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| Article type:  Original Research  Article history:  Received 28 September 2024  Revised 28 November 2024  Accepted 04 December 2024  Published online 20 December 2024  Abbas. Owaid Abdulhussein Jebur1, Sayed Hamidreza. Mirtavousi2\*, Mustafa Sabah. Hlaihel Almaliki3, Saeid. Aghasi4  1 PhD Student, Department of Public Administration, Isfahan (Khorasgan) Branch, Islamic Azad University, Isfahan, Iran  2 Assistant Professor, Department of Public Administration, Isfahan (Khorasgan) Branch, Islamic Azad University, Isfahan, Iran  3 Assistant Professor, Department of Public Administration, Faculty of Management, Sumer University, Sumer, Iraq  4 Assistant Professor, Social and Cultural Researches Center, Dehaghan Branch, Islamic Azad University, Dehaghan, Iran  Corresponding author email address:  hamidreza-mirtavousi@yahoo.com  How to cite this article:  Owaid Abdulhussein Jebur, A. , Mirtavousi , S.H. , Hlaihel Almaliki , M.S. & Aghasi , S. (2024). Design and Presentation of a Human Resource Allocation Model with a Soft Skills Approach. *Future of Work and Digital Management Journal,* 2(4), 1-13. <https://doi.org/10.61838/fwdmj.161>    © 2024 the authors. This is an open access article under the terms of the Creative Commons Attribution-NonCommercial 4.0 International ([CC BY-NC 4.0](http://creativecommons.org/licenses/by-nc/4.0)) License. | **Design and Presentation of a Human Resource Allocation Model with a Soft Skills Approach**  **ABSTRACT**  The aim of the present study is to design and present a human resource allocation model with a soft skills approach. The research is exploratory in terms of purpose, qualitative in terms of data type, cross-sectional in terms of data collection time, and survey-based in terms of research method. The statistical population consists of experts, managers of knowledge-based companies, and university professors in the city of Karbala. The results of the study indicate that, in the qualitative section, five main dimensions were identified, including required skills, assessment of employees’ current skills, identification of job requirements, appropriate selection and training of employees, and monitoring and evaluation of soft skills. The qualitative data analysis tool employed was the thematic analysis technique. The research findings show that, out of 188 categories, seven dimensions were extracted, including identification of required skills, evaluation of employees’ current skills, identification of job requirements, appropriate selection and training of employees, and monitoring and evaluation of soft skills. This study recommends that creativity, socio-human systematic perspectives, explorative and critical thinking, and innovation (including technology and digitalization) can contribute to balancing the knowledge, skills, and abilities required for professionals to perform effectively in their professional activities.  **Keywords:** Human Resources, Human Resource Allocation, Soft Skills |

# Introduction

In contemporary management science, the allocation of human resources has evolved beyond the traditional paradigm of matching qualifications with job requirements. The emerging emphasis on soft skills—interpersonal, emotional, and cognitive competencies—has redefined how organizations conceptualize human capital as a strategic asset. In the digital and knowledge-driven economy, success is increasingly dependent on employees’ abilities to collaborate, adapt, communicate, and innovate effectively rather than solely on their technical expertise [[1](#_ENREF_1), [2](#_ENREF_2)]. Scholars now recognize that while hard skills remain essential for operational proficiency, soft skills constitute the differentiating factor that enhances organizational performance, resilience, and innovation [[3](#_ENREF_3), [4](#_ENREF_4)].

The concept of soft skills has attracted significant academic and managerial attention because it bridges the gap between human capability and organizational adaptability. These competencies, including teamwork, problem-solving, communication, leadership, and emotional intelligence, facilitate effective interpersonal relationships and sustainable performance in dynamic contexts [[5](#_ENREF_5), [6](#_ENREF_6)]. As organizations face globalization, digital transformation, and continuous uncertainty, they require human resources capable of managing complexity through creativity and social intelligence [[7](#_ENREF_7), [8](#_ENREF_8)]. Consequently, soft skills are not merely complementary traits but strategic imperatives that define the agility and competitiveness of institutions [[1](#_ENREF_1), [9](#_ENREF_9)].

In this context, the integration of soft skills into human resource allocation models has become a critical research focus. Traditional models, which emphasize quantitative optimization of labor distribution, have been increasingly criticized for neglecting qualitative factors that influence productivity and satisfaction [[10](#_ENREF_10), [11](#_ENREF_11)]. Modern organizations must balance technical specialization with social adaptability to ensure not only functional alignment but also cultural and strategic coherence [[12](#_ENREF_12), [13](#_ENREF_13)]. Accordingly, scholars have proposed new models of HR allocation that incorporate emotional, cognitive, and relational dimensions of competence [[14](#_ENREF_14), [15](#_ENREF_15)].

Soft skills also play a fundamental role in preparing individuals for the rapidly changing demands of the labor market. Studies indicate that university graduates who possess developed soft skills exhibit higher employability and readiness for professional environments [[2](#_ENREF_2), [16](#_ENREF_16)]. This trend reflects the growing alignment between education, labor policy, and industry expectations, particularly in economies undergoing technological transformation [[17](#_ENREF_17), [18](#_ENREF_18)]. Moreover, as organizations transition toward digital ecosystems and AI-assisted decision-making, the human factor—specifically empathy, creativity, and critical judgment—remains indispensable for balancing automation with human-centered values [[19](#_ENREF_19), [20](#_ENREF_20)].

From a strategic perspective, soft skill integration contributes to organizational sustainability by enhancing leadership, communication, and employee engagement [[21](#_ENREF_21), [22](#_ENREF_22)]. Effective leadership in the modern workplace requires managers to act not only as decision-makers but as facilitators of trust, innovation, and collaboration [[6](#_ENREF_6), [9](#_ENREF_9)]. By fostering soft skills through structured HR policies, organizations can cultivate cultures of psychological safety, collective learning, and ethical awareness—all of which strengthen institutional legitimacy and long-term competitiveness [[1](#_ENREF_1), [4](#_ENREF_4)].

The digitalization of HR processes has further amplified the relevance of soft skills within the context of data-driven management. The emergence of human resource analytics has allowed organizations to quantify qualitative attributes, providing insight into behavioral patterns, communication efficiency, and teamwork potential [[8](#_ENREF_8)]. These analytical tools not only optimize recruitment and training but also predict future performance trends, supporting strategic workforce planning [[10](#_ENREF_10), [23](#_ENREF_23)]. However, the challenge remains to balance algorithmic precision with human intuition, ensuring that automated systems do not marginalize the very interpersonal qualities that define effective collaboration [[19](#_ENREF_19), [24](#_ENREF_24)].

In knowledge-based organizations, such as those operating in the higher education, technology, and services sectors, the integration of soft skills is essential for sustaining innovation and institutional learning [[15](#_ENREF_15), [25](#_ENREF_25)]. The proliferation of digital platforms and global collaborations has transformed traditional communication patterns, requiring professionals to operate across cultural, disciplinary, and virtual boundaries [[13](#_ENREF_13), [26](#_ENREF_26)]. Effective HR allocation in these contexts depends on the ability to identify and nurture relational competencies that foster synergy across diverse teams [[7](#_ENREF_7), [12](#_ENREF_12)]. Moreover, the inclusion of soft skills in HR models enables organizations to adapt to disruptions such as automation, globalization, and socio-political crises by building a resilient and adaptable workforce [[27](#_ENREF_27), [28](#_ENREF_28)].

Soft skills development is also directly tied to the competency-based approach in human resource management, which seeks to align individual abilities with organizational missions [[20](#_ENREF_20), [21](#_ENREF_21)]. Competency-based HR models emphasize continuous learning, empowerment, and feedback mechanisms as drivers of professional growth. Within such frameworks, employees are viewed as strategic partners who co-create value through collaboration and innovation [[5](#_ENREF_5), [7](#_ENREF_7)]. This paradigm shift demands a reconceptualization of HR allocation—not merely as a mechanical distribution of labor, but as a dynamic process of aligning human potential with organizational vision [[11](#_ENREF_11), [29](#_ENREF_29)].

Furthermore, studies highlight the critical relationship between soft skills and job performance across various cultural and institutional contexts [[12](#_ENREF_12), [22](#_ENREF_22)]. Employees with strong interpersonal and emotional competencies tend to demonstrate higher adaptability, motivation, and ethical decision-making, leading to improved productivity and innovation outcomes [[1](#_ENREF_1), [4](#_ENREF_4)]. Similarly, at the macro level, nations that invest in soft skills education and professional training show stronger institutional cohesion and social capital formation [[16](#_ENREF_16), [27](#_ENREF_27)]. These findings suggest that soft skill development contributes not only to organizational success but also to broader socio-economic advancement.

Despite growing recognition, the incorporation of soft skills into human resource allocation remains complex, particularly in developing economies where structural and technological limitations persist [[17](#_ENREF_17), [18](#_ENREF_18)]. Many organizations continue to rely on rigid administrative structures that undervalue the qualitative dimensions of performance [[24](#_ENREF_24), [29](#_ENREF_29)]. To overcome these challenges, scholars advocate for the use of hybrid frameworks combining analytical modeling with qualitative assessment, ensuring that both measurable efficiency and human potential are addressed [[10](#_ENREF_10), [14](#_ENREF_14)]. This integrated perspective enhances not only the precision of HR allocation but also its alignment with organizational ethics and sustainability goals [[8](#_ENREF_8), [20](#_ENREF_20)].

The relevance of soft skills–oriented HR allocation models becomes even more apparent in the era of Industry 4.0, where the intersection of technology and human adaptability defines competitive advantage [[7](#_ENREF_7), [23](#_ENREF_23)]. Industry 4.0 environments require professionals capable of synthesizing technological expertise with emotional intelligence and collaborative leadership [[25](#_ENREF_25), [28](#_ENREF_28)]. In such contexts, HR allocation must ensure that individuals with diverse competencies are strategically positioned to create synergy across departments, thereby fostering innovation ecosystems [[13](#_ENREF_13), [15](#_ENREF_15)].

In conclusion, contemporary organizations must reconceptualize human resource allocation as a strategic, dynamic, and soft-skill–driven process.

# Methodology

Given that the aim of this study is to design and present a human resource allocation model with a soft skills approach, the research method is classified as exploratory–applied in terms of purpose, cross-sectional in terms of data collection time, inductive–deductive in terms of philosophical orientation, and survey-based in terms of data collection method and research nature. To conduct the study, the thematic analysis method was employed. The thematic method involves the use of a qualitative approach with the aim of identifying, categorizing, and extracting concepts based on the perspectives of relevant experts and specialists. The stages of the thematic analysis method are presented in Figure 1.

**Figure 1**

*Stages of Thematic Analysis*

The statistical population consists of university professors and managers of knowledge-based companies in the city of Karbala. The criteria for expert interviews included relevant education and work experience. The sample for this part of the study was selected purposefully from among the experts based on the principle of theoretical saturation. The sampling method was snowball sampling, and 10 experts were interviewed. The data collection instrument for the qualitative section was semi-structured interviews. To ensure validity and reliability, Creswell’s eight strategies for verifying research findings were applied.

# Findings and Results

Table 1 presents the findings related to the demographic characteristics of the participants in the study, including the average age, average work experience, and academic qualifications in the field of study.

**Table 1**

*Demographic Characteristics of Interviewed Experts*

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| Group | Number | Mean Age | Mean Work Experience | Master's Degree | Ph.D. |
| Managers of Knowledge-Based Companies | 5 | 42.22 | 14.66 | 60% | 40% |
| University Professors and Academic Experts | 5 | 41.25 | 15.33 | – | 100% |

An examination of the average age of the interviewed experts showed that managers of knowledge-based companies had the highest average age (42.22 years), while university professors and academic experts had the lowest (41.25 years). Regarding average work experience, university professors and academic experts had the highest (15.33 years), whereas managers of knowledge-based companies had slightly less (14.66 years). Among the participants, seven individuals held doctoral degrees and three held master’s degrees.

A portion of the interview text from one of the interviewees is presented below:

“From my perspective, focusing on the company’s goals and strategy helps us identify the soft skill requirements needed to achieve organizational objectives. By defining the company’s goals and strategies, we can determine what types of soft skills (such as leadership, collaboration, interpersonal communication, and others) are important for our employees to reach these goals. Considering the company’s goals and strategies, we can emphasize soft skills in the recruitment and selection process. By defining key criteria for soft skills and having a clear understanding of which skills are required for each job, we can allocate human resources more effectively by hiring individuals who possess these skills. Based on the company’s soft skill needs, we can design training and development programs for employees. These programs can help strengthen and improve employees’ soft skills, thereby increasing performance and enhancing organizational effectiveness. In line with the company’s goals and strategies, we can also develop a system for evaluating employee performance based on soft skills. This system can help us identify and reward employees who possess the necessary soft skills and have achieved company objectives. Such actions lead to increased employee commitment and satisfaction and contribute to retaining and developing human resources with strong soft skills. Focusing on soft skills in human resource allocation can also promote organizational culture. Considering the importance of soft skills such as collaboration, interpersonal communication, leadership, and adaptability, we can promote these skills as core values and expected behaviors within the company. By portraying employees who possess these skills and leaders who reinforce them, we can shape an organizational culture that fosters and advances soft skill capabilities.”

By examining the identified open codes obtained from the analyzed interviews, the final step involved defining and naming the themes. The findings indicate that the most important dimensions influencing the design and presentation of a human resource allocation model with a soft skills approach consist of five major dimensions: identifying required skills, assessing employees’ current skills, identifying job requirements, selecting and training suitable employees, and monitoring and evaluating soft skills. Each of these main dimensions also includes several subcomponents. The results of this categorization are presented in Table 2.

**Table 2**

*Secondary Codes Derived from Primary (Open) Codes Extracted from the Conducted Interviews*

|  |  |  |
| --- | --- | --- |
| Primary Codes (Extracted from Interviews) | Extracted Secondary Codes (Main Indicators) | No. |
| Emphasis on organizational purpose and strategy – identifying organizational needs – developing soft skills (e.g., leadership, cooperation, interpersonal communication, etc.) aligned with organizational goals – selection and recruitment aligned with organizational procedures – designing employee training and development programs aligned with strategic objectives – performance evaluation and reward systems linked to goal achievement – enhancing employee commitment and satisfaction through soft skills – retaining and developing human resources with soft skills – promoting organizational culture aligned with strategic objectives – strengthening soft capabilities consistent with organizational strategies | Focus on organizational purpose and strategy | 1 |
| Identification of required soft skills – job task and responsibility analysis – matching soft skills with employee profiles – focusing on soft skills in selection criteria and job interviews – recruiting in accordance with job analysis – performance evaluation based on job requirements and soft skills | Organizational job analysis | 2 |
| Emphasis on current employee capabilities and experience – identifying existing soft skills – focusing on abilities such as leadership, teamwork, and problem-solving – attention to interpersonal communication and managerial competence – using existing soft skills in HR allocation – developing current soft skills – transferring skills and experiences – internal HR training – offering courses on communication and managerial soft skills | Focus on employees’ current capabilities and experiences | 3 |
| Feedback from customers and stakeholders – identifying stakeholder needs – prioritizing soft skills – improving customer satisfaction – identifying employee strengths and weaknesses in soft skills – building stakeholder trust – improving internal processes | Feedback from customers and stakeholders | 4 |
| Identifying competitors and similar industries – assessing required soft skills among competitors – reviewing training, development, and recruitment policies – identifying strengths and weaknesses relative to competitors – enhancing innovation and competitiveness in soft skills – identifying opportunities and threats related to soft skills | Benchmarking competitors and industries | 5 |
| Aligning soft skills with organizational needs – flexibility of soft skills during organizational changes – individual empowerment based on soft skills – promoting diversity and interaction in teams – systems thinking and adaptability to change | Employee flexibility and adaptability | 6 |
| Building effective teams – improving intra-team communication – developing communication skills – supporting personal development – joint problem-solving and decision-making – developing soft skills such as critical thinking, problem-solving, and group decision-making | Developing team interaction and collaboration | 7 |
| Self and others’ management and leadership – developing leadership skills – motivating and inspiring team members – positive influence on others – identifying individual strengths and capabilities – collaboration and team engagement – empowering team members – creating a learning-conducive environment – flexibility in HR allocation – rapid decision-making and adaptability in HR allocation | Managing and leading self and others | 8 |
| Possession of analytical and critical thinking skills – analyzing organizational needs – accurate performance evaluation – assessing capabilities and skills – examining team competencies – assessing potential risks and consequences | Possession of analytical and critical thinking skills | 9 |
| Communication and interpersonal skills – interaction with key personnel for HR allocation – understanding stakeholder needs – effective and powerful communication – active listening – effective cooperation and interaction – resolving organizational conflicts – adaptability under changing conditions | Developing communication and interpersonal skills | 10 |
| Problem-solving and critical thinking skills – logical analysis of situations and related data – constructive criticism of existing organizational conditions – providing innovative HR allocation solutions – data-driven decision-making | Possession of problem-solving and critical thinking ability | 11 |
| Understanding and addressing organizational needs through soft skills – strengthening interpersonal communication – teamwork and collaboration – adapting to challenges and changes – leadership and facilitation skills – prioritization and integration of relevant information – assessment of individual and team capabilities | Understanding and addressing organizational needs | 12 |
| Efficiently presenting ideas and opinions – providing an open space for discussion – increasing group meetings and dialogue sessions – using communication platforms and open discussions with leaders and colleagues – encouraging diversity of viewpoints – establishing systematic processes for idea collection – using online platforms for receiving ideas – considering expert opinions on soft skills – tracking and evaluating ideas – creating an environment that fosters ideation and innovation – encouraging freedom of expression and positive evaluation of ideas – offering financial and non-financial incentives for successful ideas | Effective presentation of ideas and opinions | 13 |
| Thinking outside the box (creative and innovative thinking) – identifying new solutions for organizational problems – employing forward-looking approaches – improving internal processes – challenging conventional methods – encouraging creative thinking among colleagues | Ability to think outside the box | 14 |
| Managing organizational changes – identifying change requirements – adjusting strategy, work methods, and structure – assessing soft skills needed for change – developing knowledge-sharing and experience-sharing skills – training and team development according to change requirements – recruiting based on change needs – developing soft skills for change management | Managing organizational changes | 15 |
| Identifying required skills based on organizational needs analysis – setting HR allocation priorities – identifying core organizational needs – aligning with organizational strategy – assessing strengths and weaknesses – evaluating team skills – determining training needs – HR planning based on soft skills | Organizational needs analysis | 16 |
| Aligning with organizational opportunities and visions – identifying required skills – organizational growth and customer demand – competition, innovation, and technological development – long-term transformation – analyzing current skills – examining members’ soft and technical skills – training and developing soft skills – considering individual experiences – aligning individuals with organizational opportunities – enhancing soft skills in line with strategic goals – creating a suitable environment for growth and development | Alignment with organizational opportunities and vision | 17 |
| Evaluating current employee skills – identifying strengths and weaknesses – developing soft skills – allocating HR for promotion and advancement – encouraging and retaining employees for soft skill development | Evaluation of current employee skills | 18 |
| Considering organizational culture – developing soft skills and rewarding top performers – aligning employee soft skills with organizational culture – enhancing organizational culture – selecting employees compatible with culture – creating a positive cultural impact – rewarding soft skill excellence and performance success | Considering organizational culture in decision-making | 19 |
| Empowering and developing employees’ soft skills – creating training opportunities – promoting a learning culture – identifying skill needs – providing educational resources – periodic and systematic performance assessment – offering advancement opportunities – assigning new and challenging tasks | Employee empowerment and soft skill development | 20 |
| Monitoring and evaluating employee performance – identifying top soft skills – feedback from colleagues, managers, and customers – gaining soft skills through training – strengthening employees’ soft skills – aligning with project and team needs | Monitoring and evaluating employee performance | 21 |
| Measuring employee progress based on identified needs – focusing on performance evaluation and progress – developing soft skills – providing targeted educational resources – recruiting employees based on required soft skills – assessing performance and progress in soft skills | Measuring employee progress in soft skills | 22 |
| Feedback and guidance from employees and managers – evaluating soft skill performance – supervisor and peer observations – feedback through coaching and mentoring – providing managerial counseling, workshops, and training – enhancing leadership – using 360-degree evaluations and direct feedback | Providing feedback and guidance to HR decision-makers | 23 |
| Motivating employees to improve soft skills – offering learning and career growth opportunities – valuing and rewarding soft skill enhancement – improving organizational culture to promote soft skills – providing feedback and recognition – enhancing job satisfaction – creating career advancement opportunities – fostering a healthy work environment and work-life balance – offering suitable rewards and benefits | Motivation and job satisfaction | 24 |
| Aligning soft skill practices with organizational needs – identifying organizational needs – reviewing strategies, goals, and activities – assessing employee strengths and customer feedback – designing appropriate training programs – developmental dialogues and learning resources – implementing continuous training programs – evaluating and measuring soft skill practices | Aligning soft skill practices with organizational needs | 25 |

Table 3 presents the main dimensions of the study derived from the secondary codes, which were obtained from the primary (open) codes extracted from the conducted interviews.

**Table 3**

*Main Dimensions of the Study Derived from Secondary Codes Obtained from Primary (Open) Codes*

|  |  |  |
| --- | --- | --- |
| No. | Main Dimensions of the Study | Secondary Codes |
| 1 | Identifying Required Skills | Focus on Organizational Purpose and Strategy |
| 2 |  | Organizational Job Analysis |
| 3 |  | Attention to Employees’ Current Capabilities and Experiences |
| 4 |  | Feedback from Customers and Stakeholders |
| 5 |  | Benchmarking Competitors and Industries |
| 6 | Assessing Employees’ Current Skills | Employee Flexibility and Adaptability |
| 7 |  | Developing Team Interaction and Collaboration |
| 8 |  | Managing and Leading Self and Others |
| 9 |  | Possession of Analytical and Critical Thinking Skills |
| 10 |  | Developing Communication and Interpersonal Skills |
| 11 | Identifying Job Requirements | Possession of Problem-Solving and Critical Thinking Ability |
| 12 |  | Understanding and Addressing Organizational Needs |
| 13 |  | Effective Presentation of Ideas and Opinions |
| 14 |  | Ability to Think Outside the Box |
| 15 |  | Managing Organizational Changes |
| 16 | Selecting and Training Suitable Employees | Organizational Needs Analysis |
| 17 |  | Alignment with Organizational Opportunities and Vision |
| 18 |  | Evaluation of Current Employee Skills |
| 19 |  | Considering Organizational Culture in Decision-Making |
| 20 |  | Employee Empowerment and Soft Skill Development |
| 21 | Monitoring and Evaluating Soft Skills | Monitoring and Evaluating Employee Performance |
| 22 |  | Measuring Employee Progress in Soft Skills |
| 23 |  | Providing Feedback and Guidance to HR Decision-Makers |
| 24 |  | Motivation and Job Satisfaction |
| 25 |  | Aligning Soft Skill Practices with Organizational Needs |

Figure 2 presents the final model derived from the study’s indicators and secondary codes. The model includes the identified dimensions and components, which are illustrated separately in Figure 2.

**Figure 2**

*Conceptual Model of the Study*

A screenshot of a computer

AI-generated content may be incorrect.

# Discussion and Conclusion

The findings of the present study led to the development of a conceptual model for human resource allocation with a soft skills approach, which encompasses five main dimensions: identifying required skills, assessing employees’ current skills, identifying job requirements, selecting and training suitable employees, and monitoring and evaluating soft skills. These results demonstrate that human resource allocation is no longer a purely quantitative process of distributing labor according to operational needs; rather, it has evolved into a strategic, competence-based, and adaptive process that integrates interpersonal and behavioral capabilities. The qualitative analysis revealed that organizations emphasizing soft skill-based allocation tend to exhibit greater organizational flexibility, improved collaboration, and enhanced innovation potential. This aligns with prior research emphasizing that soft skills, such as communication, teamwork, adaptability, and emotional intelligence, are critical in shaping workforce performance and overall organizational effectiveness [[1-3](#_ENREF_1)].

The first dimension, identifying required skills, underscores the necessity of aligning individual competencies with organizational strategies and goals. Participants emphasized that understanding the strategic orientation of the organization allows managers to map the soft skill needs required to achieve long-term objectives. This finding corresponds with prior research highlighting that the integration of soft skills in workforce planning enhances organizational adaptability and resilience [[8](#_ENREF_8), [17](#_ENREF_17)]. Moreover, the identification of soft skill needs promotes a human-centered allocation system where employees’ emotional and cognitive capacities are viewed as valuable assets [[5](#_ENREF_5), [6](#_ENREF_6)]. The results of the present study also reaffirm that organizations with strategic clarity in skill identification achieve superior performance outcomes because they align job requirements with both technical and interpersonal abilities [[7](#_ENREF_7), [21](#_ENREF_21)].

The second dimension, assessing employees’ current skills, indicates that continuous evaluation of employees’ existing soft skills provides the foundation for effective resource allocation. This finding aligns with the competency-based approach proposed by [[20](#_ENREF_20)], who emphasized the importance of skill mapping and continuous assessment to ensure alignment between individual strengths and organizational goals. Participants in this study highlighted that flexibility, team collaboration, and leadership are among the most valuable soft skills for dynamic environments. This aligns with [[12](#_ENREF_12)] who noted that employee adaptability and self-management are central to achieving organizational excellence. Similarly, [[25](#_ENREF_25)] observed that institutions undergoing digital transformation rely heavily on employees’ communicative and cognitive competencies to manage technological and procedural changes.

The third dimension, identifying job requirements, emphasizes the integration of soft skill frameworks into job design and role definition. The study found that organizations that incorporate problem-solving, creativity, and innovation into job requirements cultivate more proactive and future-oriented employees. These findings align with [[7](#_ENREF_7)], who argued that in the context of Industry 4.0, soft skills are indispensable in complementing digital literacy and technical expertise. Similarly, [[13](#_ENREF_13)] demonstrated that international companies that embed knowledge management and soft skill criteria in role descriptions achieve higher organizational learning and adaptability. [[9](#_ENREF_9)] also confirmed that embedding soft skills in HRM practices leads to higher engagement and performance, particularly in service and knowledge-intensive organizations.

The fourth dimension, selecting and training suitable employees, illustrates that effective HR allocation depends on a systematic process of recruiting individuals with the right combination of soft and hard skills, followed by targeted training to enhance those competencies. The study found that organizations prioritizing soft skill development during the selection phase tend to create cohesive teams capable of collaborative problem-solving. This result is consistent with the findings of [[2](#_ENREF_2)], who demonstrated that developing soft skills among university graduates significantly improves their employability and work readiness. Moreover, [[4](#_ENREF_4)] emphasized that the level of soft skill proficiency among professionals correlates with their performance and job satisfaction, underscoring the need for structured training programs. Similarly, [[22](#_ENREF_22)] found that employees who received systematic soft skill development training demonstrated superior communication and leadership abilities, leading to improved job performance.

The fifth dimension, monitoring and evaluating soft skills, reflects the growing importance of performance feedback systems that incorporate qualitative indicators of employee behavior and interpersonal effectiveness. According to participants, organizations that regularly assess and reinforce soft skill development not only enhance productivity but also foster a culture of learning and continuous improvement. This finding aligns with [[20](#_ENREF_20)], who emphasized that periodic assessment of soft skill competencies through multivariate models enhances the predictive validity of HR allocation systems. Similarly, [[21](#_ENREF_21)] and [[14](#_ENREF_14)] underscored that systematic evaluation mechanisms ensure the sustainability of competency-based HR frameworks by linking performance data with training and promotion decisions. The use of feedback loops, coaching, and 360-degree evaluations, as noted by [[27](#_ENREF_27)], enhances employees’ self-awareness and motivation to improve interpersonal behaviors.

The results of this study also highlight the transformative potential of soft skill-oriented HR allocation in fostering organizational innovation and digital adaptation. Organizations that integrate soft skills into allocation frameworks can better navigate technological disruptions and market uncertainties. This conclusion is supported by [[19](#_ENREF_19)], who found that communication efficiency and digital competency, supported by AI-based management tools, are critical for sustainable performance in modern enterprises. Similarly, [[25](#_ENREF_25)] and [[15](#_ENREF_15)] reported that knowledge-based organizations increasingly rely on employees’ soft skill portfolios to overcome barriers to digital transformation. Moreover, [[18](#_ENREF_18)] and [[17](#_ENREF_17)] confirmed that fostering creativity, leadership, and adaptability enables public and private organizations to achieve institutional renewal and citizen-centered innovation.

In line with previous literature, the findings of this study also demonstrate that soft skill development contributes to organizational resilience and ethical management. [[1](#_ENREF_1)] found that the integration of soft and hard skills enhances the quality of human capital and organizational reputation. Similarly, [[3](#_ENREF_3)] emphasized that soft skills such as emotional intelligence and teamwork significantly affect innovation capacity across industries. The evidence from this study indicates that organizations that consciously incorporate such competencies into their HR models tend to display higher job satisfaction, lower turnover rates, and stronger collective efficacy. This is supported by [[12](#_ENREF_12)] and [[4](#_ENREF_4)], who both concluded that employees with developed interpersonal competencies contribute to a more cohesive and collaborative organizational culture.

Another critical insight from the results concerns the role of leadership and culture in enabling soft skill-based HR allocation. Participants emphasized that leadership commitment and cultural alignment are essential for institutionalizing soft skill frameworks. [[6](#_ENREF_6)] demonstrated that managerial literacy in scientific and technological contexts directly enhances soft skill development initiatives within organizations. Similarly, [[20](#_ENREF_20)] observed that leadership’s emphasis on competency-based models positively correlates with employee empowerment and innovation. [[7](#_ENREF_7)] also argued that in Industry 4.0 environments, effective HR allocation depends on leaders who can integrate emotional intelligence with data-driven decision-making to balance efficiency and human well-being.

In addition, the findings support the view that competency-based and data-driven approaches can enhance HR allocation efficiency without compromising human values. [[8](#_ENREF_8)] highlighted that human resource analytics can translate qualitative competencies into measurable indicators that inform strategic workforce decisions. However, as [[24](#_ENREF_24)] cautioned, overreliance on quantitative analytics without accounting for social and emotional variables may reduce the human dimension of HR practices. This study corroborates that hybrid models—integrating analytics with qualitative assessment—achieve more balanced and ethically sustainable outcomes. This aligns with [[14](#_ENREF_14)] and [[10](#_ENREF_10)], who demonstrated that integrating information systems with human insight optimizes both operational performance and organizational cohesion.

Furthermore, the study provides evidence that soft skill-based HR allocation enhances employee engagement and motivation, as individuals perceive fairness and recognition of their diverse abilities. This outcome is consistent with [[22](#_ENREF_22)], who found that employee motivation and performance are significantly improved when HR systems acknowledge interpersonal competencies. Likewise, [[21](#_ENREF_21)] and [[20](#_ENREF_20)] confirmed that when organizations design HR models that reward collaboration, adaptability, and learning, they create sustainable work environments conducive to long-term growth. [[11](#_ENREF_11)] also emphasized that integrating psychological and behavioral metrics into HR allocation leads to more equitable and effective workforce utilization, which supports the current findings.

Overall, this study expands on the theoretical and empirical evidence demonstrating that soft skills are the cornerstone of human resource allocation in modern organizations. The results support the proposition that HR allocation models must evolve from mechanistic systems toward dynamic frameworks emphasizing continuous learning, cultural fit, and social competence [[1](#_ENREF_1), [8](#_ENREF_8), [20](#_ENREF_20)]. The alignment of soft skill development with organizational strategy ensures that employees are not merely resources but strategic partners in value creation. Such an integrated perspective fosters adaptability, innovation, and ethical responsibility—core dimensions of sustainable organizational success in the digital era.

This study, while comprehensive, is not without its limitations. The qualitative design and limited sample size restrict the generalizability of the findings to broader populations or industries. The focus on a specific regional and cultural context may limit the applicability of the model in different socio-economic environments. Additionally, the study relied primarily on self-reported data, which may introduce subjective biases or incomplete reflections of actual behaviors. The absence of quantitative validation also means that causal relationships between soft skills and allocation efficiency remain theoretical rather than empirically confirmed. Finally, the cross-sectional nature of the data prevents the assessment of temporal dynamics in soft skill development and HR allocation effectiveness.

Future studies should employ mixed-method or longitudinal designs to quantitatively validate the proposed model and examine causal relationships among soft skill dimensions, performance metrics, and organizational outcomes. Expanding the scope across various sectors and cultural settings would provide comparative insights into how soft skill integration manifests differently across industries. Researchers should also explore the role of artificial intelligence and HR analytics in automating soft skill assessment and prediction while maintaining ethical oversight. Furthermore, future investigations could address the influence of leadership styles, digital maturity, and psychological capital on the success of soft skill-oriented HR allocation frameworks.

Practically, organizations should adopt competency-based HR allocation systems that incorporate continuous soft skill assessment and targeted training. Managers should emphasize communication, adaptability, and emotional intelligence as key performance indicators during recruitment, evaluation, and promotion. Investment in leadership development and digital literacy should accompany soft skill programs to ensure alignment with strategic objectives. Moreover, organizations should create supportive environments that encourage feedback, mentorship, and collaborative learning. By institutionalizing soft skill development within HR allocation systems, companies can enhance workforce agility, innovation, and overall organizational sustainability.

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# Authors’ Contributions

All authors equally contributed to this study.

# Declaration of Interest

The authors of this article declared no conflict of interest.

# Ethical Considerations

The study protocol adhered to the principles outlined in the Helsinki Declaration, which provides guidelines for ethical research involving human participants. Written consent was obtained from all participants in the study.

# Transparency of Data

In accordance with the principles of transparency and open research, we declare that all data and materials used in this study are available upon request.

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# References

[1] S. N. Marzuki, M. Muljan, H. Haslinda, and L. Affandi, "Soft Skill and Hard Skill Development Model in Improving the Quality of Human Resources in the Higher Education Environment," *QALAMUNA: Jurnal Pendidikan, Sosial, dan Agama,* vol. 16, no. 1, pp. 571-582, 2024, doi: 10.37680/qalamuna.v16i1.5070.

[2] K. P. Aprilita and A. Pritasari, "The Influence of Soft Skills Development on Perceived Work Readiness: Case of Recent Public University Graduates," *Jurnal Ekonomi, Manajemen, Bisnis, dan Sosial (EMBISS),* vol. 4, no. 4, pp. 291-310, 2024. [Online]. Available: <https://www.embiss.com/index.php/embiss/article/view/327>.

[3] M. Sopa *et al.*, "Hard skills versus soft skills: Which are more important for Indonesian employees' innovation capability," *International Journal of Control and Automation,* vol. 13, no. 2, pp. 156-175, 2020. [Online]. Available: <https://www.researchgate.net/publication/340412466_Hard_Skills_versus_Soft_Skills_Which_are_More_Important_for_Indonesian_Employees_Innovation_Capability>.

[4] S. Rahimi and R. Sohaili, "Examining the status of soft skills among university librarians in Kermanshah province," *Academic Library and Information Science Research,* 2023. [Online]. Available: <https://jlib.ut.ac.ir/article_93651_d46909f580ccb9acf75b81d1dcc97918.pdf>.

[5] F. Teimurzadeh and H. Najafi, "The influence and impact of soft skills on critical thinking and innovative behavior of school principals (using the DEMATEL methodology)," *Quarterly Journal of Transcendent Education,* vol. 1, no. 3, 2021. [Online]. Available: <https://journals.iau.ir/article_691393.html>.

[6] N. H. Khaleghkhah, "The role of scientific-technological literacy of educational managers in enhancing soft skill components," *Bi-Monthly Scientific-Research Journal of a New Approach in Educational Management,* vol. 11, no. 46, 2021. [Online]. Available: <https://jedu.marvdasht.iau.ir/article_4549.html>.

[7] Z. N. Majid and M. Hana, "Strategic Challenges of Human Resources Allocation in Industry 4.0," *Information - An International Interdisciplinary Journal,* 2021, doi: 10.3390/INFO12030120.

[8] P. C. Bahuguna, R. Srivastava, and S. Tiwari, "Human resources analytics: where do we go from here?," *Benchmarking: An International Journal,* vol. 31, no. 2, pp. 640-668, 2024, doi: 10.1108/BIJ-06-2022-0401.

[9] Mattajang, "The Importance of Soft Skills Development in Human Resource Management," *Jurnal Ekonomi,* vol. 12, no. 4, pp. 2361-2368, 2023. [Online]. Available: <https://ejournal.seaninstitute.or.id/index.php/Ekonomi/article/view/3473>.

[10] C. Zhou and Wang, "Design of the Human Resource Optimization Allocation Model Based on Information Integration," *Mobile Information Systems,* 2022, doi: 10.1155/2022/6549647.

[11] B. Estadi and H. Z. K. S. Ebrahimi Sadrabadi, "Presenting a model for optimal allocation of human resources to operational processes using the Markowitz model: A case study in the urology department of a specialized kidney center," *Scientific-Research Journal of Engineering and Quality Management,* vol. 11, no. 1, pp. 77-87, 2021. [Online]. Available: <https://www.pqprc.ir/article_136306.html>.

[12] A. Kolak and M. S. M. B. N. Soltani, "The impact of human resource management on organizational performance from the perspective of managers and employees with a comparative approach," *Quarterly Journal of Education and Human Resource Improvement,* vol. 10, no. 1, pp. 40-63, 2023. [Online]. Available: <https://journals.iau.ir/article_704780.html>.

[13] P. Maxim, K. Igor, and B. Volodymyr, "Knowledge management in international companies: specific features and information tools," *Finansovo-Kreditna Dìâlʹnìstʹ: Problemi Teorìï ta Praktiki,* 2023, doi: 10.55643/fcaptp.3.50.2023.4061.

[14] Z. H. J. C. d. S. Bruno, "A knowledge‐based system for electric motors compliance verification in a multinational‐level company," *Expert Systems,* 2022, doi: 10.1111/exsy.12979.

[15] S. Knut, *The Rise of the Knowledge-Based Companies*. 2022.

[16] H. Martins, C. Rouco, L. Piedade, and F. Borba, "Soft skills for hard times: Developing a preparedness framework for overcoming crises in higher education students," 2020, pp. 280-290. [Online]. Available: <https://research.ulusofona.pt/en/publications/soft-skills-for-hard-times-developing-a-framework-of-preparedness-2>.

[17] M. A. Falaha, M. S. I. Saadon, and M. R. Othman, "The effect of strategic organizational challenges on managing human resources the Jordan SME logistic companies," *Russian Law Journal,* vol. 11, no. 4S, pp. 321-337, 2023, doi: 10.52783/rlj.v11i4s.855.

[18] I. Dewa and G. Satrya, "Assistance in Demographic Administration Innovation in Surabaya," *International Journal of Business, Economics and Social Development,* vol. 4, no. 2, pp. 60-63, 2023, doi: 10.46336/ijbesd.v4i2.438.

[19] A. M. A. Sudirjo, S. Ausat, Y. Rijal, S. Riady, and Suherlan, "ChatGPT: Improving Communication Efficiency and Business Management of MSMEs in the Digital Age," *Innovative: Journal Of Social Science Research,* vol. 3, no. 2, pp. 643-652, 2023, doi: 10.31004/innovative.v3i2.347.

[20] A. Hosseini, H. Mohammadi, Z. Kazemi Saraskaneroud, F. Jafari Baziyar, and M. Yazdanza, "Designing a Human Resource Competency Model for Mazandaran Gas Company: A Multivariate Grounded Theory Approach," *Journal of Sustainable Human Resource Management,* vol. 7, no. 12, pp. 25-48, 2025.

[21] E. S. Bahri, "The Identification of Competency-based Human Resource Development Strategy," *International Journal of Strategic Studies,* vol. 2, no. 1, pp. 1-7, 2025, doi: 10.59921/icestra.v2i1.50.

[22] S. Zayed Naji, A.-A. Mohammed Abdullah, and A.-Z. Abdullah Mohsen, "The role of soft skills in job performance: A field study in the Public Telecommunications Corporation of Yemen," *University of Amran Journal,* vol. 3, no. 6, 2023.

[23] G. Thimmanna and Bhat, "A study on challenges in human resource management," *Multidisciplinary Journal for Applied Research in Engineering and Technology,* 2022, doi: 10.54228/mjaret07220005.

[24] G. Mihajlovski, "Human resource management in unprofitable companies," *International Journal of Scholarly Research and Reviews,* vol. 2, no. 2, 2023, doi: 10.56781/ijsrr.2023.2.2.0050.

[25] V. Gkrimpizi, I. Peristeras, and Magnisalis, "Classification of Barriers to Digital Transformation in Higher Education Institutions: Systematic Literature Review," *Education Sciences,* vol. 13, no. 7, p. 746, 2023, doi: 10.3390/educsci13070746.

[26] M. S. Sukarno, S. Riadi, and I. Kurnia, "Implementation of Regional Development Planning Policies at the Regional Development Planning Agency of Central Sulawesi Province: Study on the Preparation of the (2024) Central Sulawesi Provincial Government Work Plan," *LAW&PASS: International Journal of Law, Public Administration and Social Studies,* vol. 1, no. 2, pp. 81-91, 2024. [Online]. Available: <https://lawpass.org/index.php/ojs/article/view/9>.

[27] M. P. Bhandari, "Past and present of social inequality: Analysing structure and future trends," *Futurity of Social Sciences,* vol. 1, no. 3, pp. 47-60, 2023, doi: 10.57125/FS.2023.09.20.04.

[28] N. Fallahi and Abtahi, "Designing a resource allocation model in learning-oriented organizations," *A New Approach in Educational Management,* vol. 41, no. 11, pp. 69-94, 2020. [Online]. Available: <https://jedu.marvdasht.iau.ir/article_4110.html>.

[29] H. D. Vu and T. T. Ho, "Provincial foreign direct investment absorptive capacity of Vietnam," *Entrepreneurial Business and Economics Review,* vol. 8, no. 2, pp. 7-26, 2020, doi: 10.15678/EBER.2020.080201.