International Journal of Environmental Sciences
ISSN: 2229-7359
Vol. 11 No. 22s, 2025
https://theaspd.com/index.php

Leveraging Talent Mobility For Sustainable Competitiveness: A Strategic Framework For Enterprise Development In The Digital Age

Qi Sheng[1], Norhanim Binti Dewa[2]
[1]Graduate School of Business, SEGi University, Petaling Jaya, Malaysia
[2]Graduate School of Business, SEGi University, Petaling Jaya, Malaysia
[1]qisheng780@gmail.com, [2]norhanimdewa@segi.edu.my

Abstract

In the era of globalization and digital transformation, building sustainable enterprise competitiveness requires more than technological innovation, it demands strategic management of human capital. Talent mobility is the cross-functional and cross-regional movement of skilled professionals has emerged as a critical mechanism for sustaining innovation, adaptability, and organizational learning.This study explores the dual role of talent mobility in fostering sustainable competitiveness. On one hand, it enables knowledge diffusion, promotes cross-disciplinary innovation, and strengthens dynamic capabilities. On the other hand, it introduces challenges such as knowledge fragmentation, dependency on core individuals, and organizational instability. Drawing on theories of dynamic capabilities and knowledge-based strategy, this study develops a conceptual framework illustrating how talent mobility contributes to long-term enterprise value creation.Recommendations include designing institutionalized knowledge systems, building cross-functional learning ecosystems, and implementing inclusive career development strategies to enhance employee retention and resilience. By aligning talent strategies with sustainability goals, organizations can move from reactive HR models to proactive systems that reinforce organizational adaptability and inclusive growth.

This paper positions talent mobility not merely as a resource allocation tool, but as a leverage for achieving enterprise sustainability in volatile environments. It contributes to the discourse on sustainable organizational development and offers practical implications for HRM and innovation leadership in the digital economy.

Keywords: *Talent Mobility; Sustainable Competitiveness; Human Resource Management; Organizational Learning; Knowledge Integration; Employee Retention; Innovation Strategy; Dynamic Capabilities.*

1.0 INTRODUCTION

Driven by the rising global economic uncertainty and accelerated technological evolution, enterprises are faced with an increasingly complex external environment and escalating competition. As an important pillar of the national economic system, the manufacturing industry is under great pressure to maintain technological advancement and market flexibility (Gur, & Dilek , 2023).Especially in China, with the adjustment of industrial structure, the promotion of "double carbon" strategy and the change of international geopolitics, manufacturing enterprises are forced to quickly adapt to the dual challenges of global industrial chain restructuring and local digital transformation.Enterprises not only need to achieve breakthroughs in technology and products, but also urgently need to establish sustainable competitive advantages in human capital.

However, current manufacturing companies generally face problems such as insufficient supply of high-quality talents, poor internal talent flow mechanism, and loss of core technical personnel (Li & Chen,

2024).With the increasing mobility of talents across industries and regions, how to stabilize key positions and attract high-value human resources in the context of rapid knowledge iteration and organizational renewal has become a key bottleneck for the sustainable development of China's manufacturing industry (Liu & Zhao, 2022).This is not only a challenge for corporate management, but also reflects the structural human capital issues behind national competitiveness.

From a global perspective, talent mobility has gradually evolved from traditional “labor allocation behavior” to a strategic mechanism to promote knowledge integration, organizational learning, and collaborative innovation (Xu & Lyu, 2022).At the same time, however, the increasing reliance of organizations on high-level mobile talent, unclear knowledge transfer pathways, and lagging internal training systems have also exposed the vulnerability of enterprises at the institutional level and in terms of their capability systems (Settembre-Blundo & González-Sánchez. 2021).Most of the current literature focuses on the immediate performance effects of talent mobility, but lacks a systematic analysis of its role in improving organizational dynamic capabilities and building sustainable competitive advantages.

herefore, based on the dynamic capability theory and knowledge-based view, this paper intends to construct a four-dimensional conceptual framework of "talent flow-knowledge integration-organizational capability-competitive advantage" to re-examine the functional value of talent strategy in a complex environment.The study aims to reveal the challenges of human resource mechanisms in China's manufacturing industry in the global competitive landscape, and to put forward talent strategy recommendations oriented towards institutionalization, synergy and sustainability, so as to help enterprises move from passive adaptation to active resilience building, thereby achieving a leap from local advantages to systemic competitiveness (Bari & Chimhundu,2022).

2. 0 LITERATURE & THEORETICAL FRAMING

2.1 Flexible Human Resource Allocation

Driven by the dual forces of digitalization and global competition, the human resource allocation issues faced by enterprises have shifted from static management to dynamic response. The traditional "rigid establishment-fixed positions" configuration logic is difficult to adapt to the rapidly evolving technological changes and organizational adjustment needs.To achieve sustainable competitiveness, companies must build a "dynamic adaptation" mechanism with talent mobility at its core, and seek a strategic balance between efficiency and agility through flexible allocation of human resources.This mechanism emphasizes the real-time reconstruction and optimization of human resources based on the company's strategic goals and business cyclical needs to ensure the structural matching of talent supply and demand and the optimization of resource utilization (Jerab,& Mabrouk,2023).

The implementation path of the "dynamic adaptation" mechanism mainly includes two dimensions: first, the internal talent training and mobility mechanism, which improves the transferability and job adaptability of employees through job rotation, cross-functional collaboration, project management, etc.;The second is the external talent introduction mechanism, which uses digital recruitment platforms, talent databases and AI screening technology to achieve efficient and accurate talent acquisition(Paramita & Nuur 2024).The integration of these two paths not only helps to enhance the organization's ability to control human capital, but also promotes the reconstruction of internal knowledge and the redistribution of innovation resources through knowledge flow and job migration(Marchesani & Masciarelli ,2022).For example, a large technology company has implemented a "dynamic talent pool" system for key positions such as AI algorithm engineers, relying on big data tools to match job demand and talent supply in real

time, shortening the recruitment cycle by more than 40% and significantly improving talent allocation efficiency and job response speed.

More importantly, the "dynamic adaptation" mechanism is essentially a strategic means to drive organizational adaptability and resilience through the flow of talent.By establishing a real-time monitoring and forecasting system for key positions, enterprises can identify potential human resource bottlenecks in advance, implement differentiated allocation strategies, and achieve flexibility in organizational structure and forward-looking resource allocation.In this process, talent mobility is no longer seen as the result of passive adjustments, but the starting point for proactive upgrading of corporate strategy.Especially in the face of digital transformation, business model reconstruction and shortened technology life cycle, a flexible human resource allocation mechanism can accelerate knowledge updating and capability reorganization, providing a solid talent base and organizational support for enterprises to continuously create competitive advantages.

To sum up, flexible human resource allocation not only reflects the company's responsiveness and integration capabilities to talent resources, but also reflects the company's systematic thinking in achieving sustainable competitiveness through institutionalized talent flow mechanisms in the digital age.It serves as a bridge between human capital management and the achievement of strategic goals, and is an indispensable component of building a corporate development strategy driven by “talent, knowledge, and innovation”.

2.2 Cross-Departmental Collaboration to Enhance Output Efficiency

In business operations in the digital age, complexity and uncertainty are constantly increasing, and traditional linear departmental divisions and job function divisions can no longer meet the needs of rapid market response and continuous innovation.In order to improve the organization's knowledge integration capabilities and innovation efficiency, more and more companies are adopting cross-departmental talent mobility to break internal boundaries and achieve rapid knowledge flow and capability reorganization within the organization.This horizontal talent collaboration mechanism not only promotes knowledge sharing and experience complementarity, but also becomes an important organizational practice path for enterprises to gain sustainable competitive advantages (Azeem & Sajjad, 2021).

First, cross-departmental mobility helps break down information silos and achieve knowledge sharing and cognitive integration(Mariyono & Akmal,2024).The rotation, dispatch and collaboration of employees between different functional departments enable the heterogeneous integration of professional knowledge such as technology, marketing, finance and human resources within the organization.For example, technical engineers are transferred to the marketing department to participate in strategy formulation, which not only incorporates technical feasibility into the market evaluation system, but also promotes the precise connection between products and user needs; financial personnel participate in the early product design stage to optimize product structure from the perspective of cost control and financial sustainability.This type of cross-functional “knowledge embedding” stimulates obvious synergy effects, forming collective wisdom and organizational learning outcomes of “1+1>2”.

Secondly, cross-departmental flow injects diverse perspectives and systematic thinking into innovation.The generation of innovation often depends on the cross-collision between different experience backgrounds and knowledge fields.By building a planned "flow mechanism" within the organization - such as project-based collaboration, group development, and the "innovation ambassador" system - companies can stimulate employees' creative potential in knowledge transformation, concept reconstruction, and process reengineering.For example, the "Innovation Ambassador" program

implemented by a certain technology company selects 20% of its technical backbones to rotate in different business departments every year. During the rotation period, employees are deeply involved in the processes and decision-making of other departments, thereby breaking professional limitations and enhancing systematic thinking ability.Data shows that two years after the implementation of the plan, the company's product development cycle was shortened by an average of 30%, and the market success rate of new products was significantly improved.

More importantly, from a strategic perspective, cross-departmental talent mobility constitutes the internal logical chain of "knowledge reconstruction – capability iteration – organizational renewal" of an enterprise and is an important driving factor for achieving dynamic capabilities (Ajgaonkar & Wiemann,2022).The orderly flow of talents between different departments not only promotes the horizontal expansion of personal capabilities, but also enhances the organization's response speed and adaptability to external changes, laying the foundation for enterprises in the digital age to build agile capabilities of "rapid learning - rapid trial and error - rapid adjustment".With the widespread application of technologies such as artificial intelligence and data-driven management, the knowledge flow and collaboration mechanism on which cross-departmental collaboration relies will become key indicators for measuring the maturity of an enterprise's innovation system.

To sum up, cross-departmental talent flow is not only a means of organizational design optimization, but also a way to build strategic capabilities for the future(Li,2024).It effectively enhances the survival adaptability and sustainable competitiveness of enterprises in highly uncertain environments by promoting knowledge sharing, improving innovation capabilities, and accelerating organizational learning. It is one of the core mechanisms for enterprises to realize the transformation of human resource value in the digital age(Zhang & Chen,2024).

2.3 Talent Mobility Mechanisms

Against the backdrop of the rapid evolution of the digital economy, talent mobility, as a dynamic form of human resource allocation, is becoming an important mechanism for enterprises to acquire, integrate and regenerate knowledge.Traditional research on talent mobility focuses on its impact on labor structure, organizational stability, etc.In recent years, more and more scholars have begun to pay attention to its role in promoting corporate knowledge transfer and innovation capabilities (Iqbal, 2021).In this process, the incentive and retention mechanism of human resources is not only related to the stability of core talents, but also depends on whether it can effectively stimulate the willingness of talents to externalize and share knowledge, thereby promoting the flow of knowledge within the organization (Zhao & Hong, 2021).For example, motivational factors such as organizational commitment, career development support, and flexible work mechanisms help to build a psychological contract, enhance the sense of belonging and innovation initiative of talents (Ardi & Pramono,2024), and thus make knowledge accumulation and reuse possible.At the same time, a moderate influx of external talent can also serve as a channel for the introduction of heterogeneous knowledge, helping to enhance the organization's cognitive boundaries and cross-domain integration capabilities. This two-way mechanism of "external input-internal digestion" is an important path to promote the flow of knowledge towards innovation.

In addition, from the perspective of knowledge management, talents are not only the owners of knowledge, but also the disseminators and re-creators of knowledge.Knowledge flow does not rely solely on technology platforms, but is deeply embedded in human interactions, organizational atmosphere, and management systems (Alaimo & Kallinikos, 2022).In this sense, a firm's talent incentive and retention strategies can be viewed as institutional inputs into the knowledge creation process.For example, by building a project-

based cross-departmental collaboration mechanism, establishing a knowledge sharing reward system, or encouraging tacit knowledge transformation platforms such as the "mentorship system", organizations can effectively promote knowledge from individuals to the collective, from tacit to explicit, and thus form a collective expression of innovation capabilities (Cao & Nguyen,2022).Research shows that high-quality talent mobility mechanisms not only help to form knowledge networks among organizations, but also enhance the dynamic capabilities of organizations, enabling enterprises to maintain continuous strategic adjustments and technological updates in a rapidly changing environment (Ghosh & Hughes,2022).

In general, incentive and retention mechanisms constitute a bridge for the transformation of talent flow into knowledge flow, while knowledge flow provides a source of vitality for corporate innovation capabilities.In this logical chain, talent flow is no longer an opposing issue of "loss" or "stability", but should be reconstructed as part of the dynamic capabilities of the enterprise.Therefore, building a talent flow mechanism centered on incentives, retention support, and knowledge sharing will become an important strategic path for companies to achieve sustainable competitiveness in the digital age.

2.4 Theoretical Framing

Regarding the research on the relationship between talent mobility and corporate competitiveness, the academic community mainly explores the strategic role of human capital from three major paths: motivation theory, resource-based view (RBV) and dynamic capabilities.Early studies were mostly based on Maslow's hierarchy of needs theory (Maslow, 1943) and Herzberg's two-factor theory (Herzberg, Mausner, & Snyderman, 1959), emphasizing the importance of satisfying employees' basic needs such as physiological, safety, and belonging, thereby improving their organizational loyalty and work performance through intrinsic motivation.However, in today's highly dynamic business environment, this type of "incentive-stability" model has been unable to cope with the complex challenges of cross-departmental collaboration, rapid capability updating and continuous knowledge integration.

The resource-based view (Barney, 1991) that emerged later proposed that a company's sustainable competitive advantage comes from its internal resources that are scarce, difficult to imitate, and can be converted into value.Talent has been redefined as a "strategic resource" whose flow patterns and integration mechanisms play a key role in the formation and maintenance of organizational capabilities (Sohel-Uz-Zaman & Jalil,2022).However, the RBV theory has the limitation of insufficient endogenous renewal in dealing with environmental uncertainty and high-frequency changes - it emphasizes resource "ownership" but does not fully explain how the ability of resource "reconstruction" and "flow" is formed.

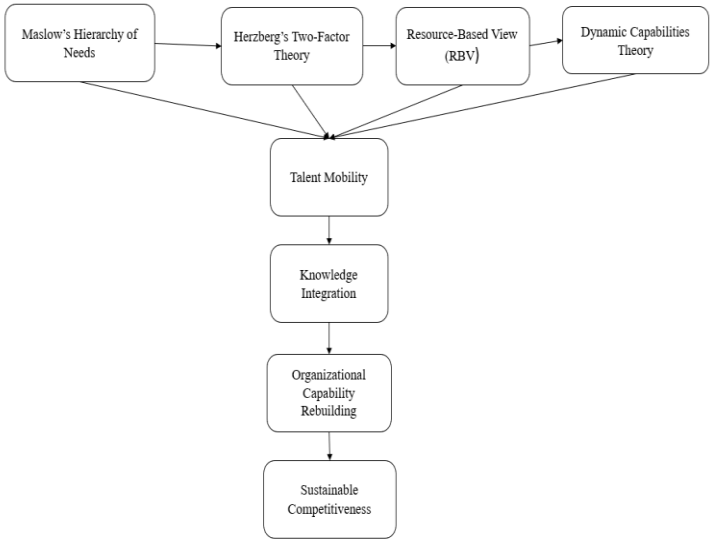
To make up for the above shortcomings, dynamic capability theory (Ghosh & Hughes,2022) came into being.This theory emphasizes the three-stage capabilities of enterprises in an uncertain environment: "perception-integration-reconstruction". Specifically, it breaks down knowledge barriers through cross-functional talent flow and realizes knowledge reconfiguration within the organization; enhances adaptability and learning capabilities through institutional job rotation and project-based collaboration; and finally forms an internal mechanism for rapid reconstruction and strategic transformation at the organizational structure level.From this perspective, talent mobility is not only a job allocation behavior, but also a structural force that drives corporate strategic renewal.

At the same time, the Sustainable HRM theory (Mariappanadar, 2024) proposes that the human resource system should ensure a balance between employee well-being and the future development of the organization while meeting current operational performance.In this framework, talent mobility is viewed as an important source of organizational resilience rather than a risk factor.For example, companies can promote knowledge sharing and cross-domain understanding through internal talent rotation programs,

thereby building a "sustainable learning ecosystem"; for another example, establishing an institutionalized talent reserve mechanism and multi-path career development channels will help employees retain their jobs for a long time and ensure organizational continuity (Price, 2023).

To sum up, this paper reconstructs the three theories of Maslow, Herzberg and RBV into the integrated framework of dynamic capabilities and sustainable HRM, and proposes a theoretical path model of "talent flow-knowledge integration-organizational adaptation-competitive sustainability".This integration not only expands the application boundaries of classical theories, but also provides a more explanatory academic perspective for understanding how human resource strategies can achieve value transformation and dynamic competitiveness in complex environments.

Figure 1: Theoretical Framework of Talent Mobility and Sustainable Competitiveness



2.5 Conceptual Framework

Talent Mobility:

Refers to the process of employee mobility between different positions, functions, regions and industries within and outside the organization.This process not only reflects the reallocation of personnel, but also brings about the cross-border integration of knowledge, culture and skills. It is a key mechanism for organizations to achieve dynamic adjustment.

Knowledge Integration:

It refers to the integration of professional knowledge, experience and skills from different sources through personnel flow to form shared cognition and knowledge structure at the organizational level, supporting the organization to respond and make decisions quickly in a complex environment.

Organizational Learning:

Emphasizing that organizations continuously absorb external knowledge and optimize internal processes through talent flow, achieve institutional updates, skill upgrades and cultural reshaping, is the core mechanism for achieving continuous innovation.

Resource Reallocation:

It means that driven by the flow of talent, enterprises can more flexibly allocate core resources such as human resources, technology, and capital, strengthen support for key tasks and strategic directions, and improve resource utilization efficiency.

Strategic Flexibility:

An organization's ability to quickly shift its strategy through internal capability adjustments and resource reorganization when faced with changes in the external environment is an important manifestation of maintaining competitive vitality.

Innovation Capability:

It means that the organization's ability to continuously conduct research and development, develop new products and innovate business models based on knowledge integration and learning mechanisms is the core driving force for differentiated competition.

Collaborative Efficiency:

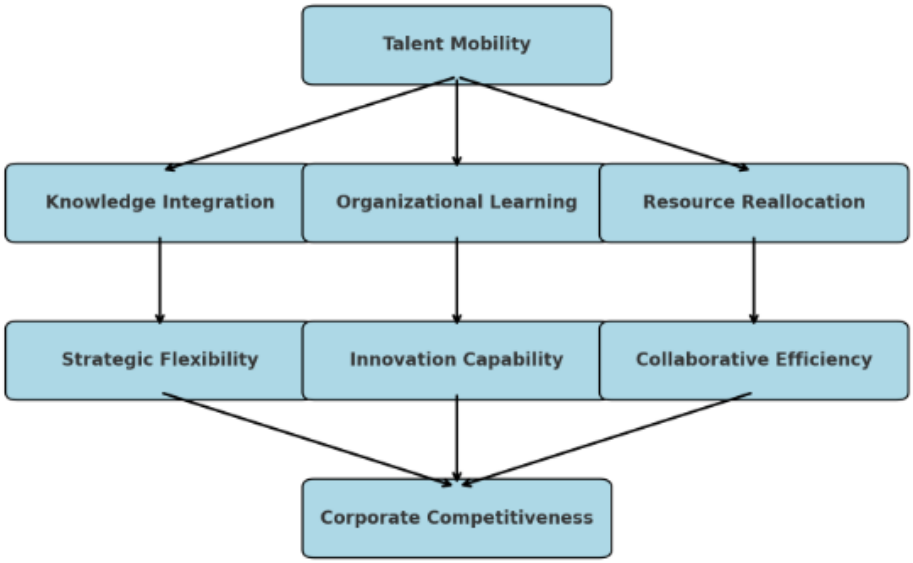
It means improving communication efficiency, reducing internal friction, and enhancing cooperation effects through the flow of talent and knowledge among various functions, teams or subsidiaries, thereby achieving overall output optimization.

Corporate Competitiveness:

It comprehensively reflects the comprehensive capabilities of the enterprise in market positioning, customer value creation, resource allocation and strategic execution, and pays special attention to the ability of the enterprise to maintain sustained advantages in rapid changes.

As shown in Figure 2 , talent mobility can influence corporate competitiveness through several mechanisms, including knowledge integration, organizational learning, and strategic flexibility (Shan & Wang, 2024).

Figure 2: Conceptual Framework of Talent Mobility's Influence on Corporate Competitiveness



The conceptual framework proposed in this study (see figure) shows how talent mobility in the digital age affects the long-term competitiveness of enterprises through a series of mediating variables.In this model, talent mobility is not only a form of human resource change, but also a catalyst for organizational knowledge updating, strategic flexibility and optimization of collaborative mechanisms（Rana & Sharma, 2023）.First, talent mobility brings new skills and external experience, strengthens knowledge integration and organizational learning processes, enables organizations to quickly absorb and internalize diverse knowledge, and promotes the accumulation of knowledge capital(Nguyen & Malik, 2022).Secondly, the flow process prompts enterprises to reallocate resources and achieve transformation from rigid structure

to flexible configuration, which is especially critical in highly dynamic industries.These three mechanisms respectively affect the three core capabilities of the organization: strategic flexibility enables the company to respond quickly to environmental changes, innovation capability enhances its differentiated advantages in products and services, and collaborative efficiency ensures the smooth operation of cross-departmental collaboration and systematic operations.Ultimately, these capabilities work together to improve the overall competitiveness of the enterprise and build sustainable advantages for it in the digital economy and the global market with increasing uncertainty. This model not only enriches the theoretical discussion on talent mobility in organizational management, but also provides an operational framework path for how to transform human capital into sustainable competitiveness in practice.

3.0 Challenges in Enhancing Competitiveness Through Talent Mobility

3.1 Over-Reliance on Core Talent and Technological Discontinuity

In digital and technology-intensive industries, core technical talents often possess the most competitive knowledge assets of an enterprise.However, while enterprises are leveraging talent mobility to achieve strategic upgrades, they are also increasingly exposed to the systemic risks brought about by their high reliance on individual knowledge.This risk is not only reflected in delays in technology development and product innovation, but also more deeply reflects the fragility of the organization's knowledge management system, the imbalance of the talent structure and the general lack of job security under digital transformation.

First, the technological gap caused by the loss of key talents has become an important obstacle to the sustainable competitiveness of enterprises.In many small and medium-sized enterprises and start-ups, core technologies are often dependent on a few key personnel, and problems such as fragmented technical documents, imperfect process standards, and insufficient knowledge explicitness are common.For example, after the thermal management R&D team of a battery manufacturer collectively resigned, due to the lack of a systematic knowledge accumulation and inheritance mechanism, the replacement team spent an additional six months redeveloping the thermal runaway alarm algorithm after taking over, causing the company to miss the market window and incur an estimated loss of more than RMB 230 million.This type of technological discontinuity reflects the lack of organizational adaptation mechanisms and lagging knowledge flow design in enterprises under a high talent mobility environment.

Secondly, employees' rising sense of job insecurity has further exacerbated the uncertainty of talent mobility.With the continuous introduction of digital technology and automated processes, many jobs are facing the pressure of being replaced or transformed, and employees are increasingly concerned about "uncertain future skills" and "ambiguous promotion paths".This sense of insecurity weakens employees' organizational identification and willingness to make long-term investments, prompting more talents, especially mid- and high-skilled talents, to migrate to "mobile career paths", increasing the frequency of personnel turnover and management difficulty of the organization.If an enterprise fails to establish corresponding career development mechanisms and psychological safety mechanisms, it will easily fall into a vicious cycle of "high turnover rate - technology gap - reduced production capacity".

Furthermore, although the trend of automation and algorithm substitution has improved operational efficiency, it has also brought about new knowledge gaps and collaboration barriers.In an enterprise that relies on data-driven decision-making and platform-based collaboration, employees need to master interdisciplinary knowledge and complex tool systems.If organizations fail to simultaneously promote internal retraining and knowledge sharing mechanisms, the introduction of automation systems may

amplify the skill differences between different employees, leading to a collaboration gap between “new knowledge masters” and “traditional experience holders,” thereby weakening the efficiency of knowledge flow within the organization .

Therefore, in the context of the digital age, companies' over-reliance on key talent and the stability of technological paths is no longer a safe option for sustainable development.On the contrary, companies should build an "anti-fragile" talent flow system and knowledge reconfiguration mechanism from a strategic perspective, and transform "individual knowledge dependence" into "organizational knowledge system" through institutional knowledge management, cross-generational talent training, technical document standardization, etc., thereby enhancing the organization's resilience and adaptability in the face of human resource uncertainties.

To sum up, although over-reliance on core talents can improve efficiency and innovation results in the short term, the knowledge gap, mobility risks and structural instability it brings have become important hidden dangers that restrict the sustainable competitiveness of enterprises.Building a future-oriented talent resilience mechanism and knowledge succession system has become a necessary path for enterprises to achieve strategic security and long-term competitive advantages in the digital age.

3.2 Neglecting Internal Talent Mobility

Against the backdrop of the wave of digitalization and increasing demands for organizational agility, many companies still continue to maintain traditional vertical department structures and rigid talent allocation methods, ignoring the key role of internal talent mobility in activating organizational potential, integrating cross-functional knowledge and preventing systemic risks.This structural lag not only results in inefficient utilization of organizational resources, but also exacerbates knowledge barriers, buck-passing and delayed collaboration between positions, creating multiple risks of "organizational insensitivity", "slow learning" and "knowledge gap" in a rapidly changing market.

First, the rigid departmental structure limits employees’ cognitive boundaries and value creation capabilities.In most function-oriented organizations, employees are fixed in a certain position or department for a long time and lack understanding of the company's overall strategy and collaborative goals.This "job limitation" inhibits employees' lateral learning and cross-border thinking abilities, and also weakens the overall knowledge mobility of the organization.For example, in 2014, when a Polish 3A game studio was developing a key project, the marketing department failed to communicate effectively with the development team and unilaterally announced an unrealistic release date. Ultimately, the functions could not be delivered as scheduled and product quality was compromised, which led to a strong market reaction, a 40% drop in the company's stock price, and damage to its brand reputation.This case highlights the high correlation between departmental fragmentation and the lack of internal talent flow mechanism.

Secondly, the lack of internal mobility channels exacerbates employees’ job insecurity and tendency to leaveWhen employees do not see multiple paths for career development, or are unable to update their skills and rotate jobs within the organization, they are more likely to seek opportunities outside the organization.This "static job structure" is not conducive to talent retention, nor is it conducive to the accumulation and inheritance of organizational knowledgeOnce core positions leave, it will result in extended job vacancy periods, insufficient knowledge handover and even process interruptions. Especially in systems with highly coupled digital technologies, the risks are further magnified.

Third, with the increasing popularity of automation and intelligent tools, the internal talent flow mechanism could have become a buffer zone and adaptation channel for enterprises to promote the transformation of "human-machine collaboration", but the ignored reality has made the "skill elimination

anxiety" brought about by technological substitution further aggravate employees' anxiety.Many companies have not simultaneously implemented job reshaping and skill retraining plans when promoting the deployment of automation systems, causing some employees to feel "marginalized" while others feel overloaded with additional tasks.This imbalance within the human resources system reflects a serious misalignment between internal mobility design and technological evolution.

Therefore, in the process of achieving sustainable competitiveness of enterprises in the digital age, internal talent mobility should not be regarded as a simple job transfer behavior, but should be regarded as a three-in-one system of strategic knowledge transfer, organizational adaptability construction and employee empowerment mechanism.If an organization fails to establish a clear, transparent mobility mechanism that supports cross-departmental growth and lateral migration, it will not only face the risk of talent loss and collaboration failure, but will also weaken the company's overall learning and adaptability, ultimately leading to a decline in competitiveness.

To sum up, ignoring the problem of internal talent flow reflects the structural shortcomings of enterprises in organizational design, talent strategy and technology adaptation.In the digital age, building an internal talent mobility system that is oriented towards employee development, centered on organizational learning, and based on cross-functional collaboration is a necessary path for companies to break through departmental boundaries, repair knowledge gaps, and respond to challenges of instability.

4. 0 Solutions to Current Challenges

4.1 Building Robust Talent Development and Knowledge Systems

In a business environment where digitalization and knowledge-intensiveness are evolving in parallel, talent competition strategies that rely solely on "individual-driven" strategies are no longer able to support an organization's long-term competitive advantage.In order to transform from "talent dividend" to "organizational dividend", enterprises urgently need to build a systematic, structured and sustainable talent development and knowledge management system to transform human capital advantages into replicable and sustainable organizational capabilities.The system should start from the four dimensions of retention mechanism, training system, leadership development and employee welfare, and form an organizational practice logic that supports "stability in mobility and accumulation in renewal".

4.1.1 Institutionalized knowledge retention mechanism: from individual dependence to system support

In order to reduce the high dependence on key talents, enterprises must make tacit knowledge explicit through institutional and technological means and embed it into organizational processes and system architecture.First, companies can establish cross-organizational talent development mechanisms with core suppliers, such as sharing technical training bases, establishing joint certification standards, and developing interoperable teaching materials, to achieve the co-construction and sharing of knowledge and consistency of technical standards.This not only enhances upstream and downstream collaboration capabilities, but also reduces the risk of "knowledge breakpoints" caused by the departure of a single technical staff.

Secondly, it is crucial to promote the construction of digital knowledge management platforms.Enterprises should consolidate the experience gained by employees in practice into modular knowledge assets, and combine artificial intelligence and machine learning technologies to establish a searchable and updateable knowledge graph.For example, by having employees upload cases, failure records, and optimization strategies, an "intelligent document ecosystem" is formed; then, through automatic labeling and classification through algorithms, knowledge reuse and path optimization can be

achieved.This strategy helps drive the organization's strategic transformation from "people follow the project" to "knowledge remains".

4.1.2 Multi-level training and lifelong learning mechanism: stimulating internal mobility potential

Companies should emphasize job rotation, project-based learning and cross-departmental collaborative practices in their talent development strategies, and build a "capability evolution chain" based on talent flow.By establishing a learning platform that is deeply integrated with digital technology, employees can achieve online learning, self-selected courses, and instant feedback.For example, some leading companies have implemented a "micro-credentials" system, incorporating technical skills, communication and collaboration, data analysis and other capabilities into the daily work evaluation system, enabling employees to "upgrade while moving" during job transitions, thereby promoting the flow of knowledge and adaptability accumulation within the organization.

In addition, policies can also promote the establishment of a closer talent linkage mechanism between higher education and enterprises.For example, we encourage cooperation between government, industry, academia and research to establish a "digital skills retraining fund", support small and medium-sized enterprises and vocational education institutions to jointly develop customized courses, and enhance the mobility and retention rate of local talents.

4.1.3 Strategic leadership development: supporting organizational resilience in flux

Under a work mechanism driven by high-frequency mobility and task-based management, the leadership of middle-level and grassroots managers will directly affect the resilience and performance stability of the organization.Companies should establish a "leadership pool" and select high-potential employees to participate in phased, multi-situational leadership development programs, such as mentoring, job shadowing, situational leadership training, etc.Especially in the process of promoting internal horizontal talent flow, talents with cross-functional leadership will become the key hub connecting different knowledge fields and coordinating the flow of resources.

4.1.4 Optimizing work-life balance mechanism: Improving retention rate and organizational commitment

The flow of talent in the digital age is not only limited by salary incentives, but is also influenced by organizational culture, psychological contracts and perceptions of quality of life.Companies need to systematically optimize work-life balance strategies, such as introducing flexible working hours, remote work systems, mental health support programs, family-friendly policies, etc., to enhance employees' sense of belonging and satisfaction.In addition, organizational governance mechanisms with voluntary employee participation (such as employee councils and innovation proposal platforms) can be used to enhance employees' sense of influence and recognition, and strengthen their willingness to stay long-term and their organizational commitment.

4.2 Restructuring Departmental Collaboration Models

In the highly complex and ever-changing digital age, the traditional vertical departmental structure is increasingly exposing its constraints on organizational flexibility and innovation efficiency.Problems such as fragmented information flow, unclear responsibilities and rights, and high collaboration costs make it difficult for knowledge to flow within the organization and for the value of talent to be fully released.Therefore, restructuring departmental collaboration models and building a flat structure centered on cross-functional teams has become one of the key paths to enhance the sustainable competitiveness of enterprises.

From the perspective of sustainable organizational practice, the reorganization of departmental collaboration models is not only an adjustment of the organizational structure, but should also be

embedded with multi-dimensional strategies for talent retention, training mechanisms, leadership development, and employee welfare protectionFirst of all, the cross-functional project system itself is an effective means of talent retention. It provides employees with a wider range of growth paths and stronger goal identification, thereby enhancing their organizational commitment and development momentum.Secondly, cross-departmental collaboration provides a natural breeding ground for on-the-job learning and project-based training, enabling employees to improve key capabilities such as cross-border communication, teamwork and systems thinking in actual combatCompanies can design a closed-loop training system of “rotation-reflection-feedback” based on these capabilities to promote the growth of talents in mobility.

In addition, cross-functional teams also provide practical scenarios for the establishment of new leadership mechanisms.Team leaders need to have complex coordination skills, situational judgment and empowerment awareness. Therefore, companies can identify and select high-potential talents in cross-departmental collaboration and incorporate them into the "project leadership echelon" training system.At the same time, the flexible small team mechanism makes it easier to implement flexible working hours, remote collaboration platforms and psychological support mechanisms, thereby achieving continuous support for employees' work-life balance at the organizational level and improving their sense of happiness and stability.

At the policy level, the government and industry organizations should also encourage companies to establish a cross-functional collaboration culture, especially through financial subsidies, tax exemptions and other means, to support small and medium-sized enterprises in introducing transformation practices such as agile management, cross-domain training and collaborative office tools.Local governments can also establish a cross-enterprise talent sharing mechanism within industrial parks to promote cross-border talent flow within the region and break down the "departmental boundaries" of talent and knowledge.

To sum up, the reorganization of departmental collaboration models not only optimizes the talent allocation and knowledge integration paths, but also provides an organizational foundation and practical path for enterprises to build sustainable competitive advantages with talent mobility as the core.In the future, organizations should continue to iterate their management mechanisms and support systems on a cross-functional basis to truly achieve "collaboration in mobility and growth in collaboration."

5.0CONCLUSION

This study shows that talent mobility has become a key mechanism for enterprises to acquire and maintain sustainable competitiveness in the digital age.On the one hand, the rational allocation and flow of talent resources significantly enhances the organization's innovation capabilities, resource integration efficiency and environmental adaptability;On the other hand, it cannot be ignored that problems such as over-reliance on key talents, internal knowledge gaps and unstable organizational culture have also become potential risks that restrict sustainable developmentTherefore, companies need to mitigate these risks and further optimize their human resource management systems by introducing high-potential talents, systematic training mechanisms, and flexible work processes.Especially in a dynamic market environment, building a strategic human resources framework - including job rotation, knowledge accumulation, flexible collaboration and other measures - is crucial to ensuring the stability of talent and the continuous growth of the organization.

The survey results also show that sustainability principles should be deeply embedded in the company's human resource management (Sustainable HRM).This not only includes retention mechanisms (such as

career development paths and organizational identity building), employee well-being improvement (such as work-life balance policies), leadership succession (such as high-potential team training), and knowledge management system construction, but also covers the organization's re-recognition of the long-term strategic value of employees.Talent should not be viewed as a “replaceable resource” but should be managed as “sustainable capital”. This requires companies to incorporate strategic vision, ethical considerations and systematic planning into their human resource policies, ultimately achieving the coordinated prosperity of organizations and employees.

Looking ahead, academia and practice urgently need to further explore the deep interaction mechanism between digital transformation and talent mobility.Especially in knowledge-intensive industries, how enterprises can enhance the capture and prediction of talent flow data through technical means (such as HR Analytics, intelligent recruitment systems, knowledge graphs, etc.), and thus improve innovation performance and organizational agility, will be an important research direction (Rana, 2023b).In addition, the popularity of the Internet of Things (IoT) and the deepening of cross-industry collaboration are reshaping organizational boundaries, making the flow of talent across enterprises and ecosystems the norm.In this context, future research should reposition the following key issues: first, how the Internet of Things and remote working environment change the traditional talent management logic, including performance evaluation, knowledge accumulation and cultural construction;Second, the construction mechanism of joint talent pool and shared talent platform under the cross-industry collaboration mechanism; third, how the intelligent HR system based on AI and human resource technology (HRTech) can achieve efficient and transparent talent decision-making support without harming the rights and interests of employees.

In short, in the context of the digital age, building a sustainable competitiveness strategic framework with talent mobility as the core requires companies to not only focus on short-term performance goals, but also integrate technological innovation, organizational design and long-term human capital strategy to promote companies from "talent management" to "talent ecosystem construction", thereby consolidating their sustainable competitive advantages in the wave of globalization and technology.

REFERENCES

[1]Sun Zheyuan, Bai Yan. How Urban Talent Policies Influence the Transformation of SMEs into "Specialized, Refined, and Innovative" Enterprises [J]. China Human Resource Development, 2024, 41(03): 98-108.

[2]Zuo Xiaode, Sun Peng. The Strategic Impact and Management Strategies of Talent Mobility in Chinese Enterprises Under Economic Globalization [J]. China Business Review, 2024, 33(22): 124-127.

[3]Li Zhimin. Global Talent Mobility and High-End Talent Recruitment: International Experience and Local Pathways [J]. World Education Information, 2024, 37(11): 3-7.

[4]Zheng Yangyang. The Impact of Internal Promotion and External Recruitment on Talent Mobility and Performance [J]. Market Modernization, 2024, (14): 102-104.

[5]Li Pingping. Research on Talent Management and Technical Talent Incentive Mechanisms in State-Owned Enterprises Under Market Competition [J]. Journal of Shijiazhuang Railway Institute, 2024, 23(02): 75-78.

[6]Chen Min. On Enterprise Talent Retention Mechanisms [J]. Employment and Security, 2024, (05): 190-192.

[7]Li Yuehong, Liang Yina, Guo Dong. On Trade Secret Protection in Talent Mobility [J]. Journal of Shanxi Higher Education, 2020, 32(09): 66-69+75.

[8]Rana, S. (2023b). Advancing Methodologies of Conducting Literature Review in Management Domain. Emerald Group Publishing.

[9]Gur, N., & Dilek, S. (2023). US–China economic rivalry and the reshoring of global supply chains. The Chinese Journal of International Politics, 16(1), 61-83.

[10]Li, X., Chen, Z., & Chen, Y. (2024). The Impact of Digital Talent Inflow on the Co-Agglomeration of the Digital Economy Industry and Manufacturing. Systems, 12(8), 317.

[11]Liu, H., & Zhao, H. (2022). Upgrading models, evolutionary mechanisms and vertical cases of service-oriented manufacturing in SVC leading enterprises: Product-development and service-innovation for industry 4.0. Humanities and Social Sciences Communications, 9(1), 1-24.

[12]Xu, Y., Lyu, J., Xue, Y., & Liu, H. (2022). Does the agricultural productive service embedded affect farmers' family economic welfare enhancement? An empirical analysis in black soil region in China. Agriculture, 12(11), 1880.

[13]Settembre-Blundo, D., González-Sánchez, R., Medina-Salgado, S., & García-Muiña, F. E. (2021). Flexibility and resilience in corporate decision making: a new sustainability-based risk management system in uncertain times. Global Journal of Flexible Systems Management, 22(Suppl 2), 107-132.

[14]Bari, N., Chimhundu, R., & Chan, K. C. (2022). Dynamic capabilities to achieve corporate sustainability: a roadmap to sustained competitive advantage. Sustainability, 14(3), 1531.

[15]Jerab, D., & Mabrouk, T. (2023). Strategies for Effective Organizational Restructuring: A Comprehensive Guide. Available at SSRN 4584665.

[16]Paramita, D., Okwir, S., & Nuur, C. (2024). Artificial intelligence in talent acquisition: exploring organisational and operational dimensions. International Journal of Organizational Analysis, 32(11), 108-131.

[17]Marchesani, F., Masciarelli, F., & Doan, H. Q. (2022). Innovation in cities a driving force for knowledge flows: Exploring the relationship between high-tech firms, student mobility, and the role of youth entrepreneurship. Cities, 130, 103852.

[18]Azeem, M., Ahmed, M., Haider, S., & Sajjad, M. (2021). Expanding competitive advantage through organizational culture, knowledge sharing and organizational innovation. Technology in Society, 66, 101635.

[19]Mariyono, D., & Akmal, A. N. A. (2024). Strategic Overhaul: Reframing Data Integration for Optimal AI Utilization. Available at SSRN 4892176.

[20]Ajgaonkar, S., Neelam, N. G., & Wiemann, J. (2022). Drivers of workforce agility: a dynamic capability perspective. International Journal of Organizational Analysis, 30(4), 951-982.

[21]Li, D. (2024). Innovative Pathways for Organizational Development and Planning in the Context of Digital Transformation. Journal of Computer Technology and Electronic Research, 1(2).

[22]Zhang, J., & Chen, Z. (2024). Exploring human resource management digital transformation in the digital age. Journal of the Knowledge Economy, 15(1), 1482-1498.

[23]Iqbal, A. (2021). Innovation speed and quality in higher education institutions: the role of knowledge management enablers and knowledge sharing process. Journal of Knowledge Management, 25(9), 2334-2360.

[24]Zhao, S., Jiang, Y., Peng, X., & Hong, J. (2021). Knowledge sharing direction and innovation performance in organizations: do absorptive capacity and individual creativity matter?. European Journal of Innovation Management, 24(2), 371-394.

[25]Ardi, A., Cahyadi, H., Meilani, Y. F. C. P., & Pramono, R. (2024). Talent attraction through flexible work anytime from anywhere. Journal of Infrastructure, Policy and Development, 8(3), 2998.

[26]Alaimo, C., & Kallinikos, J. (2022). Organizations decentered: Data objects, technology and knowledge. Organization Science, 33(1), 19-37.

[27]Cao, T. T., Le, P. B., & Nguyen, N. T. M. (2022). Impacts of high-involvement HRM practices on organizational innovation capability: the mediating mechanism of tacit and explicit knowledge sharing. International Journal of Innovation Science, 14(5), 733-749.

[28]Ghosh, S., Hughes, M., Hodgkinson, I., & Hughes, P. (2022). Digital transformation of industrial businesses: A dynamic capability approach. Technovation, 113, 102414.

[29]Sohel-Uz-Zaman, A. S. M., Kabir, A. I., Osman, A. Z. M. R., & Jalil, M. B. (2022). Strategic human resource management, human capital management and talent management: Same goals many routes. Academy of Strategic Management Journal, 21(1), 1-15.

[30]Mariappanadar, S. (2024). Sustainable HRM Theories. In Sustainable Human Resource Management Strategies and Practices: Human Capital for Corporate ESG Sustainability (pp. 85-109). Singapore: Springer Nature Singapore.

[31]Price, J. E. (2023). Introduction and Utilization of a University Technology Transfer Capital Efficiency Model for the Evaluation of Technical and Capital Efficiencies and the Identification of Institutional Factors that Contribute to Technology Transfer Success (Doctoral dissertation, Keiser University).

[32]Shan, Z., & Wang, Y. (2024). Strategic talent development in the knowledge economy: a comparative analysis of global practices. Journal of the Knowledge Economy, 1-27.

[33]Rana, T., & Sharma, R. (2023). Talent mobility in digital ecosystems: A strategic lever for knowledge transformation. Journal of Organizational Effectiveness: People and Performance, 10(1), 24–42

[34]Nguyen, T., & Malik, A. (2022). Knowledge management capability and innovation in digital enterprises. Journal of Knowledge Management, 26(2), 458–478..