



Innovation for Enhancing the Efficiency of Human Resource Management System in the Faculty of Liberal Arts, Rajamangala University of Technology, Suvarnabhumi

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Abstract

Background and Aims: In an era where technology and innovation are rapidly changing, higher education institutions need to adapt to the changes, especially in terms of human resource management, which is the heart of the organization. The Faculty of Liberal Arts at Rajamangala University of Technology Suvarnabhumi is facing challenges in human resource management, including the complexity of work processes, operational delays, limitations in accessing information, and discontinuity in personnel development. Therefore, the application of innovation and technology is an important approach to solving these problems. This research has two objectives: 1) to study the model for promoting the efficiency of the human resource management system of the Faculty of Liberal Arts, Rajamangala University of Technology Suvarnabhumi, and 2) to present and evaluate innovations in developing innovations to promote the efficiency of the faculty's human resource management system.

Materials and Methods: This research is a qualitative research with 3 groups of key informants, totaling 17 people, or until the data is saturated, namely, Group 1, people with experience in personnel management; Group 2, people involved in innovation and technology; and Group 3, lecturers and staff within the faculty. The research instruments consisted of 1) an In-depth Interview and 2) an Innovation evaluation form. Data analysis used content analysis for data from in-depth interviews and descriptive statistics (mean and standard deviation) for data from the innovation assessment.

Results: (1) The research on a model for promoting the efficiency of the faculty's personnel management system found that the model for promoting the efficiency of the faculty's personnel management system consists of 5 aspects: 1) Recruitment: Develop a complete digital platform that uses AI for screening and has a real-time tracking system. There is a Social Recruiting system that is linked to social networks. 2) Appointment: Develop a digital platform with an electronic document system and electronic signatures. There is an e-Contract system and a real-time notification system. 3) Personnel development: Develop an integrated platform that uses AI and Big Data to analyze data for planning individual development. There is a Learning Management System (LMS) and a tracking system linked to career paths. 4) Evaluation: Develop a digital system that evaluates in multiple dimensions, such as 360 degrees. There is a real-time evaluation system that uses AI to analyze evaluation results to provide advice on self-development. 5) Reward, punishment, and morale building: Develop a real-time evaluation application that allows coworkers to participate. There is a clear reward system and career progression planning system. 2. Innovation to enhance the efficiency of the faculty's personnel management system. From the research results, the "Integrated Digital HR System" innovation has been developed, which is a system that integrates all 5 subsystems using various technologies, such as 1) a Mobile Application that supports usage anywhere and anytime. 2) A Single Sign-on system that allows personnel to access all systems with a single login. 3) API Gateway that allows various systems to connect and exchange data. 4) Data security and privacy system. 5) Executive Dashboard that displays important information in real time. The innovation evaluation results by experts found that the innovation was correct (average 4.75), appropriate (average 4.68), feasible (average 4.50), and useful (average 4.85) at a very high to high level. (2) The benefits of the research can be divided into 3 areas as follows: 1) Academic benefits, such as new knowledge on the integration of personnel management systems in higher education institutions, the application of AI and Big Data in personnel management, and the design framework of a digital HR system that is appropriate for the faculty's context. 2) Policy benefits provide administrators with information and guidelines for setting policies on the development of digital personnel management systems, budget allocation, and creating an organizational culture that is conducive to the use of digital technology. 3) Practical benefits provide faculties and other units with concrete guidelines for

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developing digital personnel management systems, starting from the preparation of action plans, the development of pilot systems, personnel development, and the establishment of system development teams. 4) Technology development benefits provide technology developers with guidelines for selecting appropriate technologies, designing user-friendly systems, developing security systems, and integrating with other systems. And (5) Research and development benefits provide the basis for further research, developing innovations, and creating a learning community for the development of digital personnel management systems in higher education institutions.

Conclusion: This research presented a model for promoting efficiency of the personnel management system and innovation, "Integrated HR Digital System" that responds to the needs of the faculty by applying digital technology, AI, and Big Data to increase efficiency in every step of the personnel management system. The benefits of the research can be divided into 3 areas as follows: 1) Academic benefits as new knowledge on the integration of personnel management systems in higher education institutions; 2) Policy benefits provide administrators with information and guidelines for setting policies on the development of digital personnel management systems, budget allocation, and creating an organizational culture that is conducive to the use of digital technology and 3) Practical benefits provide faculties and other units with concrete guidelines for developing digital personnel management systems as well as further research and development benefit.

Keywords: Innovation; Efficiency; Human Resource Management System; Faculty of Liberal Arts; Digital HR System

Introduction

Amidst rapid technological change, the faculty is facing challenges in managing human resources, which is the heart of the organization. Specific problems encountered by the faculty include traditional paperwork systems that cause delays and fragmented information, which makes it impossible to effectively track development along career paths, as well as performance evaluations that lack clear and comprehensive criteria. This study was conducted on the strategic human resource management (SHRM) framework that focuses on linking people management with organizational vision, combined with the resource-based view (RBV) theory that views innovative HR systems as a source of sustainable competitive advantage. It also applies the concept of Ulrich (1997), who proposed the role of HR as a strategic partner, change management expert, and people advocate.

In this context, "innovation" refers to disruptive developments in both technology and processes, specifically the integration of digital technologies, artificial intelligence, and big data analytics into traditional HR processes. Research by Johnson and Miller (2022) shows that using AI to screen candidates can save time and increase efficiency in the recruitment process. Maystrovskaya and Shramchenko (2020) found that mobile applications can integrate HR processes more efficiently.

This research, therefore, aims to develop an innovative digital personnel management system that responds to the specific context of Thai higher education institutions, which differ from general business organizations in terms of culture and management systems. The expected outcome is a digital system model that not only solves the specific problems of the faculty but can also be effectively applied to Thai higher education institutions.

Objectives

1. To study the model for promoting efficiency of the personnel management system of the Faculty of Liberal Arts, Suvarnabhumi Rajamangala University of Technology.
2. To present and evaluate innovations in the development of innovations to promote efficiency of the personnel management system of the Faculty of Liberal Arts, Rajamangala University of Technology, Suvarnabhumi.

Literature Review

1. Human resource management concept and the need for innovation. The Faculty's human resource management is based on three main conceptual frameworks that support innovation development in line with the principles of Lunenberg (2012) that emphasize eight components covering everything from planning to relationship management, including the scope of Mullins (2016) that emphasizes systematic





recruitment, development, and retention of personnel, and the university's policy (2023) that defines five key components. All concepts are consistent with Maslow's hierarchy of needs theory (1943), which indicates that the system must meet the needs of personnel at multiple levels.

HR innovation research indicates that modern technology can effectively solve faculty-specific problems, stating that AI recruitment has reduced time by 40% (Johnson & Miller, 2022), that digital systems have reduced paperwork time by 60% (Maystrovskaya & Shramchenko, 2020), and that people analytics have helped create personalized career paths (Schmidt & Van Der Merwe, 2024), including 360-degree assessments that create transparency (Wittayudom et al., 2022), and that data integration has improved decision-making efficiency (Kumar & Sharma, 2023).

2. Factors of success in human resource management from the synthesis of literature found 4 success factors that are related to the above theoretical concepts as follows:

1) Effective data management with a system for storing and processing accurate, up-to-date, and accessible personnel data to support effective decision-making and planning.

2) The performance appraisal system has a fair, transparent, and multidimensional evaluation process that meets the needs of acceptance according to Maslow's (1943) theory.

3) The human resource development system has individual development plans that are linked to organizational goals and career advancement, as conceptualized by Mullins (2016).

4) HR technology is the integration of digital technology, AI, and big data analytics into all HR processes.

These factors will be evaluated by stakeholders using Bourne and Walker's (2005) framework, covering six dimensions: 1) clarity, 2) effectiveness, 3) measurable outcomes, 4) confidence, 5) competence development, and 6) problem solving.

This research's conceptual framework presented a causal relationship between basic theories, success factors, and expected outcomes, linking human resource management theory with innovations that address the specific challenges of the faculty to achieve the university's goal of becoming an effective organization and being prepared for future changes.

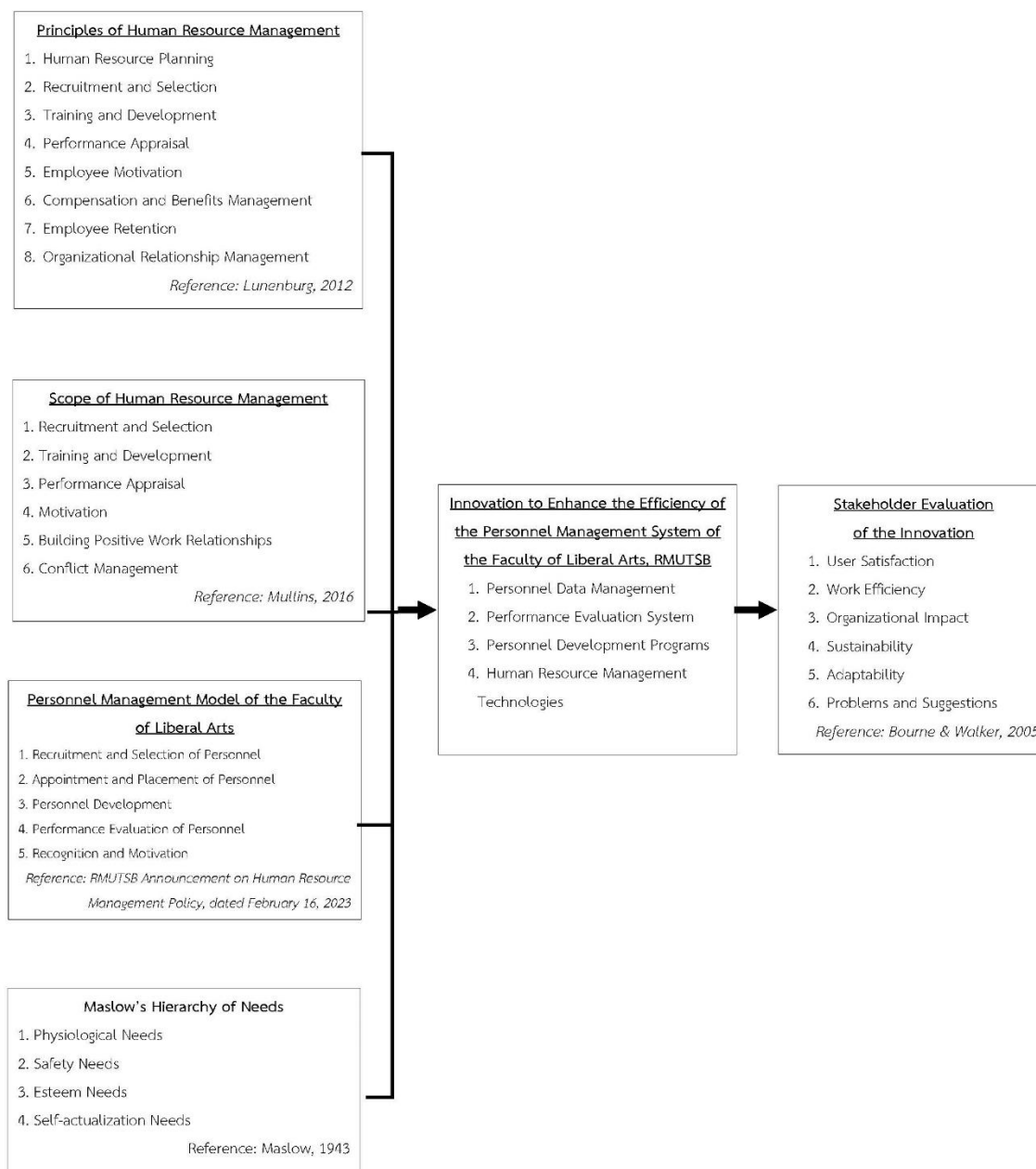


Figure 1 Research conceptual framework

Methodology

This research is primarily qualitative research, and the data were confirmed by quantitative research because it is suitable for the nature of the survey study and the development of innovation models that require in-depth information from stakeholders. The key informants were purposively selected (Purposive Sampling) and divided into 3 groups, totaling 17 people: 1) 5 people with experience in personnel management with not less than 5 years of experience; 2) 7 people involved in innovation and technology who have work in digital system development; 3) 5 lecturers and faculty staff who regularly use the personnel management system. Data saturation was determined using the principle of data iteration. The



researchers determined the criterion that when interviewing 2 additional informants in each group consecutively, if no new issues that were different from the original data were found, the data was considered saturated. In addition, data saturation was checked using the approach of Guest et al. (2006), which analyzed the frequency of new codes or issues that occurred in each interview.

Research instruments were as follows: 1. In-depth interview form developed from literature review and SHRM theoretical framework with the following process: 1) Study theories and concepts related to human resource management and innovation; 2) Define questions based on 5 main components from the conceptual framework; 3) Test the interview form with 3 groups with similar characteristics to the sample group; 4) Improve questions based on tester suggestions and 5) Check content validity by 3 experts. The questions in the interview form cover the current status and problems of the HR system, development needs, technology application guidelines, support factors and obstacles, and efficiency assessment guidelines. 2. The innovation evaluation form, adopting a 5-level Likert scale, was evaluated by 8 experts in 4 aspects, namely 1) Accuracy, consistency with principles and theories; 2) Proprietary, appropriate to the context of the faculty and university; 3) Feasibility for actual implementation, and 4) Utility expected from implementation.

Data collection was divided into 2 parts: 1. In-depth interviews using a semi-structured interview form designed to cover SHRM theory and the university's human resource management model. The interviews were conducted in a private setting by the principal researcher. Each interview lasted 45-60 minutes and consisted of the following steps: 1) Familiarization and explanation of the objectives, 2) Conducting the interview based on the main issues, 3) Asking additional questions on interesting issues, 4) Summarizing key points and checking understanding with the informants. 2. Innovation evaluation by experts based on the specified evaluation form, and providing additional suggestions.

Data analysis consisted of 1. Qualitative data from the interviews that were analyzed using inductive content analysis according to the guidelines of Elo and Kyngäs (2008), consisting of 1) Open coding, transcribing verbatim, reading all data, and recording key points; 2) Categorization, grouping codes with similar meaning into sub-categories; 3) Abstraction, synthesizing sub-categories into main categories and themes reflecting the overall content. Triangulation was used to check reliability in terms of data (from 3 groups of informants), researchers (analysis by 2 researchers), and theory (using multiple theories). 2. Quantitative data from innovation evaluation: analyzed using descriptive statistics (mean and standard deviation) according to the specified interpretation criteria, and analyzed additional suggestions for improving the innovation.

Results:

The researchers presented the results divided according to the two research objectives as follows:

1. The Faculty of Human Resource Management System Efficiency Model: The results of the study found that the appropriate model should integrate 5 elements according to the university framework, but be adjusted to suit the faculty context as follows: 1) Recruitment. The traditional recruitment process has time constraints, transparency, and access to potential candidates. The informants proposed the development of a system consisting of a digital platform and AI for screening that is in line with the SHRM principles of efficiency and fairness, reducing the screening process time by 40% and reducing bias in selection, allowing the organization to benefit from the diversity of personnel (Diversity and Inclusion) (Johnson & Miller, 2022). And the qualification and skill analysis system is in line with the Person-Organization Fit theory that emphasizes the alignment between individuals and organizational culture, resulting in long-term engagement and work performance (Kristof-Brown et al., 2020). The use of the Social Recruiting system is in line with the Employer Branding strategy to create an attractive corporate image, helping to reach a group of Passive Candidates with potential but not seriously looking for a job (Backhaus & Tikoo, 2022); 2) In terms of appointment, the Faculty challenges problems of delays and complexity of document procedures which affect efficiency as well as the experience of new personnel. The proposed system consists of an electronic document and signature system, which is in line with the concept of Administrative



Efficiency in SHRM, reducing the steps and time in document management by up to 60%, increasing the efficiency of human resources (Maystrovskaya & Shramchenko, 2020) and the E-Contract system supports the Lean HR concept, which aims to reduce waste in the process, helping to speed up and reduce errors, and creating clarity in employment agreements (Danilina, 2021). The notification and status tracking system is in line with the Psychological Contract theory, which emphasizes transparency and clear communication, affecting the confidence and first impression of new personnel (Rousseau & McLean Parks, 2023) 3. In terms of personnel development, the traditional model lacks continuity and does not meet individual needs. Therefore, a Big Data analysis system should be used to plan individual development in line with the concept of Personalized Human Capital Development, which focuses on development that matches the potential of each individual, making investment in development efficient and worthwhile (Mahachai and Wichienthammarot, 2021). The learning management system supports the concept of a Continuous Learning Organization that promotes lifelong learning and helps organizations promptly adapt to changes (Senge et al., 2022). The development monitoring and evaluation system is in line with the ROI concept of human resource development, linking development with the progression path, increasing employee motivation and engagement (Schmidt & Van Der Merwe, 2024) 4. In terms of evaluation, traditional evaluation systems are often seen as unfair and do not reflect actual performance. Therefore, a multi-dimensional (360-degree) evaluation system should be introduced in line with the Comprehensive Performance Evaluation concept, which focuses on evaluations from all stakeholders, reducing bias and increasing the reliability of the evaluation results (Wittayudom et al., 2022). The real-time evaluation system supports the principle of Continuous Performance Management, which changes from annual evaluations to continuous feedback, facilitating development and improvement at all times (Hencharoenlert and Saengsuwan, 2021). The AI evaluation analysis system is linked to the Data-Driven HR concept, which uses data to make decisions and plan, helping personnel development to be specific and on point (Falletta, 2024) 5. In terms of rewards, punishments, and building morale and encouragement. Online reward and recognition systems should be implemented in line with Maslow's hierarchy of needs theory at the esteem level to help meet the recognition needs of employees (Maslow, 1943). The automatic career planning system is linked to Vroom's expectancy theory, which explains that motivation arises from seeing the relationship between effort and desired results (Vroom, 2018). The satisfaction and engagement analysis system supports the concept of Employee Experience Management, which focuses on creating positive experiences throughout the work lifecycle, increasing the retention rate of quality personnel (Pimchanok Chairat, 2019).

From the results of the aforementioned study of the development of the faculty's personnel management system efficiency promotion model, which showed the link between the various subsystems, with integration technology as a connector and leading to the expected results in terms of work efficiency, personnel development, and service quality, the picture can be shown as follows:

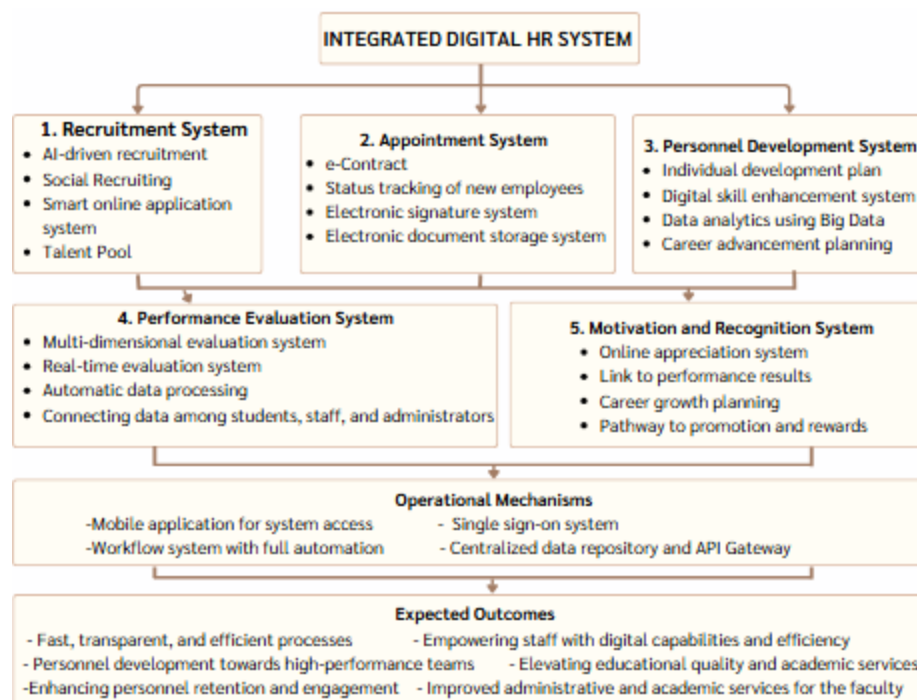


Figure 2 shows the innovation model to promote the efficiency of the personnel management system of the Faculty of Liberal Arts, Rajamangala University of Technology, Suvarnabhumi.

2. Developing an innovative "integrated digital HR system" that works seamlessly by using key technologies that promote work efficiency as follows: 1) Mobile applications Support Mobile-First work accordingly to the Work Anywhere concept, allowing personnel to access the system anywhere, anytime, creating flexibility and responding to changes in the way people work after COVID-19 (Deloitte Insights, 2023); 2) Single sign-on (SSO) system is in line with the User Experience Design principle that emphasizes convenience and reduces complexity, reducing the time to access the system and reducing the burden of remembering multiple passwords (Norman, 2022); 3) API gateway Supports System Integration work accordingly to the principles of Enterprise Architecture, allowing various subsystems to communicate and exchange data efficiently. It is the basis of seamless integration (Kumar & Sharma, 2023); 4) Data security and privacy systems respond to the principles of Data Governance and the PDPA law, creating confidence in the use of the system and protecting the organization from cybersecurity risks (Personal Data Protection Committee Office, 2022) and 5) Executive dashboards support the concept of Evidence-Based HR Management that uses data for strategic decision-making. It helps executives to see the big picture and trends clearly, leading to accurate and timely decisions (Boudreau & Ramstad, 2024).

The innovation was evaluated by eight experts who found it to be at a very to very level of validity, appropriateness, feasibility, and usefulness ($M = 4.72$, $SD = 0.31$) according to the Bourne and Walker (2005) evaluation framework, and that it was a system that responded to the specific challenges of the faculty and was consistent with the context of Suvarnabhumi Rajamangala University of Technology.

Discussion

1) The developed HR system efficiency promotion model consists of 5 main components according to the framework of Suvarnabhumi Rajamangala University of Technology (2023), but it is further developed by integrating digital technology, artificial intelligence, and big data analytics into each component in line with the SHRM concept that emphasizes linking the human resource system with the organization's strategy and using technology as a driver. The use of AI in screening applicants is consistent with the research of Johnson and Miller (2022), who found that it reduced the recruitment process time by 40% and reduced bias in selection, resulting in a more diverse workforce that meets the organization's needs. In terms of appointing electronic document systems and E-Contracts, it is consistent with the



research of Maystrovskaya and Shramchenko (2020) who found that digitizing the process reduced the processing time by 60% and increased user satisfaction, which is a reduction in administrative workload according to the Ulrich Model (Ulrich, 1997) that unlocks the potential of the HR department to work more strategically. The use of Big Data and AI in planning individual personnel development is consistent with the research of Schmidt and Van Der Merwe (2024), reflecting a shift from general development to specific development. Which is more effective in developing potential and retaining quality personnel? 2) The developed integrated digital HR system innovation features a seamless integration of five sub-systems. This is consistent with the research of Kumar and Sharma (2023), who found that linking sub-systems reduces redundancy, increases efficiency, and supports strategic decision-making. The use of mobile applications is consistent with the research of Martinez and Rodriguez (2024), who found that it increased personnel agility and satisfaction, especially in an era where flexible work and work from anywhere are major trends. Single Sign-on and API Gateway technologies are consistent with the user experience design principles that emphasize convenience and ease of use, which are important factors in the acceptance and use of technology according to the TAM Model, the concept of Davis, F. D. (1989). Data security and privacy are consistent with the concept of data governance and compliance with personal data protection laws, which are important issues in the digital age 3. The innovation evaluation results found that the innovation had a high level of accuracy, appropriateness, feasibility, and usefulness. It is also in line with the research of Suwannarat et al. (2020), who found that systems designed with the context and needs of the organization will be evaluated at a good level. The feasibility issue received the lowest score. (Although still at a high level), it reflects the challenges in implementing innovations in practice, in line with the change management concept that states that technological change not only involves installing new systems, but also involves adjusting processes, skills, and attitudes of users.

New knowledge

The findings from the study can be synthesized into valuable new knowledge in both academic and applied aspects, with links to the theoretical framework and related concepts as follows: 1. HR system integration model in higher education institutions The research presents an integration model that links 5 subsystems through digital technology, resulting in continuous data flow and supporting holistic decision-making, in line with the SHRM concept and the Ulrich model that proposes the role of HR as a strategic partner. Examples of tangible integration include linking data from the recruitment system to the personnel development system, enabling development planning from the beginning, and linking assessment results to the reward and advancement system, resulting in transparency and fairness 2. Guidelines for applying AI and Big Data in HR management of higher education institutions The research proposes guidelines for applying AI and Big Data that are specific to the context of higher education institutions, including: 1) AI in screening applicants, analyzing qualifications, skills, and suitability for organizational culture, reducing bias, and increasing diversity, in line with the concept of AI-powered Recruitment; 2) Big Data in individual development planning, using data from multiple sources to design a development plan that is appropriate for each individual, in line with the concept of People Analytics and 3) AI in analyzing assessment results that link assessment results to concrete development approaches. In line with the concept of Performance Analytics, 3. The framework for designing a digital HR system that is appropriate for the specific context of the faculty and available resources is in line with the Contingency theory of Lawrence & Lorsch (1967), which proposes that there is no best management approach for all organizations, but it depends on the specific context, such as an evaluation system that covers the workload of teaching, research, and academic services of faculty members and a personnel development system that focuses on language and communication skills; 4. Guidelines for creating participation in the development of a digital HR system show that the use of qualitative research processes and expert evaluation to collect opinions and needs of all stakeholders is in line with the principles of User-Centered Design and the concept of Stakeholder Engagement. The process of creating participation involves in-depth interviews, participation in design and testing, and continuous listening to suggestions. It is an important factor for success according to the UTAUT theory of Venkatesh et al (2003) and 5. The gradual system development model for HR systems starts with the most important and ready subsystems and then expands to other systems. This is consistent with the principles of Agile software development and Kotter's (1996) change management theory that emphasizes creating short-term wins, such as starting with an evaluation system or a personnel development system that has urgent needs, and expanding to a recruitment system and an appointment system before integrating everything in the final phase.

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Citation



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This new knowledge is not only of academic value but can also be applied in practice to develop human resource management systems of Thai higher education institutions by both international theoretical concepts and the specific context of Thai higher education institutions.

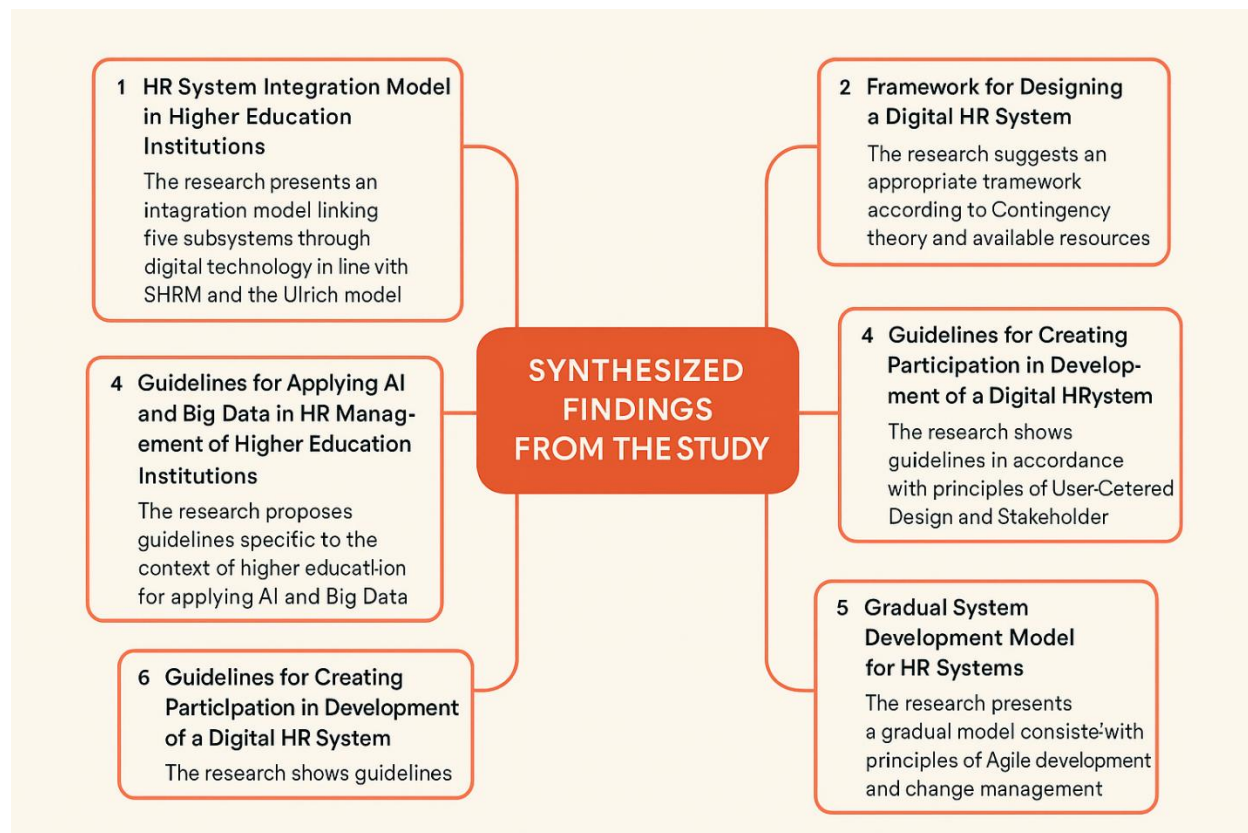


Figure 3 Contextual Digital HR Integration Model for Higher Education

The study provides a complete framework to improve human resource management at higher education institutions by utilizing digital transformation techniques. The integrated HR system model forms the foundation of the system by digitally linking five subsystems, which together facilitate seamless data transfer and strategic planning while remaining consistent with SHRM and the Ulrich model. The study provides detailed guidelines for implementing AI and Big Data in recruitment processes and development planning while assessing performance analysis to improve fairness and personalize People and Performance Analytics. The framework mandates the creation of digital HR systems that fit each institution's specific needs according to Contingency Theory principles. The study considers participation and stakeholder engagement as fundamental elements that qualitative research and User-Centered Design, along with UTAUT principles, support to ensure system usability and acceptance. This recommendation outlines a phased development approach that utilizes Agile and Kotter's change management theory by initially prioritizing key areas such as evaluation and development systems before expanding to other areas to create enduring digital HR solutions tailored to specific contexts.

Conclusion

This research has the objectives to study the model for promoting the efficiency of the faculty's personnel management system and to present and evaluate innovations in developing such a system. The research results can be summarized as follows: 1) The model for promoting the efficiency of the human resource management system consists of 5 integrated components, namely recruitment, appointment, personnel development, evaluation, rewards, penalties, and morale building. Each component applies digital technology, artificial intelligence, and big data analytics, in line with the SHRM concept and the



Ulrich model that emphasizes elevating the role of the human resource department from administrative work to strategic partnership; 2) The "integrated digital HR system" innovation developed connects all 5 subsystems through modern integration technology, including mobile applications, single sign-on systems, API gateways, data privacy and security systems, and executive dashboards, enabling human resource management to be more flexible, transparent, and efficient and 3) The innovation evaluation results by experts found that the innovations were accurate, appropriate, feasible, and useful at the highest level, especially in the usefulness aspect, which received the highest score, indicating its potential to meet the needs and solve problems in the faculty's human resource management. However, the feasibility aspect received the lowest score. Reflecting the challenges in implementing innovations

This research contains both academic and practical significance as it develops new knowledge on the integration of human resource management systems in higher education institutions, the application of digital technology, and the design of systems appropriate to the specific context of the faculty. In addition, it presents innovations that can be applied in practice to increase the efficiency of human resource management, which will affect the development of the faculty and the university as a whole.

Recommendation

Recommendations for applying the research results:

1. The formulation of the digital HR policy should cover important issues such as system integration, data security, system development standards, and the development of personnel digital skills, in line with the IT Governance theory of Weill, P., & Ross, J. W. (2004), which emphasizes the importance of having a clear policy and operational framework.

2. Adequate and continuous budget allocation. A 3-5 year budget plan should be prepared according to Becker's (1964) Human Capital Investment concept, which views human resource development as an investment that will generate long-term returns. Long-term budget planning will help system development to be continuous and sustainable.

3. Creating a digital organizational culture- Executives should promote a culture that is conducive to the use of digital technology in human resource management, emphasizing openness to change, lifelong learning, and integrated collaboration. This is in line with Schein, E. H.'s (2010) concept of organizational culture change, which states that for technological change to be successful, a cultural change must be accompanied by a commensurate change.

4. Action plan preparation- The Faculty should prepare an action plan for the development and implementation of an integrated digital HR system by clearly defining goals, indicators, steps, timeframe, responsible persons and required resources, according to the Goal-Setting Theory of Locke and Latham (1990) which states that setting clear, specific and challenging goals will increase motivation and work efficiency;

5. Pilot system development should start with the most important and ready subsystems, such as an evaluation system or personnel development system, to be used as a pilot and evaluation system before expanding to other systems. This approach is consistent with the principles of Agile software development and Kotter's (1996) change management theory, which emphasizes creating short-term victories to create momentum for change.

6. Personnel development should provide training to provide the necessary knowledge and skills to personnel at all levels, both system users and system administrators. A variety of training courses may be organized that are appropriate for each group of personnel, in line with the Human Capital Theory, which emphasizes developing personnel's knowledge and skills to increase work efficiency and productivity.

7. Establishing a system development team - A system development team consisting of human resource management experts, information technology experts, and representatives from user groups should be established to jointly develop a system that meets the needs and can be used practically. According to Tuckman's (1965) team development theory, which describes the steps of team development from Forming, Storming, Norming, to Performing.

8. Selection of appropriate technology- The research results should be used to select appropriate technology for the context and needs of the faculty, taking into account cost-effectiveness, practicality, and sustainability, according to Hammer and Champy's (1993) Systems Integration Theory, which emphasizes selecting technologies that can work with existing systems and support future changes.



9. Design of a user-friendly system- The system should be designed to be user-friendly, taking into account ease of use and convenience, having an attractive design, and supporting use on a variety of devices, according to the principles of user experience design.

Suggestions for future research

1. Comparative study of system efficiency- There should be a comparative study of the efficiency of the human resource management system before and after the implementation of the "integrated digital HR system" to determine the results of using the system. The research should use the longitudinal research method according to the concept of Bryman (2012), which emphasizes collecting data at different times to track changes.

2. Study of success factors in system implementation- There should be a study of factors affecting the success of the implementation of the "integrated digital HR system" in personnel management of the faculty by using the concept of critical success factors of Rockart (1979) that emphasizes identifying factors affecting the success of technology implementation in the organization.

3. Study of system development in other dimensions- There should be a study of the development of the human resource management system in other dimensions, such as personnel competency development, learning organization creation, and leadership development, to make the development of the human resource management system more comprehensive and complete.

4. Study of system integration- There should be a study of the integration of the human resource management system with other systems of the faculty and university, such as the financial and budget management system, academic administration system, to make the management of the faculty and university efficient and create maximum benefits according to the Enterprise Integration concept of Ross et al. (2019).

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