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Influence of Digital Leadership on Employees' Digital Creativity Based on the Research Perspective of the Mediating Effect of Job Crafting



Abstract: - Employees' digital creativity have become important driving forces for enterprises to use digital technology to create business benefits. However, research on digital creativity is still insufficient. Digital leadership, due to its unique characteristics and important role in driving the digital development process of individuals, businesses, and society, is used as antecedent variable in this study to influence employees' digital creativity. Job crafting is the mediating variable, and power distance is the moderating variable. This study uses mature scales to compile a questionnaire distributed to digital enterprises in China in two periods. Finally, 344 valid questionnaires were obtained, and the hypotheses were tested using AMOS 24.0 software and the hierarchical regression method. Research has found that digital leadership is positively related to employees' digital creativity. Job crafting mediates between digital leadership and employees' digital creativity. Power distance negatively moderates the relationship between digital leadership and employees' digital creativity, and negatively moderates the mediating role of job crafting between digital leadership and employees' digital creativity. Based on the theoretical results of this study, in addition to emphasizing the cultivation of digital leadership, enterprises should also pay attention to exploring employees with low power distance and consciously encourage them to job crafting, so as to effectively unleash their digital creativity.

Keywords: Digital Technology, Digital Leadership, Employees' Digital Creativity, Job Crafting, Power Distance.

I. INTRODUCTION

Digital technology is a scientific technology that comes with computers, including internet, block chain, big data, cloud computing and artificial intelligence. Industry 4.0 has promoted the transformation of business practices and models dominated by digital technology [1]. Enterprises must utilize digital technology to transform their value creation models in order to remain invincible in competition [2]. The successful use of digital technology by organizations to create business benefits cannot be separated from the leadership skills of managers [3]. The concept of digital leadership has been proposed by fully integrating digital technology with leadership behaviour [4]. Digital leadership refers to the ability of leaders to improve the emotions, thinking, behaviour, and organizational performance of their members based on the widespread use of digital information technology, leading the organization to successfully achieve digital transformation and sustainable growth [5]. Digital leadership optimizes the benefits of digital technology by combining individual leadership skills and digital abilities to improve business performance.

Employee creativity is a necessary support and internal driving force for driving innovation development of enterprises and breakthrough progress in the industry. With the continuous penetration of digital technology into enterprises, employees' digital creativity has attracted the attention of scholars in fields such as digital information systems and has become a new research hotspot. Digital creativity is the innovative and applicable ability that people exhibit when using digital technology products for various creative activities [6]. The upper echelons theory believes that the cognitive ability, perceptual ability, and values of leaders influence the strategic decision-making process, later behaviour, and performance outcomes of enterprises. The social cognitive theory also assumes that leadership behaviour style can affect employees' motivation and psychological efficacy during the innovation process, thereby affecting subsequent proactive innovation behaviour. From an individual perspective, the transformation of digital leadership functions and support for employees' innovation are beneficial for stimulating individual creativity. However, existing research has not conducted in-depth research on their relationship.

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In addition, traditional work methods have undergone significant changes due to digital technology. New technologies and constantly changing job demands require individuals to proactively optimize work processes and improve work methods [2], called job crafting. Job crafting not only increases the balance between job resources and demands, which is beneficial for improving employees' work engagement and satisfaction, as well as for discovering new problems in new work environments, perspectives, and interpersonal relationships, stimulating employees' creativity, and promoting the smooth implementation of the innovation process [7]. Therefore, this study speculates that digital leadership will impact employees' digital creativity through job crafting.

Power distance refers to people's acceptance of unequal status and power distribution. Power distance directly affects the relationship between superiors and subordinates, and employees' explanations and reactions to leadership actions. For employees with low power distances, digital leadership encourages employees to actively craft their jobs and provide timely support and feedback for their innovation behaviour. The support of leaders not only meets the need for employees to receive respect but also enables them to focus on the work, making it easier to enhance employees' digital creativity. However, employees with high power distances identify with the inequality in the relationship between superiors and subordinates, believing that leaders are decision-makers. They often obey authority and prioritize hierarchy, thinking leaders should not give employees more autonomy. Digital leadership may bring contradictory experiences to employees, making them at a loss and not conducive to stimulating job crafting motivation, thereby affecting the improvement of employees' digital creativity. Therefore, this study suggests that power distance moderates the impact of digital leadership on employees' digital creativity and moderates the mediating role of job crafting.

II. LITERATURE REVIEW

A. Digital Leadership

The increasing integration of digital technology into various economic and social development has led to a change in the leadership style. Enterprise managers must face new scenarios, technologies, processes, and challenges brought about by new competition. In this context, digital leadership has emerged as a new concept that intersects with digital technology and leadership theory.

At present, the theoretical community needs a unified understanding of what digital leadership is. Larjovuori [8] believes that digital leadership is the ability of enterprise managers to lead their followers in digital transformation and successfully achieve their strategic vision. Van Wart [9] defines digital leadership as the ability of leaders to recognize and understand and selectively utilize emerging information and communication technologies. Some scholars define digital leadership from the perspective of social impact processes. For example, Avolio [5] believes that digital leadership is the process of promoting individual, group, and organizational change and achieving organizational goals through the mediating role of information technology. This process closely integrates traditional leadership functions such as decision-making, communication, and motivation with digital technology.

Digital leadership inherits the essence of traditional leadership. However, due to the widespread penetration of digital technology, the process, and media for leaders to showcase personal charm, leadership, exemplary behavior, and encourage participation have changed. Digital leadership has a unique structure and characteristics. Van Wart [9] constructed the SEC model, defining digital leadership as the ability of leaders to use digital technology to communicate, socialize, manage change, form teams, and establish digital trust. Li [10] believes that digital leadership in enterprises includes using digital technology for strategic thinking, environmental control, organizational change, talent development, communication, and social interaction. Digital leadership places great emphasis on organizational innovation, characterized by speed, cross hierarchy, team orientation, and collaboration [11]. Zhu [12] and Toduk [13] proposed five characteristics of digital leadership: creativity, deep knowledge, online solid collaboration, collaborative vision, and curiosity about new technologies.

At the individual level within the organization, digital leaders attach great importance to developing employee abilities and personal growth, mobilize employees' enthusiasm and autonomy in using digital technology to work, and emphasize the construction and development of virtual teams. However, it may also lead to greater isolation among employees [10]. Therefore, the positive role of digital leadership requires moderating conditions.

B. Digital Creativity

In fierce market competition, creativity is often one of the main factors in whether an enterprise can stand out among many enterprises and have a solid competitive advantage. With the extensive penetration of digital

technology into various fields of society, people can see various of digital products everywhere in life and work, and it can be said that digital technology has formed the social background of the current era. In this context, the concept of digital creativity was born and became the focus of social attention [14].

In a broad sense, the concept of digital creativity includes innovation in digital technology itself. The narrowly-defined digital creativity emphasizes the creativity of individuals or groups using digital technology with internet technology as the main body in different fields of creative activities under the digital social background [15]. Digital creativity essentially refers to the creativity stimulated by the digital technology in the process of work [6].

Digital creativity differs from traditional creativity in applying digital technology in innovation activities, including relevant daily life places and research places. Subjects with digital creativity are generally able to master and use digital technology. They can use such technology as an intermediary or auxiliary means to generate creative ideas and behaviors in various organizations and social activities [15].

The creative activities supported by digital technology include developing creativity, communicating, collaborating, creating, making decisions, and evaluating. However digital creativity is influenced by individuals, teams, and environments, such as an individual's level of digital and professional skills, social and emotional intelligence; the intelligent structure, collaborative atmosphere, and leadership style of the team; the level of work stress, task difficulty, information technology level of the work environment.

"Digital natives" have become a particular group today, and digital innovation has been widely concerned by enterprises and society and become the focus of research. However, extensive and in-depth research on digital creativity has yet to be conducted. Therefore, this study explores whether and how digital leadership affects digital creativity, hoping to enrich the research in this field.

C. Digital Leadership and Digital Creativity

The upper echelons theory suggests that factors such as leaders' values and personal cognition directly affect communication and cooperation at work. Digital leaders possess creative thinking or creativity [8], and digital leadership places excellent emphasis on organizational innovation [11], which naturally positively impact employees' creativity. According to social cognitive theory, employees can acquire new ideas, perspectives, and knowledge through interaction, information exchange, and knowledge sharing with digital leaders, which is conducive to mobilizing employees' enthusiasm and initiative for innovation and promoting the occurrence of innovation behaviour. In addition, digital leaders not only focus on the continuous learning and application of digital technology and knowledge but also encourage employees to actively learn digital knowledge, cultivate digital thinking, explore the application of digital technology at work, and create an atmosphere that supports employee innovation [11]. Using digital tools enables leaders to establish a virtual job environment, further promoting trust-based communication and cooperation within the organization. Employees are given more autonomy and activity space, and communication and knowledge sharing within the organization are smoother, promoting digital creativity.

After the above analysis, this study proposes the research hypothesis:

H1: Digital leadership positively affects employees' digital creativity

D. Mediating Role of Job Crafting

Leadership style is only sometimes related to innovation, and it depends on moderating conditions [16]. Job shaping is the process in which employees actively make positive changes in task execution, thinking patterns, and interpersonal interactions during the work process. These changes are usually based on personal abilities and preferences, aiming to obtain a high sense of job identity and value.

The job demands-resources model suggests that job demands and job resources are two opposing yet integral components of any job description. To cope with the pressure and challenges the new market environment poses, enterprises will put forward new job demands for employees. As a negative factor, job demands may lead to energy depletion and job burnout, affecting employees' creativity. Moreover, as a positive factor, abundant job resources can buffer the psychological pressure caused by excessive job demands on employees. Job crafting breaks the previous passive top-down management approach, where employees proactively adjust job tasks, cognition, and relationships to adapt to the new environment. It increases structural and social resources to meet job demands [17].

Previous research has shown that digital leadership promotes employees' job crafting and alleviates employees' work pressure through various measures, such as providing technical support and greater autonomy [18]. With the help of digital leaders, employees' job crafting brings them more job resources and new

perspectives. These “positive factors” in the job are conducive to stimulating employees’ internal motivation and improving their innovation level [19]. Therefore, this study speculates that digital leadership will impact employees’ digital creativity through job crafting.

After the above analysis, this study proposes the research hypothesis:

H2: Digital leadership positively affects employees’ digital creativity through job crafting

E. Moderating Effect of Power Distance

Many empirical studies have explored and confirmed that employees’ power distance can affect their behaviour or attitude towards leadership behaviour or style. Employees with lower power distances believe superiors and subordinates should be equal and complete tasks together. Digital leadership has subverted traditional, highly centralized forms of power, encouraged communication and collaboration, and provided employees with more resource support and discretion to creatively complete tasks [18]. Therefore, digital leadership meets employees’ low power distance expectations, which can better promote job crafting and stimulate their digital creativity.

In addition, employees who are accustomed to substantial power differences take unequal power distribution for granted. Leaders are responsible for decision-making and management, while employees are responsible for executing decisions and obeying management. Leaders should give orders to employees and give them clear instructions, and both parties need to establish a formal work relationship. Employees with high power distances are unlikely to understand that digital leadership gives them more autonomy and decision-making participation, so the positive outcomes of digital leadership for employees will be lessened.

After the above analysis, this study proposes the research hypothesis:

H3: Power distance negatively moderates the indirect effect that digital leadership influences employees’ digital creativity through job crafting

H4: Power distance negatively moderates the relationship between digital leadership and digital creativity

In summary, the theoretical framework is shown in Figure 1.

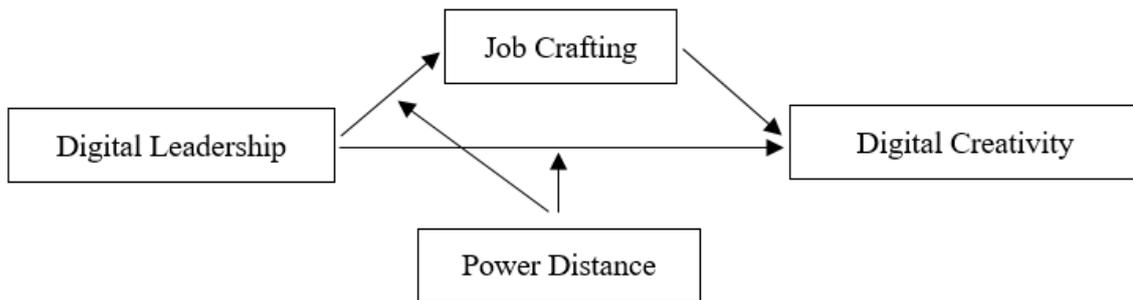


Figure 1: Theoretical Framework

III. METHOD

A. Research Sample and Questionnaire Collection

Firstly, we selected 18 enterprises with different regions, industries, and property rights, mainly digital and intelligent enterprises, internet enterprises, or enterprises with established digital platforms. And then, we contacted the company’s human resources supervisor to distribute questionnaires to employees. In order to attenuate the potential for common method variance, we gathered data at two separate times to improve the representativeness of the samples. First, employees filled out survey questionnaires on independent variables (digital leadership), moderating variables (power distance), and controlling variables (such as age and gender); One month later, the same employees fill out a survey questionnaire on the mediating variable (job crafting) and the dependent variable (employees’ digital creativity). Employees must fill in the ID card number in the two questionnaires to ensure that the same employee fills out the questionnaires for two periods.

We distributed 392 questionnaires, and 378 were collected in this study. The recovery rate is 96.41%. Invalid questionnaires were excluded, such as apparent carelessness, missing answers, and mismatched identities between the two periods. Finally, 344 valid questionnaires were collected, accounting for 91.01%.

In all samples, males account for 51.45%, and females account for 48.55%; married accounting for 68.37%, unmarried accounting for 31.63%; in terms of age structure, 43.9% are aged 20-30, 27.91% are aged 30-40, and 28.19% are in other age groups; in terms of education level, 63.37% have a bachelor's degree; in terms of positions,

ordinary employees and grassroots managers account for 91.57%; in terms of seniority, 77.04% have worked for 1-10 years.

B. Measures

To ensure the effectiveness of measurement tools, the scales for variables such as digital leadership, digital creativity, job crafting, and power distance are all from publicly published research literature in mainstream domestic and foreign journals. Based on the Chinese context and corporate characteristics, some English scales were appropriately modified and improved through “back translation” to confirm their usability and validity in the Chinese context. All scale items are measured with Likert 5-point scale, from 1 = “very inconsistent” to 5= “very consistent”.

1) *Digital Leadership*

This study used the scale of Zeike et al. [20] to measure digital leadership. There are six items on the scale. The example item is “My leader always actively learns the latest digital technology knowledge”.

2) *Digital Creativity*

This study used the scale of Lee. [21] to measure digital creativity. There are three items on the scale. The example item is “ With the support of digital technology, I can propose new ideas in my work.”

3) *Power Distance*

This study used the scale of Kirkman et al. [22] to measure power distance. There are eight items on the scale. The example item is “ Leaders who involve their employees in decision-making will lose authority”.

4) *Job Crafting*

This study used the scale of Tim et al. [17] to measure job crafting. There are fifteen items on the scale. The example item is “I try to reduce psychological stress from work.”

5) *Control Variables*

According to the existing literature, this study determined the demographic characteristics that affect employees’ innovation behaviour as control variables, such as gender, age, marriage, education level, position, and seniority.

IV. DATA ANALYSIS AND RESULTS

A. *Reliability and Validity*

After testing, the Cronbach's Alpha values for each variable are Digital Leadership ($\alpha=0.89$); Job crafting ($\alpha=0.959$); Digital creativity ($\alpha=0.805$); Power distance ($\alpha=0.904$), all above 0.7, indicating relatively high reliability of the questionnaire. We conducted confirmatory factor analysis on four factors and 32 analysis items using the Amos 22.0 program. The average variance extraction values corresponding to all four factors were greater than 0.5, and the composite reliability values were greeter than 0.7, indicating that the data had good aggregated validity. As shown in Table 1, among all competitive models, the four factor model performs the best in data fitting, and its advantages are particularly significant compared to other alternative models. This advantage demonstrates good discrimination between key variables in the model.

Table 1: Results obtained from confirmatory factor analysis

	Factor	χ^2	df	χ^2/df	RMSEA	CFI	TLI	RMR
Four-factor model	DL, JC, PD, DC	500.629	458	1.093	0.016	0.994	0.993	0.042
Three-factor model	DL, JC+PD, DC	2161.382	461.000	4.688	0.104	0.756	0.737	0.200
Two-factor model	DL+JC+PD, DC	2930.603	463.000	6.330	0.125	0.646	0.621	0.216
One-factor model	DL+JC+PD+DC	3142.305	464.000	6.772	0.130	0.616	0.589	0.218

N=344; DL, digital leadership; JC, job crafting; PD, power distance; DC, digital creativity.

B. *Control and Inspection of Common Method Variance (CMV)*

Although the questionnaire for this study was anonymously filled out by employees, due to all questions being completed by employees, there may be a certain degree of CMV. Therefore, this study conducted the Harman single-factor analysis and the variance interpretation of the first factor before rotation obtained is 35.452%, which is not greater than the 40% critical value mentioned by scholars, so CMV does not exist.

C. *Descriptive Statistics*

According to the descriptive statistical analysis results in Table 2, digital leadership positively correlates with job crafting ($r=0.456, p<0.01$) and digital creativity ($r=0.416, p<0.01$). Job crafting positively correlates with

employees' digital creativity ($r=0.488, p<0.01$). The result provides support for further validation of research hypotheses.

Table 2: Result obtained from descriptive statistical analysis

Variables	Mean	SD	1	2	3	4	5	6	7	8	9	10
1. Gender	1.485	0.501	1									
2. Age	2.971	0.903	0.038	1								
3. Marriage	1.116	0.321	0.083	0.052	1							
4. EDU	2.029	0.605	-0.037	-0.014	-0.017	1						
5. Position	1.424	0.696	-0.041	0.043	-0.065	0.109*	1					
6. Seniority	2.555	0.842	0.064	0.742**	0.041	-0.02	0.084	1				
7. DL	4.055	0.847	-0.036	0.021	-0.009	0.122*	0.121*	0.044	1			
8. JC	3.814	0.854	-0.019	0.012	-0.01	0.228**	0.174**	0.072	0.456**	1		
9. DC	3.747	0.899	-0.027	0.036	0.065	0.221**	0.209**	0.089	0.416**	0.488**	1	
10. PD	2.943	0.969	0.018	-0.013	-0.049	-0.049	0.034	-0.015	0.037	-0.01	0.059	1

$N = 344$; * $p<0.05$; ** $p<0.01$; EDU, education level; DL, digital leadership; JC, job crafting; PD, power distance; DC; digital creativity.

D. Test of the Main Effect and Mediating Effect

The test results were obtained by hierarchical regression analysis. As shown in Table 3, after considering control variables, it can be seen from Model 2 that digital leadership is significantly positive to employees' digital creativity ($\beta= 0.398, p<0.001$). H1 is supported. When testing the comprehensive effect of digital leadership and job crafting, it was found in Model 3 that the positive effect of digital leadership on employees' digital creativity decreased from 0.398 to 0.250 ($p<0.001$), and the role of job crafting is also significant ($\beta= 0.351, p<0.001$). H2 is supported.

In this study, the bootstrap approach was employed within the PROCESS program, combined with the stepwise regression method, and used Model 4 to analyses the mediating function of job crafting. After 5000 repeated sampling, the results showed that the indirect impact value of job crafting was 0.149, with a 95% confidence interval of [0.086, 0.202]. The mediating impact value of job crafting is still significant, and H2 is supported again.

E. Test of Moderating Effects

The test results of the moderating effect of power distance were obtained by hierarchical regression analysis. We first centralize digital leadership, job crafting, and power distance, then calculate the interaction terms. According to the analysis results in Table 4, the interaction between digital leadership and power distance significantly impacts job crafting and employees' digital creativity ($\beta=-0.138, p<0.005$; $\beta=-0.114, p<0.005$). This conclusion strongly supports H3 and H4. Figure 2 and Figure 3 refer to the negatively moderating effects of power distance.

Table 3: Result obtained from the main effect and mediating effect test

	DC			JC	
	Model 1	Model 2	Model 3	Model 4	Model 5
Gender	-0.043	-0.022	-0.023	-0.018	0.004
Age	-0.062	-0.053	-0.028	-0.083	-0.074
Marriage	0.226	0.226	0.223	0.008	0.007
EDU	0.301**	0.240**	0.157*	0.301**	0.236**
Position	0.238**	0.187**	0.144*	0.176**	0.122*
Seniority	0.13	0.107	0.069	0.132	0.108
DL		0.398**	0.250**		0.425**
JC			0.351**		
R 2	0.098	0.235	0.317	0.082	0.254
Adjusting R 2	0.082	0.219	0.301	0.066	0.239
F	6.083***	14.715***	19.466***	5.033***	16.379***

$N=344$; *** $p < 0.001$; ** $p < 0.01$; * $p < 0.05$; EDU, education level; DL, digital leadership; JC, job crafting; PD, power distance; DC, digital creativity.

Table 4 Result Obtained from the Moderating Effects Test

	DC		JC	
	β	<i>p</i> -value	β	<i>p</i> -value
DL	0.238	0.000**	0.407	0.000**
PD	0.061	0.145	-0.012	0.778
DL*PD	-0.114	0.026*	-0.138	0.006**
Gender	-0.021	0.793	0.01	0.898
Age	-0.029	0.668	-0.074	0.266
Marriage	0.231	0.068	0.004	0.974
EDU	0.161	0.020*	0.228	0.001**
Position	0.143	0.017*	0.122	0.037*
Seniority	0.069	0.339	0.103	0.148
JC	0.334	0.000**		
R 2	0.331		0.271	
Adjusting R 2	0.309		0.25	
F	16.480***		13.830***	

N=344; ****p* < 0.001; ***p* < 0.01; **p* < 0.05; EDU, education level; DL, digital leadership; JC, job crafting; PD, power distance; DC, digital creativity.

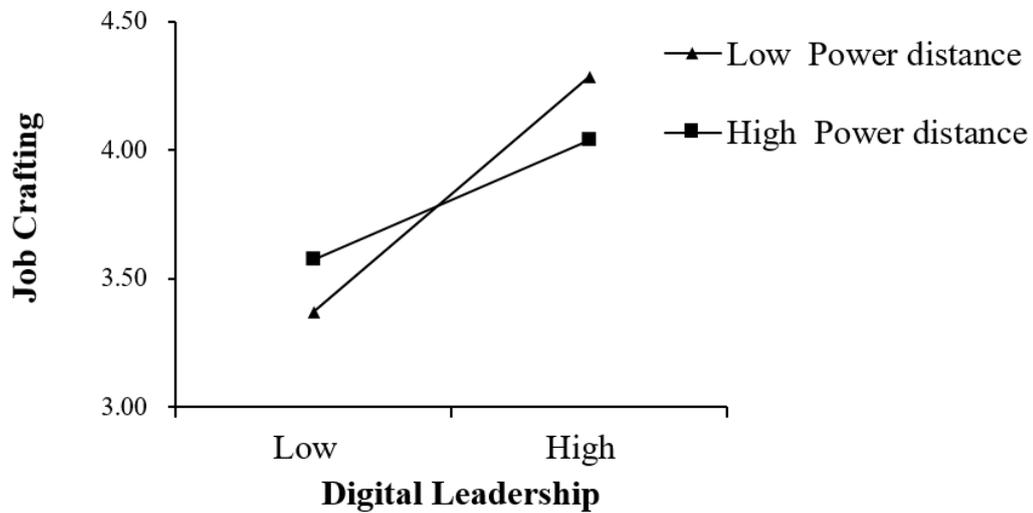


Figure 2: Moderating effect of power distance in the process of digital leadership influencing job crafting

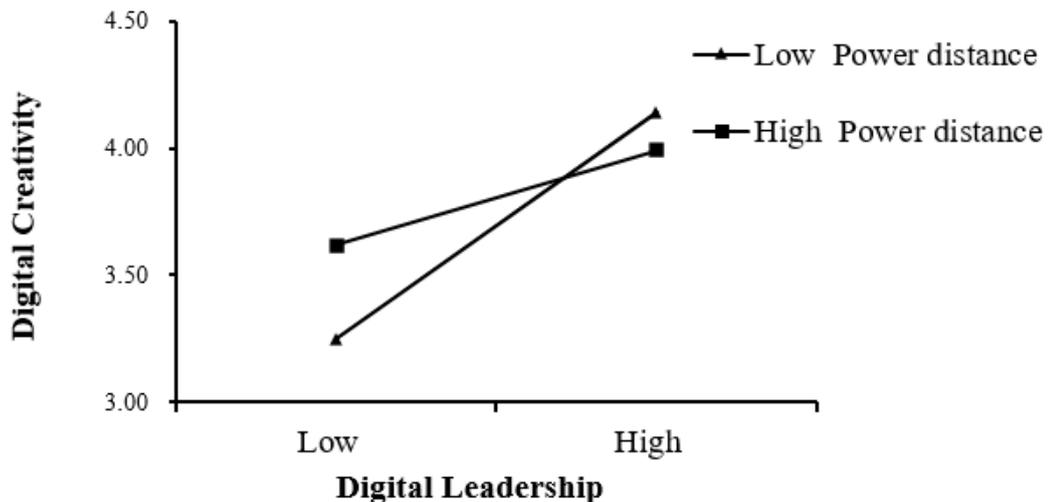


Figure 3: Moderating effect of power distance in the process of digital leadership influencing digital creativity

V. DISCUSSION

A. Theoretical Implications

First, this study explores whether and how digital leadership affects digital creativity, constructs a new theoretical model, and enhances our understanding of the micro-level effects of digital leadership. Although the academic community has paid close attention to digital leadership in the past few years [13], digital leadership is

rarely seen as an essential prerequisite for predicting employees' creativity at the micro-level in existing research [23]. Digital creativity has become a new research hotspot. This study takes digital leadership as the independent variable, and introduces job crafting and power distance as mediating and moderating variables to explore and prove their positive effects on employees' digital creativity.

Second, this study explores how digital leadership affects employees' digital creativity. The digital transformation driven by digital leadership has transformed organizations into platform, networked, and borderless forms, and facilitated job crafting. Job crafting emphasizes actively changing work content and boundaries to meet the resources required for work, relieving the work pressure imposed by external environmental changes and new demands of enterprises, and stimulating employees' internal motivation. Therefore, this study introduced job crafting as a mediating variable. Although employees may find new problems and contradictions in their work, digital leadership promotes displaying employees' digital creativity and the smooth implementation of innovative behaviors due to the new resources and relationships brought about by job crafting.

Third, the moderating effect of power distance was explored. The authority relational model believes that power distance plays an important role in evaluating the information released by authoritative figures by individuals. The power distance orientation shapes individual attitudes and behaviours, and has different impacts on innovation, silence, and organizational citizenship behaviour [1]. After research, we have confirmed that power distance does have a moderating effect, indicating that digital leadership is only sometimes effective. Power distance influences the positive impact of digital leadership, especially when employees believe there should be differences in power distribution between leaders and subordinates.

B. Practical Implications

Firstly, enterprises should emphasize selecting and cultivating talents with digital leadership. Digital technology is driving profound changes in various social organizations. Digital leadership is the core driver of Digital transformation and employee digital innovation. Therefore, enterprises should choose leaders with digital literacy based on the elements of digital leadership, develop mechanisms for enhancing digital leadership within the organization, promote the digital development strategy of the enterprise, and create prerequisites for employees' job crafting and stimulating digital creativity.

Second, enterprises should encourage and support employee job crafting. Unlike traditional organizational-led job design, job crafting is an approach in which employees engage in real-time, flexible, and covert work to gain a high sense of job identity and value [17]. The new work resources obtained through job crafting provide "positive factors" for employees' work, promoting the unleashing of digital creativity. Therefore, enterprises need to encourage and support employees to craft their work, gain new cognition and more sufficient interpersonal resources in the crafted new job environment, and support employees to unleash digital creativity.

Third, enterprises should select and cultivate employees with low power distance. From a value perspective, power distance is vital in individuals' cognition and behaviour, directly affecting their perception and acceptance of authorized behaviour. Employees with low power distance do not care about the level and power gap with their leaders and have greater autonomy at work [24], which is conducive to job crafting and stimulating digital creativity. However, for employees who adhere to the high power distance paradigm, leaders must strive to cultivate an organizational culture of equality, interdependence, and trust, so that employees can break away from traditional hierarchical concepts, actively cooperate with leaders, and more creatively complete work tasks.

VI. CONCLUSION

A. Result

Modern business models are undergoing a rapid transformation, driven by digital technologies. Drawing from the principles of the upper echelons theory and social cognitive theory, this study collected 344 valid questionnaires and conducted rigorous analysis to explore the relationship between digital leadership and employee' digital creativity. The conclusions enumerated hereunder were formulated:

First, digital leadership positively affect digital creativity; Second, digital leadership positively affects employees' digital creativity through the mediating mechanism of job crafting; Third, power distance negatively moderates the impact of digital leadership on job crafting and employees' digital creativity.

B. Limitations and Future Research

Firstly, this study collected data through anonymous measurement methods and two-time period designs to overcome the problem of common method variances. However, all variables are measured through employee self-evaluation, and future research can collect data through leader-employee pairing and conduct cross-level research to improve the credibility and effectiveness of research results.

Secondly, this study only used job crafting and power distance as mediating and moderating variables. Future research should consider other possible boundary conditions from different perspectives and construct new theoretical models, such as digital technological change, digital environment, individual, team, and organizational management characteristics.

REFERENCE

- [1] Z. G. Zhang, Q. J. Zhang, B. S. Ye *et al.*, "Research on the impact of digital transformation on business model innovation", *Science & Technology Progress and Policy*, vol. 39, no.11, pp. 114-123, 2022.
- [2] G. C. Kane, A. N. Phillips, J. Copulsky *et al.*, "How digital leadership is(n't) different," *Mit Sloan Management Review*, vol. 60, no. 3, pp. 34-39, 2019.
- [3] M. Fitzgerald, N. Kruschwitz, D. Bonnet *et al.*, "Embracing digital technology: A new strategic imperative," vol. 55, no. 2, pp. 1, 2014.
- [4] M. F. Klus, and J. Müller, "The digital leader: what one needs to master today's organizational challenges," *Journal of Business Economics*, vol. 33, no. 5, pp. 1-35, 2021.
- [5] B. J. Avolio, J. J. Sosik, S. S. Kahai *et al.*, "E-leadership: Re-examining transformations in leadership source and transmission," *Leadership Quarterly*, vol. 25, no. 1, pp. 105-131, 2014.
- [6] M. R. Lee, and T. T. Chen, "Digital creativity: Research themes and framework," *Computers in Human Behavior*, vol. 42, no. 12, pp. 12-19, 2015.
- [7] W. X. He and X. M. Liu, "The influence of constructive controversy and authentic leadership on job crafting and innovative behaviour," *Soft Science*, vol. 35, no. 4, pp. 99-105, 2021.
- [8] R. L. Larjovuori, L. Bordi, J. Mäkinemi *et al.*, "The role of leadership and employee well-being in organisational digitalisation." *In RussoSpena, T. & Mele, C (Ed.s), What's ahead in service research?, Naples, Italy*, pp. 1159-1172, 2016
- [9] M. V. Wart, A. Roman, Wang Xiaohu *et al.*, Operationalizing the definition of e-leadership: Identifying the elements of e-leadership. *International Review of Administrative Sciences*, vol. 85, no. 1, pp. 80-97, 2017.
- [10] Y. P. Li and L. Miao, "The structural dimensions of enterprise digital leadership and its impact: a study of grounded theory in the Chinese context," *Wuhan University Journal (Philosophy & Social Science)*, vol. 73, no. 06, pp. 125-136, 2020.
- [11] B. Oberer, and A. Erkkola, "Leadership 4.0: Digital leaders in the age of industry 4.0," *Social Science Electronic Publishing*, vol. 33, no.5, pp. 1-9, 2018.
- [12] P. Zhu, "Digital master: Debunk the myths of enterprise digital maturity," *Lulu Publishing Services*, 2015.
- [13] Y. Toduk and S. Gande, "What's Next in Turkey? A New Leadership Model for Connected Age," *Amrop Leadership Series*, 2016.
- [14] S. Kaveri and S. David, "Digital Youth: The Role of Media in Development," *New York: Springer*, 2010.
- [15] C. H. Gu, M. Han and Y. K. Xue *et al.*, "Digital Creativity: The impact of digital technologies on creativity," *Distance Education in China*, no. 9, pp. 55-61, 2017.
- [16] K. Rosing, M. Frese, and A. Bausch, "Explaining the heterogeneity of the leadership-innovation relationship: Ambidextrous leadership," *Leadership Quarterly*, vol. 22, no. 5, pp. 956-974, 2011.
- [17] Tims, Maria, Bakker *et al.*, "Job crafting: towards a new model of individual job redesign," *SA Journal of Industrial Psychology*, vol. 36, no. 2, pp. 1-9, 2010.
- [18] J. Zhu, B. Zhang, M. Xie *et al.*, "Digital Leadership and Employee Creativity: The Role of Employee Job Crafting and Person-Organization Fit," *Frontiers in Psychology*, vol. 13, 827057, 2022.
- [19] Y. S. Liu, L. Ye and M. Guo, "Study on the effect of job crafting on employees creativity in Chinese context," *Soft Science*, no. 5, pp. 587-91, 2019.
- [20] S. Zeike, K. Bradbury, L. Lindert *et al.*, "Digital Leadership Skills and Associations with Psychological Well-Being," *International Journal of Environmental Research and Public Health*, vol. 16, no. 14, 2628, 2019.
- [21] C. Lee, and Kun, "Digital creativity: individuals, groups, and organizations." *Springer Science & Business Media*, vol. 32, 2012.
- [22] B. L. Kirkman, G. Chen, J. L. Farh *et al.*, "Individual power distance orientation and follower reactions to transformational leaders: a cross-level, cross-cultural examination," *Academy of Management Journal*, vol. 52, no. 4, pp. 744-764, 2009.
- [23] J. Benitez, A. Arenas, A. Castillo *et al.*, "Impact of digital leadership capability on innovation performance: The role of platform digitization capability," *Information & management*, vol. 59, no. 2, 103590, 2022.
- [24] G. Chen and Q. Cui, "Service oriented leadership and employee emotional exhaustion: a mediating role based on positive emotions and deep role-playing," *New Economy*, no. 11, pp. 126-130, 2002.