Strategy of the Financial Services Authority in Developing Digital Talent Competence in the Financial Technology Era in the Banking Sector

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Abstract

Digital talent competency is an urgent to fulfill the digital competency requirements need in the labour industry. The World Economic Forum report in 2018 estimated that nearly 75 million jobs will be lost as a result of Artificial Intelligence technology development in 2025, but it is also estimated that nearly 133 million new jobs will be created. This makes the gap in competency requirements for digital talent in the banking sector unavoidable in the digitalisation of the economy. The Banking Industry requires competent human resources in order to improve the quality and variety of financial services products based on digital technology. The purpose of this article is to determine OJK's strategy in developing human resources in the banking industry, which is one of the important factors to improve competence and understanding of financial services products, so as to provide services that prioritise consumer protection and productivity. This research uses descriptive qualitative methods through literature studies, observations and interviews. The results show that efforts to fulfill the competency gap require planned, measurable, and sustainable human resource development by preparing the Indonesian National Work Competency Standards, preparing the Indonesian National Qualifications Framework, increasing human resource development through training, seminars, and workshops and fulfilling competency needs in the field of digital technology through the preparation of the Digital Competency Dictionary.

Keyword: Digital Transformation, Talent, Competency.

Introduction

Banks play an important role in the process of financial traffic in managing a country's financial system. The era of the Industrial Revolution 4.0 has caused disruption and transformation in daily life and the world of work (Fairuzzabadi, et. al., 2021). The development of information technology has led to phenomena such as the "digital economy", a radical transformation of the financial sector which includes the activities of banks, insurance companies and other financial organizations (Imelda, et. al., 2021). The banking industry must be swift in responding to changes to suit the needs of the industry as a whole. In the era of Financial Technology, information technology and internet needs are factors of change that must be adjusted by banks. Inevitably in the digital economy transformation process, the Bank must invest more in technology infrastructure to meet its operational needs. The evolutionary processes that occur in society, related to the introduction of the internet into almost all areas of human activity, have forced banks to automate and digitize all processes and products offered (Tsindeliani A, et.al., 2022).

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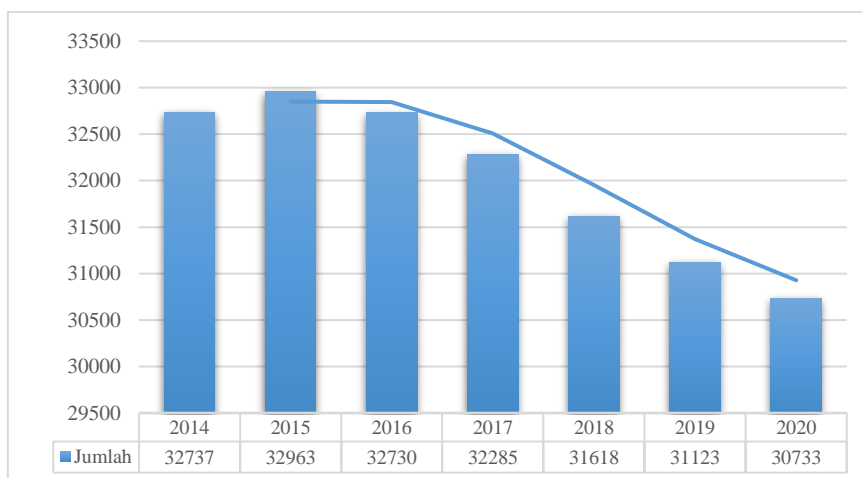==

On the other hand, the Bank must also invest in human resource development needs to be able to digitize banking services. Regulated in the Financial Services Authority Regulation Number 12/POJK.03/2018 Concerning the Implementation of Digital Banking Services by Commercial Banks, the banking industry also continues to strive to innovate by developing digital banking. Apart from Digital Banks, banks are also developing digital products such as internet banking, mobile banking and other digital services to meet current customer needs. In Figure 1 and Figure 2 are banking statistics in Indonesia which show a decrease in the number of Bank offices which is inseparable from changes in customer behavior which have started to reduce the intensity of coming directly to branch offices to make transactions and have switched to using mobile banking technology and ATMs in making transactions digital and money withdrawal. In addition, this can also reduce the operational costs of banking activities.

Figure 1.
Statistics on the Number of Banks in Indonesia

	2014	2015	2016	2017	2018	2019	2020
Jumlah	119	118	116	115	115	110	109
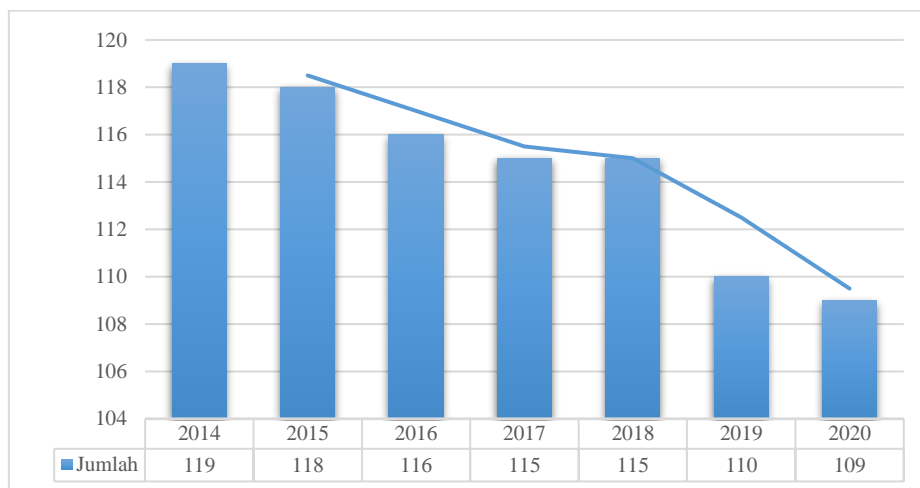
Source: Financial Services Authority (OJK) (processed)

Figure 2.
Statistics on the Number of Bank Offices in Indonesia

	2014	2015	2016	2017	2018	2019	2020
Jumlah	32737	32963	32730	32285	31618	31123	30733

Source: Financial Services Authority (OJK) (processed)

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Economic digitalization has an impact on people's lifestyle patterns. Technological innovation has shifted the way consumers obtain goods and services from conventional methods to online platforms. Thus the banking industry will face the greatest impact from technological changes and other new digital competitors in the financial market and revolutionize conventional business (Santoso, et al., 2021). Financial Technology (Fintech) has had a major impact on every aspect of financial services and is revolutionizing the entire financial industry through virtual change (Goldstein, 2019). In recent years, Fintech has developed very rapidly globally, including in Indonesia and the company's business patterns through offering digital services have also changed (Santoso, et. al., 2021). The demand for financial talent is growing rapidly. Industry needs not only refer to professional talent in finance and economics but also integration of knowledge about finance, technology, innovation and the ability to develop Fintech in a sustainable manner, so that they become competent to work in today's digital era (Santoso, et. al., 2021). Technological changes will force workers to invest in acquiring additional skills for their basic profession (Grigorescu, et. all., 2021).

McKinsey Global Institute (2018) identified skills that will no longer be needed in the future, such as basic cognitive skills, physical and manual skills. Meanwhile, following technological developments, the financial industry has identified several skills that will be needed in the future, such as technological skills, social and emotional skills, and higher cognitive skills.
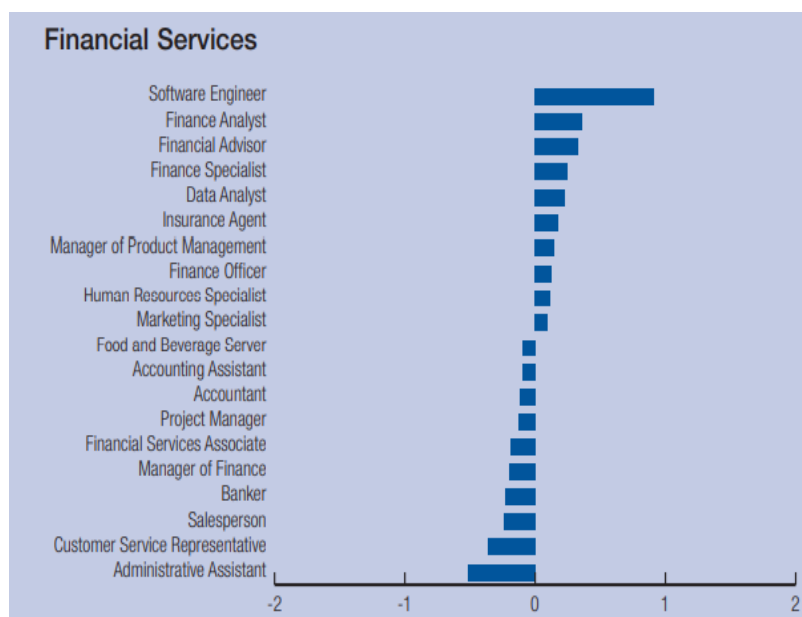
Figure 3.
Sector Job Shift by 2030

Top occupations growing and declining

Top growing
- Software developers (app, web, computer)
- Customer service representatives
- Computer systems analysts
- General and operations managers
- Financial analysts
- Computer and information systems managers
- Human resources managers
- Loan officers
- Business operations specialists
- Personal finance advisors

Top declining
- Bill and account collectors
- Word processors and typists
- Data entry keyers
- Computer network support specialists
- Secretaries and administrative assistants
- Insurance sales agents
- Tellers
- Office clerks (billing, accounting, reception, etc)
- Computer user support specialists

Source: McKinsey Global Institute Skill shift: Automation and The Future of The Workforce. 2018.

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In the Figure above there are groups of jobs that will continue to grow and will become jobs needed in the coming years that put more emphasis on expertise in the digital field. Meanwhile, as in the example above, jobs that currently exist in the banking sector, such as Accounting, Insurance Sales Agents and Tellers, will increasingly experience a decrease in demand. This is supported by banking data in Figures 1 and 2 which show a significant decrease in the number of branch offices and human resources in the banking sector. So it can be said that digital technology is giving way to the emergence of new jobs that require high digital skills and abilities (Karaboga, 2020).

The World Economic Forum's 2018 report predicts that nearly 75 million jobs will be lost as a result of developments in Artificial Intelligence technology by 2025, but it is also estimated that nearly 133 million new jobs will be created. At the same time, 54 percent of employees are expected to retrain digital skills and abilities to take advantage of this new job opportunity.

Figure 4.
Top ten most emerging and declining roles between 2013-2017 as observed in hiring trends, by industry

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Source: The Future of Jobs Report 2018.

The projection of the need for labor in the Financial Services Sector is as shown in Figure 4 above that the profession in the banking sector is one of those affected by the decline in labor demand. Therefore, developing a workforce with digital skills, acquiring and retaining digital talent are the most frequently discussed topics from business and HR leaders in companies or organizations today. Kovlov (2019) reveals that it is important to consider digital culture and the formation of individual digital competencies by using digital technology for HR development means that HR in the region must be sufficiently advanced with the digital competencies available in the population. This will create new opportunities for the digital economy in increasing social integration within the scope of the industry.

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Digital talent is also a key element of national economic transformation (Qi, Y., Jia F., 2021). Enterprise digital talent refers to those who use professional scientific and technological knowledge to contribute to the company's digital transformation business development based on the company's digital transformation needs (Zhu Heliang, Wang Chunjuan, 2021). Meanwhile, digital competence is a broad concept that combines various competency-based capabilities and communication technology skills that integrate knowledge and attitudes (Wahyuningtyas, 2021). So it is necessary to study further regarding the development of measurable digital talent competencies.

Nicoletti in the book Banking 5.0 How Fintech Will Change Traditional Banks in the "New Normal" Post Pandemic (2021), the relevance of Fintech organizations comes from Bill Gates' statement about financial institutions that "Banking is needed, while Banks are no longer needed". This results in Fintech Organizations playing a fundamental role in developing solutions that address the needs of financial services. Higher customer loyalty, new revenue sources and more efficient operating costs are some of the benefits that make Fintech organizations attractive to traditional financial institutions. To respond to changes in consumer behavior, competent human resources are needed by the banking industry to improve the quality and variety of digital technology-based financial service products. In Karaboga (2021) it is stated that the Government must have the ability to adapt quickly to changes in the environment and must create a system to understand the latest trends and developments in a country to encourage the adoption of new skills, abilities and policies (Mergel, Gong, & Bertot, 2018).

Human Resource Management as a strategic and coherent approach in managing the organization's most valuable assets in which the people working in the organization individually and collectively contribute with the aim of ensuring that the organization is able to achieve its goals and success through the people it has (Armstrong, 2006). Ulrich and Lake in Armstrong (2006) say that human resource management systems can be a source of organizational capabilities that enable organizations or companies to learn and take advantage of new opportunities. Human resource management objectives include organizational effectiveness which aims to support programs in increasing organizational effectiveness by developing policies in the areas of knowledge management, talent management and in creating a "good place" to work (Amstrong, 2006). In (Amstrong, 2006) the purpose of resource management is to ensure that the organization obtains and retains a skilled, committed and well-motivated workforce. So to meet the needs of employees in the future in increasing the potential and developing the skills of each individual is to provide continuous learning opportunities and skills development.

Human resource development in the banking industry is an important factor in increasing competence and understanding of financial services products, so that they can provide services that prioritize consumer protection and productivity. However, the identification of strategic competencies has changed following the development of digital transformation which encourages the use of digitalization in all aspects of business processes (Santoso, et. al., 2021). The Financial Services Sector is one of the important pillars in supporting national economic growth, so that the development of human resources in the banking industry is the responsibility of all stakeholders. Currently, companies need talented employees to achieve superior and competitive organizational performance. Human resource development programs in the financial services sector (SJK) must anticipate the possibility of

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the emergence of new professions, especially in the banking industry so that it remains a sustainable industry. Therefore, it is necessary to make various efforts to meet the competency needs of human resources in the field of digital technology through planned, measurable and sustainable HR development programs in the banking industry (Rinaldi, 2022).

Method

The approach used in this study is to use a post-positivist paradigm supported by qualitative data collection. This is in line with the postpositivist approach which can be used to achieve an in-depth and comprehensive understanding of all phenomena that occur, by means of in-depth interviews and observations. The data collection technique in this research is field research. This technique is carried out by the author by interacting directly (in-depth interviews) with relevant sources to get answers to research problems and literature studies including books, documents and other sources, such as journals, mass media, and others that aim to gain knowledge about related issues.

Result and Discussion

In an interview with the Director of HR Development for the Financial Services Sector, Digital Talents are needed in the financial services industry, apart from increasing effectiveness and productivity at work, digital talents can support a company or agency to continue to develop, innovate and be sustainable (Rinaldi, 2022). OJK Institute has developed human resources in the banking sector, among others, as follows:

1. Preparation of Indonesian National Work Competency Standards (SKKNI) in the Banking sector, including SKKNI for Banking Risk Management, SKKNI for Internal Bank Audit, SKKNI for General Banking, SKKNI for Treasury, SKKNI for Wealth Management, SKKNI for Funding and Services, SKKNI for Compliance, SKKNI for Banking Operations, SKKNI for Banking Credit, SKKNI for BPR, and SKKNI for BPRS.
2. Formulation of the Indonesian National Qualifications Framework (KKNI) in the banking sector, including the KKNI for Banking Risk Management, KKNI for Treasury, KKNI for RBs, and KKNI for BPRS.
3. Regular seminars or webinars every month that are not only specific to the banking sector, but can also be attended by cross-sectors from the Capital Market and the Non-Bank Financial Industry (IKNB).
4. Training in the form of workshops with themes including APU-PPT Workshop, Integrated GRC Workshop, BPR Risk Management Workshop, and Blockchain for Banking Workshop.

OJK-Institute through the Blueprint for the Development of Human Resources in the Financial Services Sector 2021–2025, in the vision of realizing HR with professional character, integrity and global competitiveness in order to improve performance and missions carried out in order to develop standardization, methods of increasing competency, adequate infrastructure , and digital competence as outlined in the following figure:

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Figure 5.

Vision and Mission of HR Development in the Financial Services Sector

One of the things in implementing competency standardization development in the FSS is compiling a competency dictionary. The FSS Digital Competency Dictionary is a reference and recommendation for the minimum requirement for generic digital competence so that it can be used by the Financial Services Industry in the context of developing digital competence in the Banking sector, Non-Bank Financial Industry, Capital Markets, Insurance and other Financial Institutions. Competence by Weigel and Collins (2007 in Child & Shaw, 2019), categorizes the definition of competence as follows: 1) Behavior (behaviour approach) defines competence as a focus on determining the distinguishing aspects of performance; 2) Generic defines the general factors that contribute to overall performance; and 3) Cognitive defines the mental capacity needed to perform the task.

Competence refers to individual skills and abilities, and therefore must be demonstrated and observable. Competence leads to effective performance, which means someone who has competence must be better than someone who does not have competence, thus competence refers to behavior that distinguishes success from just doing the job. Competence can be used to clarify and define "what" in terms of skills, knowledge, and abilities that contribute to success in certain jobs and "how" approaches are taken regarding behaviors or attitudes that contribute to a job by providing the greatest value and contribution to organizational success.

A survey conducted by Capgemini and Linkedin (2017) shows that the digital talent gap across organizations has become a major challenge affecting competitiveness and progress of digital transformation, where the talent gap is in both hard and soft digital skills. The lack of digital talent in an industry is a challenge that must be prepared by implementing a strategic plan to cover the capability gap in digital competence. OJK has described the level of competence or level of proficiency in the following definition table:
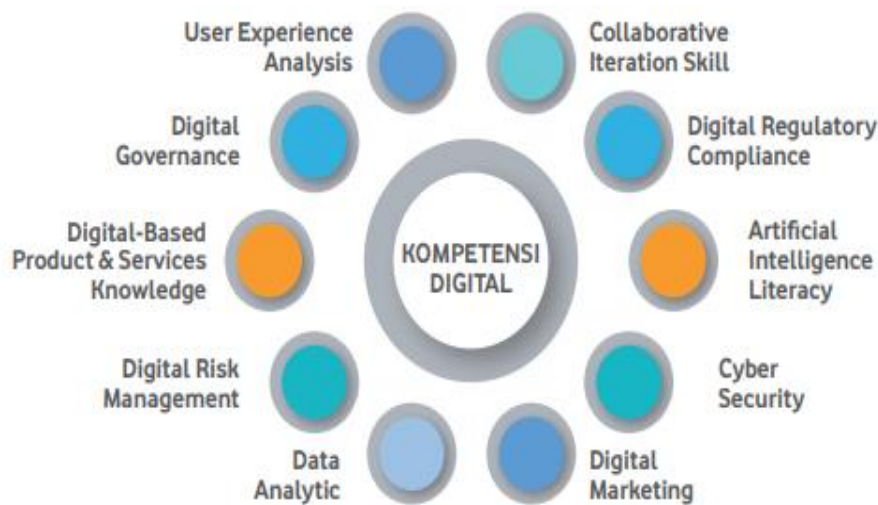
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Table 1.
Definition of Competency Level

Level	Definition	Keywords
LEVEL 1 (BASIC)	**Knowledge** • Have basic skills • Able to apply knowledge with guidance **Experience** Have minimal experience **Application** Need direction when faced with an unfamiliar situation	Understand, implement, implement, complete, discuss.
LEVEL 2 (INTERMEDIATE)	**Knowledge** • Has complex abilities according to his field • Able to apply knowledge effectively in accordance with the field **Experience** Have sufficient experience related to the field **Application** • Can carry out activities and handle and overcome complex situations through various analysis approaches and planning carried out independently. • It only requires minimal direction in carrying out its duties • Able to provide direction to others regarding conditions in accordance with the field of duty	Implement, refine, calibrate, monitor, identify and solve problems, align, forecast, modify
LEVEL 3 (ADVANCED)	**Knowledge** • Have comprehensive and complete capabilities related to their field and related to other fields • Able to carry out activities and handle and overcome complex situations critically and strategically **Experience** Have extensive experience **Application** Able to provide direction and develop related to critical strategic and ambiguous matters	Analyzing, managing, justifying strategic changes, giving and defending opinions, directing

Meanwhile, the digital competencies that form the basis or guidelines for competency development are as follows:

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Figure 7.
Digital Competency List

Source: Financial Services Authority (OJK)

Conclusion

Generic digital competencies can be used throughout the Financial Services Industry, both the Banking sector which has been significantly disrupted by the era of financial technology, where the banking sector is required to increase the development of its HR talents in utilizing technology and changing its service patterns to become customer centric. The lack of digital talent in an industry is a challenge that must be prepared by implementing a strategic plan to cover the capability gap in digital competence. OJK in this case as a regulator that plays an important role in the financial services sector has carried out the right strategy with the presence of a digital competency dictionary. Based on the competency model that has been established as a competency dictionary guide, each agency or company can identify the level of proficiency of employees or prospective employees by utilizing the competency model that is determined based on the needs of each agency or company in order to support the digitization and digitization process. In developing HR talent, OJK has implemented the SKKNI, prepared the KKNI, held webinars, seminars and also required training for the industry.

References

Armstrong, M. (2010). *Armstrong's Essential Human Resource Management Practice: A Guide to People Management*. Kogan Page Publishers.

Armstrong, M. (2020). *Strategic Human Resource Management: A Guide to Action*. Kogan-Page.

Azizatun, N, B. (2021). Indonesia's Digital Talent Policy Readiness. *Public Administration Journal of Research*, *3*(1).

Diamandis, P. F. (2008). Financial Liberalization and Changes in the Dynamic Behaviour of

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Emerging Market Volatility: Evidence from four Latin American Equity Markets. *Research in International Business and Finance*, *22*(3), 362-377.

Fairuzzabadi, Z. H. (2021). Human Resources Development Model for the Industrial Revolution 4.0 Era in Aceh, Indonesia. *Turkish Journal of Computer and Mathematics Education (TURCOMAT)*, *12*(5), 44-55.

Fu, J., & Mishra, M. (2022). Fintech in the Time of COVID− 19: Technological Adoption during Crises. *Journal of Financial Intermediation*, *50*, 100945.

Gilch, P. M., & Sieweke, J. (2021). Recruiting Digital Talent: The Strategic Role of Recruitment in Organisations' Digital Transformation. *German Journal of Human Resource Management*, *35*(1), 53-82.

Grigorescu, A., Pelinescu, E., Ion, A. E., & Dutcas, M. F. (2021). Human Capital in Digital Economy: An Empirical Analysis of Central and Eastern European Countries from the European Union. *Sustainability*, *13*(4), 2020.

Karaboga, T., Gurol, Y. D., Binici, C. M., & Pınar, S. A. R. P. (2021). Sustainable Digital Talent Ecosystem in the New Era: Impacts on Businesses, Governments and Universities. *Istanbul Business Research*, *49*(2), 360-379.

Kozlov, A., Kankovskaya, A., Teslya, A., & Zharov, V. (2019, July). Comparative Study of Socio-Economic Barriers to Development of Digital Competences during Formation of Human Capital in Russian Arctic. In *IOP Conference Series: Earth and Environmental Science* (Vol. 302, No. 1, p. 012125). IOP Publishing.

Lewis, R. E., & Heckman, R. J. (2006). Talent Management: A Critical Review. *Human Resource Management Review*, *16*(2), 139-154.

Nicoletti, B. (2021). *Banking 5.0: How Fintech Will Change Traditional Banks in the'New Normal'Post Pandemic*. Springer Nature.

Nicoletti, B., Nicoletti, W., & Weis, A. (2017). *Future of FinTech*. Basingstoke, UK: Palgrave Macmillan.

Qi, Y., Jia, F., & Li, J. (2021, May). Construction and Exploration of Digital Talent Ability Quality Model in Cold Chain. In *2021 the 6th International Conference on Distance Education and Learning* (pp. 325-330).

Ramdani, L., & Boudinar, C. (2021, May). Human Resources Management in the Era of Digital Transformation in Algeria: Challenges and Issues. In *2021 1st International Conference On Cyber Management And Engineering (CyMaEn)* (pp. 1-4). IEEE.

Sanghi, S. (2016). *The Handbook of Competency Mapping: Understanding, Designing and Implementing Competency Models in Organizations*. SAGE Publications India.

Santoso, W., Sitorus, P. M., Batunanggar, S., Krisanti, F. T., Anggadwita, G., & Alamsyah, A. (2021). Talent Mapping: A Strategic Approach toward Digitalization Initiatives in the Banking and Financial Technology (Fintech) Industry in Indonesia. *Journal of Science*

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and Technology Policy Management.

Saputra, N., Prihandoko, D., & Hidayat, B. (2020, October). Collaborative Capability: Memperkuat Ketahanan UMKM Melewati Krisis Covid-19. In *Seminar Nasional Manajemen Dan Call for Paper (SENIMA 5)* (Vol. 5, pp. 1-8).

Siagian, A. O. (2021). Sumber Daya Manusia Unggul 4.0. *SDM Unggul di Industry 4.0*, 17.

Tsindeliani, I. A., Proshunin, M. M., Sadovskaya, T. D., Popkova, Z. G., Davydova, M. A., & Babayan, O. A. (2022). Digital Transformation of the Banking System in the Context of Sustainable Development. *Journal of Money Laundering Control*, *25*(1), 165-180.

Umam, K., Fika, R., Manullang, S. O., & Fatmawati, E. (2023). Bibliometric Analysis on Policy Strategies Regarding HIV/AIDS. *HIV Nursing*, *23*(3), 376-387.

Waddill, D. D. (2018). *Digital HR: A Guide to Technology-Enabled Human Resources*. Society for Human Resource Management.

Wahyuningtyas, R., Alamsyah, A., & Diliana, N. A. (2021, October). Mapping Digital Talent Based on Competency using Social Network Analysis. In *2021 2nd International Conference on ICT for Rural Development (IC-ICTRuDev)* (pp. 1-5). IEEE.

Wicaksana, Y. S. A. S., & Perdhana, M. S. (2021). Persepsi Kepuasan Kerja terhadap Strategi Manajemen Talenta (Penelitian Fenomenologi). *Syntax Literate; Jurnal Ilmiah Indonesia*, *6*(5), 2566-2581.

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