



The relationship between Financial Management Practices, Operational Efficiency and Organizational Performance in the Service sector of Pakistan

Anwar Hussain Noorani¹, Faiz Ali², Sayeed Sabir Ali³ & Muhammad Ilyas⁴

¹Visiting Lecturer, Business Administration, Public School and College Skardu, Pakistan,
Email: nooranibalti50@gmail.com

²Lecturer, University of Baltistan, Skardu, Pakistan, Email: faiz.ali@uobs.edu.pk

³MPhil Scholar, Quaid-i-Azam University/ Quaid-i-Azam School of Management Sciences, Pakistan,
Email: syedsabirkazmi786@gmail.com

⁴Student BS Economic & Finance, School of economics and Finance, International Islamic University Islamabad,
Email: muhammadilyas2021@gmail.com

ARTICLE INFO

Article History:

Received: February 11, 2025
Revised: March 16, 2025
Accepted: March 18, 2025
Available Online: March 19, 2025

Keywords:

Financial Assessment, Operational Efficiency, Organizational Performance, Baltistan Gilgit-Baltistan Pakistan

Corresponding Author:

Anwar Hussain Noorani

Email:

nooranibalti50@gmail.com



ABSTRACT

Purpose – This study tries to study the position of operational performance as a mediator within the dating between organizational overall performance and economic control practices.

Design/methodology/approach – Data from 100 participants across 15 Banking Sector institutions in the Baltistan Region of Gilgit-Baltistan, Pakistan, were analyzed. The dimensions and validity of the research variables were assessed by regression analysis.

Findings – The results recommend that monetary management Practices are vital for the prediction of Organizational performance. The relationship between organizational success and financial management methods is improved by operational efficiency.

Research limitations/implications – The data were limited to a cross-sectional design in the Baltistan context, which may render it less appropriate for generalization throughout Pakistan. moreover, the pattern length is particularly smaller; but, the effects aren't adversely affected.

Originality/value – The significance and distinctiveness of this study are derived from the current absence of research in Pakistan regarding the role of Financial Management Practices in improving Operational Efficiency. In this investigation, the impact of operational efficiency on the correlation between organizational performance and financial management practices is extensively investigated.

Introduction

The service sector finds it difficult to convey unique value propositions and utilize potential synergies, which complicates attracting students, creating partnerships, and sustaining long-term financial stability (Mlambo et al., 2017). Numerous service sectors, especially in developing nations like South Africa, encounter significant resource limitations (Mohamed, 2020). Collaborations can provide access to infrastructure, specialized expertise, and additional financing that may be difficult for individual institutions to obtain independently (Brooks et al., 2012). Companies may offer their consumers more comprehensive and enhanced services by intentionally consolidating their resources. Businesses encounter both advantages and obstacles as technology continues to evolve rapidly (Gopalan, 2016).

Effective management of financial resources is essential for a company's competitiveness (Khokhlova G et al., 2019). Financial state is defined by other scholars as "the condition of capital during its circulation and the entity's capacity for self-development at a specific moment" (Savitskaya G V 2016). The primary objective of the investigation is to assess the efficacy of financial resource consumption in determining the necessity of adjusting their quantity, despite the fact that there are numerous methods for defining financial condition. Kretova et al. (2017) contend that a financially solid firm possesses a competitive edge in recruiting investments, securing loans, and choosing suppliers and customers.

Financial management plays a crucial role in ensuring the effective operation of the services sector globally. In recent years, effective financial management in the service sector has become increasingly evident. There are several important obstacles in the service industry, including: Limited resources, rising prices, and essential to provide a diverse population of high quality services (Mosadhrad, 2015). Companies are always obligated to develop financial management strategies and implement and modify them promptly to improve their financial performance and skills, while simultaneously reducing risk (Erambo et al., 2016). Performance improves with increased commitment to implementing financial management standards (Coleman and Cohn, 2017). Technology is extremely important for this optimization, offering equipment and structures that optimize operations and growth productiveness (Porter and Heppelmann, 2015).

Numerous studies have demonstrated that a firm's operational efficiency is enhanced by interpersonal and inter firm, interactions, which are further enhanced by information technology and online information capabilities (Johnson et al., 2007; Vaidyanathan and Devaraj, 2008). Resources pertaining to knowledge sharing procedures and connections are operationally sophisticated, socially complex, and disunitive Johnson et al., 2007), hence conferring a competitive advantage. Wade and Holland (2004) posited that a firm's information capabilities facilitate the establishment of competitive advantages by facilitating the development of encompassing capabilities and outside-in capabilities. Outside-in talents are characterized by the development of business acumen and networks that are externally focused, with a focus on the understanding of competitive environments, the gratification of consumer requirements, and the foresight of market trends. Spanning capabilities involve the synchronization of information both internally and externally, thereby bridging the conventional knowledge gaps that exist within organizations, within divisions, and throughout the supply chain.

Financial management practices are crucial for enhancing an organization's efficiency and effectiveness. While it is widely recognized that sound financial management is linked to better business outcomes, the exact ways in which these practices influence performance are still not

fully understood. Most studies on how small businesses manage their finances have been conducted in developed countries. However, there is a lack of research focused on small businesses in regions like West Africa. Financial management techniques have been shown to significantly affect the success of small businesses, helping them become more competitive and perform better (Mwangi & Biruda, 2015).

This study adds a lot to what is already known about the subject in a lot of different ways. It gives ideas for fixing problems with how well organizations work in growing countries like Pakistan. The study looked into how the way money is managed affects the performance of a company. Further, we used structures management concept (Khan et al., 2022; Yoon and Kuchinke, 2005) when it comes to resource based view idea (RBV) (Zhang et al., 2021). The correlation amongst organizational effectiveness, operational efficiency, and monetary management in Pakistan stays unexamined.

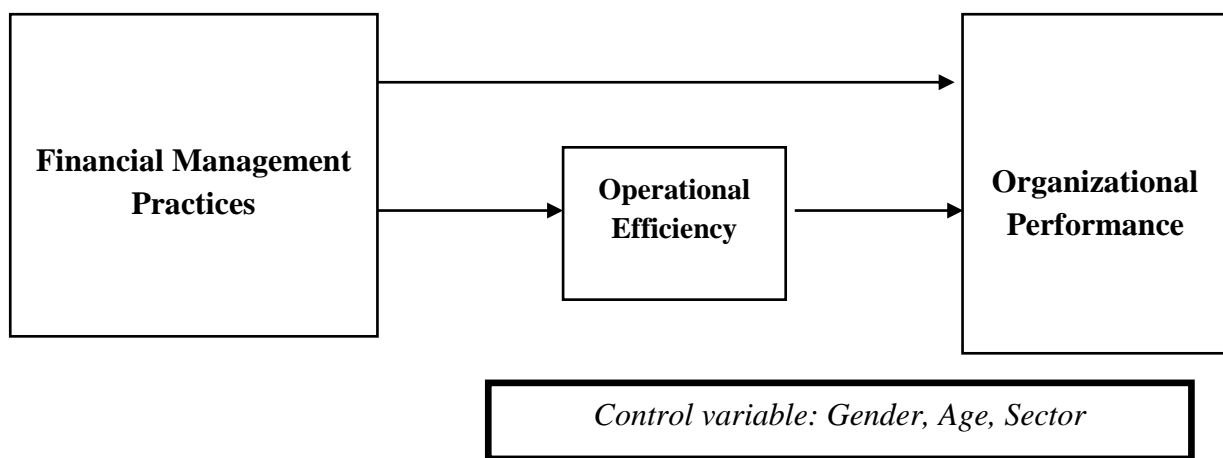


Figure 1: Research Model

Literature Review

Financial Management Practices

Financial management is essential to ensure effective monetary oversight (Coleman and Cole, 2017). Exceptional organizations must effectively manage their finances to ensure sustainability (Wawera prad Hagugi, 2014). Financial management techniques are a collection of predetermined procedures that are designed to oversee financial reporting, planning, and other business-related activities (Ahmed and Mwangi). Financial management solutions are essential for the purpose of facilitating informed financial decisions and administering financial resources (Dwangu and Mahlangu, 2021). Numerous authors (Alles et al., 2021) assert that asset management, capital budgeting, and working capital management are components of financial management techniques. Effective handling of working capital is important for a business's finances and a key part of its ability to make money and be successful (Louw et al., 2022; Ma et al., 2022; Hanif et al., 2024; Zhu et al., 2024; Sibte-e-Ali et al., 2025). Capital planning is an important part of managing money and is needed to choose which purchases to make in capital (Ross et al., 2016). In order to facilitate decision-making, asset management consolidates superior asset information from multiple sources (Abdirad and Dossick, 2020). Companies profitability and financial stability are enhanced by financial management solutions (Deakins et al., 2018). Sufficient cash flow generation is guaranteed by effective financial management practices (Deakins et al., 2018).

Operational Efficiency

Operational efficiency denotes to the capacity of a company to maintain a product or service in the cheapest way, while simultaneously maintaining a high quality standard. To accomplish this, it is necessary to optimize processes, minimize waste, and enhance resource use. Technology is extremely important for this optimization, as long as tools and systems that optimize operations and increase productivity (Porter and Heppelmann, 2015). Improving operational efficiency is a vital goal for businesses globally, and Nigerian companies are included in this trend. In a swiftly changing global marketplace, the ability to effectively utilize technology can influence a firm's competitive advantage and long-lasting viability (Lee, 2024, Pöhler, Diepold and Wallach, 2024).

The Resource-Based View (RBV) of the company, articulated by Barney (1991), is another relevant theoretical paradigm. This paradigm suggests that competitive advantage arises from a firm's ability to efficiently utilize valuable, scarce, unique, and non-substitutable resources. Technology may function as a resource, providing Nigerian firms with unique characteristics that enhance operational efficiency. By integrating technology with current resources and capabilities, organizations may achieve enhanced productivity and competitive edge.

Additionally, Lean Management and Six Sigma approaches, which concentrate on ongoing Improvement and reducing defects can be combined with technological innovations to bolster operational efficiency (Womack and Jones, 2003; Pande, Neuman, and Cavanagh, 2000). These frameworks promote the employment of technology for the collection and analysis of data. Refinement of workflows, and maintenance of consistent quality (Parker et al. 2018, Rashed & Shah, 2021).

Enhancing operational efficiency through technology has assumed increasing significance as organizations endeavor to maintain competitiveness and resilience in a swiftly changing market (Akpuokwe, Chikwe and Ench, 2024). The implementation of technological innovations plays a pivotal role in optimizing operations, augmenting productivity, and fostering economic growth. Theoretical models offer valuable frameworks for comprehending how technology can be utilized to attain these objectives. The Resource-Based View (RBV) of the firm is a fundamental theoretical framework that elucidates the potential for technology to enhance operational efficiency. The Resource-Based View (RBV) posits that enterprises enterprises can gain a competitive advantage by possessing valuable, scarce, distinctive, and non-substitutable resources (Barney. 1991). Technology, as a strategic resource, enables organizations to optimize operations, reduce expenses, and boost productivity, thereby fostering superior operational efficiency.

Operational efficiency refers to the ability of a company to maintain a product or service in the cheapest way, while simultaneously maintaining a high quality standard. To accomplish this, it is necessary to optimize processes, minimize waste, and enhance resource use. Technology is extremely important for this optimization, providing tools and systems that optimize operations and increase productivity (Porter and Heppelmann, 2015). Improving operational efficiency is a vital goal for businesses globally, and Nigerian companies are included in this trend. In a swiftly changing global marketplace, the ability to effectively utilize technology can influence a firm's competitive advantage and long-lasting viability (Lee, 2024, Pöhler, Diepold and Wallach, 2024).

The Resource-Based View (RBV) of the company, articulated by Barney (1991), is another relevant theoretical paradigm. This paradigm suggests that competitive advantage arises from a firm's ability to efficiently utilize valuable, scarce, unique, and non-substitutable resources.

Technology may function as a resource, providing Nigerian firms with unique characteristics that enhance operational efficiency. By integrating technology with current resources and capabilities, organizations may achieve enhanced productivity and competitive edge.

Additionally, Lean Management and Six Sigma approaches, which concentrate on ongoing improvement and reducing defects, can be combined with technological innovations to bolster operational efficiency (Womack and Jones, 2003; Pande, Neuman, and Cavanagh, 2000). These frameworks promote the employment of technology for the collection and analysis of data, refinement of workflows, and maintenance of consistent quality (Parker, et. al., 2018, Rashed and Shah, 2021).

Enhancing operational efficiency through technology has assumed increasing significance as organizations endeavor to maintain competitiveness and resilience in a swiftly changing market (Akpuokwe, Chikwe and Eneh, 2024). The implementation of technological innovations plays a pivotal role in optimizing operations, augmenting productivity, and fostering economic growth. Theoretical models offer valuable frameworks for comprehending how technology can be utilized to attain these objectives. The Resource-Based View (RBV) of the firm is a fundamental theoretical framework that elucidates the potential for technology to enhance operational efficiency. The Resource-Based View (RBV) posits that enterprises can gain a competitive advantage by possessing valuable, scarce, distinctive, and non-substitutable resources (Barney, 1991). Technology, as a strategic resource, enables organizations to optimize operations, reduce expenses, and boost productivity, thereby fostering superior operational efficiency.

Organizational Performance

The idea of organizational fulfillment is complex and in many components (Wood and Ogbonnaya, 2018). They are miles known as organizational success (Nitzl et al., 2018) how well the employer is doing his wishes. There is consensus among scientists that organizational success depends on their ability to create plans that work with a changing and complex environment (Rehman et al., 2019). According to many experts, organizational performance is an essential criterion for achieving established organizational goals (Laaksonen and Peltoniemi, 2018). If you want to know if a company is achieving its goals, you can use non-subjective non-financial metrics to use objective financial performance metrics to assess success (Richard et al., 2009). However, they are working on the concurrent use of financial and non-financial standards (Harris and Mongiello, 2001; Dryer and Reeves, 1995). This was analyzed to analyse the capital markets, finance, organizational, and HR factors that influence the success of a company.

H1: Financial Management Practices has a major positive effect on Organizational Performance.

H2: Financial Management Practices has an important positive effect on Operational Efficiency.

H3: Operational Efficiency has a vital positive effect on Organizational Performance.

H4: Operational Efficiency mediates the relationship between Financial Management Practices and Organizational Performance.

Research Methodology

Data were collected from different full-time and part-time workers in the Banking industry of Baltistan G. B. Pakistan. The selection of participants for data collection was executed using convenience sampling methods. Data were gathered through online soft copy via WhatsApp, FB, and Email, in addition to hard copy.

A covert letter was included with questionnaires that clarified to the participants the aim of the research. It also advised participants that their answers to this questionnaire are handled with confidentiality and anonymity. Their responses are utilized solely for academic purposes. A total of 150 questionnaires were distributed, of which 118 were returned, with 100 being deemed useful. Usable data had a response rate of 66.66%. Table 1 presents details regarding the distribution and attributes of the sample. As per the findings, men constituted 33 percent while women comprised 67%. (32 percent) of the total participants were single, and (68%) were married. The remaining respondents (10%) were part-time employees, who formed the majority of respondents (90%). Additionally, 30% of participants were in the age group of 18 to 25. In contrast, 40% of respondents belonged to the age bracket of 26 to 30% of participants were between the ages of 41 and 60. Among all respondents, 60% performed their duties in Management, 10% were employed in the maintenance sector, 10% offered technical services, and the remaining 20% were clerical personnel. Of the respondents, 60 percent possessed work experience from 0 to 5 years, 8 percent had experience ranging from 6 to 10 years, 12 percent had experience spanning from 11 to 20 years, and 20 percent had experience extending from 21 to 30 years. No respondents had more than 30 years of work experience.

Measures

To check how well financial management plans worked, asset management (Kelly and Hardy, 2018), capital budgeting management (Balarabe, 2020), and working capital management (Mazlan and Choong, 2018) were used. The fourteen products had a reliability score of 0.782. Three components were extracted from the investigation into operational efficiency, which served as the mediating variable (Michino, P. W. (2011). The average confidence for Operational Efficiency was 0.855. We assess the success of financial results (Rowe and Morrow, 1999), organizational results (Chenhall and Langfield-Smith, 2007), human resource results (Dryer and Reeves, 1995), and capital market results (Richard et al., 200). Alpha's reliability for group success was 0.877. All components of this study were rated using a 5-point Likert scale, with 1 being strong disagreement and 5 being strong consensus.

Table 1: Characteristics of Sample Distribution

Variable	Categories	No	(%)
Gender	Male	33	33
	Female	67	67
	Total	100	100
Marital Status	Signal	32	32
	Married	68	68
	Total	100	100
Age	18-25	30	30
	26-40	40	40
	41-60	30	30
	Over 60	0	0
	Total	100	100
Work status	Full time	90	90
	Part time	10	10
	Total	100	100
Position	Management	60	60

	Maintenance	10	10
	Technical Service	10	10
	Clerical	20	20
	Total	100	100
Experience	0-5	60	60
	6-10	8	8
	11-20	12	12
	21-30	20	20
	Over 30	0	0
	Total	100	100

Every item was scored using a Likert scale of 1 to 5, where 1 meant "Strongly Disagree" and 5 meant "Strongly Agree." Organizational Performance 's Cronbach alpha reliability was (0.899).

Controlling element / Controller Variable

The study's control variables included age, gender, and sector, according to a prior Khan study conducted in 2022. The study utilized the following coding for variables: Age (1 = under 25 years, 2 = 26-30 years, 3 = 31-40 years, 4 = 41-50 years, 5 = 51-60 years, and 6 = over 60), gender (1 = male, 2 = female), and section (1 = public, 2 = private).

A 5-point Likert scale was used to evaluate all study variables, with 1 being a strong discrepancy and 5 being a strong match.

Results

One-way ANOVA was utilized to address the variation in Organizational Performance according to the demographic variable examined in this study. The findings of the One-Way ANOVA (refer to table 2) indicated that the average Organizational Performance value did not significantly differ based on Gender, Age, and Sector.

Table 2: One-way ANOVA

		OP	
Sources of variation	of	F statistics	p-value
Gender		.310	.798
Age		1.999	.155
Sector		.877	.478

OP= Organizational Performance

Statistical instrument: Means, standard deviation, correlation, reliability, and multiple regression analysis using SPSS version 22.

Results

Table 3: Means, Standard deviation, correlation and Reliabilities

	Mean	SD	1	2	3
FMP	3.73	0.74	(0.782)		
OE	3.86	0.99	0.568**	(0.855)	
OP	3.55	0.99	0.688**	0.899**	(0.877)

FMP= Financial Management Practices, **OE**= Operational Efficiency, **OP**= Organizational Performance

The data in Table 3 demonstrates that Financial Management Practices is strongly positively correlated with Organizational Performance (0.688, $p = .000$), thus fully validating hypothesis 1. Then, there is a positive correlation between Financial Management Practices and Operational Efficiency (0.568, $p = .000$), which supports hypothesis 2. Operational Efficiency is positively correlated with Organizational Performance (0.899 $p = .000$), which supports hypotheses 3 and 4 respectively.

Regression Analysis

The mediation nation of Baron and Kenny (1986) become used in this take a look at. To decide the variable's number one effect and mediating effect, regression analysis changed into applied. table four contains the final results of the regression evaluation. The outcome indicates that monetary management Practices has a quite advantageous and vast effect on Organizational performance ($\beta = 0.899$, $R^2 = 0.289$, $p = .000$), main to the attractiveness of speculation 1. Considering the pronounced beneficial and noteworthy influence of Financial Management Practices on Operational Efficiency ($\beta = 0.818$, $R^2 = 0.223$, with $p = .000$) Hypothesis 2 has been accepted. The outcome also shows that Operational Efficiency significantly and positively influences Organizational Performance ($\beta = 0.911$, $R^2 = 0.955$, $p = .000$). Thus, hypothesis 3 is accepted.

Table 4: Regression Analysis

Predictor	Operational Efficiency			Organizational Performance		
	B	R ²	▲ R ²	B	R ²	▲ R ²
Direct effect						
FMP	0.818***	0.223	0.244***	0.899***	0.289	0.299***
OE				0.911***	0.955	0.961***
Indirect effect						
FMP X OE				0.888***	0.866	0.877***

N = 100. FMP = Financial Management Practices, OE = Operational Efficiency

*=p < .05. ** = p < .01. *** = p < .001. ns = not significant

Table 3 suggests that Operational Efficiency functions as a mediator between Organizational Performance and Financial Management Practices. Hypothesis 4 is supported by the following: $\beta = 0.888$, $R^2 = 0.866$, $\Delta R^2 = 0.877$, and $p = .000$. This study examines the correlation between organizational performance and financial management practices.

Discussion and Managerial Implications

In Baltistian's banking practices, financial management practices have a prominent and respectable effect on the performance of the organization. This is communicated by operational efficiency. This study highlights the relevance of financial management procedures in the banking industry, where they are critical to organizational performance. To improve performance and achieve competitive advantages in market, management and management, financial management must prioritize.

Limitation and Future research

In Baltistian's banking practices, monetary control practices have a distinguished and decent effect at the performance of the agency. Future research could include extra sectors from throughout the nation to investigate and reveal valid and trustworthy results. The current study accounted for employee demographics like Age, Gender, and Sector; thus, future research might consider various demographic factors. The effects and conclusions of this study are based at the banking area. destiny studies can be undertaken by using investigators contrasting banking and tourism.

References

1. Abdirad, H. and Dossick, C. (2020), "Rebaselining asset data for existing facilities and infrastructure", *Journal of Computing Civil Engineering*, Vol. 34 No. 1, pp. 1-13.
2. Ahmed, A.Y. and Mwangi, L.W. (2022), "Working capital management and financial performance of small and medium enterprises in Garissa County, Kenya", *International Journal of Current Aspects in Finance, Banking and Accounting*, Vol. 4 No. 1, pp. 56-71.
3. Akpuokwe, C. U., Chikwe, C. F., & Eneh, N. E. (2024). Leveraging technology and financial literacy for women's empowerment in SMEs: A conceptual framework for sustainable development. *Global Journal of Engineering and Technology Advances*, 18(3), 020-032.
4. Alles, L., Jayathilaka, R., Kumari, N., Malalathunga, T., Obeyesekera, H. and Sharmila, S. (2021), "An investigation of the usage of capital budgeting techniques by small and medium enterprises", *Quality & Quantity*, Vol.55 No.3, pp. 993-1006.
5. Barney, J. (1991). Firm resources and sustained competitive advantage. *Journal of Management*, 17(1), 99-120.
6. Brooks, R. F., Rhodes, F., & Stibbe, D. (2012). Partnerships for education: Building the foundations of a green, prosperous and equitable society. *T. P. I. I. B. L. Forum*.
7. Deakins, D., Logan, D. and Steele, L. (2018), *The Financial Management of Non-Profit Organisations*, Certified Accountants Educational Trust, London.
8. Deakins, S. and Cohn, R. (2017), "Non-profit organization's use of financial leverage: evidence from the 2013 national survey of organisations finances", *Journal of Business Entrepreneurship*, Vol. 12 No. 3, pp. 81-98.
9. Dryer, L. and Reeves, T. (1995), "HR strategies and firm performance: an approach and an agenda", *Industrial Relations*, Vol. 23 No. 1, pp. 156-169.
10. Dwangu, A.M. and Mahlangu, V.P. (2021), "Accountability in the financial management practices of school principals", *International Journal of Educational Management*, Vol. 35 No. 7, pp. 1504-1524.

11. Dwangu, A.M. and Mahlangu, V.P. (2021), "Accountability in the financial management practices of school principals", *International Journal of Educational Management*, Vol. 35 No. 7, pp. 1504-1524.
12. Erambo, G.E., Mulwa, J.M., Aketch, J.R., Sangoro, O. and Muchibi, W.M. (2016), "Financial management practices and firm performance among micro and small enterprises in Busia Town, Kenya", *International Journal of Management and Commerce Innovations*, Vol. 4 No. 2, pp. 303-310.
13. Gopalan, C. (2016). The impact of rapid change in educational technology on teaching in higher education. *HAPS Educator*, 20(4), 85-90.
14. Hanif, M., Sibte-e-Ali, M., Asghar, M. M., & Farhan, M. (2024). Macroeconomic Factors of Financial Performance: A Case Study of Cement Sector of Pakistan. *Review of Applied Management and Social Sciences*, 7(4), 929-937.
15. Harris, P. and Mongiello, M. (2001), "Key performance in European hotel properties: general managers' choices and company profile", *International Journal of Contemporary Hospitality Management*, Vol. 13 No. 3, pp. 120-127.
16. Henschel, T. (2006), "Risk management practices in German SMEs: an empirical investigation", *International Journal of Entrepreneurship and Small Business*, Vol. 3 No. 5, pp. 554-571.
17. Johnson, P.F., Klassen, R.D., Leenders, M.R., Awaysheh, A., 2007. Utilizing e-business technologies in supply chains: The impact of firm characteristics and teams. *Journal of Operations Management* 25 (6), 1255-1274.
18. Khan, K.U., Atlas, F., Ghani, U., Akhtar, S. and Khan, F. (2020), "Impact of intangible resources (dominant logic) on SMEs innovation performance, the mediating role of dynamic managerial capabilities: evidence from China", *European Journal of Innovation Management*, Vol. 24 No. 5, pp. 1679-1699.
19. Khokhlova G, Kretova N and Burov V 2019 The problems of investment activity of entrepreneurship and methodological aspects of credit risks assessment ICRE IOP Conference series: materials science and engineering 667 doi:10.1088/1757-899X/667/1/012038
20. Kiyabo, K. and Isaga, N. (2019), "Strategic entrepreneurship, competitive advantage, and SMEs' performance in the welding industry in Tanzania", *Journal of Global Entrepreneurship Research*, Vol. 9 No. 62. pp. 1-23.
21. Kretova N V, Tsaregorodtseva E Y and Khokhlova G I 2017 Applying advanced methods of evaluation of level of innovative development for industrial sector *Advances in Economics, Business and Management Research*, TTISS 38 doi: org/10.2991/ttiess-17.2017.116
22. Laaksonen O., Peltoniemi, M. (2018), "The essence of dynamic capabilities and their measurement", *International Journal of Management Review*, Vol. 20 No. 2, pp. 184-205.
23. Lee, L. (2024). Enhancing financial inclusion and regulatory challenges: a critical analysis of digital banks and alternative lenders through digital platforms, machine learning, and large language models integration. arXiv preprint arXiv:2404.11898.
24. Louw, E., Hall, J.H. and Pradhan, R.P. (2022), "The relationship between working capital management and profitability: evidence from South African retail and construction firms", *Global Business Review*, Vol. 23 No. 2, pp. 313-333.
25. Ma, X., Akhtar, R., Akhtar, A., Hashim, R. A., & Sibte-e-Ali, M. (2022). Mediation effect of environmental performance in the relationship between green supply chain management practices, institutional pressures, and financial performance. *Frontiers in Environmental Science*, 10, 972555.

26. Michino, P. W. (2011). A survey of the impact of internal controls on operational efficiency among non-governmental organizations in Nairobi.
27. Mlambo, H. V., Hlongwa, M., & Mubecua, M. (2017). The provision of free higher education in South Africa: A proper concept or a parable? *Journal of Education and Vocational Research*, 8(4), 51–61.
28. Mohamed, S. (2020). South Africa: Broken and unequal education perpetuating poverty and inequality. *Amnesty International*, 11
29. Mosadeghrad, A. Developing and Validating a Total Quality Management Model for Healthcare Organizations. *TQM J.* 2015, 27, 544–564.
30. Mwangi, J. W., & Biruda, S. (2015). *Financial management practices and their influence on the performance of small businesses in Kenya*. *Journal of Finance and Accounting*, 6(7), 113-128.
31. Nitzl, C., Sicilia, M.F. and Steccolini, I. (2018), “Exploring the links between different performance information uses, NPM cultural orientation, and organizational performance in the public sector”, *Public Management Review*, Vol. 21 No. 5, pp. 1-25.
32. Pande, P. S., Neuman, R. P., & Cavanagh, R. R. (2000). *The Six Sigma Way: How GE, Motorola, and other top companies are honing their performance*. McGraw-Hill.
33. Parker, D. W., Dressel, U., Chevers, D., & Zeppetella, L. (2018). Agency theory perspective on public-private-partnerships: International development project. *International Journal of Productivity and Performance Management*, 67(2), 239-259.
34. Pohler, L. D., Diepold, K., & Wallach, W. (2024). A practical multilevel governance framework for autonomous and intelligent systems. *arXiv preprint arXiv:2404.13719*.
35. Porter, M. E., & Heppelmann, J. E. (2015). How smart, connected products are transforming companies. *Harvard Business Review*, 93(10), 96-114.
36. Rashed, A. H., & Shah, A. (2021). The role of private sector in the implementation of sustainable development goals. *Environment, Development and Sustainability*, 23(3), 2931-2948.
37. Rehman, S., Mohamed, R. and Ayoup, H. (2019), “The mediating role of organizational capabilities between organizational performance and its determinants”, *Journal of Global Entrepreneurship Research*, Vol. 9 No. 1, pp. 1-23.
38. Richard, P.J., Devinney, T.M., Yip, G.S. and Johnson, G. (2009), “Measuring organizational performance: towards methodological best practice”, *Journal of Management*, Vol. 35 No. 3, pp. 718-804.
39. Ross, S.A., Westerfield, R.W., Jordan, B. and Roberts, G. (2016), *Corporate Finance*, McGraw-Hill Ryerson.
40. Salazar, A.L., Soto, R.C. and Mosqueda, R.E. (2013), “The impact of financial decisions and strategy on small business competitiveness”, *Global Journal of Business Research*, Vol. 6, No. 2, pp. 93-103.
41. Savitskaya G V 2016 Analysis of economic activity of the enterprise p 378
42. Shea, T., De Cieri, H. and Cooper, B. (2012), “Evaluation of a perceived organisational performance scale using Rasch model analysis”, *Australian Journal of Management*, Vol. 37 No. 1, pp. 507-522.
43. Sibte-Ali, M. S., Javed, M. Q., Urooge, S., & Hanif, S. (2025). The impact of Financial Knowledge and Financial Socialization on Financial Satisfaction in Covid-19: A Mediating Role of Information Management. *Review of Applied Management and Social Sciences*, 8(1), 329-346.

44. Singh, S., Darwish, T.K. and Potocnik, K. (2016), "Measuring organizational performance: a case for subjective measures", *British Journal of Management*, Vol. 27 No. 1, pp. 214-224.
45. Vaidyanathan, G., Devaraj, S., 2008. The role of quality in e-procurement performance: An empirical analysis. *Journal of Operations Management* 26 (3), 407-425.
46. Vohra, P.S. and Dhillon, J.S. (2014), "Best financial practices lead financial performance of SMEs", *International Journal of Accounting and Financial Management Research*, Vol. 4 No. 3, pp. 5-16.
47. Wade, M., Hulland, J., 2004. The resource-based view and information systems research: Review, extension, and suggestions for future research. *MIS Quarterly* 28 (1), 107-142.
48. Waweru, C. and Hgugi, K. (2014), "Influence of financial management practices on the performance of micro and small enterprises in Kenya", *European Journal of Business Management*, Vol. 1 No. 11, pp. 141-161.
49. William, A.J. (2018), "Why so many non-governmental organisations fail", *Real Estate Journal*, Vol. 12 No. 3, pp. 16-22.
50. Womack, J. P., & Jones, D. T. (2003). *Lean Thinking: Banish Waste and Create Wealth in Your Corporation*. Simon & Schuster.
51. Wood, S. and Ogbonnaya, C. (2018), "High-involvement management, economic recession, well-being, and organizational performance", *Journal of Management*, Vol. 44 No. 8, pp. 3070-3095.
52. Zhang, Z., Wan, D. and Jia, M. (2008), "Do high-performance human resource practices help corporate entrepreneurship: the mediating of organizational citizenship behavior", *Journal of High Technology Management Research*, Vol. 19 No. 2, pp. 128-138.
53. Zhu, Y., Salman, M., Kiran, S., Sajjad, F., Sibte-e-Ali, M., Sherwani, S., & Wajid Kamran, M. (2024). The CSR perspective: Interplay of technological innovation, ethical leadership and government regulations for sustainable financial performance. *Plos one*, 19(2), e0297559.