

Digital Transformation in the Arts Industry: Implications for Talent

Management and Skills Development

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Abstract: The digital transformation of the art industry, emblematic of the current epoch's evolution within the sector, represents both a prevailing trend and an indispensable trajectory. This transformation exerts a profound influence on talent management and skill development in the art industry. This study aims to investigate the ramifications of digital transformation on talent management, elucidate the role these impacts play in the industry's digital progression, and explore the manifestations of changes and influences on talent's skill development throughout this transformative phase. Consequently, this study employs a questionnaire, randomly sampling 100 workers from various art sectors to gather research data. The data is then analyzed and processed using SPSS, with regression analysis to test the correlation between indicators. The findings of this investigation reveal that art industry's digital transformation has impacts on talent management and skill development include enhancing the willingness of talents to commit to fixed jobs, improving the economic benefits of the art industry, accelerating the adaptation time to positions, enhancing employment efficiency, strengthening operational capabilities of skills, developing comprehensive future career planning for talents, enhancing the role of corporate technical skill training, and refining performance evaluations.

Keywords: Art Industry; Digital Transformation; Talent Management; Skill Development

1. Introduction

The art industry, serving to meet the spiritual needs of consumers, typically bases its production on technological products (Campbell, 2005, Throsby, 1994, Wolff and Wolff, 1981).

It focuses on producing and providing goods and services with cultural connotations, oriented towards the cultural and artistic market (Hudson, 2008, Scott, 2000). This industry comprises businesses engaged in the production and service of cultural and artistic products (Throsby, 1994, Dellavedova, 2024). Common professions in the art industry include fashion designers, graphic designers, photographers, landscape designers, etc (Damon, 2004, Dubman, 1976, Chapman, 1998). The presence of digital technology is evident across various artistic professions (Susskind and Susskind, 2022, Molloy, 2020, Menger, 1999). So, the digital transformation of the art industry not only reflects the modernization of the industry but also highlights the significance of digital technology in the realm of arts (Abdullah and Afriadi, 2024, AYDIN, 2024, Pioli, 2024).

A literature review indicates that domestic studies on the digital transformation of the art industry are highly targeted, focusing on specific art content or professional directions (Wilson, 2003, Messinger et al., 2009, Huizingh, 2011). Feng Wuqing (2020) analyzed the characteristics of digital transformation in image art and discussed its impact on creation, summarizing creative strategies for digital transformation in image art. Warner and Wager (2019) studied the digital transformation of traditional advertising companies, their practical logic, and the internal and external challenges they face, proposing a path for digital transformation and considerations for them (Warner and Wäger, 2019). Birringer explored new approaches to digital communication in stage art, identifying issues in the "double performance" integration and suggesting strategies like innovating content production, strengthening professional collaboration, focusing on copyright development, and innovating management and talent support (Biringner, 1991). Wang Xin (2021) researched the transformation of teaching art design course in the digital age, suggesting the need for a comprehensive teaching model combining offline and online approaches, extending teaching space and time, enhancing practical abilities, and fostering multi-skilled talents. Chen Weiyan approached her research from the perspective of vocational colleges, focusing on the current situation, challenges, and strategies for the digital transformation of vocational art and design education. The study specifically pointed out that vocational art and design disciplines have

shown clear signs of digital integration, but a comprehensive digital education system is yet to be established (McCullough, 1998). The research also proposed solutions for addressing the challenges in digital transformation of this field, including expanding the range of art student enrollment, building a digital art major platform, and developing a diverse teacher training system. Li Cuiqing et al. (2023) conducted a study on the innovation of talent cultivation models for art and design majors in the context of digital transformation. They proposed utilizing the national vocational education intelligent education platform as a key tool (Li et al., 2023). Addressing existing challenges in training art and design talents, the study outlined a pathway for the digital transformation of vocational education in art and design (Marope et al., 2015). This pathway was defined across several dimensions: educational concepts, digital resources, teaching models, digital literacy, and evaluation mechanisms. The study concluded with a comprehensive approach for implementing the digital transformation in the talent cultivation models of vocational education for art and design majors (Jiang et al., 2024). These studies demonstrate the targeted and practical value of research in the digital transformation of the art industry, providing significant references for the development of industry, education, and enterprises in the art sector.

Additionally, in international research, Bhattacharyya (2023) conducted a study titled "Trends and Issues in Vocational Education: A Case Study of Pine Wood and Applied Arts Specializations." This study clearly states that vocational education aims to build a self-reliant society. Technology has transcended mere skill learning (practical arts) and now includes the learning of knowledge, practical materials, and skills. Technology involves the acquisition and application of scientific knowledge, technical knowledge, materials, and skills (Göranzon, 2012, Burnaford et al., 2013). Takeuchi H (2023) in his research on the digital transformation of university libraries, pointed out that digital transformation involves using digital technology to induce changes in systems, organizational structures, business models, or operational cultures. Hu Y (2023), in his study "Application of Artificial Intelligence in the Innovation of Zhuang Brocade Digital Art - A Case Study of 'The Words of Zhuang Brocade,'" showed that creating NFT digital collections through AI to achieve the digital inheritance, cross-regional

dissemination, and industrialization of Guangxi Zhuang brocade is feasible. Xiong G et al. (2023), in their research on the development trends of digital art in the era of artificial intelligence, indicated that "in the field of digital art, the application of AI is gradually becoming a trend, bringing more possibilities and innovations to the creation, expression, and dissemination of digital art; digital art creation is becoming increasingly intelligent, autonomous, and diverse" (Liu, 2020, Qian, 2022). Thus, it is evident that international research on the digital transformation of the art industry approaches from a practical perspective, exploring directly related aspects of the industry's digital transformation (Aris et al., 2023, Shen and Yu, 2021). Studies focusing on specific regions or particular art forms provide strong persuasive evidence.

Therefore, by collecting and organizing relevant domestic and international research, the main viewpoints of this study are grasped. The literature serves as the theoretical basis for this study. In this research on the digital transformation of the art industry: its impact on talent management and skill development, the focus is on detailing how digital transformation in the art industry affects talent management and skill development. The study elaborates on the specific contents of the transformation process in the art industry, with respect to talent management and skill development.

2. Research Content

2.1 Subjects

The subjects of this study are 100 workers from various art sectors, complemented by interviews with 10 business leaders from art industry. The content of these interviews serves as an objective basis for survey analysis. In total, 127 questionnaires were distributed, of which 114 were collected, and 100 were deemed valid, resulting in an validity rate of 87.7%. The statistical results in information science are presented in Table 1.

Table 1: Statistical Results of the Questionnaire in Information Science

Items	Category	Number of being influenced	Impact Rate: %	F	P
Age	22-25 (n=27)	9	33.33	6.684	0.038
	25-30 (n=34)	15	44.12		
	30-35 (n=31)	17	54.84		
	Over 35 (n=8)	3	37.50		
Work Experience in Art Industry: Years	Under 2 years (n=40)	18	45.00	11.234	<0.001
	2-5 (n=35)	12	34.29		
	5-10 (n=17)	9	52.94		
	Over 10 (n=8)	5	62.50		
Profession	Fashion Designer (n=15)	6	40.00	1.206	0.154
	Graphic Designer (n=17)	7	41.18		
	Photographer (n=21)	10	47.62		
	Interior Designer (n=47)	21	44.68		
Educational Level	Associate Degree (n=31)	11	35.48	8.151	0.024
	Bachelor's Degree (n=48)	20	41.67		
	Higher than Bachelor's Degree (n=21)	13	61.90		

From Table 1, it is observed that 44 individuals, accounting for 44% of the total number of respondents, believe that the digital transformation of the art industry impacts talent management and skill development. Among different age groups, the most affected are those aged 30-35 years, with 17 out of 21 individuals affected, showing an impact rate of 54.84%. This suggests that the impact of digital transformation on talent management and skill development increases with age and then decreases. In terms of work experience, the highest perceived impact is observed in individuals with over 10 years of experience, where 5 out of 8 are affected, resulting in an impact rate of 62.50%, indicating that the longer the work experience, the more pronounced the impact. Regarding profession, photographers are the most affected, with 10 out of 21 individuals impacted, a rate of 47.62%, suggesting that professions

with higher demand for digital technology and equipment are more affected. In terms of educational level, those with a bachelor's degree or higher are most affected, with 13 out of 21 individuals impacted, a rate of 61.90%, indicating that the impact increases with higher educational levels.

2.2 Research Methodology

This study employs literature review, questionnaire and interviews. Authoritative literature databases such as Wanfang, CNKI, and CQVIP are used to collect and organize literature, providing theoretical support and clarifying the research direction. The questionnaire is used to collect necessary data, and the data is analyzed and summarized to derive the main content of the study. The interview involves one-on-one interviews with industry business leaders to understand their perspectives on digital transformation and its integration into talent management and skill development, thereby enhancing the practicality of the research.

2.3 Reliability and Validity Test

The study uses SPSS 22.0 to analyze the reliability and validity of the questionnaire, ensuring strong credibility and validity. As shown in Table 2 and Table 3.

Table 2: Reliability Test Results

Content	Item	Cronbach' s Alpha
Understanding of Digital Transformation in Art Industry (A1)	4	0.929
Career Planning (A2)	4	0.930
Skill Operation Ability (A3)	4	0.934
Job Adaptation Time (A4)	4	0.926
Technical Skill Training (A5)	4	0.931

From Table 2, it is evident that the Cronbach's Alpha values for the scale and its dimensions range from 0.926 to 0.936, all greater than 0.900, indicating good internal consistency and validity in the questionnaire used in the survey.

Table 3: Validity Test Results

KMO Sampling Adequacy Measure		0.947
Bartlett Test	Chi-Square Approximation	8106.12
	Degrees of Freedom	84%
	Significance Level	0.000

Table 3 shows that the KMO value for the questionnaire is 0.947, exceeding 0.900. In the Bartlett's Test, the chi-square approximation is 8106.12 with a significance level of 0.000 ($P < 0.001$), and the total variance explained (degrees of freedom) is 84%, indicating that the questionnaire used in the study has good overall explanatory power, and the data's validity meets the requirements for the research.

2.4 Regression Analysis

The study utilized Logistic regression analysis to examine the impact of age, work experience, profession, and educational level on talent management and skill development in the context of the digital transformation of the art industry. The Logistic regression analysis revealed that these variables are positively correlated with talent management and skill development in the art industry's digital transformation. The specific results are presented in Table 4.

Table 4: Logistic Regression Analysis Results

Factors	β	F	Wald	P	OR
Age	-0.192	6.685	5.133	0.038	1.063
Work experience	-0.057	11.234	11.233	<0.001	2.874
Profession	-0.121	6.058	6.117	0.039	0.053
Educational level	-0.110	8.151	4.127	0.024	0.060

2.5 Variable Correlation Analysis

The study also employed Pearson correlation analysis to further explore the relationship between digital transformation in the art industry and its impact on talent management and skill

development. The results indicated that both talent management and skill development are positively correlated with the digital transformation of the art industry. These findings are summarized in Table 5.

Table 5: Pearson Correlation Analysis

	1	2	3
Digital Transformation of Art Industry	1	-	-
Talent Management	0.561	1	-
Skill Development	0.553	0.093	1

3. Findings and Discussion

3.1 Impact of Digital Transformation in the Art Industry on Talent Management

The impact of digital transformation in the art industry on talent management can be analyzed based on survey results considering the factors of age on career planning, work experience on job adaptation ability, and insights from interviews with industry leaders.

The first aspect is the influence of age on career planning. The results are illustrated in Figure 1.

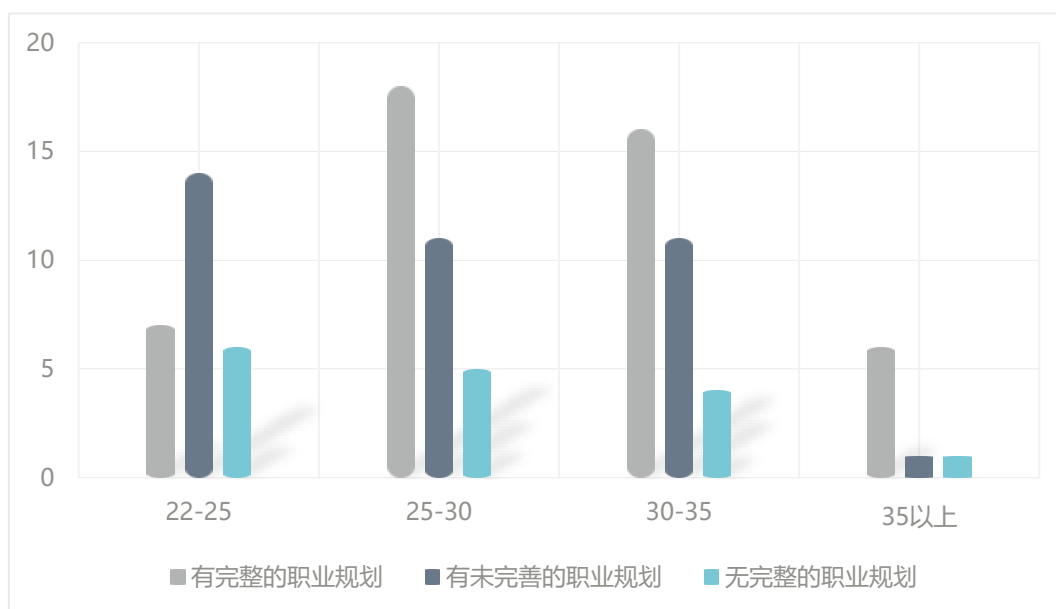


Figure 1 The impact of age on career planning

From Figure 1, it can be inferred that in the surveyed group, individuals of different ages exhibit varying perspectives on career planning. Among them, 47 individuals have a complete career plan, 37 have an incomplete career plan, and 16 lack a comprehensive career plan. This suggests that as individuals age, particularly those in the art industry, their career planning becomes clearer. Furthermore, under the influence of digital transformation in the art industry, those with more extensive life experiences can demonstrate stronger advantages in the field of art. Consequently, in the management of talent, older individuals often occupy positions such as management roles. These individuals are generally less likely to resign or make significant errors due to their experience and established career plans.

The next aspect is the influence of work experience on job adaptation ability. The specific survey results are presented in Figure 2.

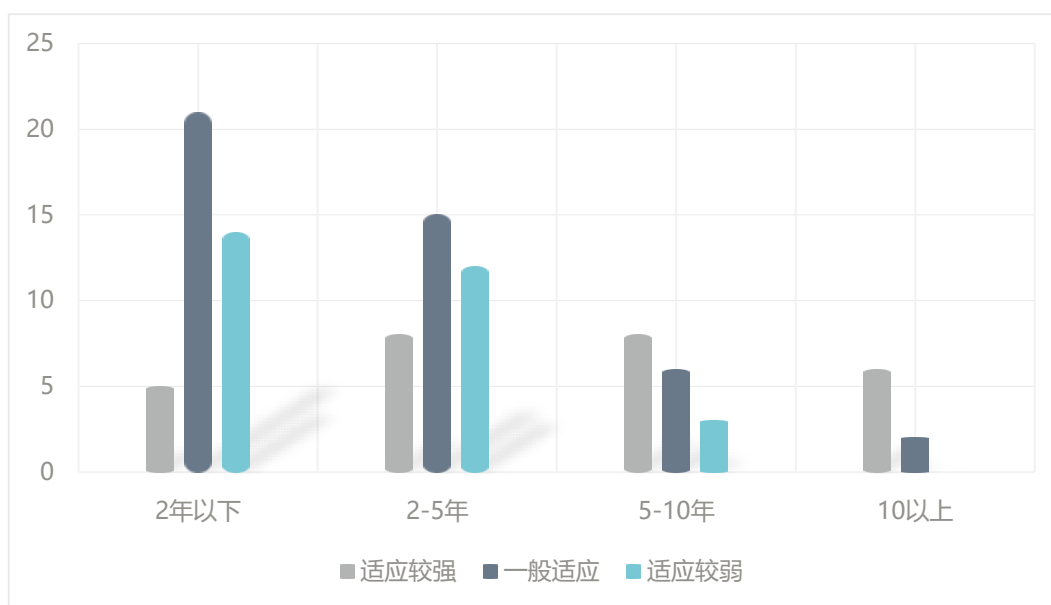


Figure 2 The impact of work experience on job adaptation ability

From Figure 2, it is evident that among the surveyed group, individuals with different lengths of work experience show varying levels of job adaptation ability. Specifically, 27 individuals demonstrate strong adaptation ability, 44 have average adaptation ability, and 29 show weak adaptation ability. This suggests that in the art industry, the majority of individuals possess average job adaptation ability, followed by those with weak ability, and finally, those

with strong adaptation ability. This indicates that work experience is crucial in determining an individual's ability to adapt to different positions within the art industry. However, due to the specialized nature of jobs in this field, adapting to different positions requires considerable work experience for rapid adaptation. Notably, individuals with over 10 years of work experience exhibit a very strong job adaptation ability, making them ideal candidates for job placements during the digital transformation of the art industry.

Lastly, the analysis includes insights from interviews with business leaders. Since the interviews serve as a basis for the study and are not separately statistically analyzed, they are integrated into the above two survey aspects for a comprehensive analysis. During the interviews, most business leaders agreed that digital transformation in the art industry is a necessity for societal development and a reform to adapt to the changing times. They emphasized that digital transformation could fully implement the concept of "technology as the primary productive force" in the art industry. They acknowledged that managing talent in this context has both advantages and disadvantages. The advantages include higher production efficiency and elevated requirements for talent, calling for skilled individuals with high professional capabilities and cultural literacy. Effective management of such talent requires humane systems that are supported by digital technology and equipment to simplify processes and provide opportunities for innovation and growth. The disadvantages involve heightened demands on modern talent due to the rapid development of the art industry, increased market competition, and higher expectations for company development. Therefore, companies need continuous innovation and reform to survive in the art industry. From an age perspective, older individuals in the digital transformation process of the art industry are more likely to be influenced by digital technology, exhibiting lower digital application efficiency. However, they possess strong learning abilities and attitudes, enabling them to have clear career planning. Consequently, companies highly value and demand talent aged 30-35 years. With the influx of young job seekers due to digital transformation, companies can recruit suitable young digital talent for positions. However, due to their unclear career planning, it is challenging to retain these young talents for long periods, affecting management efficiency. In terms of work

experience, individuals in the art industry with 5 to 10 years of experience are highly sought after by companies. They not only possess strong job adaptation abilities but also have a foundational career plan, even if it's not fully fleshed out. Therefore, companies just need to leverage their value and offer sufficient compensation. Such individuals are likely to have a long tenure with the company, contributing to various management tasks. They are considered key in the depth of management strategy and also from the perspective of supporting the company's objectives. Additionally, their ability to adapt to the digital transformation in the art industry makes them a vital part of the workforce, essential to the core strength of companies in this sector.

Suggestions:

(1) It is advised that companies in the art industry, during their talent recruitment, should consider adjusting salary packages to maximally satisfy the life demands of job seekers. For younger candidates with less work experience, more opportunities for learning and work participation should be provided. Moreover, in line with the current developments and changes of the era, periodic educational and training programs should be established. This approach allows job seekers of different age groups to contribute more significantly to the company and achieve greater material and spiritual satisfaction.

(2) Art industry should adopt diverse approaches to job position structuring, enrich the content of job roles, and expand job responsibilities. This would enable employees to understand the work requirements of different positions within the same industry during their tenure in a single position, thus fostering their adaptability to multiple roles. Ultimately, this approach aims to develop employees into versatile talents. Additionally, under related job systems, it is vital to ensure that employees' labor contributions are adequately rewarded.

(3) Business leaders are encouraged to explore and investigate the development of the art industry, particularly from the perspective of younger generations. By understanding the youth's perception of the industry and their job requirements, companies can develop humane and personalized talent management strategies. Emphasizing the skill development of talents

should be regarded as one of the primary methods to retain them and enhance their sense of belonging to the company.

3.2 Impact of Digital Transformation in the Art Industry on Skill Development

The impact of digital transformation in the art industry on skill development can be discerned from the survey results, focusing on the influence of profession on operational skill abilities, the impact of educational level on technical skill training, and insights from interviews with business leaders. The specific details are as follows.

The first aspect is the influence of profession on operational skill abilities. The specific survey results are illustrated in Figure 3.

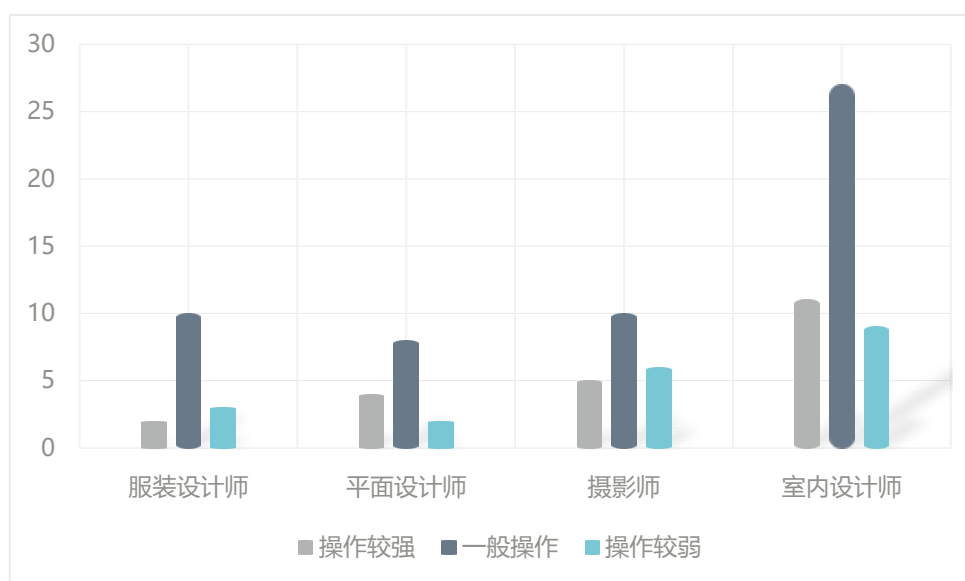


Figure 3 The influence of profession on operational skill abilities

From Figure 3, it is evident that in the survey examining the impact of profession on operational skill abilities, there are variations among different professions in the art industry. Specifically, only 2 fashion designers, accounting for 13.33% of the total in this profession, demonstrate strong operational skills. For graphic designers, 4 individuals, representing 23.81% of the total, show strong operational skills. 5 photographers, or 23.81% of their total, exhibiting strong skills. And among interior designers, 11 individuals, making up 23.40% of their

profession, display strong operational skills. These results suggest that different professions within the art industry have varying requirements for operational skills in the context of digital transformation.

The next aspect is the influence of educational level on technical skill training. The survey results for this are presented in Figure 4.

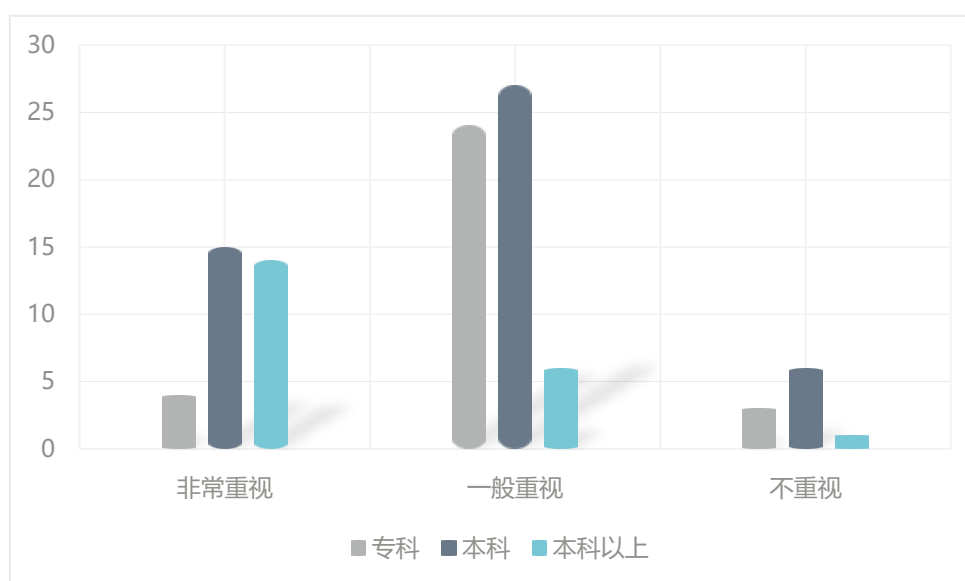


Figure 4 The influence of educational level on technical skill training

From Figure 4, regarding the impact of educational level on technical skill training, it is observed that among those with an associate degree, only 4 individuals, accounting for 12.90% of the total, place high importance on technical skill training. Among bachelor's degree holders, 15 individuals, making up 31.25% of the total, consider technical skill training very important. Notably, for those with education beyond a bachelor's degree, 14 individuals, or 66.67% of the total, highly value technical skill training. This indicates that the higher the educational level, the greater the emphasis placed on technical skill training.

Finally, the analysis includes insights from interviews with business leaders. As these interviews serve as foundational research and are not separately statistically analyzed, they are integrated into the previous survey aspects for a comprehensive analysis. During the interviews, most business leaders indicated that their companies place significant emphasis on the skill

development of talents. Typically, human resource departments are tasked with creating appropriate skill development and training programs based on current business needs. However, most leaders noted that due to the nature of their business, many employees possess or are familiar with interior design skills. Consequently, companies often recruit professionals with interior design capabilities, as most of their work is directly related to art. Regarding educational level, business leaders expressed a preference for hiring bachelor's degree holders with less work experience over associate degree holders with richer work experience, due to the former's stronger learning abilities. Companies aim to achieve effective results from skill and technical training programs for such employees and are willing to provide educational training and attractive salaries, encouraging these employees to grow and develop alongside the company (Holzer, 1996, Kirkpatrick and Kirkpatrick, 2006). Furthermore, the impact of digital transformation in the art industry on skill development is evident in the profession, with professions involving more digital technology and equipment being more affected, and vice versa (Li, 2020, Chui et al., 2016). From the perspective of educational level, individuals with higher education show less impact from the digital transformation in the art industry (Kaputa et al., 2022, Barzman et al., 2021). Therefore, the impact of digital transformation on skill development in the art industry is positively correlated (Han, 2024, Scuotto et al., 2023).

Suggestions

(1) Given the varying skill operation requirements in the digital transformation of the art industry, enhancing the operational abilities of professionals in different art careers poses a significant challenge. It is recommended that individuals in various art professions increase their interest in their respective fields. Depending on their financial situation, they should seek to learn and master the digital equipment and basic requirements of other professions, thus improving their adaptability and competency within their industry.

(2) Regarding educational level, it is advisable for companies to offer opportunities for advancement in education to employees with an associate degree as part of regular training programs. This could involve shared costs between the company and employees or could be

based on the employee's work experience, age, current educational level, and the company's future development plans. The goal is to help employees formulate comprehensive career plans and encourage them to elevate their educational levels.

(3) Business leaders should place greater emphasis on the company's talent management systems and real-world operations. They should be aware of how employees of different educational levels are performing in the company and their prospects for future development. In the realm of talent management, it is also suggested to establish subsidy systems for educational advancement and skill operation. This approach would ensure that employees of all educational backgrounds feel valued by the company, indirectly boosting their work motivation and encouraging them to actively engage in activities that enhance both their educational and skill levels over the long term.

4. Conclusion

In summary, the impact of digital transformation in the art industry on talent management and skill development, as derived from this research, can be summarized as follows:

(1) The study was based on a survey of 100 workers from various art industries and interviews with 10 industry business leaders, using the collected data as crucial evidence. Additionally, the gathered and organized literature served as the theoretical foundation for the study.

(2) The research findings indicate that the impact of digital transformation in the art industry on talent management is positively correlated. The deeper the digital transformation, the more it contributes to improving the economic benefits of the art industry, accelerating the adaptation time of talents to their roles, and enhancing the efficiency of talent employment.

(3) The study also shows that the impact of digital transformation on skill development is positively correlated. As digital transformation in the art industry becomes more profound, it enhances the operational abilities of talents, improves their future career planning, elevates the role of corporate technical skill training, and refines performance evaluations.

Additionally, the innovation of this study lies in its theoretical approach, applying

references from the last three years to align closely with the current situation. From a practical perspective, the comprehensive and objective nature of the research data was ensured by surveying and interviewing personnel from different professions within the art industry and business leaders, adding significance of research and value of reference to the study. However, the study has certain limitations, mainly in the relatively limited investigation of skill development and weaker objective evidence in this area. As a result, the analysis on skill development is not as comprehensive. In future research, more practical content on skill development will be included to make the survey data more comprehensive and the analysis more objective and effective.

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References:

- ABDULLAH, I. & AFRIADI, D. 2024. Beyond Cultural Disruption: Art and Creativity in the Technological Era. *Elegantia: Journal of Arts, Media, and Technology*, 1, 1-7.
- ARIS, S., AEINI, B. & NOSRATI, S. 2023. A digital aesthetics? artificial intelligence and the future of the art. *Journal of Cyberspace Studies*, 7, 219-236.
- AYDIN, S. 2024. ART MARKETING TECHNIQUES AND THE DEVELOPMENT OF ART MARKETING WITH DIGITAL TRANSFORMATION. *Turkish Online Journal of Design, Art & Communication*, 14.
- BARZMAN, M., GERPHAGNON, M., AUBIN-HOUZELSTEIN, G., BARON, G.-L., BENARD, A., BOUCHET, F., DIBIE-BARTHELEMY, J., GIBRAT, J.-F., HODSON, S. & LHOSTE, E. 2021. Exploring digital transformation in higher education and research via scenarios. *Journal of Futures Studies*, 25, 65-78.
- BIRNINGER, J. 1991. Video Art/Performance: A Border Theory. *Performing Arts Journal*, 13, 54-84.
- BURNAFORD, G. E., APRILL, A. & WEISS, C. 2013. *Renaissance in the classroom: Arts integration and meaningful learning*, Routledge.

- CAMPBELL, C. 2005. The craft consumer: Culture, craft and consumption in a postmodern society. *Journal of consumer culture*, 5, 23-42.
- CHAPMAN, N. 1998. *Careers in Art and Design*, Kogan Page Publishers.
- CHUI, M., MANYIKA, J. & MIREMADI, M. 2016. Where machines could replace humans- and where they can't (yet). *The McKinsey Quarterly*, 1-12.
- DAMON, M. 2004. *The graphic design profession: from margins to mainstream*. University of British Columbia.
- DELLAVEDOVA, C. 2024. Investigating the potential correlation between the Arts and culture industry and Organizational business models: a Case Study.
- DUBMAN, S. 1976. Exploring Visual Arts and Crafts Careers. A Student Guidebook.
- GÖRANZON, B. 2012. *Skill, Technology and Enlightenment: On Practical Philosophy: On Practical Philosophy*, Springer Science & Business Media.
- HAN, X. 2024. Empowering the Global Tourism Workforce: How Digital Transformation Influences HR Development. *Journal of the Knowledge Economy*, 1-25.
- HOLZER, H. J. 1996. *What employers want: Job prospects for less-educated workers*, Russell Sage Foundation.
- HUDSON, R. 2008. Cultural political economy meets global production networks: a productive meeting? *Journal of economic geography*, 8, 421-440.
- HUIZINGH, E. K. 2011. Open innovation: State of the art and future perspectives. *Technovation*, 31, 2-9.
- JIANG, X., XU, J. & XU, X. 2024. An overview of domestic and international applications of digital technology in teaching in vocational education: Systematic literature mapping. *Education and Information Technologies*, 1-33.
- KAPUTA, V., LOUČANOVÁ, E. & TEJERINA-GAITE, F. A. 2022. Digital transformation in higher education institutions as a driver of social oriented innovations. *Social innovation in higher education*, 61, 81-85.
- KIRKPATRICK, D. & KIRKPATRICK, J. 2006. *Evaluating training programs: The four levels*, Berrett-Koehler Publishers.
- LI, C., ZHAO, C., WEI, H. & LIU, Q. The Teaching Reform of Animal Pathology Course in Application Oriented Universities Based on Computer Technology. EAI International Conference, BigIoT-EDU, 2023. Springer, 436-446.
- LI, F. 2020. The digital transformation of business models in the creative industries: A holistic framework and emerging trends. *Technovation*, 92, 102012.
- LIU, X. Artistic reflection on artificial intelligence digital painting. Journal of Physics: Conference Series, 2020. IOP Publishing, 032125.
- MAROPE, P. T. M., CHAKROUN, B. & HOLMES, K. 2015. *Unleashing the potential:*

- Transforming technical and vocational education and training*, UNESCO Publishing.
- MCCULLOUGH, M. 1998. *Abstracting craft: The practiced digital hand*, MIT press.
- MENGER, P.-M. 1999. Artistic labor markets and careers. *Annual review of sociology*, 25, 541-574.
- MESSINGER, P. R., STROULIA, E., LYONS, K., BONE, M., NIU, R. H., SMIRNOV, K. & PERELGUT, S. 2009. Virtual worlds—past, present, and future: New directions in social computing. *Decision support systems*, 47, 204-228.
- MOLLOY, L. A. 2020. *Creative connections: the value of digital information and its effective management for sustainable contemporary visual art practice*. University of Oxford.
- PIOLI, M. 2024. Museums of the future: Digitalisation as a new form of communication.
- QIAN, J. 2022. Research on artificial intelligence technology of virtual reality teaching method in digital media art creation. *Journal of Internet Technology*, 23, 125-132.
- SCOTT, A. J. 2000. *The cultural economy of cities: essays on the geography of image-producing industries*.
- SCUOTTO, V., TZANIDIS, T., USAI, A. & QUAGLIA, R. 2023. The digital humanism era triggered by individual creativity. *Journal of Business Research*, 158, 113709.
- SHEN, Y. & YU, F. 2021. The influence of artificial intelligence on art design in the digital age. *Scientific programming*, 2021, 4838957.
- SUSSKIND, R. & SUSSKIND, D. 2022. *The future of the professions: How technology will transform the work of human experts*, Oxford University Press.
- THROSBY, D. 1994. The production and consumption of the arts: A view of cultural economics. *Journal of economic literature*, 32, 1-29.
- WARNER, K. S. & WÄGER, M. 2019. Building dynamic capabilities for digital transformation: An ongoing process of strategic renewal. *Long range planning*, 52, 326-349.
- WILSON, S. 2003. *Information arts: intersections of art, science, and technology*, MIT press.
- WOLFF, J. & WOLFF, J. 1981. *The social production of art*, Springer.