

Impact of high-performance practices on financial and non-financial performance of organizations: The moderating role of employee productivity

 Raja Rehan^{1*},  Muhammad Shahid Iqbal²,  Qazi Muhammad Adnan Hye³,  Auwal Adam Sa'ad⁴

^{1,4}*IUM Institute of Islamic Banking and Finance, International Islamic University Malaysia, Kuala Lumpur, Malaysia; rajarehan@iium.edu.my (R.R), auwal@iium.edu.my (A.A.S)*

²*Universiti Utara Malaysia, Kedah, Malaysia, shahid6114@outlook.com (M.S.I)*

³*Academic Research and Development Wing, Dubai, United Arab Emirates; Adnan.econ@gmail.com (Q.M.A.H)*

Abstract. This study examines managerial and organizational factors associated with high-performance practices and high-performance Malaysian organizations. Theoretically, firm financial performance, organizational productivity, and market responsiveness are theorized to be connected with a high-performance organization. It is anticipated that employees' productivity moderates the relationship between nominating explanatory and dependent variables, which are firm financial performance, organizational productivity, market responsiveness, and high-performance organizations. For investigating relationships among the variables, this study adopts the Partial Least Square Structural Equation Modeling (PLS-SEM) by using quantitative data from 186 firms' managers. The outcomes indicate that firm financial performance of an organization, organizational productivity, and market responsiveness are foundational building blocks for excellence in performance. The study found out that employee productivity was the essential moderator in strengthening the relationship between organizational productivity, market responsiveness, and high-performance organizations, while firm financial performance had no significant moderating effect on high-performance organizations. The findings are beneficial for the Malaysian firms' managers to improve their financial and non-financial performance.

Keywords: Financial and non-financial performance, High-Performance organization, Market responsiveness, Organizational productivity, PLS-SEM.

1 | BACKGROUND

The attempt to achieve the utmost organizational efficiency is an endeavor that is complex and dynamic and has attracted considerable scholarly interest from dissimilar fields (De Waal, 2021; De Waal, Burrell, Drake, Sampa, & Mulimbika, 2023; Khan, Khan, Jamil, & Akbar, 2024). Notably, high-performance organizations (HPOs) emerged as a paradigm recognizing the complex nature of factors that influence organizational performance (Do & Mai, 2020). In this study, we conduct a thorough examination of the complicated relationship between Firm Financial Performance (FFP), Organizational Productivity (OP), and Market Responsiveness (MR) in the context of HPOs.

The body of work concerning organizational performance has, from its inception, tended to center upon financial metrics as recognized indices of an organization's fiscal condition and survivability (Guthrie & Neumann, 2007; Lebas & Euske, 2002). Nevertheless, the usual emphasis on financial parameters very often lacks a holistic assessment of organizational performance. In reaction, the notion of HPOs has appeared, stressing a holistic approach that encompasses more than just financial metrics (De Waal & Sivro, 2012). Remarkably, HPOs have inherent characteristics referred to as high-performance practices (HPPs), which determine the corporate culture and guarantee stability to achieve the utmost financial and non-financial performance (Beer, 2009; De Waal, 2007; Javidan, 1991). Also, these characteristics include a commitment to continuous improvement and renewal, an openness to change, a focus on quality management, a high-quality workforce, and a long-term orientation (André de Waal & Wang, 2017). As we embark on this exploration, we recognize the interconnectedness of these HPPs and their collective impact on organizational financial and non-financial performance, as the actual concept of HPO presents the idea that a high-performance organization (HPO) is an organization that is superior in achieving financial and non-financial results to those of its peer group over a period of five years or more by focusing on the really important factors (Rehan & Abdul Hadi, 2019; Rehan, Abdul, & Hussain, 2019) in a disciplined and organized way that make the organization HPO, as shown in Figures 1 and 2 (André de Waal & Wang, 2017; Kaliprasad, 2006). According to De Waal (2008) an organization is probably high-performance because it considers high-performance features and high-performance characteristics more vital when compared to other competitive organizations. Investigations of high-performance organizations have revealed that, normally, their income growth is 10 percent higher, their earnings are 29 percent greater, and their total stakeholder profit is 23 percent greater compared to enterprises that are not high-performance firms (De Waal, 2008).

In our investigation of the relationships within the HPO framework, Firm Financial Performance (FFP) stands as a crucial independent variable. Technically, FFP serves as a quantitative measure of an organization's financial health, encompassing factors such as revenue, profitability, and return on investment (Egbunike & Okerekeoti, 2018; Matar & Eneizan, 2018). Traditionally, financial metrics have been the cornerstone of performance assessment, but within the HPO context, we seek to interpret how FFP aligns with the broader organizational performance landscape, transcending the confines of the traditional financial realm. Organizational productivity, i.e., OP, the second independent variable, is the organizational efficiency and effectiveness of how resources are used to achieve the goals of the organization (Masi & Cooke, 2000). Within HPO concepts, a strong work force plays a pivotal role, with employee productivity emerging as a significant moderating variable. The productivity of the employees not only affects internal processes but also substantially influences the overall performance of the organization (Pritchard, Jones, Roth, Stuebing, & Ekeberg, 1989). The significance of HPPs is shown here as workers who are skilled, active, and motivated, which lies at the heart of organizational attainment.



Figure 1: HPO non-financial developments.

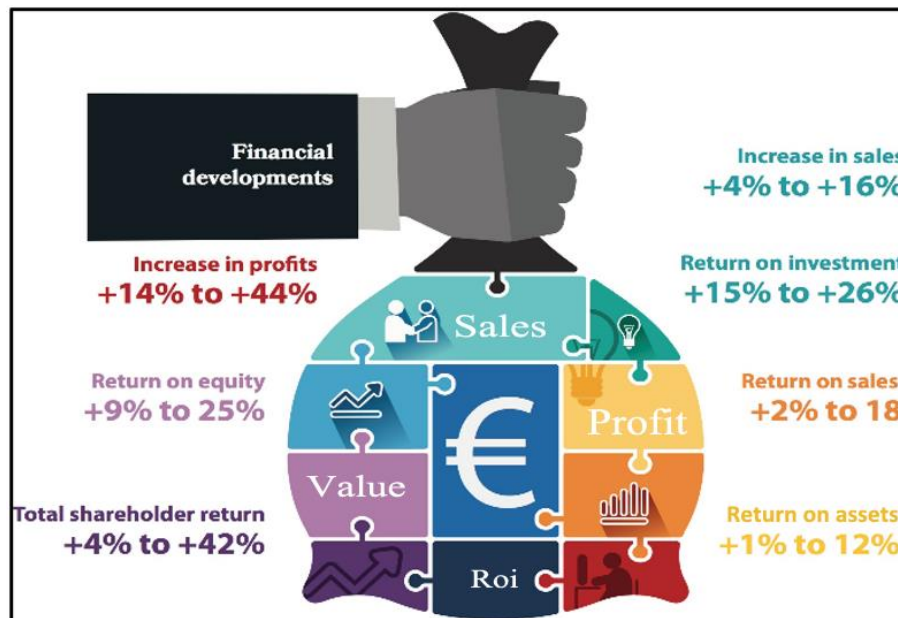


Figure 2: HPO financial developments.

Market responsiveness, i.e., MR, is the third independent variable that is used to measure the capacity of an organization to adapt and react to ongoing environmental changes (Aljanabi & Ghafour, 2021). According to the HPO concept, market responsiveness is linked to principles of continuous improvement and openness to change. The variable quantifies to what extent an organization can perceive and respond to changes in market conditions, emerging trends, and customer tastes (Garrett, Covin, & Slevin, 2009; Katzenbach & Smith, 2015). The reactive character of HPOs reflects the foresight orientation of their strategies, adjusted to follow the changing market conditions. The relationships among these variables are complex and multilateral, allowing a careful inspection. Our research aims to unravel the connection between FFP, OP, and MR within the scope of the HPO construct. Taking HPPs as the fundamental basis, we make an effort to figure out how such variables systemically impact organizational achievement. As well, we recognize the dynamic nature of organizational environments and the crucial need for a long-term orientation to ensure high performance.

In essence, this research explores the interplay between financial performance, organizational productivity, and market responsiveness within the specific context of high-performance organizations. Our paper aims to contribute the development of organizational financial and non-financial performance discourse by adopting a broad set of variables and considering the unique attributes of HPOs, while also providing valuable guidance for practitioners and scholars. Combining further through the complexities of HPOs, we will discover that hidden in them are relationships that will expand our vision of organizational excellence into which we can make strategic decisions for the future, as suggested by De Waal (2021). Besides the individual impact of FFP, OP, and MR, our research also examines their joint impact with HPO. Such interdependence of these variables, looked at through the prism of HPP, gives us a multi-faceted, though interesting picture that should be thoroughly studied. This extensive assessment is both theoretical and applied, contributing to academic literature and providing practical implications for organizational leaders who are striving to improve performance given the dynamic business environment. In addition, our study recognizes the ever-changing nature of organizational environments characterized by fast technological developments, volatile consumer behavior, and unpredictable market forces recognized by Mizrak (2024). Moving through such complicated ground, HPOs shine as organizations that not only adjust to change but flourish in it. The long-term orientation assumed in HPPs makes HPOs robust organizations that are able to withstand disturbances and grab opportunities (Do & Mai, 2020).

Such resilience, we argue, is what drives organizational excellence. Through our inquiry into the complex linkages within the HPO framework, we realize the need for empirical validation of our theoretical claims. Our research design is comprehensive, encompassing a systematic approach to capture the complex nature of organizational performance in both financial and non-financial aspects, as shown in Figure 3. Through surveys and data analysis, we aim to provide a subtle understanding of how FFP, OP, and MR collectively shape the performance landscape of HPOs.



Figure3: HPO outcomes.

Source: Commonwealth Center of a high-performance organization.

In a nutshell, this research initiative encompasses a lot that may eventually unravel the mysteries of organizational performance from the simple point of view of high-performing Organizations. Through a holistic management concept that transcends conventional financial measures, we seek to contribute to the theoretical knowledge of HPOs, while offering practical guidance to organizational leaders. As we navigate the intricate relationships between FFP, OP, and MR, guided by the principles of HPPs, we anticipate uncovering valuable insights to advance the discourse on contemporary organizational success in the third millennium.

Despite the substantial body of research on organizational performance, there are notable gaps that our study aims to address. Firstly, the majority of existing studies have predominantly focused on traditional financial metrics, offering a limited perspective on the multifaceted nature of organizational excellence. HPOs, characterized by a set of distinctive practices, remain an underexplored area in contemporary organizational literature. Second, while previous research has acknowledged the importance of financial indicators, not enough research has been done on how firm financial performance, organizational productivity, and market responsiveness affect each other in the context of HPOs. Our study bridges this gap by examining the complex relationships among these variables within the unique framework of high-performance organizations in Malaysian firms. We choose Malaysia as the research setting due to its rising economy and strong economic growth. According to Douglas (2016), Malaysia offers an ideal setting for researching the principles behind organizational excellence, as more and more companies strive for high performance. Similarly, Malaysia is a prime place for this kind of research because most firms there have adopted High-Performance Practices (HPP) widely (Husain, Abdullah, Idris, & Sagir, 2001). Furthermore, the moderating role of employee productivity in translating organizational practices, particularly within the HPO paradigm, has not been thoroughly investigated. Our research seeks to fill this gap by examining how employee productivity moderates the relationships between financial performance, organizational productivity, and market responsiveness.

In summary, our research strives to contribute to the existing body of knowledge by addressing these study gaps and providing a comprehensive understanding of the complex dynamics shaping organizational performance within the HPO context. Through a rigorous exploration of these relationships, we aim to offer valuable insights for both scholars and practitioners in the field of organizational excellence.

2 | LITERATURE REVIEW (HPPS AND HIGH-PERFORMANCE ORGANIZATION)

It is very difficult to define the term high-performance organization (HPO), as organizations have many facets and frequently changing goals. Earlier studies have considered financial performance to be one of the key elements of organizational performance (Barauskaite & Streimikiene, 2021; Nirino, Santoro, Miglietta, & Quaglia, 2021; Rehan, 2022; Rehan, Hadi, Hussain, & Hye, 2023). Technically, financial performance has been assessed through indicators such as sales growth, return on investment (ROI), return on asset (ROA), profit rate, return on sales, and earnings per share (EPS) (see for example, (Ghani, Hye, Rehan, & Salahuddin, 2023; Ghani, Rehan, Salahuddin, & Hye, 2023; Rehan, Sa'ad, Rosman, & Hye, 2024; Zandi, Rehan, Hye, & Choo, 2023)) but in recent times non-financial performance has been considered an integral part of firm performance which includes product quality, total quality management (TQM), marketing effectiveness, improved process management, improved stakeholder relationships and improved customer value in a highly competitive environment (Bartolacci, Caputo, & Soverchia, 2020; De Waal, Peters, & Broekhuizen, 2017; Guthrie & Neumann, 2007). High-performance practices (HPPs) form the bedrock upon which the concept of high-performance organizations (HPOs) is constructed, advocating a comprehensive and interconnected approach to organizational excellence (Owen, Mundy, Guild, & Guild, 2001). Within this framework, firm financial performance FFP, organizational productivity OP, and market responsiveness MR emerge as foundational elements, each contributing uniquely to the establishment and sustenance of HPOs (Erhardt, Werbel, & Shrader, 2003; Garrett et al., 2009; Masi & Cooke, 2000).

Firm Financial Performance FFP is a critical element in HPPs because it is quantifiable proxy for an organization's financial health (Garas & El-Temtamy, 2020). The continuous improvement endeavor, a core HPP, is mingled with the strategies geared at achieving optimal financial metrics. Openness to change, a second HPP core principle, links up with the factor model by promoting adaptability to dynamic market settings and financial

landscapes (Selman, 2013). Quality management, given a special emphasis by the HPPs, acts as a catalyst to use FFP for strategic analysis and overall financial stability (Yusoff, Omar, Zaman, & Samad, 2019). The link between HPPs and FFP validates the proposition that solid financial health implies an organization's sustainability.

The capability of an organization to produce occurs as yet another hook on the river of HPPs formed by the authority of the industrial workers. Through HPPs, we can have an engaged, skilled, and motivated workforce, which subsequently influences the performance of these organizations. The HPPs are evidence of refined organizational performance with continuous improvement as their core element. Staff quality orientation in HPP is one of the productivity heighteners because it links to new thinking, teamwork, and the quest for excellence. Long-term orientation, an essential component of humanity, directs all of the employees to achieve ultimate organizational goals that provide sustainable results. The interdependency between HPPs and OPs showcases workforce quality and culture in determining organizational productivity.

Market Responsiveness through openness to change and continuous improvement, MR inextricably links with HPPs (Karneli, 2023). For organizations that want to be high-performing, responding well to the current market dynamics and anticipating future changes are compulsory. The commitment to continuous improvement within HPPs includes MR, which creates an atmosphere where organizations are actively adapting to changes in the market. According to Savage et al. (2021) for stressed businesses, the openness to change underlined by HPPs orients the organizations in preparation to respond to emerging market trends and customer choice.

Long-term orientation embedded in HPPs directs organizations in connecting market strategies to future trends, thereby maintaining relevance and competitiveness. The integration of HPPs with MR results in a dynamic balance where the market responsiveness and organizational strategies mutually reinforce each other, vital for achieving and maintaining high performance (Chwialkowska, Bhatti, & Glowik, 2020; Lu & Wang, 2021). It is easy to say that the complex relationship between FFP (firm financial performance), OP (organizational productivity), and MR (market responsiveness) shows how these factors affect the effectiveness of an organization in many ways. Thus, this interplay is our theoretical underpinning for designing the hypotheses and focusing on the refined pathways to high performance in HPOs.

2.1 | Theoretical Foundation and Hypotheses Development

2.1.1 | Financial Performance and HPO

The relationship between firm financial performance and FFP and HPO are the crust of achieving sustained organizational excellence (Situmeang, Hasyim, & Sibarani, 2023). FFP serves as an imperative parameter in gauging an organization's financial health, which entails indicators like revenue and profitability, among others (Barauskaite & Streimikiene, 2021). As high-performance organizations aim for comprehensive excellence beyond mere financial metrics, the association between FFP and the bedrock principles of HPO becomes evident. The results of achieving financial success are diverse and include the provision of funds that are required for reaching HPP implementation and accelerating the adoption of a culture of constant improvement, quality management, and long-term vision. Kaliprasad (2006) asserts, that flourishing companies are better placed to invest in human development and sophisticated technology, which are, among others, pillars of HPO. Financial stability derived from a strong fiscal and program measures framework helps organizations attract and retain high-quality talent, which is a key element of human resource management. Besides that, a positive FFP and HPO correlation suggests that firms with stronger financial ground are more likely to exhibit characteristics such as adaptability, openness to change, and a proactive way of meeting market needs.

Overall the link between financial performance measurements and high-performance organizations goes beyond the conventional interpretation of financial sustainability. It extends to the domain of organizational culture, emphasizing the interdependency of financial success and the development of HPPs. This correlation hypothesizes that organizations that attain superior financial performance are more prepared to realize the core principles of HPO, thus leading to continuous organizational success, as evident from the work of Flammer (2015); Roberts and Dowling (2002) and Sjödin, Parida, and Kohtamäki (2019). As we explore the dynamics of FFP and HPO, our research intends to offer a comprehensive explanation of how financial performance measures act as a precondition for the creation and sustenance of high-performance organizations. Using empirical analysis and investigation of the practices that existed in European multinational enterprises, we strive to add to the discussion on the organizational excellence in the modern era. The above arguments form the basis for the first hypothesis for this study:

H₁: There is a positive relationship between FFP and HPO in the context of Malaysian multinational firms.

2.1.2 | Organizational Productivity and HPO

Organizational productivity (OP) is a pillar of HPO. The OP indicates how an organization uses the available resources to achieve the desired objectives (Khan et al., 2024). For the HPO context, which focuses on continuous improvement, quality management, and a high-quality workforce, organizational productivity becomes the role to reckon with.

According to Juechter, Fisher, and Alford (1998) for high-performance organizations, the constituent elements of the organizational culture include employee engagement, skill development, and motivation. These establishments reflect the view that an effective workforce is a critical enabler of organizational success. Efficiency of resource utilization, simplified processes, and emphasis on quality management are shared features of both OP and HPO (Owen et al., 2001; Tavana, Szabat, & Puranam, 2016). Organizations that excel in productivity are more likely to adopt and maintain high-performance practices (HPPs), which contributes to overall business excellence. The connection between organizational productivity and HPO encompasses a lot more than just efficiency. It captures the underlying culture of employee quality, a pursuit of continuous improvement, and a long-term orientation, which form the bedrock of HPPs. The tendency for OP and HPO to be positively related suggests that such organizations that promote the culture of productivity have more chances to incorporate the principles of HPO in their daily operations.

Our research aims to find the complicated link between organizational productivity and high-performance organizations, explaining how the concentration on efficiency and effectiveness constitutes a bigger picture of the HPO. Through empirical studies within Malaysian MNCs, we intend to shed more light on the mutuality of OP and HPO, offering compelling information to the debate on organizational excellence and productivity. Drawing from these arguments, we formulate the second hypothesis for this study as follows:

H₂: There is a positive relationship between OP and HPO in the context of Malaysian multinational firms.

2.1.3 | Market Responsiveness and HPO

Market responsiveness MR forms the cornerstone of building and running high-performance organizations. MR is a measure of an organization's capacity to adjust and respond to changes in the external environment, in line with the idea of continuous improvement and the principle of openness to change, typically found in HPOs (Xanthopoulou, Tsiotras, Kafetzopoulos, & Kessopoulou, 2023). Dynamism and competitiveness characterize the market landscape of HPOs, and responsiveness to the market becomes critical in proactively monitoring the changes in market conditions, trends, and customer behaviors. High-performance organizations, which are characterized by commitment to excellence and innovation, see market responsiveness as a strategic imperative (De Waal et al., 2017; Oseghale, Nyuur, & Debrah, 2019). The capability to preemptively recognize market trends, rapidly change with the customer needs, and quickly take advantage of existing possibilities matches the central beliefs of HPOs. According to Khan et al. (2024) the prioritization of long-term orientation and persistency, primary features of high-performance practices (HPPs), reflect seriousness in adapting to the external market dynamics. The relationship between market responsiveness and HPO surpasses sheer adaptability. It embodies the wider philosophy of strategic alignment, customer orientation, and pursuit of long-term excellence—integral elements of the HPPs. There is a strong positive relationship between MR and HPO, implying that organizations more proficient in reading the environment and responding to market changes are more likely to adopt the notions of strategic HPO.

Our research seeks to reveal the complicated interaction between market responsiveness and high-performance organizations, exploring how an organization's ability to maneuver the external environment contributes to the broader picture of HPO. We aim to provide an insightful yet detailed account of the symbiotic bond between MR and HPO through empirical analysis within the context of multinational firms; this is an important contribution to the discussion on organizational excellence and adaptability in a dynamic market. These arguments provide the basis for our third hypothesis, stated as follows:

H₃: There is a positive relationship between MR and HPO in the context of Malaysian multinational firms.

2.1.4 | Moderating Role of Employee Productivity

Within the framework of high-performance organizations (HPOs), employee productivity, considered a fundamental feature of organizational functioning, modifies the relationship between firm financial performance (FFP), organizational productivity (OP), and productive responsiveness (MR) (De Waal, 2008; Egbunike & Okerekeoti, 2018; Garrett et al., 2009; Pritchard et al., 1989). High-performance organizations are evidently driven by continuous improvement, change acceptance, quality management, high-quality workforce, and long-term orientation; hence, they have to be handled with a high precision on the interrelationship between financial performance, organizational productivity, and market responsiveness (Xanthopoulou et al., 2023). In the aforementioned context, employee productivity appears to be an essential moderator that determines the relationships between these variables. Firm financial performance (FFP) serves as a quantitative measure of an organization's fiscal health, which includes factors like revenue, profitability, and return on investment (Sjödin et al., 2019). Within the HPO framework, the FFP-OP connection is moderated by the effectiveness and efficiency of the labor force. An efficient workforce, following the tenets of quality management and continual development, results in better financial performance. Employees show strong engagement, skills, and motivation, which in turn drives the organizational productivity, leading to the connection between FFP and OP.

Market responsiveness MR, which is an essential independent variable in the HPO framework, stands for the ability of an organization to shape up to external changes (Wei, Samiee, & Lee, 2014). The relationship between MR and organizational success exhibits employee productivity as a vital moderating factor (Bhatti & Qureshi, 2007). An organizational culture that is goal-oriented and embraces change makes it highly responsive to market demand. Adaptable employees who have the skills to forecast and handle the shifts in business carrying out an examination of the complex relationships among those variables to be guided by the principles of HPOs shall find out, how a quality labor force might influence the relationships between financial performance, organizational productivity, and market adaptability. This moderating role of employee productivity highlights the importance of cultivating a skilled, engaged, and motivated workforce as a catalyst for achieving high performance in HPOs. These arguments provide the basis for the hypotheses stated as follows:

H₄: Employee productivity moderates the relationship between firm financial performance and HPO.

H₅: Employee productivity moderates the relationship between organizational productivity and HPO.

H₆: Employee productivity moderates the relationship between market responsiveness and HPO.

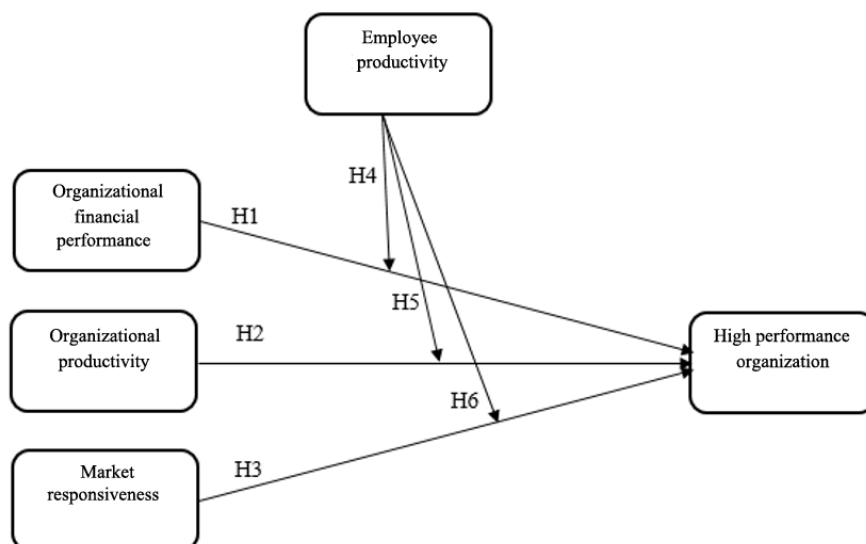


Figure 4: Proposed research model.

Figure 4 illustrates the constructed model for this study. The high-performance organization is selected as a dependent variable, whereas, the organizational financial performance, organizational productivity, and market responsiveness are nominated as independent variables. The other variable, i.e., employee productivity, is adopted as a moderating variable to check the underlying mechanism between these complex relationships.

3 | DATA AND METHODOLOGY

The data was collected from Malaysian multinational firms located in Malaysia. The extent of an emerging economy in Malaysia is experiencing rapid economic growth, and more and more firms are focusing on being high-performing (Douglas, 2016). The favorable environment and HPP practices already adopted by most organizations have made Malaysia an appropriate place to study the high-performance mechanism (Husain et al., 2001). More importantly, fast-growing local and multinational firms trying to maintain higher standards and organizational excellence in Malaysia have not been studied extensively, regardless of having the potential to be an HPO (Moin, Abu Bakar, & Bin Samat, 2023). European and American researchers have conducted the majority of HPO-related work. Therefore, studying Malaysian local and international firms would be valuable for considering this relatively new concept of firm financial performance, organizational productivity, market responsiveness, and the moderating role of employee productivity in high-performance organizations.

The organizations were selected based on HPO's basic criteria. That is, firms operating in the industry for more than five years and performing well with respect to the comparable firms in the sector can be considered and have the potential to become a high-performance organization (De Waal, 2008; Do & Mai, 2020). Secondly, as mentioned by Gounaris (2005) information gathered from varied sources containing heterogeneity in the responses usually leads to stronger relationships within the investigated constructs. Therefore, this criterion was applied with regard to the selected firms, representing a diversity of industries. Thirdly, the respondents' willingness to provide the requested data was an important criterion. Senior executives and managers were asked to participate in the study as managers help to improve and provide directions towards performance improvements.

A total of 300 questionnaires were distributed online to senior executives and managers of Malaysian local and multinational firms located in Malaysia. We received 210 questionnaires. 24 responses were treated as outliers with a standard deviation of zero; therefore, these responses were removed from the data, leaving 186 (62%) usable responses. This study employed the Partial Least Square Structural Equation Modeling (PLS-SEM) technique to analyze both measurement and structural models. Many disciplines, particularly in project management, value PLS-SEM for its ability to handle complex models and higher-order constructs (Afthanorhan, 2013). It provides high predictive power, measures latent constructs through path analysis, and effectively explains variance in the dependent variable (Sarstedt, Ringle, & Hair, 2021). The study used Smart PLS v. 3.2.7, which addresses key assumptions and is suitable for exploratory studies examining moderation effects.

3.1 | Measures and Analysis

We adopted all instruments from previous studies to measure the study variables. Partial least squares structural equation modeling (PLS-SEM) factor reduction method ensured that all constructs had better composite reliability (CR) and average variance extracted (AVE), as items not meeting the minimum criterion for factor loadings, i.e., ≥ 0.5 , were removed from the model (Hair, Sarstedt, Hopkins, & Kuppelwieser, 2014; Wong, 2013). Firm financial performance was assessed with three items used by Chi and Gursoy (2009), asking managers to rate their company's financial performance relative to their major competitors during the last twelve months using a seven-point Likert scale ranging from 1 much lower to 7 much higher. Similar measures were used to assess the firm financial performance by Gursoy and Swanger (2007). MR9 was removed from the model because it had a lower factor loading. The CR of the firm's financial performance measure in this study was 0.879.

We adopted two items from Garrett et al. (2009), to measure market responsiveness. We measured the items on a seven-point Likert scale, which ranged from 1 (strongly disagree) to 7 (strongly agree). All items had factor loading greater than 5, and no items were removed from the model because they had a lower factor loading. In this study, the market responsiveness measure's CR was 0.939. Organizational productivity was measured with nine items adapted from the work of Rao and Miller (2004). The items were measured on a seven-point Likert scale ranging from 1 (strongly disagree) to 7 (strongly agree). All items had a factor loading greater than 5, and no item was removed from the model because it had a lower factor loading. In this study, the organizational productivity measure's CR was 0.850. Employee productivity was measured with two items developed by Adeinat and Kassim (2019). The items were measured on a seven-point Likert scale ranging from 1 (strongly disagree) to 7 (strongly agree). All items had factor loadings greater than 5, and no item was removed from the model because it had a lower factor loading. The CR of employee productivity measure in this study was 0.877.

HPO was measured with 35 items developed by De Waal (2008) on a seven-point Likert scale from 1 (strongly disagree) to 7 (strongly agree). HPO26 was removed from the model because it had a lower factor loading. In this study, the high-performance organization measure's CR was 0.977.

4 | FINDINGS

In order to test the measurement and structural model, this study employed variance-based PLS-SEM. Accounting, strategic management, operations management, human resource management, marketing, supply chain management, management information systems, hospitality, and tourism are just a few of the fields in which PLS-SEM has become increasingly popular (Cheah, Sarstedt, Ringle, Ramayah, & Ting, 2018; Hair, Matthews, Matthews, & Sarstedt, 2017). Papers based on PLS-SEM have also recently been published in the SSCI journal on project management (Banihashemi, Hosseini, Golizadeh, & Sankaran, 2017; Kiridena & Sense, 2016). In large complex models with hierarchical latent variables, the PLS-SEM technique is virtually without competition, as it has been termed the best and most advanced tool for advanced research analysis (Hair, Ringle, & Sarstedt, 2011; Hair, Risher, Sarstedt, & Ringle, 2019; Memon et al., 2021; Wong, 2013). PLS-SEM possesses high predictive power to analyze complicated models (Hair et al., 2017). The technique offers the advantage of measuring latent constructs through path analysis (Hair et al., 2011).

As it processes both parametric and nonparametric data, the most recent version of Smart PLS, v. 3.2.7, fully accounts for crucial assumptions, including normality, linearity, and multi-collinearity (Hair et al., 2014). Because this study is exploratory in nature and requires investigating the moderating effects of employee productivity, PLS-SEM is a better fit because it offers route analysis estimations with fewer error terms (Hair et al., 2014).

4.1 | Testing Measurement Model (Stage 1)

In terms of model validation and assessment, the current study used a two-stage evaluation process, as suggested by Hair et al. (2017). This includes the evaluation of the measurement model as well as the evaluation of the structural model (Hair et al., 2011; Manley, Hair, Williams, & McDowell, 2021). Figure 5 below shows the two-step process of PLS path model assessment. In the first stage, individual item reliability and internal consistency reliability were assessed, followed by convergent and discriminant validity evaluations. From there, the model was taken for second-stage analysis, whereby r-squared values, effect size, and q-square results were obtained and the significance of the path coefficients for direct and moderating relationships was analyzed.

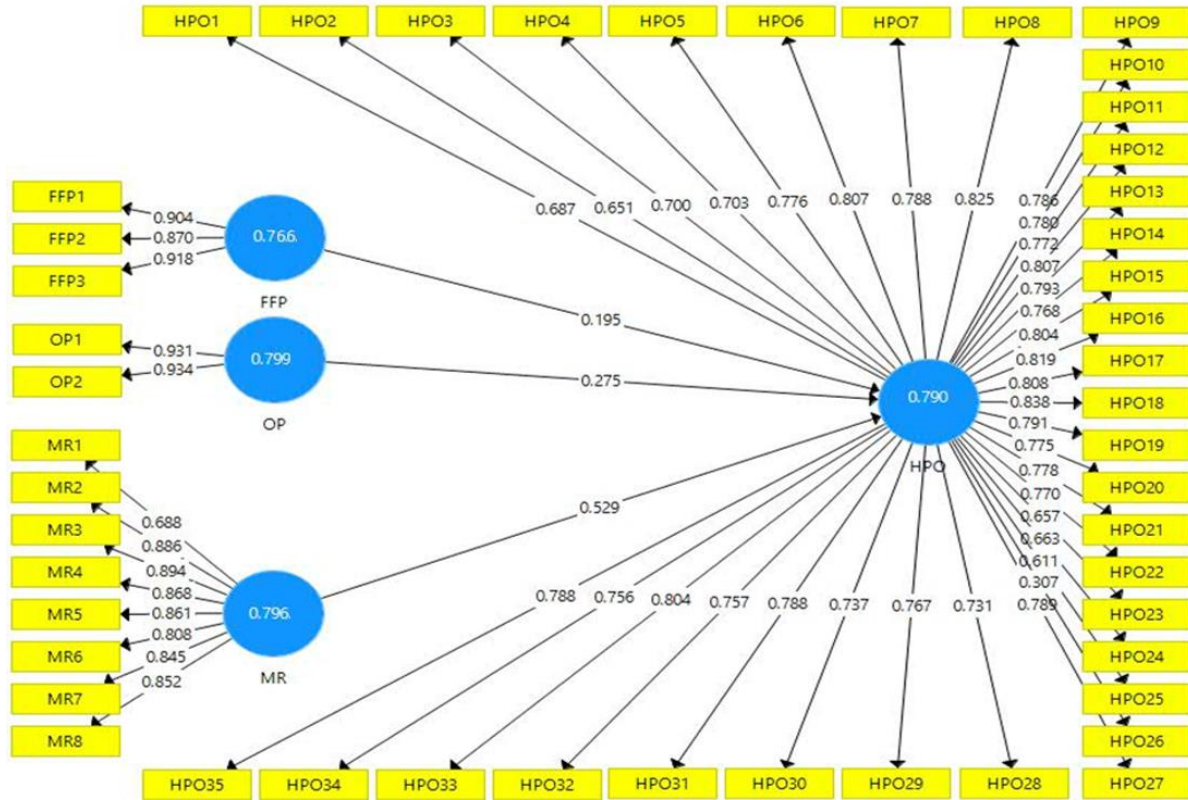


Figure 5: Structural model for FFP, OP, MR and HPO.

The factor-based PLS algorithm furnished the outer loadings' value to represent the measuring model of a high-performing organization, which includes firm financial performance, organizational productivity, and market responsiveness. As per Hair et al. (2017) and Wong (2013) the factor reduction method amplifies the measurement model's importance. Thus, we determined the final model by eliminating the inconsequential components that failed to satisfy the cutoff point, which is approximately 0.5. Each item's scale reliability for each construct was examined, and convergent and discriminant validity were assessed after that to determine the measurement model's quality. We can use the convergent and discriminant validity of constructs to assess validity, and the internal consistency of items to assess reliability (Hair et al., 2019). Table 1 displays the outcomes of the quality criteria that the measurement model requires. The findings showed outer loading values for every item that met the minimal requirements, which were less than 0.5 for the construct. Furthermore, the highest items were above and closer to the desired range of 0.7 and 0.8 (Hair et al., 2017; Kock, 2015).

Furthermore, all of the questionnaire's items' internal consistency was confirmed by Cronbach's α and CR (Hair et al., 2017). Cronbach's α for HPO ($\alpha = 0.977$), FFP ($\alpha = 0.879$), OP ($\alpha = 0.836$), MR ($\alpha = 0.939$), and EP ($\alpha = 0.943$) is shown in Table 1. According to Hair et al. (2014), Table 1 offers CR, which is thought to be a more accurate instrument for measuring the reliability of findings. According to Hair et al. (2019) the findings verified that every construct attribute had a good degree of CR and Cronbach's α , with values above the cutoff of ≥ 0.70 .

Discriminant and convergent validity. Convergent validity evaluation produces correlational measures that demonstrate how well several indicators of the same construct agree with one another. According to Hair et al. (2017) convergent validity is proven when the factor loadings, CR, and AVE value ranges are greater than the threshold value of 0.5. Table 1 evaluates all factor loadings, CR, and AVE constructions that exceed the threshold of 0.50. As a result, these results validate the composites' unidimensionality and the validity of their convergence.

Table 1: Assessments of the measurement model.

Construct	Items	Outer loadings	Cronbach's alpha (CA)	Composite reliability (CR)	Average variance extracted (AVE)
Employee productivity	EP1	0.943	0.877	0.942	0.891
	EP2	0.944			
Firm financial performance	FFP1	0.904	0.879	0.925	0.806
	FFP2	0.87			
	FFP3	0.918			
High-performance organization	HPO1	0.689	0.977	0.978	0.568
	HPO2	0.777			

Construct	Items	Outer loadings	Cronbach's alpha (CA)	Composite reliability (CR)	Average variance extracted (AVE)				
	HPO3	0.812							
	HPO4	0.798							
	HPO5	0.767							
	HPO6	0.802							
	HPO7	0.814							
	HPO8	0.806							
	HPO9	0.836							
	HPO10	0.789							
	HPO11	0.785							
	HPO12	0.659							
	HPO13	0.772							
	HPO14	0.775							
	HPO15	0.766							
	HPO16	0.654							
	HPO17	0.66							
	HPO18	0.606							
	HPO19	0.784							
	HPO20	0.729							
	HPO21	0.763							
	HPO22	0.709							
	HPO23	0.734							
	HPO24	0.785							
	HPO25	0.753							
	HPO27	0.75							
	HPO28	0.785							
	HPO29	0.712							
	HPO30	0.782							
	HPO31	0.81							
	HPO32	0.795							
	HPO33	0.827							
	HPO34	0.791							
	HPO35	0.689							
	Market responsiveness	MR1				0.687	0.939	0.950	0.705
		MR2				0.886			
		MR3				0.894			
MR4		0.868							
MR5		0.861							
MR6		0.808							
MR7		0.845							
MR8		0.852							
Organizational productivity	OP1	0.931	0.850	0.930	0.870				
	OP2	0.934							

The Fornell-Larcker criterion of cross-loading indicators was used to assess the measurement model's discriminant validity (Hair et al., 2017). In contrast to other constructs and their indicators, the evaluation of discriminant validity ensures that reflective constructions and their indicators have significant correlations (Hair et al., 2017). Therefore, the evaluation of discriminant validity verifies the empirical distinction between different constructs. Table 2 displays the values of the intercorrelations between the model constructs. These correlations between latent constructs are compared with the square root of AVE using the Fornell-Larcker cross-loading criteria. Therefore, the discriminant validity as indicated in Table 2 would be confirmed by larger square roots of each latent construct's AVE relative to correlation with other latent variables.

Table 2: Discriminant validity Fornell-Larcker criterion.

Variables	EP	FFP	HPO	MR	OP
EP	0.822				
FFP	0.524	0.898			
HPO	0.695	0.654	0.854		
MR	0.629	0.573	0.646	0.840	
OP	0.451	0.568	0.777	0.747	0.933

4.2 | Significance of Structural Model (Stage 2)

According to Hair et al. (2011) a structural model looks at the statistical significance of each path coefficient between exogenous (i.e., independent) and endogenous (i.e., dependent) variables. The PLS-SEM algorithm and bootstrapping (i.e., resampling) process use path coefficients and t-values to

assess the significance level of structural correlations (Hair et al., 2019). While t-values provide the significance level of the research constructs, which should be more than 1.64, path coefficients yield standardized β coefficients of regression results (Hair et al., 2017; Marko Sarstedt, Hair Jr, Nitzl, Ringle, & Howard, 2020). Figure 2 displays the structural model of the variables, whereas Table 3 provides the path coefficients, t-values, and significance level for the variables under investigation.

Furthermore, without taking into account the interaction effect, the results demonstrate the predictive significance of the model constructs through direct connections with firm financial performance, organizational productivity, and market responsiveness. Furthermore, the coefficient of determination, or value of R^2 , provides the primary evaluation of the structural model. Table 3 demonstrates that the combined contributions of FFP, OP, and MR account for 78% of the variation in HPO. According to Hair Jr, Howard, and Nitzl (2020) the study model's R^2 -value indicates a higher level of statistical power in parameter estimations. We employed the PLS-SEM blindfolding process to further verify the model's predictive relevance. For our study model's predictive relevance, the determined Stone-Geisser's value ($Q^2 = 0.42$) satisfies the required requirement (i.e., $Q^2 > 0$) (Chin, 1998).

The PLS-SEM bootstrapping technique provides the assessment scores of the structural path model based on study hypotheses, as shown in Table 3. The model shows the direct effects of FFP, OP, and MR on HPO. The relationship shows that FFP has a significant and positive impact on HPO ($\beta = 0.188$; $t = 4.106$; $p < 0.05$). therefore, H1 is accepted. In addition, OP ($\beta = 0.277$; $t = 5.074$; $p < 0.05$) and MR ($\beta = 0.534$; $t = 10.268$; $p < 0.05$) also show a significant and positive effect on HPO. Similarly, the interaction effect of employee productivity was investigated on the relationship between firm financial performance, organizational productivity, market responsiveness, and high-performance organizations, as graphically exhibited in Figure 6. The moderation effect of EP between FFP and HPO ($\beta = 0.054$; $t = 1.073$; $p > 0.05$), showed non-significant results with no moderation effects. However, between OP and HPO, ($\beta = 0.248$; $t = 4.151$; $p < 0.05$), and between MR and HPO ($\beta = 0.455$; $t = 7.437$; $p < 0.05$), there are significantly positive moderation effects.

Furthermore, the coefficient of determination (R^2) changes when interaction effects are included in the model. The inclusion of the employee productivity interaction effect enhances the high-performance model's explanation of variation. The R^2 -value for the employee productivity interaction changed from 0.78 to 0.83, as shown in Table 3. R^2 is important for examining the interaction impact, even if the change is relatively minor (Hair et al., 2017).

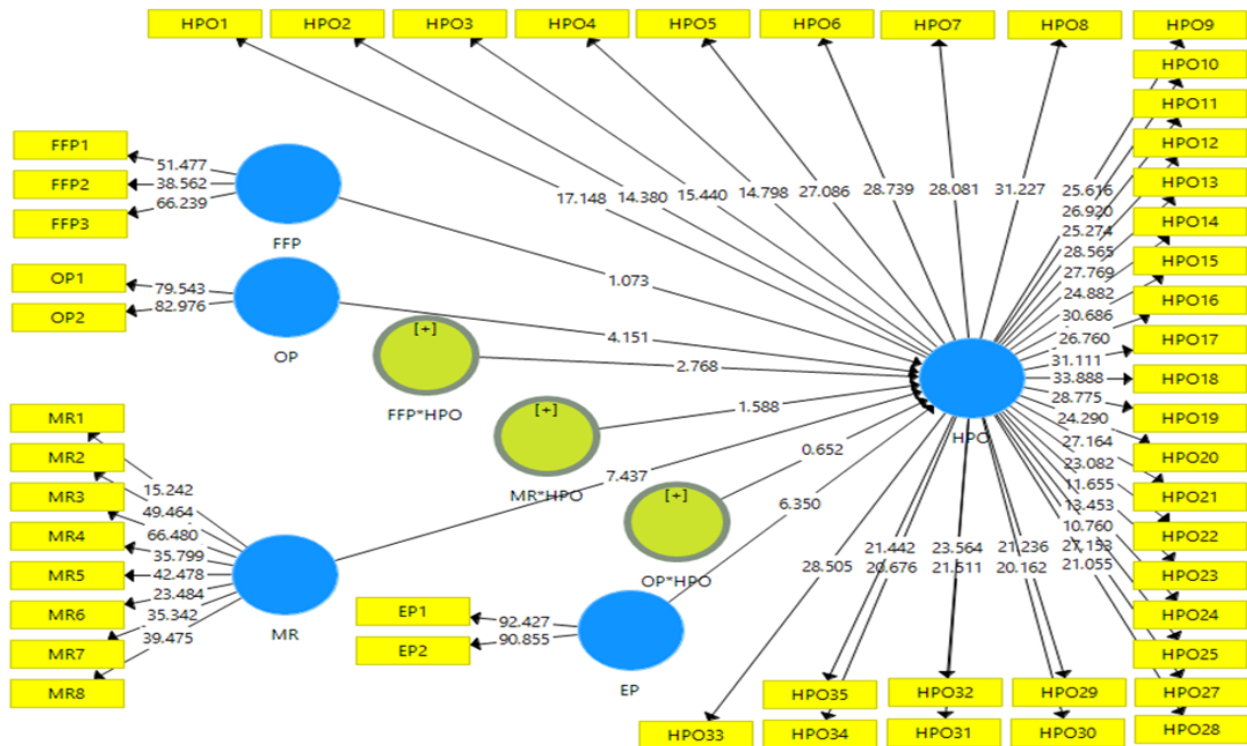


Figure 6: Interactional effect of EP on the relationship between FFP, OP, MR, and HPO.

Table 3: Summary of the structural and interactional model.

Construct	Path coefficient	t-statistics	p-values	Effect size (f^2)	R^2 value	Q^2 value
FFP → HPO	0.188	4.106	0.000	0.104	0.78	0.42
OP → HPO	0.277	5.074	0.000	0.149		
MR → HPO	0.532	10.268	0.000	0.545		
Moderating effect FFP → EP → HPO	0.054	1.073	0.284	0.008	0.83	0.44
Moderating effect OP → EP → HPO	0.248	4.151	0.000	0.132		
Moderating effect MR → EP → HPO	0.455	7.437	0.000	0.330		

5 | DISCUSSION

The study embarked on a detailed investigation of the aspects of organizational performance within the distinct context of high-performance Organizations (HPOs), highlighting the intricate links between firm financial performance (FFP), organizational productivity (OP), and market responsiveness (MR), all relating to organizational excellence. The results reveal the sublime paths that these variables follow to build and maintain HPOs, filling both the academic and practicability dimensions.

The outcomes of this study reveal the multipart nature of organizational excellence in the context of HPOs. Second, the findings substantiate the positive association between firm financial performance and HPO, thus proving Hypothesis 1. The entities that demonstrate better financial results have the condition to dedicate resources toward practices of high performance, ensuring continuous improvement and quality management along with long-term orientation. The alignment of financial success and HPO principles substantiates the dominant role of financial stability in promoting the organization's quality. Second, the findings validate a positive relationship between HPO and productivity in an organization, thereby supporting Hypothesis 2. Corporate performance is dominated by organizational productivity, which indicates how well resources are deployed to accomplish organizational objectives. HPPs prioritize employee engagement, skill development, and motivation to reinforce the notion that workforce productivity serves as the primary catalyst for organizational excellence.

Consequently, the findings confirm the strong positive association between market responsiveness and HPO, supporting Hypothesis 3. Organizations capable of correctly perceiving and responding to market changes gain a competitive advantage in the dynamic business environment. Integrating market responsiveness with the elements of the HPO approach implies the need for strategic alignment and customer orientation as well as innovation in the pursuit of prolonged organizational performance (Asif, Raouf, & Searcy, 2013). In addition, through moderation analysis, we learn more about the role of employee productivity in determining the links between financial performance, organizational productivity, market responsiveness, and HPO. The effect of firm financial performance on HPO is not moderated by any significant effect, but employee productivity emerges as a significant moderator in the relationship between organizational productivity, market responsiveness, and HPO. Thus, the importance of an experienced, engaged, and willing-to-work employee as a key factor in the company's performance and adaptability to market circumstances is proven.

Furthermore, it was observed that the nexus between firm financial performance and HPO, highlighting the crucial role of financial survival in enhancing organizational excellence. Companies enjoying solid financial results are better placed to put resources into building competencies, innovation efforts, and strategic activities guided by the principles of high-performance practices HPPs (De Waal et al., 2023; Terziovski, 2002). Furthermore, financial prosperity gives way to surviving market disruptions, grabbing emerging opportunities, and staying ahead in the competitive business environments. Such findings support the argument that financial health is the catalyst for the environment of continuous improvement, adaptability, and strategic orientation within HPOs. Additionally, the study demonstrated the fundamental connection between organizational productivity and HPO, emphasizing the importance of utilizing resources, employees, and processes optimally to outperform competitors. The core values of high-performance organizations encompass employee development, teamwork, and performance-oriented cultures, which create a workplace conducive to innovation, collaboration, and operational efficiency (Do & Mai, 2020). Our results suggest the significant role of matching a firm's strengths with its strategies in view of workforce capabilities in realizing the objectives and ultimate performance improvement.

Furthermore, responsiveness to the market was recognized as a critical factor of organizational excellence in HPOs, highlighting the need for strategic fit, customer orientation, and agility when adjusting to shifting market realities (Egan & McQuinn, 2023). Organizations that can guesstimate and respond to market changes are more likely to harness new opportunities, satisfy customer expectations, and survive in a dynamic industry (Masiello, 1988). This establishes the need for organizations to develop a customer-focused outlook, encourage innovation, and integrate change as the pillars of their strategy.

The study found a non-significant moderation effect of firm financial performance and HPO, but revealed the essential moderating role of employee productivity in strengthening the relationships between organization productivity, market responsiveness, and HPO. This stresses the requirement of cultivating a capable, interested, and motivated pool of employees as a driver of organizational performance and adaptability to shifting market circumstances. Organizations that emphasize human resource development, empowerment, and recognition are more prepared to use human capital as a positional advantage toward achieving high-performance (Delery & Roumpi, 2017).

Overall, the study adds to what is known about organizational performance within the HPO framework. It does this by using the micro-foundations approach to show how firm financial performance, organizational productivity, market responsiveness, and the ways these things affect the organization's excellence are all connected. These results stress the need for a holistic approach toward performance management by integrating both financial and non-financial metrics and creating a culture of continuous improvement, adaptability, and customer-centricity for attaining and sustaining high performance in volatile business settings. Potential research in the future can be done on the longitudinal consequences of financial performance, productivity measures, and market responsiveness on organizational success, and it may also explore the moderating role of contextual factors including organizational culture, the dynamics of the industry, and regional location on the outcomes of HPO.

6 | CONCLUSION

The study, therefore, focused on the complex interactions shaping HPO organizational performance concerning the literature, which has not been exhaustive, and which it is hoped will be useful to scholars and practitioners. We evinced several crucial insights by exploring the interactions among firm financial performance FFP, organizational productivity OP, market responsiveness MR, and their combined influence on HPOs. Finally, the research found a significant positive relationship between firm financial performance and HPO, pointing out the catalytic role of financial stability in leading to organizational excellence. High-performing firms possess better capabilities to invest in people development, innovation projects, and HPP-oriented initiatives, collectively creating a culture of continuous improvement and strategic orientation.

Also, the results of the study emphasized the interdependence between organizational productivity and HPO, which encompasses resource optimization, employee engagement, and operational efficiency. According to Delery and Roumpi (2017) high-performance organizations focus on talent development, teamwork, and performance-driven cultures, view human capital as a strategic asset necessary to sustain longer-term performance improvements. Besides, market responsiveness was regarded as a crucial factor influencing organizational excellence within HPOs, stressing the importance of strategic fit, customer orientation, and flexibility in adapting to the changing market conditions (Garrett et al., 2009). Agile organizations that can foresee trends, quickly shift, and adapt to market changes are in a better position to take advantage of emerging trends, meet customers' needs, and remain competitive.

Although the study did not discover a significant moderation effect between firm financial performance and HPO, it did disclose the critical moderating role of employee productivity between organizational and HPO. This further emphasizes training a capable and receptive workforce as a key enabler of effective performance and quick adaptability. Future researchers can focus on other potential links between financial performance, performance measurements, and market responsiveness to organizational success. Furthermore, the researchers can investigate the moderating effects of contextual factors like organizational culture, industry dynamics, and geographical location on HPO outcomes.

Furthermore, looking at the effect of emerging technologies, digital transformation, and remote work trends on HPOs could give invaluable

information about the shifting nature of organizational excellence in the digital era (Tohanean, Sorin-George, & Dumitru, 2018). The findings of this study proved very valuable; we have, however, limitations. Second, the study specifically targeted a single context (Malaysian multinational firms), which may affect the generalization of the findings, additionally, the use of self-reported data, and a cross-sectional data collection creates the possibility of common method bias and limits inference about causality. The next research project can work around the problem by using longitudinal designs, multiple data collection methods, and different organizational samples. In a nutshell, this study deepens the perception of organization performance within the HPO framework and shows interrelated dynamics of financial performance, productivity, market responsiveness, and these matters for organizational excellence. Through understanding and considering such dynamics and addressing the limitations of the study, researchers and practitioners can progress our understanding of HPOs and the development of strategies to improve organizations' performance in a more than ever competitive and dynamic business environment.

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Transparency:

The authors state that the manuscript is honest, truthful, and transparent, that no key aspects of the investigation have been omitted, and that any differences from the study as planned have been clarified. This study followed all writing ethics.

Competing Interests:

The authors declare that they have no competing interests.

Authors' Contributions:

All authors contributed equally to the conception and design of the study. All authors have read and agreed to the published version of the manuscript.

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