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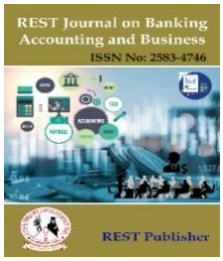

New Perspectives on Human Resource Management in a Global Context Using the ELECTRE Method

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Abstract: *Human Resource Management (HRM) involves the methods and approaches organizations use to efficiently oversee their workforce. It includes tasks like hiring, training, development, compensation, and managing relationships with employees, all designed to enhance employee performance and meet organizational objectives. HRM is essential for optimizing human capital utilization, boosting employee motivation and engagement. By cultivating a positive workplace atmosphere and aligning HR strategies with business goals, HRM plays a vital role in driving overall organizational success and longevity. Research enables organizations to comprehend optimal HR practices that boost productivity, efficiency, and profitability. By analyzing trends, best practices, and emerging technologies, HRM research guides strategic decisions that align human capital with organizational objectives. Additionally, research identifies influences on employee satisfaction, motivation, and engagement, empowering HR professionals to introduce initiatives that enhance workplace morale, diminish turnover, and cultivate a supportive organizational environment. Studying HRM aids in crafting successful recruitment and retention strategies. Research offers insights into attracting top talent, evaluating candidates, and establishing programs to retain employees, thereby reducing turnover and sustaining a proficient workforce. Additionally, HRM research assists organizations in adhering to evolving laws and regulations concerning labor practices, diversity, inclusion, and ethical standards. This knowledge ensures that HR policies are impartial, just, and compliant with legal mandates. Moreover, research guides long-term HR planning by identifying demographic shifts, skill deficiencies, and workforce requirements. This foresight empowers HR departments to pre ELECTRE (Elimination et Choix Traduisant La Realité - Elimination and Choice Reveals Reality) methods are extensively employed in various practical decision-making scenarios, including recruitment and transportation, among others. Additionally, there is ongoing theoretical research focused on the foundational aspects of ELECTRE methods. Evaluation Preference: Employee Satisfaction (Benefit), Productivity Increase (Benefit), Talent Retention (Benefit), Cost (Non-Benefit), Implementation Time (Non-Benefit), Administrative Burden (Non-Benefit). Based on the results, Strategy A achieved the highest ranking, while Strategy D obtained the lowest rank. Strategy A holds the highest rank, while Strategy D holds the lowest rank.*

Keywords: *Human Resource Management (HRM), Implementation Time, Talent Retention, Administrative Burden.*

1. INTRODUCTION

The availability of these common matches provides a user-friendly approach to integrating the human element into strategy formulation and implementation. Personnel managers play a crucial role in this process, leveraging their expertise to recommend the most suitable HR system for specific situations. This approach aligns with the fundamental theory of HRM, which emphasizes that "human resources should be an integral part of strategic planning." [16] While the knowledge economy poses challenges for HR within organizations, it also presents opportunities for significant transformation. The skills and capabilities of knowledge workers are essential for the success of modern firms adapting to this economy. This shift underscores the potential to elevate HR functions within organizations, positioning HR as a vital element crucial to organizational success. In virtual environments, technology-driven HR processes are essential to enhance personalization, flexibility, interactivity, and engagement, thereby bridging the gap between employees and supervisors. Despite these compelling arguments, further research is necessary to assess the effectiveness and acceptance of these new HR practices. Despite technology often being viewed as a challenge in these contexts, it is crucial to acknowledge the new opportunities it brings to HR. Research indicates that technology frequently reduces the administrative burden on human resources and improves overall efficiency. [17] There are several issues with this perspective on Human Resource Management (HRM). One concern is its predominant focus on the internal characteristics of HRM at the expense of broader strategic considerations. By emphasizing best practices without adequately addressing diverse pressures and varying business strategies, there's a risk of assuming a one-size-fits-all approach as inherently superior. A second issue is the lack of clarity regarding the goals of HRM. While these goals are generally understood, the specific ranking of HRM practices remains unclear, lacking a clear theoretical specification or

robust empirical foundation. These challenges highlight the need for a more nuanced and contextually sensitive approach to HRM that integrates strategic flexibility and empirical validation to better align with diverse organizational needs and realities. [18] These assumptions imply that the core challenge lies in how organizations Designing governance structures that capitalize on bounded rationality while safeguarding against opportunism involves creating, monitoring, enforcing, and revising clear and transparent agreements. This approach ensures that decision-making remains practical and realistic, taking into account human cognitive limitations, while also protecting against self-serving behaviors. This theoretical framework directly informs our understanding of HRM practices by emphasizing the importance of well-defined and transparent policies that can adapt over time, thereby enhancing the effectiveness and reliability of HR functions within organizations. establish a multitude of implicit and explicit governance structures akin to contracts between employers and employees. Organizations that prioritize concrete knowledge and skills are predicted to cultivate self-interested and limited internal labor markets. In contrast, organizations that do not prioritize these skills may find themselves competing in an external labor market where self-interest and competition for rational skills are paramount. [19] The top two categories, pay and benefits, represent transactional or tangible rewards of a financial nature crucial for attracting and retaining employees. However, these rewards are easily replicable by competitors. In contrast, relative or intangible non-financial rewards, while often undervalued, are essential for developing human capital and gaining a competitive edge. These non-financial rewards play a critical role in enhancing the value of the upper two quadrants. Real power emerges when companies cultivate and leverage shared and interconnected exchange rewards. This model distinguishes between individual and collective rewards, highlighting how the latter are often fostered by the work environment. [20] We anticipate that emerging technologies such as Web 2.0 will enhance the effectiveness of e-learning by enabling greater interaction compared to current capabilities. In the future, companies are likely to adopt virtual environments, simulations, gasification, knowledge repositories, and crowd sourcing to enhance the efficiency of e-training. Virtual reality (VR) training, in particular, will play a significant role in this transformation. aims to immerse trainees in a virtual environment where they can interact in a manner that feels authentic and "real" to them. Immersive elements and effective communication are crucial in the learning process as they encourage users to engage actively with the virtual environment. This engagement fosters deeper learning experiences and facilitates effective skill development through simulated scenarios and interactive learning activities. [21] It is evident that HR scholars primarily relied on interviews to gather evidence for identifying key research questions. Qualitative methods were favored over quantitative ones due to the detailed nature of interview data. Consequently, the data indicated that the descriptive phase of theory development followed an inductive analytical approach. Despite their traditional role in drawing conclusions, laboratory experiments and secondary data analysis were surprisingly undervalued in comparison. [22] Comments from employees about the companies they work for are crucial. At this juncture, employee performance hinges significantly on job satisfaction, which Employee satisfaction and performance are influenced by factors such as salary, interactions with colleagues and managers, social and statutory rights provided by the organization, working conditions, and the overall outcomes achieved by the organization. These aspects fall within the purview of human resource management (HRM), where fulfilling necessary provisions and making appropriate arrangements can enhance motivation. Increased motivation, in turn, fosters greater employee engagement with their work and enhances productivity and success in their roles. [23] The challenge with psychological contracts lies in the ambiguity often surrounding what employees expect from the organization and the perceived value they bring to it. Numerous employees may not have a clear understanding of their own expectations. This ambiguity is inherent to psychological contracts, which are believed to develop informally and evolve over time with unintended outcomes. Actions or perceived actions by the management can significantly influence how employees perceive and adjust their psychological contracts. Similarly, the The behavior of employees, both individually and collectively, also influences the employer's perception of the contract. This dynamic interplay highlights the complex and sometimes unpredictable nature of psychological contracts in the workplace. [24]

2. MATERIALS AND METHODS

A primary focus was recognized as a priority area related to ELECTRE, specifically the central aspects studies of ELECTRE methods or theoretical advancements of concepts utilized in ELECTRE that were considered most relevant to Group D. Papers that explore ELECTRE or ELECTRE-based methods but do not specifically include or discuss their application were also noted. Here, we document the core elements, provide an example, and record the corresponding area as well. [1] This subsection highlights the main strengths The ELECTRE family of methods boasts several strengths. These include its capability to handle both qualitative and quantitative criteria, its versatility across diverse criteria types, and its effectiveness in managing inconsistencies in measurements and compensatory effects. ELECTRE methods are also adept at accommodating imperfect knowledge and arbitrary criteria, while skillfully managing the considerations for and against an outranking decision. Moreover, they are designed to preserve the qualitative nature of certain criteria, allowing original data to be utilized without requiring recoding. In practice, all criteria are treated as qualitative, even if some are initially quantitative. [2] They are inherently subjective and can vary based on the perspective of the decision-makers. This subjectivity introduces challenges in achieving consensus and ensuring the model accurately reflects the preferences and priorities of all stakeholders involved. determining their values directly is difficult, and understanding the overall implications of these values on the model's output is challenging. Our approach to developing the ELECTRE TRI

model seeks to replace the direct expression of model parameters with assignment examples. [3] A methodology is proposed to handle various types of interactions between criteria organized hierarchically. Extending this proposal, we explain in this paper how to address decision-making problems where hierarchical criteria exhibit different interactions, such as synergy, redundancy, and antagonistic effects. Although the method is primarily designed for ranking problems, it can also be applied to selection and ranking issues using criteria-importance interpretation methods, as seen in the ELECTRE methods. [4]

Creating a decision-making matrix (DMM). The following DMM of preferences (xij) is for m alternatives (rows)

evaluated based on various criteria (columns):

$$X = x_{ij} = \begin{bmatrix} x_{01} & x_{02} & \cdots & x_{0n} \\ x_{11} & x_{12} & \cdots & x_{1n} \\ \vdots & \vdots & \ddots & \vdots \\ x_{m1} & x_{m2} & \cdots & x_{mn} \end{bmatrix} \quad i$$

Normalized matrix

$$r_{ij} = \frac{x_{ij}}{\sqrt{\sum_{i=1}^{m} x_{ij}^2}},$$

$$V_{ij} = R \times W = \begin{vmatrix} r \\ r \\ r_i \end{vmatrix}$$

Find the concordance and discordance interval sets.

Let A={a,b,c,…}A = \{a, b, c, \ldots\}A={a,b,c,…} denote a finite set of alternatives. In the following formulation, we divide the attribute sets into two different sets: the concordance interval set (Cab) and the discordance interval set (Dab). The concordance interval set is used to describe the dominance query.

The discordance interval set (Dab) Calculation of the concordance interval matrix

$$C_{ab} = \sum_{j \in C_{ab}} W_j$$

The concordance index indicates the preference of the assertion “A outranks B.” The concordance interval matrix an be formulated as follows:

$$C = \begin{vmatrix} - & c(1,2) & \cdots & c(1,m) \\ c(2,1) & - & \cdots & c(2,m) \\ \vdots & \vdots & \ddots & \vdots \\ c(m,1) & c(m,2) & \cdots & - \end{vmatrix}$$

Calculate the discordance interval matrix.

Calculate the discordance interval matrix. The discordance index d(a,b)d(a, b)d(a,b) can be interpreted as the level of discontent or disagreement when preferring scheme aaa over scheme bbb.

$$d(a,b) = \frac{\max\limits_{j \in D_{ab}} |v_{aj} - v_{bj}|}{\max\limits_{j \in J, m, n \in 1} |v_{mj} - v_{nj}|}$$

$$D = \begin{vmatrix} - & d(1,2) & \cdots & d(1,m) \\ d(2,1) & - & \cdots & d(2,m) \\ \vdots & \vdots & \ddots & \vdots \\ d(m,1) & d(m,2) & \cdots & - \end{vmatrix}$$

Determine the concordance index matrix. The concordance index matrix for a satisfaction measurement problem can be expressed as follows:

$$\bar{c} = \sum_{a=1}^{m}\sum_{b}^{m} c(a,b)/m(m-1)$$

Here, c¯\bar{c}c¯ is the critical value, which can be determined by the average dominance index. Thus, a Boolean matrix (E) is given by:

$$\begin{cases} e(a,b) = 1 & if \quad c(a,b) \geq \bar{c} \\ e(a,b) = 0 & if \quad c(a,b) < \bar{c} \end{cases}$$

Determine the discordance index matrix.

The preference of dissatisfaction can be measured by the discordance index as follows:

$$\bar{d} = \frac{\sum_{a=1}^{m}\sum_{b}^{m} d(a,b)}{m(m-1)}$$

Based on the discordance index mentioned above, the discordance index matrix FFF is given by:

$$\begin{cases} f(a,b) = 1 & if \quad d(a,b) \leq \bar{d} \\ f(a,b) = 0 & if \quad d(a,b) > \bar{d} \end{cases}$$

To calculate the net superior value (Ca) and net inferior value (Da), where Ca represents the sum of competitive superiority for alternatives:
Ca is calculated by summing the number of instances where alternatives demonstrate competitive superiority. The higher the value of Ca, indicating more and larger instances of competitive superiority, the better the alternative performs.
If you have specific values or data points for alternatives and their competitive performance, you would sum these values to compute Ca.

$$c_a = \sum_{b=1}^{n} c_{(a,b)} - \sum_{b=1}^{n} c_{(b,a)}$$

On the contrary, Da is used to determine the number of instances where alternatives are ranked as inferior:
Da calculates the count of inferior rankings assigned to alternatives. The lower the value of Da, indicating fewer instances of inferior ranking, the better the alternative performs in terms of avoiding inferior positions.

Every team member participates in the process by providing information about their preferences and beliefs, thereby contributing to the final outcome. Although there is usually an overall goal agreed upon by all members, they often differ in their approaches to achieving this goal. Each member considers the same set of alternatives or possible actions, and there are numerous criteria, which often conflict with one another. Each member must develop relevant criteria that may be shared by some, none, or all of the other members. [5] Outranking methods assess pairs of actions to determine their prioritization based on systematic evaluation of each criterion. These assessments yield numerical outcomes that reveal coherence or inconsistency among actions. The outranking relation is widely recognized as the primary approach for integrating metrics in Multi-Criteria Decision Analysis (MCDA). However, there is no universally optimal method for any MCDA problem, and relying solely on numerical comparisons often fails to identify the most suitable approach. Instead, exploring different models from various perspectives proves advantageous. Real-world decision-making often unfolds in complex environments marked by conflicting criteria, uncertainty, and imprecise information. As a result, numerous methods have been developed to address multi-criteria challenges. under conditions were accurate information is available. [6]. Instead of buying or building an app To implement the ELECTRE method, we opted to utilize Excel's flexibility for prototyping a project ranking tool. We anticipated that the inputs and the creation of the performance matrix would evolve iteratively throughout the project development phase. This approach allowed for thorough testing and validation of the entire system before committing significant resources to application development. An electronic form was distributed among employees to gather data for small projects. Around 80 minor capital and maintenance projects were submitted, and the relevant data for each project was consolidated into a spreadsheet. A business analyst

and the team accountant meticulously reviewed the input data for consistency. Ultimately, using ELECTRE, a ranked list of projects was derived generated. [7]

3. ANALYSIS AND DISSECTION

TABLE 1. Human Resource Management

	Employee Satisfaction (Benefit)	Productivity Increase (Benefit)	Talent Retention (Benefit)	Cost (Non-Benefit)	Implementation Time (Non-Benefit)	Administrative Burden (Non-Benefit)
Strategy A	1350	1850	7.5	2.58	93.5	0.045
Strategy B	1680	1650	8.5	3.75	95.3	0.068
Strategy C	1560	1950	6.5	4.86	88.6	0.095
Strategy D	1470	1850	9.5	3.16	98.4	0.072

When assessing various strategies to enhance employee satisfaction, productivity, and talent retention, it's important to consider several key metrics along with the associated costs, implementation time, and administrative burden. **Strategy A** offers a balanced approach with an employee satisfaction score of 1350 and a productivity increase of 1850. It provides a moderate talent retention benefit of 7.5. The costs are relatively low at 2.58, with an implementation time of 93.5 and an administrative burden of 0.045. Strategy B excels in employee satisfaction with a score of 1680 and a high talent retention benefit of 8.5, though its productivity increase is slightly lower at 1650. The costs are higher at 3.75, with an implementation time of 95.3 and a slightly elevated administrative burden of 0.068. Strategy C offers the highest productivity increase at 1950 and a strong employee satisfaction score of 1560. However, its talent retention benefit is the lowest among the strategies at 6.5. The costs are the highest at 4.86, but it has the shortest implementation time at 88.6 and a higher administrative burden of 0.095. Strategy D provides high talent retention at 9.5 and maintains solid scores for both employee satisfaction (1470) and productivity increase (1850). Its costs are moderate at 3.16, with an implementation time of 98.4 and an administrative burden of 0.072. In summary, each strategy has unique strengths and weaknesses. Strategy A is cost-effective with moderate benefits, Strategy B excels in employee satisfaction and talent retention but at a higher cost, Strategy C leads in productivity but incurs the highest cost and administrative burden, and Strategy D offers a balanced high retention benefit with moderate costs.

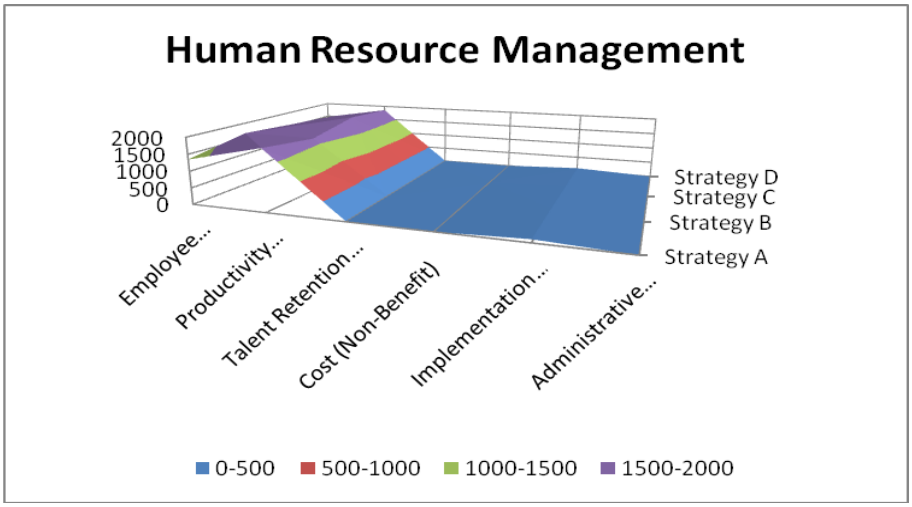

FIGURE 1. Human Resource Management

TABLE 2. SUM & SQRT

	Employee Satisfaction (Benefit)	Productivity Increase (Benefit)	Talent Retention (Benefit)	Cost (Non-Benefit)	Implementation Time (Non-Benefit)	Administrative Burden (Non-Benefit)
Strategy A	1822500	3422500	56.25	6.6564	8742.25	0.002025
Strategy B	2822400	2722500	72.25	14.0625	9082.09	0.004624
Strategy C	2433600	3802500	42.25	23.6196	7849.96	0.009025
Strategy D	2160900	3422500	90.25	9.9856	9682.56	0.005184
	9239400	13370000	261	54.3241	35356.86	0.020858
	3039.638	3656.501	16.15549	7.370488	188.0342	0.144423

When evaluating strategies to enhance employee satisfaction, productivity, and talent retention, it is essential to balance the benefits against the associated costs, implementation time, and administrative burden. Strategy A shows a significant

increase in both employee satisfaction (1,822,500) and productivity (3,422,500), along with a respectable talent retention score (56.25). The costs are relatively low at 6.6564, with an implementation time of 8,742.25 and a minimal administrative burden (0.002025). Strategy B excels in employee satisfaction (2,822,400) and talent retention (72.25), although its productivity increase (2,722,500) is lower than that of Strategies A and C. This strategy incurs higher costs (14.0625), with an implementation time of 9,082.09 and an administrative burden of 0.004624. Strategy C leads in productivity increase (3,802,500) and maintains a high employee satisfaction score (2,433,600). However, it has the lowest talent retention benefit (42.25). This strategy has the highest costs (23.6196), but benefits from the shortest implementation time (7,849.96) and has a higher administrative burden (0.009025). Strategy D provides the highest talent retention benefit (90.25) while maintaining solid scores for employee satisfaction (2,160,900) and productivity increase (3,422,500). It has moderate costs (9.9856), an implementation time of 9,682.56, and an administrative burden of 0.005184. In summary, each strategy offers distinct advantages and trade-offs. Strategy A is cost-effective with moderate overall benefits. Strategy B offers the highest satisfaction and retention but at higher costs. Strategy C leads in productivity but has the highest cost and administrative burden. Strategy D provides the best retention with moderate costs and implementation time. Balancing these metrics is crucial to selecting the most appropriate strategy.

TABLE 3. Normalized Data Matrix

	Normalized DM					
	Employee Satisfaction (Benefit)	Productivity Increase (Benefit)	Talent Retention (Benefit)	Cost (Non-Benefit)	Implementation Time (Non-Benefit)	Administrative Burden (Non-Benefit)
Strategy A	0.444132	0.505948	0.464238	0.350045	0.49725	0.311585
Strategy B	0.552697	0.451251	0.526137	0.508786	0.506823	0.470839
Strategy C	0.513219	0.533297	0.40234	0.659386	0.471191	0.65779
Strategy D	0.48361	0.505948	0.588035	0.428737	0.523309	0.498536

When evaluating normalized decision metrics for strategies aimed at enhancing employee satisfaction, productivity, and talent retention, it is important to consider each strategy's relative benefits and non-benefits. Strategy A scores 0.444 in employee satisfaction and 0.506 in productivity increase, indicating moderate performance in these areas. Its talent retention score is 0.464, suggesting decent retention capabilities. This strategy is the most cost-effective with the lowest cost score of 0.350. It also has a balanced implementation time score of 0.497 and a relatively low administrative burden of 0.312. Strategy B leads in employee satisfaction with a score of 0.553 and has a moderate talent retention score of 0.526. However, it shows the lowest productivity increase among the strategies at 0.451. The costs are higher at 0.509, and the implementation time is 0.507, indicating moderate ease of deployment. The administrative burden for Strategy B is relatively high at 0.471. Strategy C excels in productivity increase (0.533) and performs well in employee satisfaction (0.513). However, it has the lowest talent retention score at 0.402. This strategy incurs the highest cost (0.659) and administrative burden (0.658), but it benefits from a relatively efficient implementation time of 0.471. Strategy D offers the highest talent retention score (0.588) and solid scores in both employee satisfaction (0.484) and productivity increase (0.506). It has moderate costs (0.429) but the highest implementation time (0.523), indicating a slower deployment process. The administrative burden is relatively high at 0.499. In conclusion, each strategy presents unique strengths. Strategy A is the most cost-effective with balanced benefits. Strategy B excels in employee satisfaction and retention but comes at higher costs. Strategy C leads in productivity but has the highest cost and administrative burden. Strategy D offers the best retention with moderate costs and the highest implementation time. Carefully considering these factors is essential for selecting the most suitable strategy.

TABLE 4. Weighted Normalized matrix

	Weighted Normalized matrix					
	0.2336	0.1652	0.3355	0.1021	0.0424	0.1212
	Employee Satisfaction (Benefit)	Productivity Increase (Benefit)	Talent Retention (Benefit)	Cost (Non-Benefit)	Implementation Time (Non-Benefit)	Administrative Burden (Non-Benefit)
Strategy A	0.103749	0.083583	0.155752	0.03574	0.021083	0.037764
Strategy B	0.12911	0.074547	0.176519	0.051947	0.021489	0.057066
Strategy C	0.119888	0.088101	0.134985	0.067323	0.019978	0.079724
Strategy D	0.112971	0.083583	0.197286	0.043774	0.022188	0.060423

When evaluating the weighted normalized matrix for different strategies aimed at enhancing employee satisfaction, productivity, and talent retention, several key insights emerge: Strategy A shows moderate performance across the board, with weighted scores of 0.104 in employee satisfaction and 0.084 in productivity increase. It has a talent retention score of 0.156, indicating balanced retention capability. This strategy boasts the lowest weighted cost (0.036) and a moderate administrative burden (0.038). The implementation time score is also moderate at 0.021. Strategy B leads in employee satisfaction with a weighted score of 0.129 and has a strong talent retention score of 0.177. However, its productivity

increase is the lowest at 0.075. The weighted cost is higher at 0.052, with an administrative burden of 0.057, indicating higher management complexity. The implementation time score is 0.021, showing moderate deployment speed. Strategy C excels in productivity increase with a weighted score of 0.088 and performs well in employee satisfaction at 0.120. However, it has the lowest talent retention score at 0.135. This strategy incurs the highest weighted cost (0.067) and administrative burden (0.080) but benefits from a slightly lower implementation time score of 0.020. Strategy D provides the highest talent retention score of 0.197 and maintains solid scores in both employee satisfaction (0.113) and productivity increase (0.084). Its weighted cost is moderate at 0.044, with an administrative burden score of 0.060, suggesting a manageable level of management complexity. The implementation time score is the highest at 0.022, indicating a slower deployment process. In conclusion, each strategy presents distinct strengths and trade-offs:
Strategy A offers a balanced approach with moderate benefits and the lowest costs.

Strategy B excels in employee satisfaction and retention but comes with higher costs and administrative burden.

Strategy C leads in productivity but incurs the highest cost and administrative burden.

Strategy D offers the best retention with moderate costs and the slowest implementation time.

The weighted normalized scores highlight the strengths and weaknesses of each strategy, aiding in the selection of the most appropriate approach.

TABLE 5. Concordance Interval Matrix & Discordance Interval Matrix

C12 ={2}	D12 = {1,3,4,5,6}
C13 = {3,5}	D13={1,2,4,6}
C14 = {2}	D14={1,3,4,5,6}
C21={1,3,4,5,6}	D21={2}
C23={1,3,5}	D23={2,4,6}
C24={1,4}	D24={2,3,5,6}
C31={1,2,4,6}	D31={3,5}
C32={2,4,6}	D32={1,3,5}
C34={1,2,4,6}	D34={3,5}
C41={1,3,4,5,6}	D41={2}
C42={2,3,5,6}	D42={1,4}
C43={3,5}	D43={1,2,4,6}

Table 5 presents the sets of concordance (Cab) and discordance (Dab) intervals for a finite set of alternatives denoted as A = {a, b, c...}. These intervals categorize attributes into groups based on their agreement or disagreement among the alternatives.
The concordance interval set is applied to describe the dominance query
$C_{ab}=\{ j \mid x_{aj} \geq x_{bj} \}$
The discordance interval set (Dab)
$D=\{ j \mid x_{aj} \geq x_{bj} \} = J\text{-}C_{ab}$

TABLE 6. Concordance

0	1	0	0	0	0
0	0	1	0	1	0
0	1	0	0	0	0
1	0	1	1	1	1
1	0	1	0	1	0
1	0	0	1	0	0
1	1	0	1	0	1
0	1	0	1	0	1
1	1	0	1	0	1

Table 6Shows the Concordance =IF(I12>=I13,1,0).

TABLE 7. Concordance Interval Matrix

	Concordance Interval Matrix					
	Strategy A	Strategy B	Strategy C	Strategy D		
Strategy A	0	0.1652	0.3779	0.1652	0.7083	
Strategy B	0.8348	0	0.6115	0.3357	1.782	
Strategy C	0.6221	0.3885	0	0.6221	1.6327	
Strategy D	0.8348	0.6643	0.3779	0	1.877	
	2.2917	1.218	1.3673	1.123	6	0.5
						c bar

The Concordance Interval Matrix assesses the comparative effectiveness of four strategies: A, B, C, and D. This matrix allows for a pairwise comparison, indicating the relative performance of each strategy against the others based on a specific performance criterion. The element at the intersection of each strategy pair represents the concordance index. For instance, the value of 0.1652 in the cell where Strategy A intersects with Strategy B indicates the concordance index when comparing Strategy A to Strategy B. A higher value signifies that Strategy A is relatively better compared to Strategy B in the specific performance metric. For Strategy A, the concordance indices are 0.1652, 0.3779, and 0.1652 when compared to Strategies B, C, and D, respectively, with a total sum of 0.7083. This sum indicates Strategy A's overall performance relative to the others. Strategy B, with indices of 0.8348 and 0.6115 against Strategies A and D, respectively, totals 1.782, suggesting superior performance in these comparisons. Strategy C's comparisons yield indices of 0.6221, 0.3885, and 0.6221 against Strategies A, B, and D, respectively, summing to 1.6327. Strategy D's indices add up to 1.877, indicating it generally performs better than the others. The final row sums the concordance indices for each strategy, reflecting their overall performance, with a total of 6. The value of c bar, 0.5, could represent a threshold or average value for comparison purposes, helping to gauge the relative effectiveness of each strategy.

TABLE 8. Concordance Index Matrix

	Concordance Index Matrix			
	Strategy A	Strategy B	Strategy C	Strategy D
Strategy A	0	0	0	0
Strategy B	1	0	1	0
Strategy C	1	0	0	1
Strategy D	1	1	0	0

TABLE 9. Discordance

	Employee Satisfaction (Benefit)	Productivity Increase (Benefit)	Talent Retention (Benefit)	Cost (Non-Benefit)	Implementation Time (Non-Benefit)	Administrative Burden (Non-Benefit)
D12	0.025361	0.009036	0.020767	0.016207	0.000406	0.019302
	1					
D13	0.016139	0.004518	0.020767	0.031584	0.001105	0.04196
	1					
D14	0.009222	0	0.041534	0.008034	0.001105	0.022658
	1					
D21	0.025361	0.009036	0.020767	0.016207	0.000406	0.019302
	0.356295					
D23	0.009222	0.013554	0.041534	0.015376	0.001511	0.022658
	0.545541					
D24	0.016139	0.009036	0.020767	0.008173	0.000699	0.003357
	1					
D31	0.016139	0.004518	0.020767	0.031584	0.001105	0.04196
	0.494921					
D32	0.009222	0.013554	0.041534	0.015376	0.001511	0.022658
	1					
D34	0.006917	0.004518	0.062301	0.023549	0.00221	0.019302
	1					
D41	0.009222	0	0.041534	0.008034	0.001105	0.022658
	0					
D42	0.016139	0.009036	0.020767	0.008173	0.000699	0.003357
	0.777138					
D43	0.006917	0.004518	0.062301	0.023549	0.00221	0.019302
	0.377994					

This table presents a comparative analysis of different decision options (D12, D13, etc.) across six criteria related to employee satisfaction, productivity increase, talent retention, cost, implementation time, and administrative burden. Each option is evaluated based on its impact on these criteria, with values indicating the degree of influence. For example, D12 affects employee satisfaction by 0.025361, productivity increase by 0.009036, talent retention by 0.020767, cost by 0.016207, implementation time by 0.000406, and administrative burden by 0.019302. These numerical values enable a quantitative comparison of how each decision option performs across different aspects. Additionally, each decision is assigned a weight or importance value, where D12 and similar options have a weight of 1, indicating their high priority in the decision-making process. Conversely, options like D21 (0.356295), D23 (0.545541), D31 (0.494921), D41 (0), D42 (0.777138), and D43 (0.377994) have varying weights, reflecting their relative significance. By detailing these values comprehensively, the table facilitates a nuanced assessment of each decision option's overall impact, considering both

benefits and non-benefits. This approach supports the selection of the optimal decision by weighing its comprehensive influence across multiple dimensions, ensuring a balanced and informed decision-making process.

TABLE 10. Discordance Index matrix

	Discordance Interval Matrix				
	Strategy A	Strategy B	Strategy C	Strategy D	
Strategy A	0	1	1	1	3
Strategy B	0.678146	0	0.545541	1	2.223687
Strategy C	0.494921	1	0	1	2.494921
Strategy D	0	0.777138	0.377994	0	1.155132
	1.173067	2.777138	1.923535	3	8.87374
				d bar	0.739478

The Discordance Interval Matrix is a tool used to assess the relative disagreement or discordance among different strategies labeled A, B, C, and D. It complements the Concordance Interval Matrix by highlighting inconsistencies or conflicts between these strategies. In this matrix, diagonal elements are zero because a strategy compared to itself shows no discordance. Off-diagonal elements indicate discordance indices between pairs of strategies. For instance, a value of 1 where Strategy A intersects Strategy B signifies the discordance index between A and B, with higher values indicating greater disagreement. Strategy A exhibits discordance indices of 1 with B, C, and D, totaling 3, indicating significant discordance compared to these strategies. Similarly, Strategy B shows discordance indices of 0.678146, 0.545541, and 1 with A, C, and D respectively, totaling 2.223687. Strategy C's discordance indices with A, B, and D are 0.494921, 1, and 1, summing to 2.494921. Strategy D, on the other hand, has lower discordance with A and C (both 0) but higher with B (0.777138) and C (0.377994), totaling 1.155132. The final row sums these discordance indices for each strategy, resulting in a total discordance of 8.87374. The average discordance across all comparisons, represented as d bar = 0.739478, serves as a benchmark to evaluate overall discordance within the set of strategies. This analysis helps in identifying strategies that may be less desirable due to high discordance, thus facilitating a balanced decision-making process that considers both agreement and disagreement among the strategies.

TABLE 11. Discordance Index matrix

Discordance Index matrix				
	Strategy A	Strategy B	Strategy C	Strategy D
Strategy A	1	0	0	0
Strategy B	1	1	1	0
Strategy C	1	0	1	0
Strategy D	1	0	1	1

TABLE 12. Net superior value & Rank

	Net superior value	Rank	Net Inferior Value	Rank
Strategy A	-1.5834	4	1.826933	1
Strategy B	0.564	2	-0.55345	3
Strategy C	0.2654	3	0.571386	2
Strategy D	0.754	1	-1.84487	4

The table illustrates the Net Superior Value and Net Inferior Value for four strategies (A, B, C, and D), accompanied by their respective ranks, providing a comprehensive evaluation of their performance and comparative ranking.

Net Superior Value:

- Strategy A has a Net Superior Value of -1.5834, ranking 4th. This negative value indicates that Strategy A is the least superior among the strategies.
- Strategy B shows a Net Superior Value of 0.564, ranking 2nd. This positive value suggests that Strategy B is relatively superior compared to most other strategies.
- Strategy C has a Net Superior Value of 0.2654, ranking 3rd. It is positive but lower than Strategy B, placing it in the middle of the ranking.
- Strategy D leads with a Net Superior Value of 0.754, ranking 1st, making it the most favorable strategy in terms of superiority.

Net Inferior Value:

- Strategy A has a Net Inferior Value of 1.826933, ranking 1st. This indicates that Strategy A is considered the most inferior compared to the other strategies, consistent with its lowest rank in Net Superior Value.
- Strategy B shows a Net Inferior Value of -0.55345, ranking 3rd, indicating it is less inferior than Strategy A but more so than Strategies C and D.
- Strategy C has a Net Inferior Value of 0.571386, ranking 2nd, reflecting moderate inferiority.
- Strategy D exhibits the lowest Net Inferior Value of -1.84487, ranking 4th, suggesting it is the least inferior among the strategies, aligning with its highest rank in Net Superior Value.

In summary, Strategy D emerges as the most favorable choice with the highest Net Superior Value and the lowest Net Inferior Value, indicating it is highly effective and minimally problematic. Conversely, Strategy A ranks lowest in both metrics, making it the least favorable option overall. Strategies B and C occupy intermediate positions, showing moderate levels of superiority and inferiority. These rankings provide valuable insights for decision-making, highlighting Strategy D as the optimal choice among the evaluated strategies.

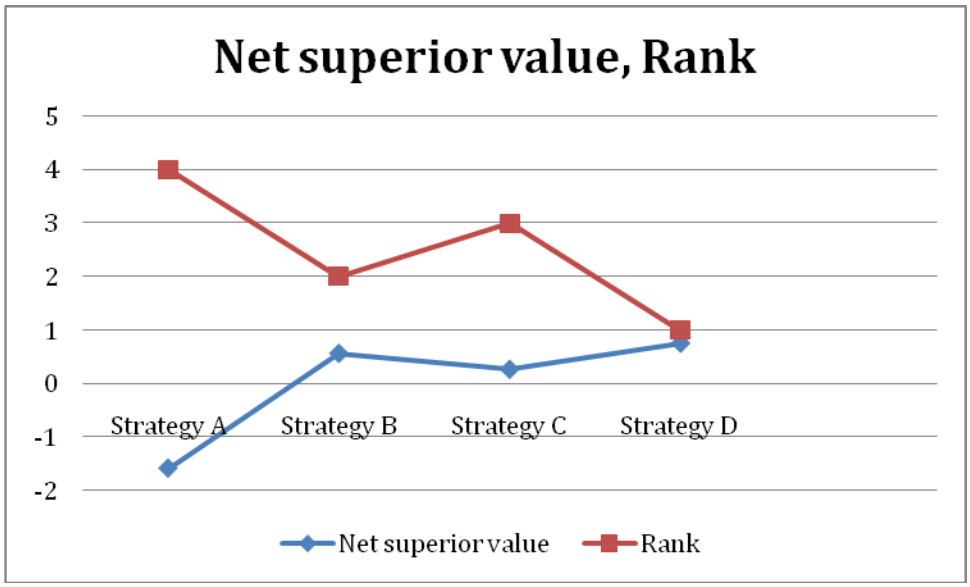

FIGURE 2. Net superior value

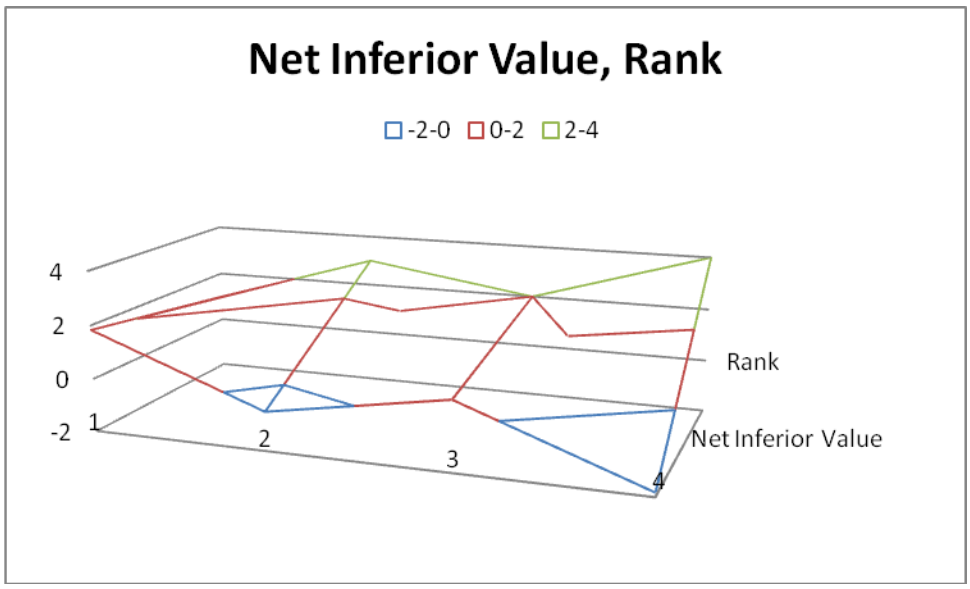

FIGURE 3. Net Inferior Value

The graph depicts the relationship between the Net Inferior Value and the Rank for four strategies in a 3D plot, offering insights into their comparative performance.

1. **Strategy A**: Shown by the blue line, Strategy A exhibits the highest Net Inferior Value (1.826933) and holds the worst rank (4). This is indicated by the line starting high on the Net Inferior Value axis and remaining at the highest rank level. It suggests that Strategy A is the most inferior and least favorable among the four strategies.
2. **Strategy B**: Represented by the red line, Strategy B displays a moderate Net Inferior Value (-0.55345) and an intermediate rank (3). The line indicates that Strategy B performs better than Strategy A but is still less favorable compared to Strategies C and D.
3. **Strategy C**: Illustrated by the green line, Strategy C shows a Net Inferior Value of 0.571386 and holds a rank of 2. This signifies that Strategy C performs moderately well, achieving better results than Strategies A and B, but not as well as Strategy D.
4. **Strategy D**: The yellow line depicts Strategy D, which has the lowest Net Inferior Value (-1.84487) and the best rank (1). The line starting low on the Net Inferior Value axis and ending at the lowest rank level indicates that Strategy D is the least inferior and the most favorable option among the four strategies.

In summary, the graph provides a visual representation of how each strategy performs relative to others in terms of both inferiority and rank. Strategy D emerges as the top-performing strategy, followed by Strategy C, Strategy B, and Strategy A, which ranks the lowest in performance among the four strategies.

4. CONCLUSION

Using the onion metaphor, I focused on delving into a few layers. The review underscores the differentiation between Universalism and Contingency theories in hypotheses linking HR practices to performance, exploring how specific human resource management strategies and interventions directly impact organizational outcomes. It primarily examines these approaches and their significance in shaping HR structures and performance. Another focal point is the enhancement of performance, where the term 'consequence' might be more apt than 'efficiency'. One argument posits that the unitarist philosophy underlying HRM aligns employees' interests with those of shareholders. However, blindly accepting this assumption without empirical evidence would be imprudent. It is crucial to rely on scientifically valid methods and evidence to advance our understanding of how HRM practices influence organizational performance. This necessitates moving beyond traditional frameworks like the balanced scorecard and conducting deeper analyses of job roles within complex organizational environments. This evolution suggests that future HRM research should elevate organizational analysis to the same level of importance as job analysis. Furthermore, it stresses the importance of basing selection systems, performance appraisals, compensation plans, and training programs on robust methodologies that align with organizational goals and contribute to overall performance improvement. The analysis highlights the critical need for rigorous research to inform and enhance HRM practices both at the job and organizational levels. Similar to earlier concerns, it questions whether goals prioritize speed and efficiency over gaining a comprehensive understanding of how employee perceptions of organizational climate and culture impact the organization. When electronic Human Resource (eHR) processes are perceived as impersonal, there is a risk of diminishing HR efficiency and overall organizational effectiveness. This perception can lead to reduced employee engagement, morale, and satisfaction, ultimately affecting organizational performance and the ability to retain top talent. Therefore, while efficiency is crucial, it should not compromise efforts to foster a positive organizational climate and culture supportive of employee well-being and productivity. The analysis was prompted by the growing diversity and proliferation of approaches within the HRM domain. Through empirical study, researchers identified overarching HRM trends and specific methodologies employed across various theoretical and quantitative stages of development.

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