## Digital Transformation and Strategic Analysis of Human Resource Value

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#### **Abstract**

With the development of COVID-19, the corporate value evaluation model has gradually changed from traditional concepts to the digital information. This article aims to analyse how the value chain of human resource management practice creates competitive advantages and value for enterprises, focuses on the value chain model, and explores value activities in practice. The decision-making model and research topic direction of human resource management are put forward to provide a reference for personnel management. Combining AMO (ability, motivation, and opportunity), employee competence, employee motivation, employee opportunity, and to use the following formula to maximize the organization's revenue. Digital transformation has improved the quality of human resource management. This study is based on the implementation of human resource management systems and human resources in listed companies in Taiwan. The survey results show that capital, employee engagement, organizational behaviour, and digital transformation help practitioners understanding.

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## 1. Introduction

In early 2020, the COVID-19 virus began to affect the global economy. Together with the two major economic powers of the United States, anti-globalization and low growth will become the norm for international economic development in the next few years. Most Taiwanese companies are export-oriented and are affected by the restructuring of the global supply chain. In addition, the development of emerging smart technologies has accelerated the number of companies and made smart competition among global companies more intense. Taiwanese companies are unwilling to start transformation and change, and they are very likely to be marginalized or even eliminated. With the advent of the post-epidemic era, the business operating model has undergone substantial changes, and the organization is not actively facing the problem of transformation; it may face a crisis of elimination. Affected by the epidemic, more than 40% of enterprises have accelerated their digital transformation plans. The primary purpose of human resource management is to maximize the efficiency and benefits of all organization members, realize the efficiency of all members of the organization and the benefits of all executive members, and organize the human resource management system to realize the efficiency and benefits of the organization members. All organization members. Therefore, in human resource management, understanding human resource management factors and whether these factors are for the purpose of achieving smooth operation has become the current human resource management. The rapid changes in the external competitive environment make the company more flexible, grasp the pulse of the market, and respond accordingly to changes in the natural environment. When the development of technology and equipment can no longer create irreplaceable competitive advantages for the company, the flexibility of resource acquisition is the key to the success of the organization. Increasing the flexibility of human resources is to increase the competitiveness of the organization by accumulating and developing employees (El-Dirani et al., 2019).

As early as 20 years ago, electric cars had come out. However, almost no one paid attention to this invention. Until the emergence of Tesla, with unprecedented thinking, it subverted people's impression, subverted the traditional transportation, and even the more substantial energy industry. To successfully transform and upgrade, we must break the stubborn mindset; according to the alliance, the Oxford Economic Research Institute pointed out that if companies want to stand out from the digital transformation, four mysteries are inseparable (Schick, 2020):

- 1) Cross-organization collaboration, focusing on "true" transformation.
- 2) Customer-oriented business departments are preferred.
- 3) Investment in dual-mode IT architecture, cloud, and mobile technology.
- 4) Adhere to the strategy of prioritizing talents.

The top executives of Taiwanese companies encourage bold changes. The project leader will use the transformation as an opportunity to reshape the company, invest in new technologies and talents, practice intelligent upgrades, and improve operational efficiency and core competitiveness. To ensure that the company always stays ahead; 89% of global digital transformation companies report that their revenue is lower than expected, of which 1/3 (66%) have not yet been transformed (66%). In addition, 57% of company executive's estimate that digital transformation can increase revenue by more than 5% and 53% believe that digitalization can increase profit growth by at least 5%. Many Time magazines pointed out in a survey at the end of 2018 that one of the most critical tasks in 2019 is digital transformation. Among them, 83% of Taiwanese companies believe that digital transformation is the key to success. Despite this, 96% of people still recognize that there are barriers to digital transformation (Teece, 2017). With the transformation of the organization, talents must be upgraded, especially the number of leaders of high-end managers. In addition to empowerment, what is more, important is the effective use of communication skills and the ability to cultivate a culture of innovation.

Not only do senior managers possess multiple abilities, in general, employees must also possess digital literacy. Although HR personnel can ask candidates to be recruited, relevant training is required to deal with new technologies/new systems to increase the number of employees. (Basu, 2017).

Further, synthesize the above three model perspectives, and put forward the framework and research propositions of human resource management decision-making. Provide managers with a reference frame for human resource management decision-making. The following conceptual reasoning will discuss the implications of strategic human resource management and value chain analysis of the literature. Then, using the decomposition and the establishment of human resource management value activities, a value chain model is proposed. From the perspective of human resource management, enabling companies to effectively transform and transform is an important issue that Taiwanese companies need to face (Maghsoudi et al., 2020). Through in-depth practical investigations, scholars at home and abroad can conduct theoretical research. Develop human resource management factors for specific companies or industries. However, there are few literature studies with a broad perspective. The literature discussion focuses on the impact of strategic human resource management, the relationship between human resource management and organizational performance, and a detailed description of the value chain analysis framework that affects its policy reports (Meyer et al., 2020).

## 2. Literary discussion

Through in-depth practical investigations, domestic and foreign scholars can conduct theoretical research. Develop human resource management factors for specific companies or industries. However, there are few literature studies with a broad perspective. The literature discussion focuses on the impact of strategic human resource management, the relationship between human resource management and organizational performance, and detailed descriptions (Pham et al., 2019).

## 2.1 Strategy Human Resource Management

Strategic human resource management is a new research field of human resource The predecessor of human resource management was Personnel Management/Human Management, which was originally intended to be manageable. These terms refer to all management activities related to corporate human resources or personnel. The historical evolution of human resource theory has changed the tremendous changes from traditional personnel management to today's strategic human resource management. Human resource management is an extension and expansion of traditional personnel management, making personnel functions compatible with the strategies of each individual and organization, and forming a dynamic interaction between project goals (Troger, 2021). Organizations cannot create knowledge that must start with individual learning and transform it into an organizational experience through team interaction. Knowledge creation is a new understanding of enterprise development, spreading new knowledge to the entire organization, and integrating it into the product and service integration system. Human resource management includes good talent acquisition, talent development, talent, motivation and talent maintenance (Zhao & Canales, 2021). Human resource management is the concept and technology required to manage employees or human resource departments, including five central departments: selection, appointment, training, compensation, and evaluation. Human resource management has gradually played a vital role in a company or organization (VARDARLIER, 2020). The absolute core competitiveness is not in product or technology but in the organization. The strategic view is that the company re-examines resources according to internal and external conditions and trends, makes full use of human resources, ensures the contribution of resources to the organization, transforms resources into unique assets. That are difficult to imitate, substitute, and creates a lasting competitive advantage the company's strengths (Anastasiu et al., 2020).

## 2.2 Value Chain Analysis Framework

## 2.2.1 Analysis Architecture

- 1) The value chain analysis method checks the interrelationship between all business activities and activities (Nagy et al., 2018).
- 2) A value chain is a tool for analysing the source of the company's competitive advantage. According to strategy-related activities, the value chain decomposes companies to understand their cost features, existing, and potential sources (Pangestu, & Setyorini, 2020, July). Value activities are divided into primary activities and auxiliary activities. The main activities directly help the final product portfolio, including five projects, including goods, production, transportation logistics, marketing, and services. Complementary activities help companies create value, including procurement, technology development, human resource management, and enterprise infrastructure (Sovacool et al., 2020). The corporate value chain is shown in Figure 1.

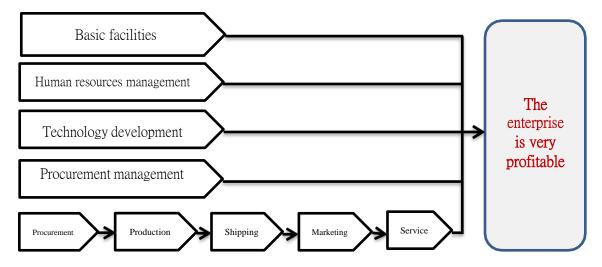


Figure 1: Enterprise value chain model

The value chain is the performance of the total value, mainly composed of value management activities and profits (Nagy et al., 2018). Each company gathers a variety of activities. Each activity can be broken down into many different activities (Ndiritu, 2020). The basic strategy for determining value activity is:

- 1) The event has different economic benefits.
- 2) The potential of the activity affects differentiation.
- 3) The activity occupies a critical cost ratio, to help companies analyse and understand existing or potential sources of cost habits or differences and use the value chain as a strategic tool for analysing relative cost conditions. Value Chain Analysis Decomposes Activities related to company strategy to understand their cost characteristics and existing and potential sources. Its cost may be lower than its price. Competitors or higher competitors effectively carry out these activities and get competitive advantages.
- 4) Value chain of human resource management practices. Understand the composition and connotation of value activities in the human resource value chain, which is necessary for decomposing and establishing human resource management activities (Chen et al., 2020).

## 2.2.2 Human Resource Value Activity Description

To analyse the human resource management activities of the value chain, we must first decompose and classify value activities. Human resource management refers to different activities such as recruitment, selection, training, development, reward, and punishment. According to the analysis, design, recruitment, training, incentive evaluation, compensation, and

punish five value activities, the human resource management value chain is constructed (Ding et al., 2021).

#### 1) Policy requirements

Strategic demand is the basis of human resource planning, which determines the human resource demand and supply pipes required to develop company strategies. Strategic requirements are derived from organizational plans, considering corporate resource allocation and different policy plans corresponding to external environments (Olson et al., 2018). The result of the strategic demand plan. The critical success factor in resource demand is the company's strategic talent demand structure. Value chains and organizational strategies for human resource management practices can be effective achieved (Karacay, 2018).

## 2) Planning and analysis

Work analysis is the most basic human resource management activity. Mainly describe and analyse the work content of the company, collect information such as work, responsibilities, knowledge, and ability to work, and determine the need to examine the employee objectives systematically. Mainly working structure and procedures to achieve enterprises' overall goals (Rigby, & Ryan, 2018).

## 3) Recruitment and selection

The primary purpose of the recruitment is to guide the most capable candidates for specific position vacancies in the organization. Evaluation and research through various tests, and choose people who meet the company's needs and are qualified to meet specific work to achieve their suitability (Roy et al., 2021).

## 4) Training and development

The training aims to improve the employee's ability through a continuous individual and evaluate and evaluate them in time to utilize human resources better. Management development focuses on enhancing knowledge and emotional ability to improve work performance. (Gilar-Corbi et al., 2019).

## 5) Motivation and Evaluation

The motivation is mainly to motivate people to take action. Its success depends on the enthusiasm of employees. Performance assessment is a process of regularly reviewing and evaluating employee performance. The assessment determines the connection between productivity and skills. Tips include salary and promotion so that personnel management can cultivate talents appropriately (Swab & Johnson, 2019).

## 6) Rewriting and punishment

The primary purpose of compensation is to attract talents, which is the most practical way to organize employees' work. The quality of compensation affects the loyalty of employees, which in turn affects the retention rate of employees. Employee resignation will affect value chain value (Vizano et al., 2020).

#### 2.3 Digital Transformation of Human Resources

## 2.3.1 Experience from human resources to employee experience

If you want to do things, you must first consider how to use the end-to-end way to build a stepwise intelligence office environment, including electronic whiteboard, community software, video conference, and self-service convenience station. The integrated design of hardware systems such as collaborative platforms allows employees to use numerous tools, from individual attention quickly and learning records to teamwork, the convenience of the team tasks, and collaboration on the far-end line, which is applying several technologies. In addition, after transition, the digital human resource management system should collect the use of footprints from employees to do extensive data analysis, not only as of the basis for managers but also to predict the future behaviour of employees. (Crawford et al., 2020). Through system equipment integration and employee use of footprints, it is a natural digital working environment through significant data predictions to optimize the system or workflow design (Brown, & Whittle, 2020).

# 2.3.2 Human Resource Management System Strengthens Design Cantered on Employee Experience

The previous ERP (Enterprise Resource Planning) is an integrated information system that integrates various departments within the enterprise, providing an integrated information system for corporate decision-making reference. To the current IoT (Internet of Things), is a computing device, mechanical, digital machine interrelated system with unique universal identification (ID or UID). The critical differences in technology applications are the transfer of core thinking. ERP management thinks focusing on "Managers," and the management of the IoT era is "useable". Most human resource management systems are still designed with the perspective of human resource managers, which also causes information asymmetries between managers and employees. Now employees have more pipelines to understand the company's information Therefore, increasing information transparency between managers and employees is critical (Chofreh et al., 2020).

Table 1: The Key factors of description and related liternature

Key factors	Description	Related literature
A1 Professionals with the potential to become "experts"	The SHAMISEN Project: challenging historical recommendations for preparedness, response and surveillance of health and wellbeing in case of nuclear accidents: lessons learnt from Chernobyl and Fukushima. Environment International.	Ohba et al., 2021
A2 People who have a big picture can always solve problems creatively	Computational literacy and "the big picture" concerning computers in mathematics education. Mathematical thinking and learning.	DiSessa, 2018
A3 People with initiative, their sense of responsibility will not be too bad	Prospect of China's energy investment in Southeast Asia under the belt and road initiative: a sense of ownership perspective. Energy Strategy Reviews.	Shi, & Yao, 2019
A4 People with learning ability have more room for improvement	Individualized fracture risk assessment: state-of-the-art and room for improvement. Osteoporosis and sarcopenia.	Nguyen, 2018
A5 People with resilience have stronger adaptability	The role of career adaptability and resilience in mental health problems in Chinese adolescents. Children and Youth Services Review.	Xu, Gong, Fu, Xu, Xu, Chen, & Li, 2020
M1 Employees, the more active they are to show innovative behaviours. M2 Intrinsic motivation, interactive justice, and domain-related skills will have a ternary interactive effect on employees' innovative behaviour.	Leadership and innovation: The moderator role of organization support for innovative behaviours. Journal of Management & Organization.  Significantly enhanced molecular stacking in ternary bulk heterojunctions enabled by an appropriate side group on donor polymer. Advanced Science.	Mokhber, Khairuzzaman, & Vakilbashi, 2018 Jiang, Li, Wang, Ren, Zheng, Wang, & Yang, 2020.
M3 Intrinsic motivation will have an intermediary effect on "the positive relationship between transformational leadership and employee innovation behaviour"	Does meaningful work explains the relationship between transformational leadership and innovative work behaviour?	Pradhan, & Jena, 2019
O1 Why invests time and money to get employees to work?	How does work motivation impact employees' investment at work and their job engagement? A moderated-moderation perspective through an international lens. Frontiers in psychology.	Shkoler, & Kimura, 2020
O2 Confirms the leadership that can inspire employees	Basic psychological need satisfaction mediates the relationship between engaging leadership and work engagement: A cross- national study. Human Resource Development Quarterly.	Rahmadani, Schaufeli, Ivanova, & Osin, 2019
O3 Provides growth opportunities	Career-related benefits and turnover intentions in accounting firms: The roles of career growth opportunities trust in superiors, and organizational commitment. In Advances in accounting behavioural research. Emerald Publishing Limited.	Kohlmeyer, Parker, & Sincich, 2017)
O4 Makes all employees feel meaningful at work	What makes work meaningful and why economists should care about it? Labour Economics.	Nikolova, & Cnossen, 2020
O5 Finds ways to praise and reward employees	Factors affecting employee engagement at not-for-profit organizations: A case in Vietnam. The Journal of Asian Finance, Economics, and Business.	NGUYEN, & PHA /M, 2020
D1 Talent and Capability	A capability approach to organizational talent management. Human Resource Development International,	Downs, & Swailes, 2013
D2 Technology and Tooling	Diamond chemical vapour deposition: emerging technology for tooling applications. Key Engineering Materials.	Trava-Airoldi, Corat, & Baranauskas, 1998

In combination, the number of enterprises must be successful, and human resources must first get rid of old thinking. They first transform into the employee experience department and master the technology trend, and use digital tools to promote transformation(Dubal, 2017). Regarding key factor analysis, please see Table 1.

## 3. Human resource value and strategic analysis research method

## 3.1 Value activities are interrelated

The relationship between value activities mainly discusses the value contribution of other valuable activities to other practical activities, and is closely related to the functional activities of human resource management. Therefore, human resource management can be regarded as a kind of mobile value chain strategic analysis, human resource management structure: Figure 2 Human resource management value chain cycle model based on hiring professionals (Wade, 2021). The evaluation of human resource sources is based on value activities, comparing various value activities, and combining the company's internal and external factors. External factors include geography and industrial structure, government laws, economics, science, etc., as well as social labour, etc., Through different value activities, trade unions, communication integration, organizational culture, politics, conflict, environment, etc., to measure their costs and benefits. Human resource management provides value for the core value activities of the enterprise. (Donner et al., 2020). From a professional point of view, according to the needs of the organization, the human resource management value chain is influenced by talent recruitment, skills, education, performance, and behaviour (Zhao & Zhou, 2021).

Figure 3 shows that by analysing the contribution of human resource management activities in the value chain to maintaining the organization's long-term strategic advantages, first understand key business processes, follow key business operating systems, and use key employees to support this work. The structure of the human resource decision-making model is divided into three stages. Human resource value activities face the cooperation and application of external competitive environment and internal strategy, the measurement of value chain activities, the evaluation of human resource sources, and the formulation of human resource management. Companies should examine the environmental factors they face, formulate a vision, value creation, and competitive processes in different environments, and cultivate core competitiveness (Stachová et al., 2019). Combining value activities with HRM value activities through human activities is the key to the survival of an enterprise. HRM value activities have different value creations. (Moustaghfir et al., 2020)

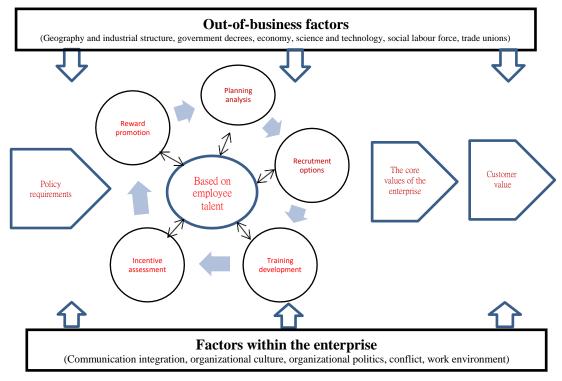


Figure 2 Professional talents of employees of Human Resource Management Value Chain Cycle

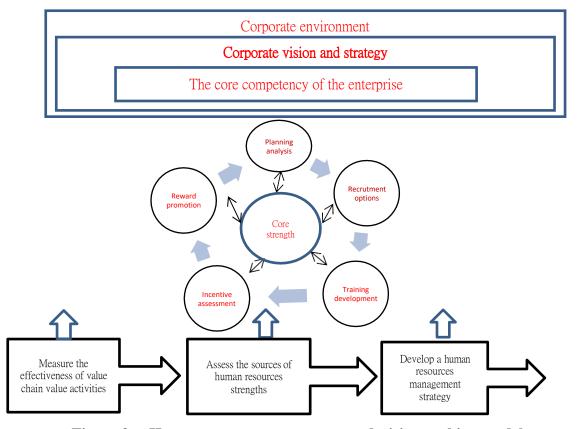


Figure 3: Human resources management decision-making model

## 3.2 Analysis of Human Resource Management Strategy

Strategic Human Resource Management; SHRM: System is a human resource allocation and activity type planning to reach an organizational goal. Emphasize the comprehensiveness and purpose, and use innovative and elasticised human resource management strategies. There are activities such as the training and development of planning and systemic organizations. It will strengthen the competitive advantage if it can be designed to cooperate with the organization's goals. In the policy analysis of human resource management (Sara et al., 2021).

## 1) Talents and Cultural Strategies

Ensuring that talents have "growth" (Growth Mindset) to create better products, services, and then add value to the core concept of the company by their mentality, and then to the core idea of the company; The discussion of the supervisor focuses on creating a cultural strategy that is most in line with enterprise development (Harsch, & Festing, 2020).

#### 2) Data orientation

Data analysis is a simple analysis of the remittance and helps the human resource personnel insight into employee recruitment, alienation and can become a complicated human resources strategy basis (Odei-Tettey, 2021).

## 3) Simplification

Many of the system services related to personnel simplify the system flow that can be viewed immediately. Significantly reduces the time consumption of communication, and when you encounter particular problems, set the system that can be online, providing human resource personnel will follow up. Problem accumulation data analysis and becomes evidence of institutional processes (Attaran et al., 2019).

#### 4) Improve skills

Strengthen training mechanisms to organize internal talent planning, manage the latest information learning in the field, and also provide cross-domain talents that can be cross-domain learning and cultivate "corporate competitiveness." (Horváth, & Szabó, 2019).

## 3.3 Steps for Digital Transformation Strategies

## 1) Population of manual operation

To integrate AI into an existing enterprise process, you must first convert the class than files and assets into digital information, then look for the optimization process. Part of this process is to ensure that your company's ERP and core systems can handle future business. The top ERP system uses AI and machine learning technology and performs fast and expandable memory databases, which will make the next step easier (Omri et al., 2020).

## 2) Combined with wisdom technology

Techniques such as AI, machine learning, and advanced analysis can strengthen precision data analysis, instant automation, and complex learning algorithms. But this is more than the technical level. To give full play to insight and intelligent functions, companies must formulate improvements and reshape skills, ensuring that teams can effectively use these smart technologies and ultimately play their roles and workflow value (Tyagi et al., 2020, December).

#### 3) Manage cultural changes

Harvard Business Comment Recent survey found that 63% of the high-end supervisors list cultural challenges as the biggest hindrance to digital transformation plans, and enterprises must understand change facts. Those who are accustomed to the past (maybe decades) operations and ideas should realize the potential benefits of these change bands.

## 3.4 Digital Transformation Benefits and Advantages

Digital transformation can integrate all levels and departments of modern enterprises, and innovative technologies provide organizations with important tools to maintain competitiveness. In-depth insight to make immediate improvement decisions, Through modern ERP and advanced analytics, companies will view instant messages and customize powerful analysis algorithms to make the best decisions immediately (Ghobakhloo & Ching, 2019).

- 1) Improve efficiency and productivity: Internet access devices and machines will continuously transmit data, machine logs, and performance reports. Advanced analysis of applications can support predictive maintenance and reduce downtime, and provide insightful analysis to improve workflow productivity and efficiency (Cinar et al., 2020).
- 2) Excellent customer experience: Your customers have many expectations: personalization, Omni-channel access, customized service plans, and instant data access help you meet these needs while increasing potential customers and increasing the remaining rate and loyalty. Improving resilience and agility are the two driving forces of digital transformation.
- 3) Improving resilience: Improving resilience and agility are the two driving forces of digital transformation. In 2020, the consultant's new crown epidemic allowed modern companies to examine the shortcomings of existing operations and how companies can use digital solutions to increase flexibility and agility (Racano, 2020).
- 4) Sustainability: Through digital transformation, companies can obtain the tools needed for sustainable operations, analyse complex data sets in various fields and fields through intelligent technology, and evaluate raw materials from these insights. Fuel efficiency, transportation, and logistics practices. With the power of artificial intelligence and modern business systems, companies can create predictive and resilient supply chains and business models, master all information, and evolve over time (Awan et al., 2021).

## 3.5 Steps to Plan Digital Transformation

In a challenging business environment, companies must grasp each competitive advantage, especially the numerical benefits. In 2018, more than 89% of the high-order executives adopted some priority business policies. By 2020, this number will not increase. But in fact, many digital transit projects are stagnant, and the obstacles are not technical but the strategy. The goal is inconsistent, and the communication is poor is the main reason for the incorrect hysteresis (Górriz et al., 2020).

## 1) Determine the starting point

Please review your existing system and assets: Which machines have been digitized? Which devices will need the Internet of Table? Does your company use, scalable, modern ERP or still run the system on a disk-type memory? To do your work, we must first consider the more priority operating processes in the enterprise and arrange the most straightforward conversion method (Gong, & Ribiere, 2021).

## 2) Define priorities

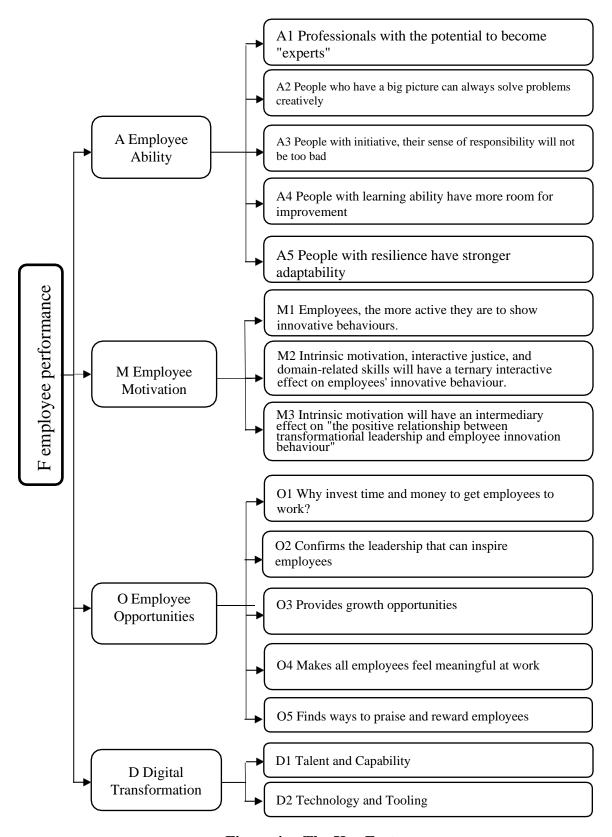
Don't complete all the plans too early before implementing the initial project. The characteristics of digital transformation are impossible to in place, just like covering the house, the expertise of intelligent technology is constantly evolving, expanding, and integrated. Please get in touch with your software supplier to enterprise transformation services to understand how they help you start up (Denning, 2018).

## 3) Planning blueprint

The decisive advantage of intelligent technology is excellent scalability and capacity and can be quickly adjusted and reconfigured. Perfect transformation blueprints should consider flexibility and growth but start from several essential and achievable goals. Enterprises should also include stable change management and transfer strategies in planning: Digital transformation is a journey of staff and technology; there are several critical early steps; please find professional support, and let them assist in your unique needs. Plan the best solution for your company (Dileep, 2020).

## 4) Let the team be ready

There has been said: "Everything is constant, but people will change." Although intelligent technology can help reduce cumbersome duplicate work, enhance employee participation, and support collaboration, only when all personnel are coincident can fully play these advantages. Don't just release news to the team, but accept their opinions and ideas, frankly respond to everyone's doubts, and plan to change the adaptation time to help your team ready, smooth adopt new technologies (Bozkurt et al., 2020).



**Figure 4: The Key Factors** 

## 4. Policy Analysis of Digital Transformation and Research Discussion

## 4.1 Relationship between policy analysis and value activities

Enterprise Strategy Analysis First, what is the core value of the company? Human resource value activities are the essential value activity, examine the most critical talent needs, and then analyse whether strategy analysis is related to value activities and how to deal with this related Sexual correcting human resource strategy (Sparrow, 2019).

## 4.2 Interrelation and impact of value activities

When an enterprise evaluates value activities, you must first understand the loop concept of the human resource value chain and then develop a set of human resources value calculation methods, systematically integrate other functional systems of enterprises, enabling companies to present and show value activities effectively. Correctly use the value of human resources. Management activities, and then study whether there is a relationship between weights, how to interact with each other is the basis of enterprise strategy analysis (Chen et al., 2020).

## 4.3 Advantages of human resources information system

The so-called Human Resources Information System (HRIS) refers to a corporate information management system that collects, stores, operations, analyses, retrieves, and distributes organizational human resources, information or using information—promoting the technical information processing and virtualized digital human resources system of human resource resources, 24 hours a day. In addition to playing the role of traditional administrative experts, the Human Resources Department also hopes to contribute to the accumulation and utilization of human capital: In these three situations, he will deeply intervene in the endless personnel, resigning administrative affairs, and essential personnel information. Management, holiday processing, overtime processing. Wheel arrangement, medical insurance and retirement processing, salary adjustment operation, bonus calculation operation, salary calculation operation. Given the amount of work that is already saturated, it is almost a fish and wood to manage human capital. The introduction of the electronic system is critical, and only the opening of the human resource system. Release administrative business human resources; increase the human resources activities of other high added value activities (Valcik et al., 2021).

## 4.4 Human resource information system function strengthen

Human resource information systems organize information collected, preserved, analyzed, and reporting information about people and people. HRIS (Human Resource Information System) is a Human Resource Decision Support System that allows all the analysis and statistics required to provide human resource decision-making. The Human Resource Information System is a computer's personnel management product built by a computer, records the functional simulation information database for each employee's skill and performance (Hosain et al., 2020). The information system can be manual or computerized. In addition to traditional personnel management operations (personnel, pay, attendance, insurance), a complete enterprise management platform architecture must also cooperate with relevant value-added modules (performance appraisal, education, training). Finally, the Human Resource Portal (or Human Resource Services System) is an information exchange platform that can help companies accumulate and stimulate human capital and improve management levels. According to this framework, the purpose of the personnel compensation management module is to ensure the administrative operation of the personnel, including organizational architecture management, employee essential data management, employee promotion and change management, public service calendar settings, employee attendance management, employee salary structure management, labour insurance management. Medical insurance management, labour pension management, wage accounting management, income tax management, etc., through these, can smoothly carry out the necessary personnel management and wage accounting operations (Zani et al., 2021), In the performance and training management sector, through training needs analysis, annual training programs, training courses management, employee learning plan, etc., through target management and operation evaluation functions, help employees have made clear, evaluated, challenging objectives, and provide employees with real-time feedback through

systematic evaluation functions, excite their enthusiasm. Finally, in the human resource system and assisting employees, such as meeting room booking, online vacation, optional application benefits, etc., he is also essential information between the company and employees, the company's employees, through the bulletin board. If you need it, you can conduct a questionnaire investigation to collect employee comments. Colleagues can also express their opinions through suggestions and public functions and share them with its management. Collective harmony is achieved in the field of discussion (Bird, 2017).

## 4.5 Big data analysis business strategy

Business strategies for extensive data analysis are not to have a lot of data and information, but to focus on these meaningful data and provide insight into business operations. Corporate Human Resource Management Activities will also produce many talent data and business wisdom tools to help human resource management dependent on management. In addition, talent assessment can establish mathematical models through subjective experts and reluctantly assess the high data processing technology. Enterprise Talent Recruitment Process also relies on social networks and extensive data analysis. This shift enables the company's human resource management team to use data collection and analysis with broader business needs, provide more accurate insights, and help organize human resources policies and directions in talent investment and development (Hamilton, & Sodeman, 2020).

## 4.6 Digitalization of human resources system

Several technologies, including mobile Internet, cloud operations, vast amounts of information, artificial wisdom, the Internet of Things, obstruction chains, etc., are quietly subverting the process of corporate organization and human resources management. Companies redesign the future-oriented organization, such as the high-level authorization of traditional scientific organizational architecture and agile-based network organizational architecture. The rise of social enterprises, the height of the zero-industrial economy, and the angle of freelancers also broke through the organization boundaries. The digital transformation of internal human resource management has become an essential topic of corporate organization management, briefly explaining three human resources, digital transformation strategies, including digitized work fields, digital human resource operation management, and several human resource decisions (Salmon, & Thompson, 2021)..

## 4.7 Establish the most vital talent database

In this process, the human resources department must develop a blueprint for the company's future organization of talents. We have found that an excellent human resources department can become the right and left hand of the CEO and better catalyse the transformation (Singh et al., 2020).

First of all, according to my observation, the number of company partners is afraid that it lags behind other departments. In addition to resumes and performance management data, information about people and talent is sufficient. When many departments of the company are undergoing a digital transformation, the human resources department should also transform as soon as possible, establish the ability to collect and use data, and a data-oriented decision-making process. We look at the "cultivation" of the four major cycles of human resource management, the most closed talent recruitment, and now there are many tools and services that can help companies quickly and efficiently. For example, the professional community LinkedIn. On this platform, the professional resume information of all talents is public. Real-time updates, contact details, and assessments are also helpful. Coupled with the innovative media or recommendations provided by the platform. More and more excellent media services can meet short-term and longterm human resource needs. It's better to have full-time personnel in the personnel department to conscientiously operate such an external platform, which can effectively introduce talents and In addition, the use of digital tools will also become a challenge for internal talent training and management. Enterprises should strengthen the configuration of analytical human resources and skill development models, link them with the company's strategic goals, and coordinate with the setting of performance goals. Let people become an indispensable driving force for enterprises.

Second, if you are a person or a relief, please think about yourself "Have you mastered the

trend of digital technology?" In the face of digital transformation, the most important thing is to systematically cultivate future talents and numbers. Skills: Start from two levels: one is to increase the number of individuals and human resources departments, and the other is to strengthen the delivery and sharing of digital capabilities within the organization. In addition, the personnel department cannot just passively wait for the needs of various departments. The personnel department should work closely with the IT and R&D departments to regularly learn and exchange a large amount of knowledge and train the left and right brains. Through more communication and cooperation, help people understand which digital skills, the company's most critical development, and human resources will be combined with transformation (van Hoek et al., 2020).

Third, the people's share and people's remuneration must improve strategic thinking and become the necessary assistant to the minister of administration and its development. In particular, we must focus on planning and designing a "future organizational structure" in line with its innovative business model, and cultivating leaders that will be needed in the future. Human compensation must participate in the early stages of the strategy, with the CEO's strategic thinking, design a human resource plan that is in line with the long-term development of the organization, and continuously meet the company's business development goals, verify and adjust each other (MacKeigan et al., 2017).

Finally, the fourth point, as we mentioned before, the main purpose of digital transformation is to build a more agile, independent, and efficient organization, innovation culture, and entrepreneurial spirit; this time, the human resources department can best play a new catalyst and lubricate The effect of agents on culture. In terms of catalysis, the first part of the human resources department must cooperate with the transformation strategy formulated by the CEO. The importance and goals of the change will convey and push everyone to reach a consensus on the direction of the change. Secondly, the personnel department should encourage and cultivate their growth mentality and cultivate their growth mentality (Pi et al., 2016). This wave of digital transformation will bring you tremendous pressure, more because of the streamlining of human nature and organizational changes; many people will have a lot of anxiety. At this time, human capital must be able to act as a buffer and lubrication, assisting supervisors at all levels and adapting to employees, mainly in the case of layoffs, in order to more effectively appease returning employees and help everyone through the cruel transition process.

## 4.8 Empirical Analysis

This paper adopts the DANP operation architecture and uses the total influence relationship matrix of DEMATEL as the unweight super-matrix in the ANP operation. The matrix is normalized, and the normal. The transformed results are multiplied by themselves until convergence, and the super limit matrix shown in Table 2 is obtained. The super limit matrix can determine the relative weight of each criterion). For example, the consequences of M1 and O3 are 0.230 and 0.243, respectively. Since DEMATEL and ANP generate information on the importance of standards, when determining key factors, the volume of DEMATEL or the weight of DANP should not be the only consideration. Therefore, this research adopts combining the two information pieces to determine the criterion weight ranking. The importance and chosen reason of criteria are added to the order of the measure weights generated by DANP. Matrix algorithm by weight scoring method, eliminating the key factors behind the ranking, and getting the lower score respectively, can provide space and suggestions for further improvement, shown in Table 3 (Mubarik et al., 2021).

**Table 2: The total influence matrix** 

T	A1	A2	A3	A4	A5	M1	M2	M3	O1	O2	O3	O4	O5	D1	D2	D(effect)
A1	0.276	0.289	0.346	0.328	0.271	0.230	0.286	0.303	0.272	0.322	0.243	0.250	0.266	0.285	0.360	4.326
A2	0.343	0.281	0.373	0.351	0.297	0.292	0.350	0.294	0.297	0.313	0.340	0.273	0.289	0.312	0.391	4.795
A3	0.401	0.337	0.324	0.343	0.350	0.342	0.332	0.314	0.351	0.370	0.359	0.290	0.306	0.330	0.380	5.130
A4	0.379	0.385	0.411	0.311	0.328	0.355	0.380	0.325	0.326	0.344	0.336	0.299	0.351	0.378	0.426	5.334
A5	0.416	0.353	0.378	0.359	0.291	0.321	0.384	0.328	0.363	0.384	0.372	0.339	0.321	0.346	0.431	5.386
M1	0.392	0.364	0.390	0.335	0.311	0.262	0.332	0.307	0.314	0.326	0.319	0.286	0.301	0.357	0.405	5.002
M2	0.374	0.349	0.337	0.328	0.295	0.294	0.272	0.326	0.293	0.312	0.303	0.272	0.284	0.339	0.353	4.731
M3	0.386	0.326	0.354	0.341	0.314	0.297	0.326	0.261	0.338	0.321	0.315	0.292	0.304	0.327	0.399	4.901
O1	0.466	0.430	0.458	0.434	0.407	0.367	0.404	0.370	0.334	0.430	0.416	0.371	0.391	0.422	0.481	6.182
O2	0.440	0.406	0.439	0.412	0.354	0.359	0.378	0.358	0.353	0.332	0.391	0.323	0.374	0.392	0.453	5.763
O3	0.430	0.429	0.461	0.427	0.404	0.397	0.427	0.399	0.405	0.425	0.343	0.352	0.371	0.392	0.481	6.145
O4	0.400	0.379	0.399	0.397	0.371	0.368	0.398	0.339	0.348	0.367	0.384	0.276	0.367	0.389	0.444	5.627
O5	0.437	0.373	0.434	0.385	0.358	0.350	0.365	0.377	0.374	0.403	0.388	0.327	0.298	0.386	0.446	5.699
D1	0.460	0.416	0.448	0.418	0.391	0.386	0.419	0.394	0.392	0.422	0.410	0.345	0.358	0.345	0.465	6.069
D2	0.436	0.404	0.430	0.393	0.365	0.363	0.398	0.350	0.360	0.377	0.361	0.355	0.370	0.401	0.381	5.744
R(affected)	6.037	5.522	5.981	5.562	5.106	4.984	5.450	5.045	5.121	5.448	5.281	4.652	4.949	5.400	6.297	80.834

Table 3: Analysis of prominence and the relation of criteria

Guidelines	D(effect)	R(affected)	D+R(Importance)	D-R(Cause degree)	Ranking
A1	4.326	6.037	10.363	-1.711	10
A2	4.795	5.522	10.317	-0.726	11
A3	5.130	5.981	11.111	-0.851	6
A4	5.334	5.562	10.897	-0.228	7
A5	5.386	5.106	10.492	0.280	9
M1	5.002	4.984	9.986	0.018	14
M2	4.731	5.450	10.181	-0.718	13
M3	4.901	5.045	9.946	-0.144	15
01	6.182	5.121	11.303	1.061	4
O2	5.763	5.448	11.211	0.315	5
O3	6.145	5.281	11.425	0.864	3
O4	5.627	4.652	10.279	0.975	12
O5	5.699	4.949	10.649	0.750	8
D1	6.069	5.400	11.469	0.669	2
D2	5.744	6.297	12.041	-0.553	1

**Table 4**: The overall ranking for criteria

Attributes	DEMATEL	D-ANP		
A1	10	15		
A2	11	13		
A3	6	14		
A4	7	10		
A5	9	7		
M1	14	8		
M2	13	12		
M3	15	9		
O1	4	1		
O2	5	6		
O3	3	3		
O4	12	2		
O5	8	4		
D1	2	5		
D2	1	11		

According to the research results in Table 4, we have obtained eight critical factors for the accountant industry in computer auditing. The analysis of the importance of these factors to the accountant industry in computer auditing is as follows (Daoud et al., 2021).

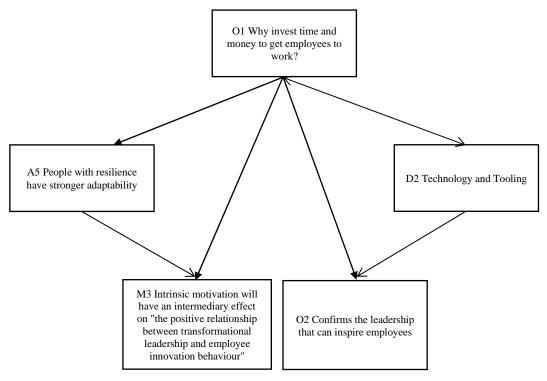


Figure 5: Key factors

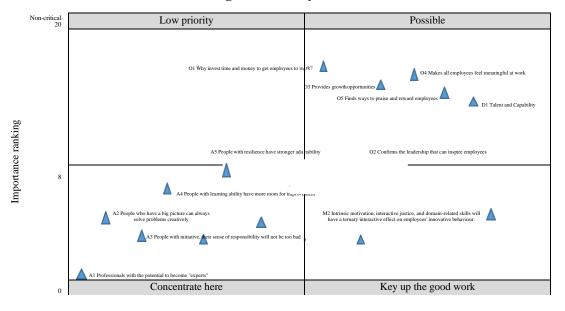


Figure 6: IPA for evaluation criteria

Although there are many other methods using expert interviews and DANP methods to solve multi-criteria decision-making problems, this study still has some shortcomings and limitations. First of all, because the DANP method requires experts to fill out a lot of tedious questionnaires, it takes up a lot of expert experience and time, and requires the cooperation of an expert team (Lee, & Hu, 2021). It is about whether other simplified multi-criteria decision-making methods can be adopted, such as the Delphi method, and the combination of gravy relational analysis (GRA) is worth thinking about. In addition, the interviewed expert teams are all from Taiwan, so the management impact of this article may be limited to providing reference

for the Taiwanese accountant industry. Therefore, in the follow-up research, we can strive for more empirical data from domestic and foreign accountants and auditors to improve the international applicability of the research. Today, short journal articles can still mention this issue. Therefore, we will continue to pay attention to the latest research on this topic to improve the educational value of this article (Lee, & Hu 2021).

#### 5. Conclusions and Recommendations

This article starts with the corporate assets in the era of the knowledge economy and proposes a practical human resource management value chain model. It discusses all the strategic values of business management and discusses the impact of digital transformation of business management. Human resource strategic decisions affect the application of value chain application models and the impact of research proposals (Bekrar et al., 2021). The key to the competition: The concept of the human resource value chain and human resource system allows managers to understand the distribution of human resource value and the application of internal and external factors in human resource decision-making models, so that managers can use human resource value and follow organizational goals and Create Competitive Advantage. Employees are regarded as value-added assets and are trained to realize their full potential. The Human Resources Department improves employee work efficiency and corporate management efficiency through job analysis, job profile, talent selection and recruitment, and employee training. When implementing human resource management strategies, human resources are part of its strategic plan (Macke & Genari, 2019). The company's future development, market development, and new product development all require the support, coordination, and cooperation of the human resources department. Human resources are a strategy to improve the competitiveness of enterprises. At the same time, human resource management helps companies motivate employees through the material, encourage employees, enhance employees' sense of belonging to the company, improve employee morale, and reduce dissatisfaction with work. For example, a high degree of self-confidence can make work more efficient and smoother, and ultimately benefit employees (Karrieva et al., 2021).

Under the wave of diversification, if a company is expected to be eliminated, it will definitely transform. However, it is assumed that there is no professional key talent. In this case, the organization has not changed in terms of integration trends. Operators or supervisors do not have several ways of thinking in operation. The road to digital transformation is destined to be difficult. What HR has to face is the use of AI (Artificial Intelligence, AI for short). More precise technology will further facilitate cross-border communication, help newcomers survive in the old culture and create a harmonious communication willingness organization. Human resources must play an enterprise role. Whether the key role of successful digital transformation. If you expect not to be eliminated, the company will inevitably transform. However, it is assumed that there is no professional key talent. In this case, the organization has not changed in terms of integration trends. Operators or supervisors do not have several ways of thinking in operation. The road to digital transformation is destined to be difficult. HR must face the application of artificial intelligence technology to make the "selection, use, education, and retention" of talents more precise, further assist and assist inter-departmental communication, assist newcomers to survive in the old culture, and create a harmonious "willing to communicate" organizational culture. Human resources must play a vital role in the successful transformation of enterprises. The focus of digital transformation should not be that technology is more in the company's organizational and cultural changes. How can enterprise organizations adapt to the wave of digital transformation?

In the future, how to evaluate the chains and sheds of the human resource value chain, reconstructs the human resource value chain under different organizational models, and build an electronic enterprise human resource asset evaluation system based on the concept of human

capital stock and value chain. The focus is on organizational knowledge and Based on professional talents, integrate the electronic enterprise human resource management system (Davis, 2020). In addition to management training and development, more management development and renewal plans can be made in the future. Communicate with professionals on performance management, career planning, salary and welfare, team building, etc., and conduct more in-depth exploration. This research proposes a human resource management practice value chain cycle model from the era of the knowledge economy, explores the strategic value of enterprise human resource management, integrates the application of human resource management practice value chain and research proposition direction-explore the impact of enterprise human resource management on human resource strategic decision-making (Gunduz, & Elsherbeny, 2020). In different market segments, companies adopting different human resource strategies are the key to competition. Through the concept of the human resource value chain, managers know that the company has human resource value distribution and human resource response to the organization and external factors. Decision model applications allow managers to create a competitive advantage through collaboration between human asset value and organizational goals (Belias et al., 2017).

#### References

- [1] Anastasiu, L., Gavriş, O., & Maier, D. (2020). Is human capital ready for change? A strategic approach adapting Porter's five forces to human resources. *Sustainability*, 12(6), 2300.
- [2] Anderson, T., & Dron, J. (2017). Integrating learning management and social networking systems. *Italian Journal of Educational Technology*, 25(3), 5-19.
- [3] Awan, U., Sroufe, R., & Shahbaz, M. (2021). Industry 4.0 and the circular economy: A literature review and recommendations for future research. *Business Strategy and the Environment*, 30(4), 2038-2060.
- [4] Basu, K. (2017). Change Management and Leadership. *Health Care Delivery and Clinical Science: Concepts, Methodologies, Tools, and Applications: Concepts, Methodologies, Tools, and Applications*, 85.
- [5] Bekrar, A., El Cadi, A. A., Todosijevic, R., & Sarkis, J. (2021). Digitalizing the Closing-of-the-Loop for Supply Chains: A Transportation and Blockchain Perspective. *Sustainability*, *13*(5), 2895.
- [6] Belias, D., Trivellas, P., Koustelios, A., Serdaris, P., Varsanis, K., & Grigoriou, I. (2017). Human resource management, strategic leadership development and the Greek tourism sector. In *Tourism, culture and heritage in a smart economy* (pp. 189-205). Springer, Cham.
- [7] Bird, A. (2017). Training for environmental improvement. In *Greening People* (pp. 227-246). Routledge.
- [8] Bozkurt, A., Jung, I., Xiao, J., Vladimirschi, V., Schuwer, R., Egorov, G., ... & Paskevicius, M. (2020). A global outlook to the interruption of education due to COVID-19 pandemic: Navigating in a time of uncertainty and crisis. *Asian Journal of Distance Education*, 15(1), 1-126.
- [9] Brown, G., & Whittle, R. (2020). *Algorithms, blockchain & cryptocurrency: Implications for the future of the workplace*. Emerald Group Publishing.
- [10] Career-related benefits and turnover intentions in accounting firms: The roles of career growth opportunities trust in superiors, and organizational commitment. In Advances in accounting behavioural research. Emerald Publishing Limited.
- [11] Chen, M., Liu, Q., Huang, S., & Dang, C. (2020). Environmental cost control system of manufacturing enterprises using artificial intelligence based on value chain of circular economy. *Enterprise Information Systems*, 1-20.
- [12] Chofreh, A. G., Goni, F. A., Klemeš, J. J., Malik, M. N., & Khan, H. H. (2020).

- Development of guidelines for the implementation of sustainable enterprise resource planning systems. *Journal of Cleaner Production*, 244, 118655.
- [13] Çınar, Z. M., Abdussalam Nuhu, A., Zeeshan, Q., Korhan, O., Asmael, M., & Safaei, B. (2020). Machine learning in predictive maintenance towards sustainable smart manufacturing in industry 4.0. *Sustainability*, 12(19), 8211.
- [14] Crawford, J., Butler-Henderson, K., Rudolph, J., Malkawi, B., Glowatz, M., Burton, R., ... & Lam, S. (2020). COVID-19: 20 countries' higher education intra-period digital pedagogy responses. *Journal of Applied Learning & Teaching*, 3(1), 1-20.
- [15] Daoud, L., Marei, A., Al-Jabaly, S., & Aldaas, A. (2021). Moderating the role of top management commitment in usage of computer-assisted auditing techniques. *Accounting*, 7(2), 457-468.
- [16] Davis, D. R., & Dingel, J. I. (2020). The comparative advantage of cities. *Journal of International Economics*, 123, 103291.
- [17] Denning, S. (2018). The age of agile: How smart companies are transforming the way work gets done. Amacom.
- [18] Dileep, G. (2020). A survey on smart grid technologies and applications. *Renewable Energy*, 146, 2589-2625.
- [19] Ding, J., Tang, T., Zhang, Y., & Chi, W. (2021). Using intelligent ontology technology to extract knowledge from successful project in IoT enterprise systems. *Enterprise Information Systems*, 1-27.
- [20] DiSessa, A. A. (2018). Computational literacy and "the big picture" concerning computers in mathematics education. *Mathematical thinking and learning*, 20(1), 3-31.
- [21] Donner, M., Gohier, R., & de Vries, H. (2020). A new circular business model typology for creating value from agro-waste. *Science of the Total Environment*, 716, 137065.
- [22] Downs, Y., & Swailes, S. (2013). A capability approach to organizational talent management. *Human Resource Development International*, 16(3), 267-281.
- [23] Dubal, V. B. (2017). Winning the battle, losing the war: assessing the impact of misclassification litigation on workers in the gig economy. *Wis. L. Rev.*, 739.
- [24] El-Dirani, A., Hussein, M. M., & Hejase, H. J. (2019). The Role of Human Resources in Change Management: An Exploratory Study in Lebanon. *The Journal of Middle East and North Africa Sciences*, 2.
- [25] F. A. (2021). 15 Strategy for the Functioning of Logistics Companies in Uzbekistan. In *New Institutions for Socio-Economic Development* (pp. 147-156). De Gruyter.
- [26] Ghobakhloo, M., & Ching, N. T. (2019). Adoption of digital technologies of smart manufacturing in SMEs. *Journal of Industrial Information Integration*, *16*, 100107.
- [27] Gilar-Corbi, R., Pozo-Rico, T., Sánchez, B., & Castejón, J. L. (2019). Can emotional intelligence be improved? A randomized experimental study of a business-oriented EI training program for senior managers. *PloS one*, *14*(10), e0224254.
- [28] Gong, C., & Ribiere, V. (2021). Developing a unified definition of digital transformation. *Technovation*, *102*, 102217.
- [29] Górriz, J. M., Ramírez, J., Ortíz, A., Martinez -Murcia, F. J., Segovia, F., Suckling, J., ... & Ferrández, J. M. (2020). Artificial intelligence within the interplay between natural and artificial computation: Advances in data science, trends and applications. *Neurocomputing*, 410, 237-270.
- [30] Gunduz, M., & Elsherbeny, H. A. (2020). Operational framework for managing construction-contract administration practitioners' perspective through modified Delphi method. *Journal of Construction Engineering and Management*, 146(3), 04019110.
- [31] Hamilton, R. H., & Sodeman, W. A. (2020). The questions we ask: Opportunities and challenges for using big data analytics to strategically manage human capital resources. *Business Horizons*, 63(1), 85-95.
- [32] Harsch, K., & Festing, M. (2020). Dynamic talent management capabilities and organizational agility—A qualitative exploration. *Human Resource Management*, 59(1),

- 43-61.
- [33] Horváth, D., & Szabó, R. Z. (2019). Driving forces and barriers of Industry 4.0: Do multinational and small and medium-sized companies have equal opportunities?. *Technological forecasting and social change*, 146, 119-132.
- [34] Hosain, S., Manzurul Arefin, A. H. M., & Hossin, M. (2020). The role of human resource information system on operational efficiency: evidence from MNCs operating in Bangladesh. *Asian Journal of Economics, Business and Accounting*, 18(2), 29-47.
- [35] Jiang, H., Li, X., Wang, H., Ren, Z., Zheng, N., Wang, X., ... & Yang, R. (2020). Significantly enhanced molecular stacking in ternary bulk heterojunctions enabled by an appropriate side group on donor polymer. *Advanced Science*, 7(7), 1903455.
- [36] Karacay, G. (2018). Talent development for Industry 4.0. In *Industry 4.0: Managing the digital transformation* (pp. 123-136). Springer, Cham.
- [37] Lee, C. W., & Hu, Y. T. (2021). Examining Factors Influencing Audit Risk for Professional Accountant in Business. *Advances in Management and Applied Economics*, 11(1), 25-45.
- [38] Macke, J., & Genari, D. (2019). Systematic literature review on sustainable human resource management. *Journal of cleaner production*, 208, 806-815.
- [39] MacKeigan, L. D., Ijaz, N., Bojarski, E. A., & Dolovich, L. (2017). Implementation of a reimbursed medication review program: corporate and pharmacy level strategies. *Research in Social and Administrative Pharmacy*, *13*(5), 947-958.
- [40] Maghsoudi, T., Cascon-Pereira, R., & Beatriz Hernández Lara, A. (2020). The Role of Collaborative Healthcare in Improving Social Sustainability: A Conceptual Framework. *Sustainability*, 12(8), 3195.
- [41] Mokhber, M., Khairuzzaman, W., & Vakilbashi, A. (2018). Leadership and innovation: The moderator role of organization support for innovative behaviors. *Journal of Management & Organization*, 24(1), 108-128.
- [42] Moustaghfir, K., El Fatihi, S., & Benouarrek, M. (2020). Human resource management practices, entrepreneurial orientation and firm performance: what is the link?. *Measuring Business Excellence*.
- [43] Mubarik, M. S., Kazmi, S. H. A., & Zaman, S. I. (2021). Application of gray DEMATEL-ANP in green-strategic sourcing. *Technology in Society*, 64, 101524.
- [44] Nagy, J., Oláh, J., Erdei, E., Máté, D., & Popp, J. (2018). The role and impact of Industry 4.0 and the Internet of things on the business strategy of the value chain—the case of Hungary. *Sustainability*, 10(10), 3491.
- [45] Ndiritu, S. W. (2020). Beef value chain analysis and climate change adaptation and investment options in the semi-arid lands of northern Kenya. *Journal of Arid Environments*, 181, 104216.
- [46] NGUYEN, L. G. T., & PHAM, H. T. (2020). Factors affecting employee engagement at not-for-profit organizations: A case in Vietnam. *The Journal of Asian Finance, Economics, and Business*, 7(8), 495-507.
- [47] Nguyen, T. V. (2018). Individualized fracture risk assessment: state-of-the-art and room for improvement. *Osteoporosis and sarcopenia*, 4(1), 2-10.
- [48] Nikolova, M., & Cnossen, F. (2020). What makes work meaningful and why economists should care about it. *Labour Economics*, 65, 101847.
- [49] Nisar, T. M. (2019). Technology and a Firm's Capabilities. In *Smartphone App Implementations that Improve productivity* (pp. 39-68). De Gruyter.
- [50] Odei-Tettey, K. (2021). Biting The Bullet or Steering Clear off Organisational Growth: The Essential Tensions in Knowledge Creation for Academic Staff Retention Policies in Two Private Universities in Ghana. *International Journal of Education, Learning and Development*, 9(3), 47-72.
- [51] Ohba, T., Liutsko, L., Schneider, T., Barquinero, J. F., Crouaïl, P., Fattibene, P., ... & Cardis, E. (2021). The SHAMISEN Project: challenging historical recommendations for

- preparedness, response and surveillance of health and well- being in case of nuclear accidents: lessons learnt from Chernobyl and Fukushima. *Environment International*, 146, 106200.
- [52] Olson, E. M., Slater, S. F., Hult, G. T. M., & Olson, K. M. (2018). The application of human resource management policies within the marketing organization: The impact on business and marketing strategy implementation. *Industrial Marketing Management*, 69, 62-73.
- [53] Omri, N., Al Masry, Z., Mairot, N., Giampiccolo, S., & Zerhouni, N. (2020). Industrial data management strategy towards an SME-oriented PHM. *Journal of Manufacturing Systems*, *56*, 23-36.
- [54] Pangestu, G. A., & Setyorini, R. (2020, July). Value Chain Analysis At Bank Sampah Bersinar In Bandung Regency As A Competitive Advantage Strategy. In *Proceeding of International Conference on Management, Education and Social Science* (Vol. 1, No. 1, pp. 8-21).
- [55] Perez, O., Sauceda, S., & Cruz, J. (2018). Manufacturing 4.0: The Use of Emergent Technologies in Manufacturing. Palibrio.
- [56] Pham, N. T., Tučková, Z., & Jabbour, C. J. C. (2019). Greening the hospitality industry: How do green human resource management practices influence organizational citizenship behavior in hotels? A mixed-methods study. *Tourism Management*, 72, 386-399.
- [57] Pi, C. T., Chiu, S. K., & Lin, J. Y. (2016). Effect of Employee Work Stress, Work Satisfaction and Work Values on Organizational Commitment. *Business & Entrepreneurship Journal*, 5(1), 1-3.
- [58] Pradhan, S., & Jena, L. K. (2019). Does meaningful work explains the relationship between transformational leadership and innovative work behaviour?. *Vikalpa*, 44(1), 30-40.
- [59] Racano, R. (2020). Companies' Approach to Digitalization in the Recruitment Process-A multiple case study on Swedish firms.
- [60] Rahmadani, V. G., Schaufeli, W. B., Ivanova, T. Y., & Osin, E. N. (2019). Basic psychological need satisfaction mediates the relationship between engaging leadership and work engagement: A cross-national study. *Human Resource Development Quarterly*, 30(4), 453-471.
- [61] Rigby, C. S., & Ryan, R. M. (2018). Self-determination theory in human resource development: New directions and practical considerations. *Advances in Developing Human Resources*, 20(2), 133-147.
- [62] Roy, A., Sural, S., Majumdar, A. K., Vaidya, J., & Atluri, V. (2021). Optimal Employee Recruitment in Organizations under Attribute-Based Access Control. *ACM Transactions on Management Information Systems (TMIS)*, 12(1), 1-24.
- [63] Saha, N., Gregar, A., & Sáha, P. (2017). Organizational agility and HRM strategy: Do they really enhance firms' competitiveness?. *International Journal of Organizational Leadership*, 6, 323-334.
- [64] Salmon, J. W., & Thompson, S. L. (2021). Big Data: Information Technology as Control over the Profession of Medicine. In *The Corporatization of American Health Care* (pp. 181-254). Springer, Cham.
- [65] Sara, I., SAPUTRA, K. A. K., & Utama, I. W. K. J. (2021). The Effects of Strategic Planning, Human Resource and Asset Management on Economic Productivity: A Case Study in Indonesia. *The Journal of Asian Finance, Economics and Business*, 8(4), 381-389.
- [66] Schick, N. (2020). Deepfakes: The Coming Infocalypse. Hachette UK.
- [67] Shi, X., & Yao, L. (2019). Prospect of China's energy investment in Southeast Asia under the belt and road initiative: a sense of ownership perspective. *Energy Strategy Reviews*, 25, 56-64

- [68] Shkoler, O., & Kimura, T. (2020). How does work motivation impact employees' investment at work and their job engagement? A moderated-moderation perspective through an international lens. *Frontiers in psychology*, 11, 38.
- [69] Singh, A., Klarner, P., & Hess, T. (2020). How do chief digital officers pursue digital transformation activities? The role of organization design parameters. *Long Range Planning*, *53*(3), 101890.
- [70] Sovacool, B. K., Kester, J., Noel, L., & de Rubens, G. Z. (2020). Actors, business models, and innovation activity systems for vehicle-to-grid (V2G) technology: A comprehensive review. *Renewable and Sustainable Energy Reviews*, 131,109963.
- [71] Sparrow, P. (2019). A historical analysis of critiques in the talent management debate. *BRQ Business Research Quarterly*, 22(3), 160-170.
- [72] Stachová, K., Papula, J., Stacho, Z., & Kohnová, L. (2019). External partnerships in employee education and development as the key to facing industry 4.0 challenges. *Sustainability*, 11(2), 345.
- [73] Swab, R. G., & Johnson, P. D. (2019). Steel sharpens steel: A review of multilevel competition and competitiveness in organizations. *Journal of Organizational Behavior*, 40(2), 147-165.
- [74] Teece, D. J. (2017). Towards a capability theory of (innovating) firms: implications for management and policy. *Cambridge Journal of Economics*, 41(3), 693-720..
- [75] Trava-Airoldi, V. J., Corat, E. J., & Baranauskas, V. (1998). Diamond chemical vapor deposition: emerging technology for tooling applications. *Key Engineering Materials*, 138, 195-244.
- [76] Traxler, J. (2018). Distance learning—Predictions and possibilities. *Education Sciences*, 8(1), 35.
- [77] Troger, H. (2021). Human Resource Management in a Post COVID-19 World: New Distribution of Power, Individualization, Digitalization and Demographic Developments. Springer Nature.
- [78] Tumbas, S., Berente, N., & Brocke, J. V. (2018). Digital innovation and institutional entrepreneurship: Chief Digital Officer perspectives of their emerging role. *Journal of Information Technology*, 33(3), 188-202.
- [79] Tyagi, A. K., Fernandez, T. F., Mishra, S., & Kumari, S. (2020, December). Intelligent Automation Systems at the Core of Industry 4.0. In *International Conference on Intelligent Systems Design and Applications* (pp. 1-18). Springer, Cham.
- [80] Valcik, N. A., Sabharwal, M., & Benavides, T. J. (2021). Human Resources Information Systems. *Management for Professionals*.
- [81] van Hoek, R., Sankararaman, V., Udesen, T., Geurts, T., & Palumbo-Miele, D. (2020). Where we are heading and the research that can help us get there—Executive perspectives on the anniversary of the Journal of Purchasing and Supply Management. *Journal of Purchasing and Supply Management*, 26(3), 100621.
- [82] VARDARLIER, P. (2020). Digital transformation of human resource management: digital applications and strategic tools in HRM. In *Digital Business Strategies in Blockchain Ecosystems* (pp. 239-264). Springer, Cham.
- [83] Vizano, N. A., Utami, W., Johanes, S., Herawati, A., Aima, H., Sutawijaya, A. H., ... & Widayati, C. C. (2020). Effect of compensation and organization commitment on tournover intention with work satisfaction as intervening variable in indonesian industries. *Systematic Reviews in Pharmacy*, 11(9), 287-298.
- [84] Wade, P. (2021). Man the hunter: gender and violence in music and drinking contexts in Colombia. In *Sex and violence* (pp. 115-137). Routledge.
- [85] Wilkes, J. A. (2020). The New Zealand red meat industry: Defined by the past, embedded in the present, blind to the future. An investigation into marketing myopia and its links to poor performance and profitability (Doctoral dissertation, University of Otago).

- [86] Xu, C., Gong, X., Fu, W., Xu, Y., Xu, H., Chen, W., & Li, M. (2020). The role of career adaptability and resilience in mental health problems in Chinese adolescents. *Children and Youth Services Review*, 112, 104893.
- [87] Zani, C. M., Borges, M. M., Severo, A. J. B., Garcia, E. R., & Müller, C. J. (2021). Business process management (bpm) application through strategy, indicators and operations model (meio): a health service company case. *Independent Journal of Management & Production*, 12(2), 590-612.
- [88] Zhao, H., & Zhou, Q. (2021). Socially responsible human resource management and hotel employee organizational citizenship behavior for the environment: A social cognitive perspective. *International Journal of Hospitality Management*, 95, 102749.
- [89] Zhao, Y., & Canales, J. I. (2021). Never the twain shall meet? Knowledge strategies for digitalization in healthcare. *Technological Forecasting and Social Change*, 170, 120923.