Highly Significant
Collaboration	0.475**	< .001	Highly Significant
Innovation	0.375**	< .001	Highly Significant
Customer Experience			
Risk Taking	0.671**	< .001	Highly Significant
Collaboration	0.573**	< .001	Highly Significant
Innovation	0.468**	< .001	Highly Significant

** Correlation is significant at the 0.01 level /* Correlation is significant at the 0.05 level

Collaboration has shown significant correlation in multiple aspects of digital transformation, especially in employee empowerment and engagement ($\rho=0.475$) and customer experience ($\rho=0.573$). This indicates that effective collaboration between departments and teams is crucial for achieving digital transformation goals. Collaboration is the cornerstone of organizational culture that promotes knowledge sharing, teamwork, and cross departmental integration. Collaboration can accelerate the adoption of new processes and tools, improve team efficiency, and promote a deeper understanding of user needs. Huang (2017) explored the impact of collaborative culture on promoting internal communication and team effectiveness within organizations and studied how cross departmental teams can effectively drive digital projects and innovation.

There is a close connection between innovation and digital transformation in multiple dimensions, especially in digital product and service innovation ($\rho=0.303$) and employee empowerment and participation ($\rho=0.375$). This means that an organization's innovation capability is a key factor in its successful digital transformation. Innovation is the core of digital transformation, which requires organizations to continuously explore new business models, products, and services. An innovation driven by organizational culture can stimulate employee creativity, encourage them to propose new ideas, and support their implementation. This culture can not only enhance an organization's competitiveness but also enhance its ability to adapt to market changes. Wu (2013) analyzed how an innovative culture helps organizations maintain competitiveness in the digital age. And discussed the best practices of innovation management and how to establish an organizational environment that supports innovation.

Overall, there is a direct and varying degree of relationship between digital transformation and organizational culture. The direct relationship from very weak to strong (rho values ranging from 0.104 to 0.671) indicates that the support of organizational culture is crucial for digital transformation. The significant p-value (less than 0.01/0.05) further confirms the statistical significance of this relationship. The relationship between digital transformation and organizational culture is complex and multidimensional. Organizational culture not only affects various aspects of digital transformation but also determines the speed and effectiveness of the transformation process. A culture that supports digitization can reduce resistance to change, increase employee engagement, and promote organizational adoption of new technologies and processes. Organizational culture can influence an organization's perception and response to external changes. Huang et al. (2021) studied the impact of organizational culture on the acceptance of digital transformation and how cultural intervention can promote change and explored how organizational culture affects different stages of digital transformation, including planning, implementation, and continuous improvement.

In conclusion, organizational culture involves several organizational levels. Organizations may more effectively plan and execute their transformation strategies, guarantee the seamless progression of the transformation process, and attain anticipated business outcomes by having a thorough grasp of the link between organizational culture and digital transformation. For digital transformation to be successful, organizations must foster a culture that encourages creativity, teamwork, and taking risks.

Table 7
Relationship Between Digital Transformation and Strategic Leadership

Variables	rho	p-value	Interpretation
Business Model Transformation			
Decisiveness	0.101*	0.043	Significant
Empowerment	0.037	0.464	Not Significant
Resiliency	-0.026	0.609	Not Significant
Process Automation and Optimization			
Decisiveness	0.218**	< .001	Highly Significant
Empowerment	0.093	0.064	Not Significant
Resiliency	0.069	0.169	Not Significant
Digital Product and Service Innovation			
Decisiveness	0.269**	< .001	Highly Significant
Empowerment	0.211**	< .001	Highly Significant
Resiliency	0.133**	< .001	Highly Significant
Employee Empowerment and Engagement			
Decisiveness	0.341**	< .001	Highly Significant
Empowerment	0.250**	< .001	Highly Significant
Resiliency	0.146**	< .001	Highly Significant
Customer Experience			
Decisiveness	0.417**	< .001	Highly Significant
Empowerment	0.338**	< .001	Highly Significant
Resiliency	0.227**	< .001	Highly Significant

** Correlation is significant at the 0.01 level /* Correlation is significant at the 0.05 level

The link between strategic leadership and digital transformation is illustrated in Table 7, which also provides correlation (rho value) and significance level (p-value) to quantify the relationship between key components of digital transformation and strategic leadership characteristics. According to table data, there is a considerable positive correlation between important elements of digital transformation and specific strategic leadership traits including resilience, empowerment, and decisiveness. To better direct and carry out digital transformation plans, scholars and professionals should concentrate on these aspects of strategic leadership. It shows how strategic leadership and digital transformation are related. It also quantifies the relationship between important elements of digital transformation and strategic leadership traits by providing correlation (rho value) and significant level (p-value). Data indicates that some strategic leadership attributes, including resilience, empowerment, and decisiveness, are significantly positively correlated with key components of digital transformation. This implies that to drive digital transformation, strategic leadership is crucial in promoting various experiences. Scholars and professionals should focus on these strategic leadership facets to effectively guide and execute initiatives for

digital transformation. Lian (2022) explored the role of decisiveness in corporate strategic change, emphasizing the importance of making quick decisions in the face of market pressure.

The computed rho values for the link between process automation, optimization, and strategic leadership range from 0.069 to 0.218, suggesting a relatively weak direct association between these factors and the strategic leadership sub-variables. Determinate leadership, optimization, and process automation are statistically significantly correlated. The highly significant positive correlation between process automation and optimization and decisiveness suggests that the decisiveness of leaders may contribute to the rapid implementation and improvement of automation and optimization processes in enterprises. Chen et al. (2023) discussed the key role of decisiveness in driving enterprise process innovation. And studied how decisiveness helps businesses respond quickly to technological changes.

Association between strategic leadership and digital product and service innovation shows a very weak direct relationship between the two variables. Given that the p-value is less than 0.01, there is a statistically significant correlation between the sub variables of strategic leadership and digital product and service innovation. Leaders who are decisive may encourage active enterprise exploration in new product creation and innovative services, as evidenced by the extremely substantial positive association found between decisiveness and innovation in digital goods and services. Li et al. (2021) emphasized the importance of decisiveness in the process of new product development, especially in rapidly changing technological fields and analyzed how decisiveness helps enterprises overcome uncertainty and risks in the innovation process. The highly significant positive correlation between authorization and innovation in digital products and services indicates that when leaders empower employees, it can stimulate their innovation potential and promote the creation of new products and services. Li (2021) discussed the positive impact of authorization on employee innovation behavior and studied how authorization promotes knowledge sharing and team collaboration, thereby driving innovation. The highly significant positive correlation between resilient leadership and digital product and service innovation suggests that leader resilience may help businesses maintain resilience and sustain progress in the face of challenges and failures in the innovation process. Wu et al. (2018) explored the role of resilience in innovation management, particularly in coping with failures and the learning process and analyzed how resilience helps companies maintain momentum and direction in the innovation process.

The connection between involvement in strategic leadership and employee empowerment. The sub variables of employee empowerment, devotion, and strategic leadership have a very weak direct association, according to the computed rho values, which vary from 0.146 to 0.341. Given that the p-value is less than 0.01, there is a statistically significant correlation between employee empowerment, devotion, and the strategic leadership sub-variables. A leader's decisiveness may contribute to the formation of an atmosphere where workers feel empowered and are more involved in the operation and growth of the company, as indicated by the extremely substantial positive connection found between decisiveness and employee empowerment and involvement. Wang et al. (2004) examined the relationship between decisiveness and work satisfaction and employee engagement. and investigated how decisiveness promotes a culture of employee empowerment. Authorization action by leaders may directly improve employee involvement and engagement at work, as evidenced by the extremely substantial positive association found between authorization and employee empowerment and participation. Authorization is crucial for enhancing worker engagement and productivity. According to Xu et al. (2024) who examined the ways in which permission fosters professional advancement and self-realization in employees, a leader's flexibility may assist employees retain a good attitude and adaptability when confronting obstacles and pressure in the workplace, as seen by the extremely substantial positive association found between flexible leadership and employee empowerment and involvement. Sonnentag et al. (2017) explored the role of resilience in employees responding to work pressure and challenges and studied how resilience helps employees maintain motivation and engagement in a changing work environment.

Wang et al. (2004) investigated the connection between employee engagement, work satisfaction, and decisiveness. and looked at how a culture of employee empowerment is fostered by decisiveness. The very

strong positive correlation between authorization and employee empowerment and participation suggests that leaders' actions may directly increase employee involvement and engagement at work. According to Xu et al. (2024), authorization is essential for raising employee engagement and productivity, and looked at how granting employees' permission promotes their professional growth and self-realization. The highly significant positive correlation between flexible leadership and employee empowerment and engagement suggests that a leader's flexibility may help staff members maintain a positive attitude and adaptability when facing challenges and pressure at work. Nicholson et al. (2014) discussed the key role of decisiveness in improving customer service quality and response speed. They also analyzed how decisiveness helps companies make quick decisions in customer relationship management. The highly significant positive correlation between authorization and customer experience suggests that leader's authorization behavior may help employees better understand customer needs and provide personalized and high-quality services. Adobe (2020) emphasized the importance of authorization in improving customer satisfaction and loyalty and studied how authorization enables employees to solve customer problems more effectively. The highly significant positive correlation between resilience and customer experience suggests that the resilience of leaders may help businesses maintain stable and high-quality services in the face of market challenges and customer feedback. Jones et al. (2023) explored the role of resilience in maintaining customer experience stability. And analyzed how resilience helps businesses maintain customer trust and satisfaction in crisis management.

In summary, the successful implementation of strategic leadership is critical to the success of digital transformation. Three essential components of strategic leadership—decisiveness, empowerment, and resilience—have a strong correlation with different facets of digital transformation. To encourage the adoption and success of digital transformation, organizations must develop leaders that possess these qualities. Organizations may enhance their competitiveness, develop strategies more successfully, and hold a dominant position in a market that is always evolving by having a thorough grasp of how these leadership characteristics impact digital transformation.

Table 8
Relationship Between Organizational Culture and Strategic Leadership

Variables	rho	p-value	Interpretation
Risk Taking			
Decisiveness	0.539**	< .001	Highly Significant
Empowerment	0.411**	< .001	Highly Significant
Resiliency	0.294**	< .001	Highly Significant
Collaboration			
Decisiveness	0.656**	< .001	Highly Significant
Empowerment	0.565**	< .001	Highly Significant
Resiliency	0.426**	< .001	Highly Significant
Innovation			
Decisiveness	0.714**	< .001	Highly Significant
Empowerment	0.636**	< .001	Highly Significant
Resiliency	0.507**	< .001	Highly Significant

** Correlation is significant at the 0.01 level

The table data shows a substantial positive correlation between the decisiveness, empowerment, and resilience of strategic leadership and important organizational culture aspects including risk-taking, cooperation, and innovation. Organizations may need to focus on and cultivate the abilities of their leaders in these areas to promote a more positive, innovative, and collaborative organizational culture, thereby improving the overall effectiveness and adaptability of the organization.

The relationship between risk-taking and strategic leadership. According to the correlation (rho value) and significance level (p-value) data in the table, the highly significant positive correlation between risk-taking and decisiveness suggests that the decisiveness of leaders in decision-making may have a significant impact on the tendency of risk-taking in corporate culture. A decisive leader may be more willing to support and encourage businesses to take risks, thereby promoting innovation and change. Chen et al. (2022) discussed how decisiveness affects risk-taking behavior in corporate culture, and how this culture promotes a company's

innovation capability and analyzed the role of decisiveness in leadership decision-making, especially in situations involving risk management; The significant positive correlation between authorization and risk-taking suggests that when leaders authorize employees, it may increase their willingness to take risks because employees feel that their decisions and actions are supported and trusted. Shen et al. (2019) explored how authorization enhances employee autonomy, which in turn affects their attitudes and behaviors towards risk and studied the role of authorization in promoting employee participation and innovation, especially in risk-taking environments; The study revealed a significant positive correlation between resilience and risk-taking behavior among leaders. This finding suggests that resilient leaders are more likely to embrace and navigate challenges effectively, fostering a culture of innovation and risk-taking within their organizations. This aligns with the research conducted by the Center for Creative Leadership (2016), which highlighted the crucial role of resilience in effective leadership, particularly in maintaining organizational stability and growth amidst adversity. Furthermore, the study's findings suggest that resilience enables leaders to maintain a positive outlook and adapt effectively to challenges, encouraging a more proactive and resilient approach to risk-taking within their teams. This aligns with research on the positive impact of resilience on leadership effectiveness, demonstrating the ability of resilient leaders to navigate uncertainty and inspire confidence in their teams to embrace new challenges.

The relationship between collaboration and strategic leadership. The results demonstrate a highly significant positive correlation between collaboration and decisiveness, as evidenced by the correlation (rho value) and significance level (p-value). This suggests that decisive leaders may be more effective in fostering collaborative efforts among teams and departments. By making swift decisions, these leaders can likely overcome obstacles and streamline collaborative processes. This finding aligns with the research of Wang (2023), which explored the role of decisiveness in promoting team collaboration and enhancing team effectiveness. It further emphasized how decisiveness enables leaders to establish and maintain effective collaborative mechanisms within the organization. The significant positive correlation between authorization and collaboration suggests that empowering leadership may enhance the spirit of collaboration within the team and organization by empowering employees with more autonomy and participation. Li (2018) investigated the impact of authorization on employee collaboration and knowledge sharing, examining its role in enhancing team collaboration efficiency and fostering innovation. The significant positive correlation observed between resilience and collaboration suggests that leaders with high resilience may be more adept at navigating the challenges inherent in collaborative processes, thereby maintaining effective team collaboration and cohesion.

The relationship between innovation and strategic leadership. According to the correlation (rho value) and significance level (p-value) data in the table, the highly significant positive correlation between innovation and decisiveness indicates that decisive leaders may be more able to drive and support organizational innovation activities, overcome uncertainty and risks in the innovation process through rapid decision-making. Brown et al. (2021) discussed the key role of decisiveness in promoting organizational innovation and adopting new technologies. And analyzed how decisiveness helps leaders establish an innovation-oriented culture within the organization; The significant positive correlation between empowerment and innovation suggests that empowering leadership may promote innovative thinking and behavior within an organization by stimulating employee creativity and autonomy. Li (2018) explored how authorization can stimulate employees' innovative potential and generate new ideas and studied the role of authorization in promoting organizational innovation and improving employee innovation performance. The significant positive correlation between resilience and innovation suggests that leaders with resilience may be more effective in guiding organizations through challenges and failures in the innovation process, thereby cultivating a culture of sustained innovation. Li et al. (2011) may have discussed the role of resilience in innovation management, especially in the face of failure and learning processes. And analyzed how flexible leadership can help organizations recover from innovation failures and continue to move forward.

There is a significant positive correlation between organizational culture and strategic leadership, indicating that the traits and behaviors of leaders have a significant impact on shaping organizational culture. Decisiveness,

empowerment, and resilience, as key dimensions of strategic leadership, play a crucial role in promoting organizational risk-taking, collaboration, and innovation. Organizations need to cultivate leaders with these leadership traits to promote the formation and development of a positive organizational culture.

Proposed Improve Customer Experience Framework

A proposed basic framework for improving customer experience has been created to promote the development of China's information technology and Internet enterprise organizational culture, as well as the effective use of strategic leadership, to more effectively guide and implement digital transformation strategies. In addition, this will be a good way to improve customer experience of information technology and Internet enterprises, and a good tool for information technology enterprises to become more competitive in the market. Finally, this will ensure strengthening organizational culture and shaping strategic leadership, thereby promoting the success of digital transformation and enhancing customer experience. Enhance the competitiveness of enterprises and maintain a leading position in the constantly changing market.

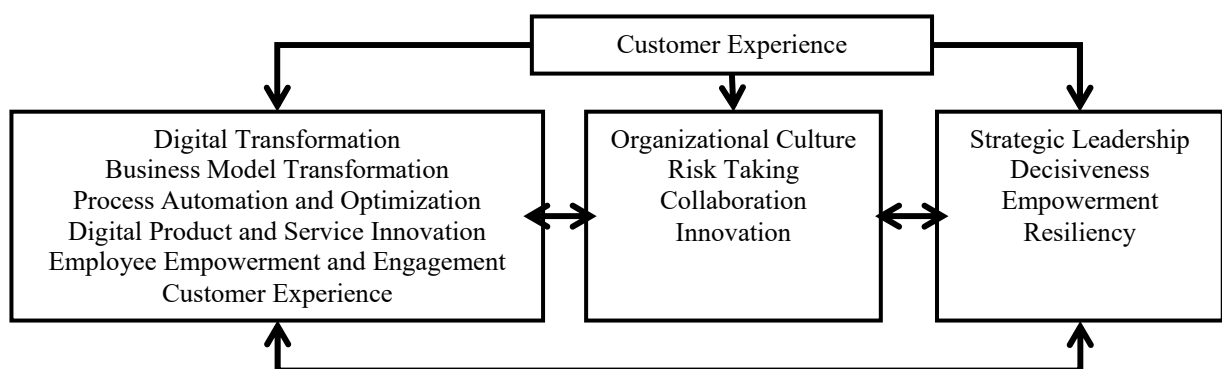


Figure 1. Proposed Framework for IT and Internet Enterprises to Improve Customer Experience

The framework posits that organizational culture, strategic leadership, and digital transformation are interconnected factors that influence customer experience. Digital transformation is hypothesized to impact both strategic leadership and organizational culture. Additionally, strategic leadership may also influence organizational culture. This study focuses on information technology and internet businesses located in Zhejiang Province, China, as the context for examining and understanding the relationships between these variables.

1. Conclusions and recommendations

The respondents demonstrated a moderate level of acceptance regarding the need for digital transformation within the organization. This transformation encompassed changes in business models, process automation and optimization, innovation in digital products and services, employee involvement and empowerment, and enhancements to customer experience. Respondents exhibited a moderate level of agreement regarding their identification with the organization's culture, particularly in terms of risk-taking, collaboration, and innovation. The findings indicated a moderate level of consensus on the need for strong strategic leadership characterized by assertiveness, empowerment, and resilience. There is a highly significant relationship between digital transformation, organizational culture and strategic leadership. A framework for improving customer experience is proposed based on the findings of the study. Enterprises may align their digital strategies with organizational culture to promote employee engagement and facilitate the acceptance of new technologies. Senior leaders may demonstrate their commitment to digital transformation by modeling desired behaviors, thereby motivating employees to actively participate in the change process. Enterprises can further optimize their practices according to the proposed customer experience improvement framework. Future researchers can delve deeper into the interrelationship between digital transformation, organizational culture, and strategic leadership through

other areas such as customer experience development programs and ethical considerations.

4. References

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