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The Role of Human Resource Management in Organizational Risk Prevention and Crisis Management

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ABSTRACT:

Rapid and sudden shifts in the outside world may cause crises for businesses that can turn out of reach. In several nations, the Covid-19 pandemic has resulted in severe economic harm and people's suffering. The effectiveness of a company is greatly influenced by HR management, and both these fields must be combined. This study examines the function of HR management in handling crisis operations and discovers a link between the inefficiency of HRM methods and company crisis management. In the era of shifting circumstances, modern businesses face risks in managing their human resources, including unsuccessful hiring, abrupt departures, and the loss of important technical personnel. These hazards have the potential to disrupt businesses' regular operations and, in the event of a severe issue, even result in fatalities. To avoid human resources threats and investigate risks identified and prevented in HR management, it is critical to create a feeling of risk. This study presents corporate human resources avoiding risk techniques and reaction strategies after elaborating on the notion of internal HR risk and features and risk recognition analysis. Overcoming the difficulties that businesses have in handling crises requires a shift in conceptual and business study.

Keywords: Human resources management (HRM), Risk Prevention, Crisis Management

Introduction:

Human resources management (HRM), which dates back to the early 1900s, is a crucial organizational component of contemporary businesses and establishments. Since it is a significant aspect of handling crises, it is vital during times of emergency. A "critical moment" is a rapid, essential alteration in the structure of a person that might have unexpected effects and be influenced by the course of growth.

While there are many real emergencies in the modern world, safety problems that occur at the finish of the day are especially deadly. Participants should choose tolerance, discuss rigidity and radicalism, and embrace pertinent knowledge via the development of mutual passions to prevent these disputes. There are new problems to solve in the current scenario, and the theoretical structure offered by a variety of experts may not be sufficient. Businesses' human resources are subject to these violent environmental shifts, which are more complicated than in earlier times both internally and outside. These aspects may be too much for conventional company human resources management to handle, which might result in strategies and procedures that diverge from how corporate human resources risk is formed (Hamouche, 2023). Adapting to the emerging century, major shifts and new difficulties in HR management are crucial for preventing human resources risk from becoming a significant component of business human resource management. Businesses may guarantee their performance and stay relevant by fostering an awareness of risk and managing the risks related to human resources.

Vol 5 Issue 1 (2025)

Literature Review:

Costly firms are at risk from crisis occurrences, yet under sixty per cent of workers think their company is ready to handle them. Companies often overlook crisis management from an operational viewpoint, which leaves them ill-prepared to handle crises the moment they arise. According to Miller (2002), just over forty-seven per cent of 137 large enterprises had an emergency plan in position, and 40 per cent of HR professionals polled by the HR Management Alliance acknowledged that their companies lacked any crisis or disaster planning. A lack of resources or flawed assumptions that an organization will be immune to crisis events are the reasons for the lack of crisis-ready plans. It is becoming clearer that crisis management strategies must be in line with company values as firms grow increasingly tech-sophisticated, and global, and operate in unstable contexts. The distinction between high and poor readiness might be attributed to the absence of thorough crisis management plans and consistent operational preparation across every level of the organization (Ngoc Su, et al. 2021).

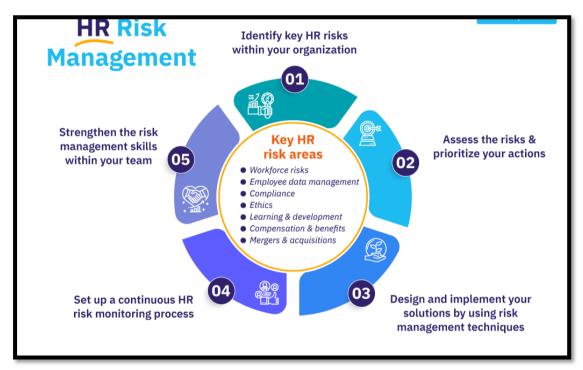


Figure 1: Key areas in HR risk management

(Source: Hamouche, 2023)

It takes specialized business education, efficiency, and assistance to acquire crisis management skills that enable participants to identify events, react to emergencies, and recover. The organizational framework, civilization, tactics, and talent growth must all be strategically integrated for high-level tactics for crisis management to be implemented successfully. Learning measures, shifts, and outcomes must be in line with the company's approach to gain stakeholder backing and promote effective adoption across different departments (He, et al. 2021).

Today, crises that jeopardize a company's viability and existence may take many different forms, including business controversies, the Internet's demise, illnesses, natural catastrophes, violent assaults, and terrorist strikes. The sheer complexity and scope of possible crises could overpower organizations, causing them to only prepare for situations they believe are manageable or highly probable. Every organization in the current day must carefully employ its human resources to guarantee the reality of its problem and present a strategy for the future to lessen its effect. The

Journal of Informatics Education and Research ISSN: 1526-4726

Vol 5 Issue 1 (2025)

business may take an active role in the HR division to develop business-focused solutions that will increase productivity and success (Azizi, et al. 2021).

Empirical Framework:

Here the Organizational crisis management effectiveness (OCME) is depicted as the measurement of organizational performance through employee retention, crisis recovery time, and financial stability index post-crisis. The other independent variables are assumed as Recruitment efficiency score (RES), Employee training hours (ETH), Performance appraisal accuracy (PAA), Crisis communication effectiveness (CCE), and HR policy compliance rate (HPCR). For such dependent and independent variables, the following empirical evaluation is established.

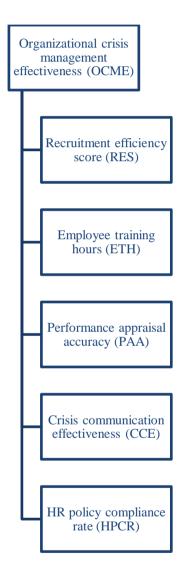


Figure 2: Key variables in risk and crisis management through HRM (Source: Created by Author)

OCME =
$$\beta_0 + \beta_1 RES + \beta_2 ETH + \beta_3 PAA + \beta_4 CCE + \beta_5 HPCR + \epsilon$$

In the above equation model, β_0 is assumed to be the intercept, β_i coefficients are representing the weight of each HRM factor, and ε is the error term.

Data Collection:

Vol 5 Issue 1 (2025)

Data was collected from 100 firms across industries including healthcare, manufacturing, and services. Performance of the key metrics has been gathered through surveys, HR reports, and crisis recovery records. Key HR metrics were normalized between 0 and 1 for comparability.

Human Resources (HR):

The term "human resources" refers to the company's management team rather than its material and monetary assets. They are among the most valuable assets that an organization has and are essential to a business's ability to achieve its goals. The company gets a collection of materials that are not productivity leaders in the absence of human resources. The five main responsibilities of supervisors are arranging, driving, regulating, forming, and preparing. The monitoring, planning, assessment, selection, company, guidance, and control of people and workers are all part of human resources management (Stone, et al. 2024). HR is essential to support businesses adapt to a changing workplace and rising employee expectations for efficiency. The development of human resources is essential to the company's success.

Human Resource Management (HRM):

A key managerial function in businesses, human resources management focuses on acquiring, developing, and overseeing human capital to achieve individual, organizational, and societal objectives. Helping the organization succeed, entails gathering and fostering both people and work units. The human element of leadership is handled by the division of human resources, which also ensures service accessibility, skill development, and high productivity incentives. Since HRM arranges, prepares, regulates, keeps up on, and oversees work and employees inside the business, it is regarded as one of the greatest significant managerial duties in corporations. Good HRM contributes to employee development, training, and rehabilitation, which boosts productivity and gives businesses a competitive advantage in job markets. In addition to handling present or upcoming business crises, HRM acts as an intermediary between managers and employees, settling conflicts and issues between staff and management.



Figure 3: Human Resource Management (Source: Created by Author)

Role of HRM in Organisational Risk Prevention:

A key component of the company's activities is human resource management, which includes hiring, educating, developing, inspiring, and retaining people to meet company objectives. Work analysis, description of duties, writing, recruiting, position, training, employees and their

Journal of Informatics Education and Research ISSN: 1526-4726 Vol 5 Issue 1 (2025)

employer's contacts, evaluations of work performance, pay, and punishment are just a few of the distinct tasks that make up this process (Li, et al. 2021).

Human resources and managing risks are linked because if these tasks are not carried out effectively, the firm is penalized for not using the abilities of its employees and risk is increased. While recruiting guarantees that every position is occupied by someone who can thrive in the role, job evaluation and position description writing assist in identifying the responsibilities and skills necessary for a job. New hires are introduced to the company via initial education and instruction, which also equips them with the abilities, expertise, and skills they need. These tasks are built upon in daily interactions between employers and employees, but neglecting to do so may lead to poorly defined roles, insufficient initial education and instruction, and poor performance reviews, pay, and punishment.

Maintaining alignment with risk control tools, predicting human resource disasters, controlling order, and making sure that staff performance assessment is linked to risk managing are the four primary consequences of the HR operations for risk control. People implement methods for managing risks, and even the best-laid plans could fail due to human resource errors (Lu, et al. 2023).



Figure 4: Role of HRM in Organisational Risk Prevention (Source: Lu, et al. 2023)

Managers must have critical abilities including enthusiasm, instruction, interpersonal skills, managerial work, handling disputes, and assessment to integrate risk prevention with human resource management effectively. To ensure workers' abilities and encourage them, leadership is essential. Relationships with others interviews, and rapport-building all depend on communicating. Gentleness, interactions, recognizing adult choices, teaching abilities, and methodical techniques are all necessary for effective training. Supervisors must inspire their staff by meeting their demands, paying them properly, and engaging them with respect. Techniques for

Journal of Informatics Education and Research

ISSN: 1526-4726 Vol 5 Issue 1 (2025)

managing conflicts are crucial for dealing with staff concerns and delaying suffering. Although most workers want to be evaluated, many managers find it difficult to communicate this desire openly and efficiently. To make evaluations beneficial and enjoyable for both managers and staff, training is necessary.

Risk Type	HRM Prevention Approach	HRM Crisis Management Plan
Accidents at Work	PPE regulations and safety instruction	Medical support and reporting of incidents
Misconduct by Employees	Policies for conduct and ethical hiring	Investigations and remedial measures
Breach of Cybersecurity	Cybersecurity training for employees	Coordination of IT and crisis communication

Table 1: Organizational Risk Types and HRM Techniques

(Source: Created by Author)

Crisis:

The word "crisis" may refer to a number of things, such as events that are unexpected and take place away from an organization's established procedures, which can cause mistrust and compromise its objectives and plans. It's critical to distinguish between an unintended disaster and a crisis since the latter relates to drastic, unanticipated, or sudden events whereby the company has no control. Regulatory crises may be caused by a variety of things, including a natural catastrophe, a violent war, a labour dispute, gossip, theft, corruption, distorted products or services, or disrupted computer systems for mother firms. The presence and mental perspective of the organization are threatened by administrative crises, and anxiety and mental sickness are exacerbated by shared information and ideas (Imperiale, and Vanclay, 2021).

Significant operational risk is created by crises, which may have catastrophic consequences if improperly handled. A crisis, according to researchers, is an abrupt unbalanced, inconsequential, and significant occurrence that occurs in a company as a result of rapid and unforeseen circumstances that might impact its system. If the crises can be controlled and handled by recognizing the issue and maximizing preparation to identify a suitable remedy at the right time, or if essential actions are not made because of a shortage of professionals and specialists, it might be a turning moment.

The role of HRM in crisis management:

Corporations depend on human resources, or experts, to create distinctive advantages and generate revenues in today's digital industry. HR professionals are essential to crisis management because they provide tools to safeguard or improve a company's actual worth via crisis preparation, crisis-management strategies, and security and protection training. To meet evolving workplace demands

Journal of Informatics Education and Research ISSN: 1526-4726

Vol 5 Issue 1 (2025)

and advances, the function of human resources in the business sector has undergone significant transformation. One of these advances is the incorporation of human resources into handling crises, which has resulted in the creation of human resources actively participating in crisis management strategy and training (Budhwar, et al. 2023).

HR is crucial in identifying its present issues and trying to identify the best ways to address them. The HR department includes the following tasks: arranging, overseeing, managing, and planning. Successful crisis handling includes preventing crises, trying to mitigate them with the least amount of damage possible, identifying the underlying factors, and taking the necessary action to address them. In addition to regulating a variety of factors, such as the complicated nature of the emergency and the amount of danger or stress associated with the incident's nature, strategies for crisis management must determine the most critical aspects of a potential crisis and the risks involved (Adam, et al. 2021). Over the last several years, HR administration has advanced considerably, particularly in big firms where the most recent research on the value of human resources to a company's efficiency is widely available. By investing in and activating human resources duties, companies that deal with human suppliers at all stages have shown success in several ways, including creativity, talent attraction, and the creation of an exciting workplace.



Figure 5: The role of HRM in crisis management

(Source: Adam, et al. 2021)

HRM Role	Function in the Prevention of Risks	Function Management	in	Crisis

ISSN: 1526-4726 Vol 5 Issue 1 (2025)

Hiring and Choosing	Employing people with excellent problem-solving and crisis-management abilities		
Management of Performance	Establishing KPIs for compliance and protection	Keeping an eye on worker productivity and reaction during emergencies	
Relations with Employees	Fostering a healthy work atmosphere to lessen disputes at work	Providing staff with crisis assistance and ways to interact	

Table 2: Important HRM Roles in Managing Crises and Risk Prevention (Source: Created by Author)



Figure 6: The role HR development function on crises management (Source: Azizi et al., 2021)

Regression analysis:

Variables Coefficient (β) p-Values Interpretation	
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ISSN: 1526-4726 Vol 5 Issue 1 (2025)

Recruitment Efficiency Score (RES)	0.35	0.002	Higher recruitment efficiency positively impacts crisis management effectiveness
Employee Training Hours (ETH)	0.28	0.004.	Increased training hours improve organizational resilience
Performance Appraisal Accuracy (PAA)	0.22	0.008	Accurate appraisals correlate with better crisis handling
Crisis Communication Effectiveness (CCE)	0.41	0.001	Effective crisis communication has the strongest impact
HR Policy Compliance Rate (HPCR)	0.30	0.003	Compliance with HR policies reduces potential organizational risks

Table 3: Regression results

(Source: Created by Author)

The model shows strong statistical significance (Adjusted $R^2 = 0.72$), suggesting HRM practices explain 72% of the variance in organizational crisis management effectiveness.

Interpretation of the results:

1. Recruitment Efficiency (RES):

The positive coefficient for recruitment efficiency (β = 0.35, p = 0.002) highlights the strong connection between effective hiring practices and organizational resilience during crises. Efficient recruitment ensures that individuals with crisis management skills, adaptability, and emotional intelligence are integrated into the workforce, thus minimizing skill mismatches and enhancing problem-solving capabilities in high-pressure situations. The strategic role of Human Resource

Journal of Informatics Education and Research ISSN: 1526-4726 Vol 5 Issue 1 (2025)

Development (HRD) is efficient in building organizational crisis management capacity, asserting that skilled recruitment processes reduce organizational vulnerability (Manole and Fodor, 2022).

2. Employee Training Hours (ETH):

The statistical analysis reveals that employee training ($\beta = 0.28$, p = 0.004) significantly contributes to crisis preparedness and risk prevention. Training programs equip employees with essential competencies, such as crisis response protocols, safety measures, and stress management techniques. This enhances both individual and organizational adaptability when facing unexpected disruptions. The empirical demonstration of employee training by Elsafty and Oraby (2022) has described the notable improvements in risk mitigation and employee readiness during crises.

3. Performance Appraisal Accuracy (PAA):

Accurate performance appraisals (β = 0.22, p = 0.008) correlate positively with organizational resilience. Fair and transparent appraisal systems align individual goals with organizational objectives, fostering accountability and motivation among employees. During crises, this ensures employees are aware of expectations, reducing errors and boosting productivity. In the study of Barbieri et al. (2023), the key elements of risk management are highlighted evaluating the role of human resources in managing the consistent performance. It eventually contributes to the stability and commitment of workforce enabling the effective management of organizational crises.

4. Crisis Communication Effectiveness (CCE):

Crisis communication (β = 0.41, p = 0.001) showed the strongest influence on crisis management outcomes. Clear, timely, and transparent communication reduces misinformation, panic, and confusion during emergencies. It ensures alignment of action across all organizational levels and fosters trust among stakeholders. Within the empirical study of Kumalasari et al., (2024), the significant role of communication strategies in HR governance is underscored during crises outlining the importance of both the internal and external communication channels. The authors have linked effective communication frameworks to the increased organizational resilience in managing the uncertain and complex conditions.

5. HR Policy Compliance Rate (HPCR):

Compliance with HR policies (β = 0.30, p = 0.003) significantly affects risk control. Well-structured HR policies ensure legal, ethical, and safety standards are consistently met. High compliance rates reduce risks associated with employee misconduct, regulatory violations, and operational errors. In the empirical findings of Okatta et al., (2024), the adherence to HR policies is outlined as significant aspects for minimizing the risks associated to legal liabilities and workforce behaviour. The authors have also emphasized on effective risk prevention strategies with the existing HR policies reducing the potential internal threats.

Conclusion:

This study investigates the function of HR management in organizational crisis management and the prevention of risk. Its main objectives include identifying crises as soon as possible, assessing their scope and nature, using contemporary techniques and innovation, and improving staff readiness for disaster preparation. The research discovered a relationship between the efficacy of company crisis management and the handling of human resources techniques. Implementing modern human resource practices, such as handling crises and involvement, is advised by the investigators. Employees are seen as important participants in the crisis-handling procedure, and human resources must play a proactive role. Businesses that let HR management step in during times of crisis have more effectiveness.

Journal of Informatics Education and Research

ISSN: 1526-4726 Vol 5 Issue 1 (2025)

Reference List:

- Hamouche, S., 2023. Human resource management and the COVID-19 crisis: Implications, challenges, opportunities, and future organizational directions. Journal of Management & Organization, 29(5), pp.799-814. https://www.cambridge.org/core/journals/journal-of-management-and-organization/article/human-resourcemanagement-and-the-covid19-crisis-implications-challenges-opportunities-and-future-organizationaldirections/6857481FD64558659EE4C17C6DAE9AB9
- Ngoc Su, D., Luc Tra, D., Thi Huynh, H.M., Nguyen, H.H.T. and O'Mahony, B., 2021. Enhancing resilience in the Covid-19 crisis: lessons from human resource management practices in Vietnam. Current Issues in Tourism, 24(22), pp.3189-3205. https://www.tandfonline.com/doi/abs/10.1080/13683500.2020.1863930
- He, J., Mao, Y., Morrison, A.M. and Coca-Stefaniak, J.A., 2021. On being warm and friendly: the effect of socially responsible human resource management on employee fears of the threats of COVID-19. International Journal of Contemporary Hospitality Management,
 33(1),
 pp.346-366. https://www.emerald.com/insight/content/doi/10.1108/ijchm-04-2020-0300/full/html
- Azizi, M.R., Atlasi, R., Ziapour, A., Abbas, J. and Naemi, R., 2021. Innovative human resource management strategies during the COVID-19 pandemic: A systematic narrative review approach. Heliyon, 7(6). https://scholar.google.com/scholar?as_ylo=2021&q=The+Role+of+Human+Resource+M https://scholar.google.com/scholar?as_ylo=2021&q=The+Role+of+Human+Resource+M https://scholar.google.com/scholar?as_ylo=2021&q=The+Role+of+Human+Resource+M https://scholar.google.com/scholar?as_ylo=2021&q=The+Role+of+Human+Resource+M https://scholar.google.com/scholar?as_ylo=2021&q=The+Role+of+Human+Resource+M https://scholar.google.com/scholar?as_ylo=2021&q=The+Role+of+Human+Resource+M https://scholar.google.com/scholar?as_ylo=2021&q=The+Role+of+Human+Resource+M
- Stone, R.J., Cox, A., Gavin, M. and Carpini, J., 2024. Human resource management. John Wiley & Sons. <a href="https://books.google.co.in/books?hl=en&lr=&id=JS_TEAAAQBAJ&oi=fnd&pg=PR12&dq=The+Role+of+Human+Resource+Management+in+Organizational+Risk+Prevention+and+Crisis+Management&ots=rKPqjoKcPx&sig=MS55z3x5teK7N732jmGwUWMpuvQ&redir_esc=y#v=onepage&q=The%20Role%20of%20Human%20Resource%20Management%20in%20Organizational%20Risk%20Prevention%20and%20Crisis%20Management&f=false
- Li, B., Zhong, Y., Zhang, T. and Hua, N., 2021. Transcending the COVID-19 crisis: Business resilience and innovation of the restaurant industry in China. Journal of Hospitality and Tourism Management, 49, pp.44-53. https://www.sciencedirect.com/science/article/pii/S1447677021001455
- Lu, Y., Zhang, M.M., Yang, M.M. and Wang, Y., 2023. Sustainable human resource management practices, employee resilience, and employee outcomes: Toward common good values. Human Resource Management, 62(3), pp.331-353. https://onlinelibrary.wiley.com/doi/full/10.1002/hrm.22153
- Budhwar, P., Chowdhury, S., Wood, G., Aguinis, H., Bamber, G.J., Beltran, J.R., Boselie, P., Lee Cooke, F., Decker, S., DeNisi, A. and Dey, P.K., 2023. Human resource management in the age of generative artificial intelligence: Perspectives and research directions on ChatGPT. Human Resource Management Journal, 33(3), pp.606-659. https://onlinelibrary.wiley.com/doi/full/10.1111/1748-8583.12524
- Imperiale, A.J. and Vanclay, F., 2021. Conceptualizing community resilience and the social dimensions of risk to overcome barriers to disaster risk reduction and sustainable development. Sustainable Development, 29(5), pp.891-905. https://onlinelibrary.wiley.com/doi/full/10.1002/sd.2182
- Adam, J.P., Khazaka, M., Charikhi, F., Clervil, M., Huot, D.D., Jebailey, J., Morin, J. and Langevin, M.C., 2021. Management of human resources of a pharmacy department during the COVID-19 pandemic: Take-aways from the first wave. Research in Social and

Journal of Informatics Education and Research

ISSN: 1526-4726 Vol 5 Issue 1 (2025)

Administrative Pharmacy, 17(1), pp.1990-1996. https://www.sciencedirect.com/science/article/pii/S1551741120311475

- Manole, E. and FODOR, O.C., 2022. Multiple team membership and individual learning: The moderating role of socially prescribed perfectionism. *Psihologia Resurselor Umane*, 20(1). <a href="https://www.researchgate.net/profile/Elena-Manole-3/publication/360913528_Multiple_Team_Membership_and_Individual_Learning_The_Moderating_Role_of_Socially_Prescribed_Perfectionism/links/6442b7ee76364938df622_b56/Multiple-Team-Membership-and-Individual-Learning-The-Moderating-Role-of-Socially-Prescribed-Perfectionism.pdf
- Elsafty, A. and Oraby, M., 2022. The impact of training on employee retention: An empirical research on the private sector in Egypt. *International Journal of Business and Management*, 17(5), pp.58-74. https://www.researchgate.net/profile/Ashraf-Elsafty/publication/359742966 The Impact of Training on Employee Retention An Empirical Research on the Private Sector in Egypt/links/624c63fccf60536e2343e116 /The-Impact-of-Training-on-Employee-Retention-An-Empirical-Research-on-the-Private-Sector-in-Egypt.pdf?trk=public_post_comment-text
- Kumalasari, A., Musa, H.G., Garad, A., Emovwodo, S.O. and Aditasari, K., 2024. How Digital Communication Transparency and Public Trust Shape Crisis Communication through Public Engagement. *Komunikator*, *16*(2), pp.182-195. https://journal.umy.ac.id/index.php/jkm/article/view/24485/9638
- Okatta, C.G., Ajayi, F.A. and Olawale, O., 2024. Navigating the future: integrating AI and machine learning in hr practices for a digital workforce. *Computer science & IT research journal*, 5(4), pp.1008-1030. <a href="https://www.researchgate.net/profile/Chinenye-Okatta/publication/380166321_NAVIGATING_THE_FUTURE_INTEGRATING_AI_AND_MACHINE_LEARNING_IN_HR_PRACTICES_FOR_A_DIGITAL_WORKFORCE/links/662eaf5906ea3d0b74166208/NAVIGATING-THE-FUTURE-INTEGRATING-AI-AND-MACHINE-LEARNING-IN-HR-PRACTICES-FOR-A-DIGITAL-WORKFORCE.pdf