



RESEARCH PAPER

The Impact of Human Capital Management on Firm Financial Performance and Market Competitiveness

¹Dr. Fiaz Ahmed Bhutto, ²Dr. Jai Kishan and ³Muzamil Saeed

1. Assistant professor, Department of business administration, Shah Abdul Latif University, Ghotki campus, Sindh, Pakistan
2. Assistant professor, Institute of Business Administration Shah Abdul latif university, Khairpur, Sindh, Pakistan
3. Campus Manager Virtual University of Pakistan Ghotki Campus, Sindh, Pakistan

Corresponding Author: Fiaz.bhutto@salu.edu.pk

ABSTRACT

The Human Capital Management (HCM) has become a key factor of firm-level financial turnover and the sustained market competitiveness in an ever-growing knowledge-based global economy. With the shift of organizations in knowledge-intensive production processes, recruitment, training, performance evaluation, compensation processes, involvement of employees, and development of leadership is the key element of sustainable competitive advantage. This paper focuses on how HCM practices have affected financial performance indicators of return on assets (ROA), return on equity (ROE), profit margins and growth in revenues and non-financial indicators of the organization of innovativeness capacity, productivity and market positioning. On Resource-Based Theory (RBT), the Human Capital Theory, and the Dynamic Capabilities Theory, the study examines the connection between formal HCM systems and firm competitiveness. The survey data that was gathered involving 120 manufacturing and service firms were used as the quantitative research design. The key HCM variables on financial and competitive performance are used.

KEYWORDS Human Capital Management (HCM), Financial Performance, Competitiveness on the market, Employee Engagement, Strategic Human Resources Management (SHRM).

Introduction

The 21st century world economy has seen the knowledge and human expertise becoming the most valuable assets in an organization. Traditional competitive advantages bases like accessibility of capital, raw materials or technological infrastructure are becoming duplicable. Nevertheless, the skills, innovativeness and determination of workforce are still inimitable (Cui *et al.* 2025). Human Capital Management (HCM) has therefore become a topical strategic activity that has a direct impact on the performance and competitiveness of firms (Chali & Lakatos, 2024).

Human capital is the body of knowledge, skills and abilities, experience amongst other qualities in individuals that enable generation of economic value. Human capital tends to increase with investment in training, education and experience unlike physical assets (Cai & H. 2024). Companies that successfully plan and manage their human resource stand in better positions to innovate, respond to environmental changes as well as attain long term profitability (Mone, 2021).

The increased role of HCM can be explained by the following reasons:

Globalization and Market Integration

Companies are currently in the international markets that are very competitive. Apple Inc. and Google LLC are two examples of how the human capital based on innovation

can establish long-lasting international leadership. They have the competitive power not just because of the technology, but also because of their capability to attract and retain highly qualified employees (Kambarov, & Melibayeva, 2023).

Digital Transformation and Technology Progress

The emerging trend of artificial intelligence, automation, and online platforms require the workforce that is highly qualified and capable of operating complicated systems. Human capital has turned away towards the manual labor to cognitive abilities, with focus on the learning agility and problem solving skills (Hoichuk, V., & Lyubomudrova, 2024).

Switch to Knowledge-Based Economies

The largest portion of corporate value is now intangible assets in the advanced economies. The international market research reports that more than 80 percent of the corporate values of top companies depend upon non-tangible resources such as human capital (Collins & Clark, 2022).

Strategic Human Resource Management (SHRM)

The changing role of HR as an administrative support to a strategic partner has enhanced the alignment of the HCM practices with corporate goals. Strategic HCM is a combination that prepares the workforce and talent acquisition planning, performance management and succession planning in the larger organizational plans. Financial performance is the traditional measure of success of a firm based on the measures like profitability, return on investment (ROI), increase in revenues and shareholder value. But according to scholars, financial outcomes are lag indicators. Leading indicators of financial success are non-financial drivers like employee engagement, rate of innovation and customer satisfaction. Effective HCM practices have an impact on both (Bai, 2024; Bhutto et al., 2025).

Market competitiveness is the capacity of a firm to retain and increase its market share despite the competition. Preferred cost leadership, differentiation or innovation can all be sources of competitive advantage (Bukhari, 2025; Afzal et al., 2023). Human capital is very important in facilitating these strategies. Cost leadership, as an example, demands the productivity enhancement which is based on the efficiency of employees, and differentiation is relying on creativity and innovativeness. Although human capital and its significance have received much popularity, the direct financial influence of the former has had empirical evidence that has been both positive and negative. There are studies that indicate a strong positive association between investment in training and profitability and others that indicate that returns of the investments in human capital could be indirect or long-term (Fazil & Gul, 2019; Shah et al., 2018).

Thus, the proposed research aims at investigating empirically the linkage between structured HCM practices and the financial performance and competitiveness of firms.

Literature Review

Theoretical Foundations

Human Capital Theory

The Human Capital Theory, as put forward by some economists like Gary Becker, holds the argument that productivity and output of the employees and the company is enhanced by investment in education and training. Companies that make human capital

investments have better performance results because they have increased efficiency and innovation (Guest, 2002).

Resource-Based View (RBV)

According to the Resource-Based View, the firms that have inimitable, valuable and non-substitutable (VRIN) resources are capable of having sustained competitive advantage. Human capital meets these requirements as employee knowledge and organizational culture is hard to imitate (Cynthia, 2025; Noor et al., 2025).

Dynamic Capabilities Theory

Dynamic capabilities can be defined as the capability of firms to combine, develop and restructure the competencies to respond to the changing environment that is dynamic. As an effective HCM, I am able to embrace flexibility due to the development of skills and constant learning (Delery, 1996; Sarmad & Bashir, 2016).

Ethnographic Research on HCM and Financial Performance.

The connection between HR practices and firm performance has been studied by many researchers

The studies have shown that training of employees and their productivity has a positive relationship. The use of performance based compensation has been associated with increased profitability (Huselid, 1995).

Employee engagement has also been greatly correlated with growth in revenues. The critics however, believe that it is hard to establish causality because of reverse causation where high performing firms might just invest more on HR (Jiang, 2012).

HCM and Competitions in the market

Innovation, operational efficiency, and responsiveness of customers are some sources of competitive advantage. HCM contributes by

- Increasing the level of innovation.
- Improving service quality.
- Reducing employee turnover.
- Enhancing employer branding.

The case studies of companies such as the Toyota Motor Corporation point out the role of constant employee improvement systems as a way of achieving global competitiveness.

Material and Methods

To increase the strength, stability, and repeatability of this research, the research methodology was formulated and rigorous procedural controls, validated measurement tools, and sophisticated statistical methods were employed. This section further discusses more about the sampling procedures, measurement scales, validity and reliability testing, model specification and diagnostic tests.

Sampling Technique and Procedure.

A stratification random sampling method was applied to have sufficient representation of both manufacturing and service sectors. The firms were divided into two strata

Manufacturing firms (n = 60)

Service firms (n = 60)

Organizations in each stratum were randomly picked in industry directories and stock exchange listing. Firms with less than five years of operation were excluded because the data on financial aspects would be stable and structured HR practices are present.

The respondents included

HR Directors / HR Managers

Finance managers/ chief financial officers.

The dual respondents would eliminate single-source bias and enhance the accuracy of the data. One hundred and fifty questionnaires were sent out, 120 valid responses were obtained giving a 80 percent response rate.

Measurement of Variables

The constructs were all operationalized using scales that had been previously tested as based on an established research on human resource management.

Human Capital Management Practices

Multi-item Likert-scale questions (1 = Strongly Disagree to 5 = Strongly Agree) were used to measure each of the HCM dimensions

Training Intensity Hours of training on an annual basis per employee, skill development initiatives, online training.

Compensation Strategy Pay that is based on performance, alignment of incentive, benefits competitiveness.

Performance Appraisal Effectiveness Objectivity, frequency of feedback, goal congruency.

Employee Engagement dedication, inspiration, willful activity.

Development in Leadership Succession Planning, Systems of mentoring, Executive coaching.

Composite indexes were made by averaging related items.

Financial Measures of Performance

Audited financial statements and annual reports were used to get financial performance indicators. The key ratios included

Return on Assets (ROA)

Return on Equity (ROE)

Profit Margin

Revenue Growth Rate

Financial indicators were averaged in three years to enhance comparability.

Competitiveness Indicators in the market.

Measures of competitiveness in the market were measured using

Market share growth

Innovation rate (number of innovation products/services)

Customer retention rate

These measurements were gathered by the means of survey and secondary data.

Testing of Reliability and Validity

In order to achieve measuring accuracy

Alpha calculated to measure internal consistency was that of Cronbach. Alpha values of all HCM constructs were greater than 0.70 and the constructs indicated acceptable reliability.

Construct validity was checked with the help of the Exploratory Factor Analysis (EFA). Factor loadings which were greater than 0.60 were kept.

Sampling adequacy was found to be sufficient as confirmed by Kaiser-Meyer-Olkin (KMO) test (KMO = 0.82).

The Test of Sphericity by Bartlett was significant ($p < 0.001$) and this confirms that the correlation matrix is factorable.

Model Specification

The regression model was then given as follows

$$FP = b_0 + b_1TR + b_2EN + b_3COMP + b_4PA + b_5LD + e$$

Where

FP = Financial Performance

TR = Training

EN = Engagement

COMP = Compensation

PA = Performance Appraisal

LD = Leadership Development

e = Error term

Individual regression equations were estimated on

Financial Performance

Market Competitiveness

Diagnostic and Robustness Tests.

In order to warrant model validity, a number of diagnostic checks were carried out

Multicollinearity Test The values of Variance Inflation Factor (VIF) were less than 5 which means no severe multicollinearity.

Test of heteroscedasticity Breusch-Pagan test indicated that there was no significant heteroscedasticity.

Normal Test The values were more or less normally distributed.

Durbin-Watson Statistic The values near 2 were used to show that there was no autocorrelation.

Limitations of Methodology

The cross-sectional design is useful, but it does not allow causal inference. Long term benefits on human capital investments might be better captured by longitudinal studies. Also, the perceptual bias could be brought by relying on self-reported engagement measures.

By implementing these methodological improvements, the research will guarantee that it has statistical rigor, reliability, and validity, which will reinforce the legitimacy of the results in answering the question on the effect of Human Capital Management on the financial performance of firms in the market and their competitiveness.

Results and Interpretation

Table 1
Descriptive Statistics

Variable	Mean	Std. Dev
Training Intensity	3.8	0.72
Employee Engagement	4.1	0.65
ROA	8.5%	2.3
Revenue Growth	12%	4.1

High average engagement levels indicate strong workforce involvement across firms.

Table 2
Correlation Analysis

Variable	ROA	Revenue Growth
Training	0.52**	0.61**
Engagement	0.63**	0.70**
Compensation	0.48**	0.55**

(**p < 0.01)

Employee engagement shows the strongest correlation with both ROA and revenue growth.

Table 3
Regression Results

Predictor	Beta	p-value
Training	0.29	0.003

Engagement	0.41	0.000
Compensation	0.21	0.012

$R^2 = 0.58$

58% of variance in financial performance is explained by HCM variables. Engagement is the strongest predictor.

Discussion

The results of this study have been increased to give a more in-depth insight of how the Human Capital Management (HCM) can be not only a system of operational support but also performance driver. The regression findings reflect that employee engagement and levels of training have the highest influence on financial performance and competitiveness in the market. This supports the theoretical arguments of the Human Capital Theory and the Resource-Based View that state that knowledge, skills and organizational culture are valuable and resource that are difficult to imitate.

The mediating effect of employee engagement is one of the implications of the findings. Involvement seems to be turning training and compensation investments into the quantifiable financial gains. Companies investing a lot of resources in training yet do not develop a sense of engagement might not maximize the returns of the skills development process. The engagement can promote discretionary effort, innovation behavior and collaborative problem solving that leads to enhanced productivity and customer satisfaction. Engagement, therefore, can perform a multiplier role in the performance in the HCM framework.

The other important observation is a comparatively high level of influence of performance-based pay system. Goal congruence is a boosted incentive alignment between organizational strategy and the employee. When pay systems are based on incentives to innovate, to be efficient, and to be customer-focused, employees tend to introduce work-related behaviors that will increase profits and competitive standing. The study however also indicates that compensation is not enough without supportive leadership and development opportunities.

Sectoral comparison showed that the service firms were a little bit more sensitive to HCM practices compared to manufacturing firms. This could be explained by the fact that the service industries are more dependent on knowledge-based work and direct interaction with the customer. Customer experience, brand reputation and outcomes of innovation are directly influenced by human capital in services.

Strategically, the research affirms that HCM has both the contribution of the short-run financial performance and long-term strategic positioning. Whereas financial performance indicators, i.e. ROA and profit margin depict short-term achievements, competitiveness indicators, i.e. innovation rate and market share growth, signify sustainable advantage. Organizations should therefore take a middle ground approach where they incorporate both financial and non-financial performance indicators.

All in all, the discussion highlights that successful HCM practices are a complex system and not individual HR functions. A combination of training, engagement, compensation, appraisal, and leadership development creates the cumulative effects to improve the firm performance and competitiveness.

Conclusion

This paper gives a detailed empirical data to support the hypothesis that Human Capital Management is a significant contributor to the financial performance and

competitiveness in the market of firms. Through combining theoretical view and quantitative examination the study shows that formalized HCM systems present a significant share of variability in the profitability, growth in revenues and competitive performance.

The results reveal that the employee engagement is the most significant predictor of financial success with training intensity and performance-based compensation coming next. This implies that organizations have to go beyond the transactional HR practices to strategic people based management systems that foster motivation, learning and alignment to corporate objectives.

It is also found in the results that human capital investments produce direct and indirect returns. The direct returns come in the form of increased productivity and profitability whereas the indirect returns come in the form of innovation potential, brand equity and positioning. Companies that consider human capital as a cost center instead of a strategy attain greater competitive advantages.

In addition, the paper supports the idea that intangible assets are becoming a guiding factor of value of firms in contemporary economies. With an increasingly unpredictable market and a fast changing technology, companies need flexible, talented and involved workers to stay afloat in the competitive world. HCM is therefore a dynamic capability that helps firms to be responsive to changes in the environment.

Nonetheless, sustainable impact necessitates commitment in the long term. There are momentary economic effects of reducing training or employee development, which may enhance the short-term financial performance but compromise competitiveness in the long run. Talent investment must therefore be consistent strategically.

To sum up, Human Capital Management is not only a supportive organizational role but a key to financial viability and leadership in the market. Those companies that consider HCM a part of their strategic planning, rely on the power of HR data analytics, and have the culture of constant improvement have more chances to have high financial results and considerable sustainable competitive edge. Further studies are needed on longitudinal data and cross country comparisons, to enhance the knowledge of the long term economic impact of HCM.

Policy Recommendations

- Combine HCM and Corporate Strategy.
- The HR leaders ought to be involved in strategic decision-making.
- Make an investment in lifelong learning.
- Firm training and reskilling.
- Adopt HR Analytics
- Calculate workforce performance with data-driven tools.
- Increase Engagement of the Employees.
- Bring about embracing leadership practices and feedbacks.
- Correlate Compensation with Performance.
- Adopt reward systems that are incentive based.
- Foster Leadership.
- Train the leaders of the future by means of succession planning.

References

- Afzal, A., Khan, M. L., & Sikandar, F. (2023). An Exploration into the University Quality Assurance Practices for Maintaining the Students' Retention. *Global Sociological Review, VIII*(II), 184-191
- Bai, Y. (2024). A study of the impact of human capital investment on organizational performance. *Highlights in Business, Economics and Management, 32*, 210–216.
- Bartram, T., et al. (2009). Strategic human resource management and organizational performance: Integrating multiple levels of analysis. *Journal of Management & Organization, 15*(5), 550–565.
- Becker, B., & Gerhart, B. (1996). The impact of human resource management on organizational performance: Progress and prospects. *Academy of Management Journal, 39*(4), 779–801.
- Becker, B., & Huselid, M. (2006). Strategic human resources management: Where do we go from here? *Journal of Management, 32*(6), 898–925.
- Becker, G. S. (1993). *Human capital: A theoretical and empirical analysis with special reference to education* (3rd ed.). University of Chicago Press.
- Boxall, P., & Purcell, J. (2003). *Strategy and human resource management* (2nd ed.). Palgrave.
- Bukhari, S. R. H. (2025). Disappearing Command: Assassinations, Purges, and the Erosion of Russian Military Leadership in the Ukraine War. *Journal of Social Sciences Review, 5*.
- Cai, X., Xiang, H., et al. (2024). Interrelation between human capital management and ESG engagement: Evidence from S&P 500 firms. *Humanities and Social Sciences Communications, 11*, Article 1654.
- Chali, B. D., & Lakatos, V. (2024). The impact of human resource management on financial performance: A systematic review in cooperative enterprises. *Journal of Risk and Financial Management, 17*(10), 439.
- Collins, C. J., & Clark, K. D. (2022). Strategic human resource practices, top management team social networks, and firm performance: The role of human resource practices in competitive advantage. *Academy of Management Journal, 46*(6), 740–751.
- Cui, X., Sun, K., & Zhang, T. (2025). Optimization of human capital in management and integration with digital finance: Strategies for enhancing corporate competitiveness. *Finance Research Letters, 83*, 107712.
- Cynthia, K. T., & Idayat, A. C. (2025). Corporate entrepreneurship and human capital management practices as tools for organizational performance in Nigeria. *International Journal of Research and Innovation in Social Science, 9010321*.
- Delery, J. E., & Doty, D. H. (1996). Modes of theorizing in strategic human resource management: Tests of universalistic, contingency, and configurational performance predictions. *Academy of Management Journal, 39*(4), 802–835.
- Fazil, S., Mubarik, F., & Gul, F. (2019). Intellectual capital efficiency and firm performance in Pakistan and Turkey: A moderating role of industry concentration. *Journal of Business and Management Research, 3*(2), 422–452.

- Guest, D. E. (2002). Human resource management, corporate performance and employee wellbeing: Building the worker into HRM. *Journal of Industrial Relations*, 44(3), 335–358.
- Hashim, M. J. M., Khamis, M. R., & Osman, I. (2025). Effective human capital and efficient intellectual capital will enhance Bumiputra SMEs performance in Malaysia. *International Journal of Research and Innovation in Social Science*, 90600094.
- Hoichuk, V., & Lyubomudrova, N. (2024). The impact of strategic human capital management on the competitiveness of an enterprise. *Three Seas Economic Journal*, 5(2), 1–6.
- Huselid, M. A. (1995). The impact of human resource management practices on turnover, productivity, and corporate financial performance. *Academy of Management Journal*, 38(3), 635–672.
- Huselid, M. A., Jackson, S. E., & Schuler, R. S. (1997). Technical and strategic human resource management effectiveness as determinants of firm performance. *Academy of Management Journal*, 40(1), 171–188.
- Jackson, S. E., & Schuler, R. S. (2000). Managing human resources for competitive advantage: Prospects for the 21st century. *International Journal of Human Resource Management*, 11(2), 121–138.
- Jiang, K., et al. (2012). Human resource management practices and organizational performance: Test of a mediated model in a Chinese context. *International Journal of Human Resource Management*, 23(17), 3642–3666.
- Kambarov, J., & Melibayeva, G. (2023). The impact of human capital and human resources on competitiveness in small enterprises. *International Conference on Global Trends and Innovations in Multidisciplinary Research*, 1(1), 148–152.
- Katou, A. A., & Budhwar, P. (2006). Human resource management systems and organizational performance: A test of a mediating model in the Greek manufacturing context. *International Journal of Human Resource Management*, 17(7), 1223–1253.
- Lepak, D. P., & Snell, S. A. (2002). Examining the human resource architecture: The relationships among human capital, employment, and organizational performance. *Journal of Management*, 28(4), 517–543.
- Lepak, D., et al. (2010). Human capital management: Understanding people systems for competitive advantage. *Journal of Management*, 36(4), 809–846.
- Mone, E. M., & London, M. (2021). *Employee engagement through effective performance management: A practical guide for managers*. Routledge.
- Noor, T., Waqas, R. M., Khan, A. M., Sain, Z. H., & Syed, H. (2025). Timetable Management and Its Impact on Teacher Efficiency in Schools. *ASSAJ*, 4(02), 1940–1948.
- Paauwe, J., & Boselie, P. (2005). HRM and performance: What next? *Human Resource Management Journal*, 15(4), 68–83.
- Putriani, S. M., et al. (2025). The effect of human capital on company performance. *Journal of Management, Accounting, General*, 4(2), 12–25.

- Sarmad, M., & Bashir, S. (2016). Impact of nurses' personality on patients' satisfaction; an occupational focus on spirituality at work as moderator. *Abasyn Journal of Social Sciences*, 9(1), 69-85.
- Shah, A. M., Kiong, W. S., Shah, S. A. A., & Shah, S. M. (2018). The Socio-Economic Impact of Ngos Development on Beneficiaries in Khyber Pakhtunkhwa Province (Kp) of Pakistan. *J. Appl. Environ. Biol. Sci*, 8(3), 118-122.
- Subramony, M. (2009). Human resource management practices and organizational performance: The mediating effect of human capital and human resource management quality. *Personnel Psychology*, 62(2), 289-317.
- Tharenou, P. (2001). Managerial career advancement: A review of influence of human capital, social capital, and organizational sponsorship. *Journal of Management*, 27(1), 1-28.
- Wright, P. M., & McMahan, G. C. (2011). Exploring human capital: Putting 'human' back into strategic human resource management. *Human Resource Management Journal*, 21(2), 93-104.