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Impact Of Enterprise Resource Planning (Erp) On Employee Performance: Mediating And Moderating Study In Banking Sector Of Pakistan

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ABSTRACT

This study investigates ERP system impact on performance of employees in the banking industry of Pakistan, with user satisfaction as a mediator and management support and work-life balance as moderator variables. ERP systems, when implemented efficiently, maximize productivity, decision-making capabilities, and adaptability through enterprise-wide integration and collaboration. System complexity and poor training, however, can restrict their impact, minimizing employee creativity and efficiency. With a quantitative, deductive method and a structured Likert-scale questionnaire, this study examines the ways in which user satisfaction determines the ERP Performance relationship and how management support and work-life balance affect these impacts. The study fills contextual gaps by examining an exhaustive model in a developing economy, where the vast majority of previous research has been conducted in developed nations. Research study findings indicate that employee performance is positively influenced by ERP systems, with user satisfaction as a key mediator. Management support reinforces this relationship to a great extent, while work-life balance contributes noteworthy moderation effect to ERP and Employee Performance in Pakistan's banking sector. ERP increases operation effectiveness and decision-making but needs customized training and management programs for achieving its maximum benefits. The study contributes academically as well as practically with insights for maximizing ERP-driven performance gains in Pakistan's banking sector. Subsequent research needs to include more variables, wider sampling, and variables like training and leadership.

Keywords: ERP System, Employee Performance, User Satisfaction, Work-life Balance, Management Support

BACKGROUND OF STUDY:

Advancement in computer hardware and software led to the development of ERP systems. Early on, companies implemented inventory control systems for optimizing stock levels, tracking inventories, and streamlining the supply chain. MRP in the 1970s ensured proper



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alignment between the needs of the product and production schedules, followed by the production resource planning of MRP II in the 1980s that improved the processes of production with additional functions in the areas of engineering, finance, and human resources.

ERP systems enabled enterprise-wide integration by the late 1980s and early 1990s, connecting business operations such as production, distribution, finance, HR, and inventory. Computer and internet technologies transformed ERP systems to make it adaptable and integrate able with internet-enabled applications. Modules such as SCM and CRM further extended the functionality of ERP. It moved from centralized computing to integrated, cross-functional systems that support modern business needs (A. Rashid et al., 2002).

INTRODUCTION:

In today's highly competitive and rapidly changing global economy, businesses must support their business processes with information technology. A strategic vision that brings together all of the information received is required for information and communication technology management. Enterprise Resource Planning (ERP) systems are examples of specific investments in information and communication technology (ICT) strategies. Corporate Resource Planning is a structure for an information system that can integrate marketing, production, logistics, finance, Human resource, production, and other functions (Gupta & Kohli, 2006; and Su & Yang 2010).

The study examined that the implementation of ERP has a positive impact on employee performance, according to general analysis, ERP implementation has a positive impact on informants for the components of creativity (creativity to come up with solutions to problems that arise at work). This is because the ERP system provides information that is more complete and can be accessed more quickly. When compared to a manual process, in which the information provided is limited and requires a process that is neither quick nor efficient, whereas ERP allows informants to finish their work and make decisions based on information of a higher quality. The ERP implementation was then concluded to have a positive effect for the Cooperation component the capacity to cooperate with others by some informants because they can interact using the ERP system and the ERP features implemented in the company have supported communication between functions and units within the company via the ERP system. Nevertheless, some informants stated that the ERP system hindered cooperation because it eliminated relationships with other functions and units and managed all of their work there (Fauzi et al., 2022).

The most effective organizations with high profiles have recognized the role of information management in attaining competitive advantage. The right type of training efforts enhances knowledge exchange in an organization, especially through new staff familiarizing to ERP

Software. Though functional ERP training stresses clear codified information, it goes largely unrealized without encouraging collaboration that allows the sharing of internalized knowledge and skills across departments.

(K. Deranek et al., 2017).

Enterprise Resource Planning (ERP) systems perform a critical role in knowledge management, which comprises the creation, sharing, utilization, and administration of an organization's knowledge and information. In the quest for a competitive edge in the global market, companies strategically implement advanced solutions to enhanced employee performance and overall organizational efficiency. ERP systems are instrumental in this endeavor, as they enable seamless integration across various departments, including sales,



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human resources, compliance, and operations. This holistic integration empowers decision-makers to respond quickly to changes and enhances overall operational performance.

(J. Girard and J. Girard, 2015).

ERP systems having the capacity to enhance integration across functional areas and management levels inside businesses, as well as to accelerate procedures. It is made easier to connect different departments, standardize procedures, and enhance coordination, in the effective running of business processes throughout the organization. ERP systems also make it possible to respond quickly to consumer orders and improve daily activity coordination. They also offer helpful information that supports the creation of well-informed management judgments. It is significant to examine that how ERP systems affect employee performance when examining the relationship between quickness and ERP software. ERP software's impact on bank operations' quickness especially with regard to staff response, flexibility, and creativity is a crucial factor. ERP systems may also let staff collaborate and share information, which can improve quickness even further by facilitating speedy decision making and problem solving. To properly utilize ERP software, staff must be taught and supported, and it is crucial to assess if the organization's strategic goals are being met by the systems' deployment (Aburub, 2015).

Here ERP was developed as an integration tool with the goal of integrating all enterprise applications into a centralized data store so that all departments (sections) that require them, including the company's relationships with suppliers (Ozkarababak et al., 2014).

The world has progressed in all areas over the past few decades. The most resources were spent on technology and software. One of these outcomes of evolution was Enterprise Resource Planning (ERP). The term "enterprise resource planning" (ERP) refers to integrated business management applications that are utilized by industries to carry out every aspect of their operations, including planning, sales management, finance management, human resource management, and so on. After Enterprise Resource Planning (ERP) was a huge success, businesses started using this new software, which gives them a competitive advantage. (Abdullah, 2017).

This study suggests that user satisfaction mediates relationship between perceived net benefits and system quality and service quality and moderates the effect of system quality on perceived net benefits by enhancing it (Serumaga-Zake, 2017).

This study was sought to identify how management support moderates the connection between employee performance and succession planning, training and development, pay, performance assessment, and recruitment and selection. In the state-owned polytechnics in Nigeria, the academic technique employed was the cross-sectional survey. Partial least squares were the method utilized to assess the study's premise (Ismail, A. I., Majid, A. H. A., Jibrin-Bida, M., & Joarder, M. H. R. (2021).

The work by Taufiq and Siddiqui (2020) critically assesses the impact of work-life balance on user attitudes during ERP system implementation, thus focusing on its influence on overall system success. While offering valuable managerial insights, the study underscores the necessity of methodological rigor and theoretical innovation to enhance its scholarly contribution. It emphasizes that the generalizability of findings and the inclusion of actionable recommendations are essential to maximize the practical and academic impact of such research.

This research examines the effects of Enterprise Resource Planning (ERP) systems on employee performance in the context of a developing country, specifically in Pakistan's private banking sector in the Khyber Pakhtunkhwa (K.P.K) province. The conceptual framework places ERP as the independent variable, employee performance as the



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dependent variable, management support and work-life balance as moderating variables, and user satisfaction as the mediating variable.

The advantages of the adoption of ERP systems have involved improving market competitiveness, performing operational tasks faster and with improved accuracy, and integrating every organizational unit to obtain harmonized information. It connects all departments to make this possible, allowing faster access to data, enabling point-of-click 360 degrees data access, and empowering timely decision-making. Therefore, these capabilities allow timely completion of standardized tasks leading to better employee performance that improves organizational productivity. These two moderators-management support and work-life balance-are checked whether they have an influence on the independent (ERP) and dependent (employee performance) variables. It means the mediator, user satisfaction is what connects ERP adoption to improved employee performance. As constrained within the limitations of time as well as other financial limits, the scope of populations, for this research, focuses only on the private sector commercial banks existing in K.P.K. The targeted sample will include employees accessing ERP systems, in both the above-stated important areas of Peshawar, Mardan, and Swat cities. Thus, the said three cities represent the importance of research interest to discover how the performance of individuals can be improvised in commercial banks through using ERP within the Pakistani context.

Research Study Structure:

Introduction

Introduces the research topic and its importance

Background, context, and research problems are provided, and the same is clarified.

Objectives and aims are stated.

Literature Review

The prior studies and scholarly works are reviewed.

Gaps in research and information missing are identified.

Formulates research questions and hypotheses

Introduces the study's importance in the scholarly context

Methodology:

Expounds on research design (for example, experimental, descriptive)

Establishes sample size, method, and population

Details data collection procedures (for example, surveys, observations)

Explains measurement instruments for reliability and validity

Discusses data analysis techniques and software

Results:

Presents findings logically by research questions and hypotheses

Uses graphs, tables, and charts for clarity

Provides descriptive and inferential statistics

Ensures that results are reported with precision and clarity

Discussion:

This is an interpretation of results based on hypotheses and research questions.



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This is the presentation of implications, with comparisons made to earlier studies. Presents the limitations, biases, and provides recommendations for further research.

Conclusion:

Summarize major findings and discuss their implications. Discuss the impact on practice, policy, and philosophy. Critically assess the overall contribution of the study to the field.

References:

List all sources cited in a consistent citation style (e.g., APA). Alphabetize references according to author's last name.

Appendices: It contains additional materials such as surveys and transcripts. Each appendix is clearly titled or described.

This framework provides clarity in the presentation of the goals, methods, conclusions, and implications of the study.

Variables Definition

ERP

ERP systems enable banks' various departments and units to share information more quickly and dynamically, resulting in improved coordination and effective adaptability to business environment threats and opportunities. Additionally, this area ought to have ERP frameworks that are redone to its requirements, which ought to be incorporated with a bank's frameworks (Metaxiotis and Liagkouras, 2017).

Employees performance

The idea or feeling of execution is the degree of progress of workers for the obligation to accomplish an organization's objectives. Factors influencing execution incorporate inspiration, capacity, schooling, information, experience, abilities, preparation, interests, perspectives, character, state of being, and other human necessities both organic, social, and proud (Suryalena, 2013).

MANAGEMENT SUPPORT

Management support can make employee get involved and encouraged to employ their know-how and skills to propose ways for improvements in some aspects of job which need the improvements. This kind of proposal can be linked to the job, the product, the work atmosphere or the firm. Management support for compensation is responsible for an organization's pay structure. Management support for performance appraisal can be referred to as the schematized process of assessing job-based performances and skills of workers (Ismail, A. I et al ,2021).

User Satisfaction

User satisfaction is a personal indicator of how happy and fulfilled a user is with a system, service, or product. It includes the total user experience, perceived value, and the degree to which the user's expectations and the entity under consideration's actual performance line up

(Oliver, R. L. 2014).

WORK LIFE-BALANCE

The term "work-life balance" describes a phenomenon in which factors such as long work hours, a culture that is reluctant to give female employees more work, negativity, nepotism,



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favoritism, increased work demand, insurance in the banking industry, politics, difficult and mismatched KPIs in the banking industry, job risk, geographic location, internal and external factors, and compliance issues are recognized as work-life balance factors in organizations

(Tamunomiebi, & Oyibo, 2020).

Research Problem Statement:

Despite extensive studies on the impact of ERP systems on organizational performance across various sectors globally, limited attention has been given to the effect of ERP systems on employee performance, particularly in the banking sector of developing countries. This study addresses this gap by examining how ERP systems influence employee performance in Pakistan's banking sector.

It engages the mediating role of user satisfaction and the moderation of work-life balance and management support. The work further examines how management support contributes towards a pleasant work environment through the practice of meritocracy, discrimination-free policies, career development, incentives, hygienic conditions, and reasonable hours of work.

By addressing the above issues, the study would provide actionable insights for researchers and practitioners in terms of how to optimize ERP systems to enhance employee performance and gain a competitive edge in a challenging market.

Research Question of the study

What is the impact of ERP systems on employee performance?

How do User Satisfaction mediate between ERP Systems and employee Performance?

Do employees in different departments or at different hierarchical levels perceive the ERP's impact on performance differently?

Do employee believes that the ERP system is a tool that improves their autonomy and ability to make decisions?

Do Work Life Balance moderate the relationship between ERP Systems and Employee's Performances such that higher positive Work Life Balance strengthen the relationship between ERP and Employee's Performances?

Do Management Support moderate the relationship between ERP Systems and Employee's Performance such that higher Management Support strengthen the relationship between ERP and Employee's Performances.

The study objectives

To investigate how ERP Systems significantly impact on Employee's performance.

To assess how management support significantly moderates the relationship between ERP System and employee's performances such that higher Management Support strengthen the relationship between ERP and Employee's Performances.

To assess work-life balance's moderating impact on ERP and employee's performances such that higher Work-Life balance strengthen the relationship between ERP and Employee's Performances.

To examine how User Satisfaction mediates the relationship between ERP Systems and Employee Performance.

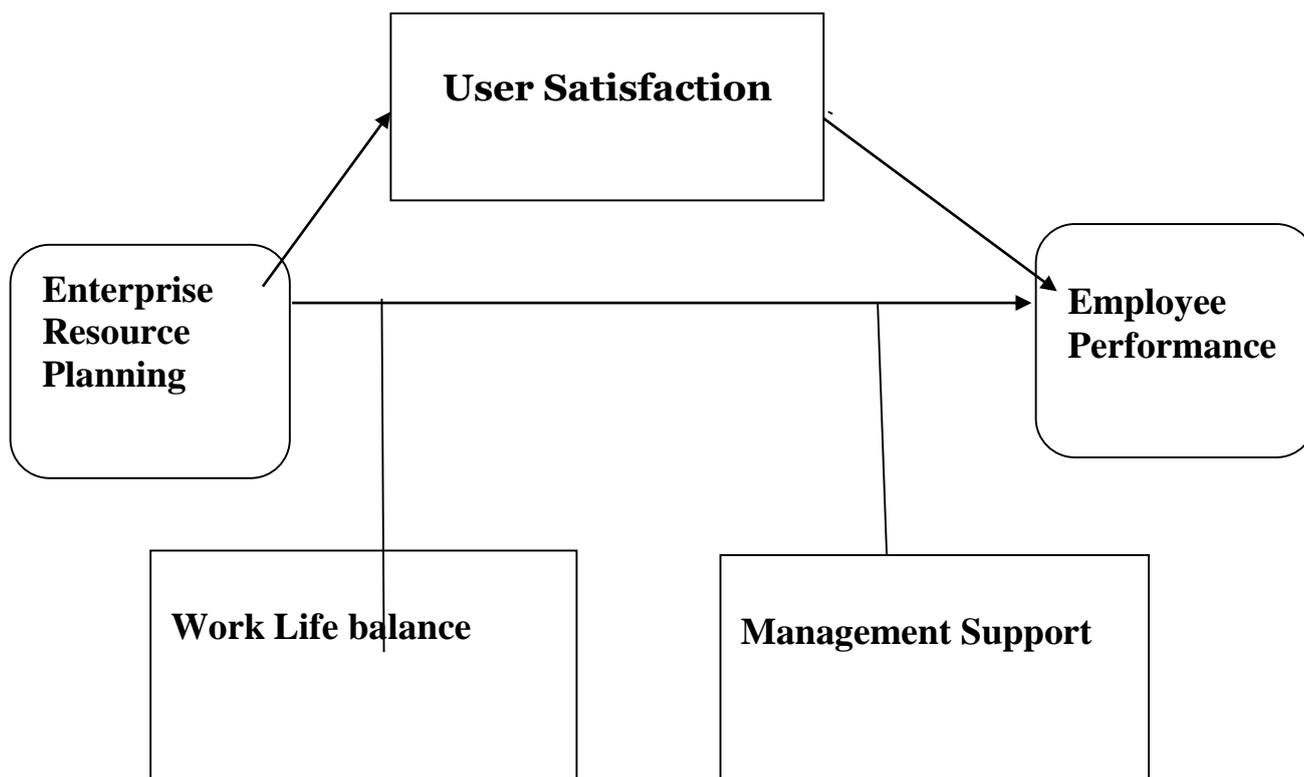
To investigate how employees in different departments or at different hierarchical levels perceive the ERP's impact on performance differently.



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To observed how employee believes that the ERP system is a tool that improves their autonomy and ability to make decisions.

CONCEPTUAL FRAMEWORK



SIGNIFICANCE OF RESEARCH:

In the context of Pakistan's private banking sector, this study discusses the impact of ERP systems on employee performance, while exploring the mediating role of user satisfaction and the moderating effects of work-life balance and management support. The study gives essential insights for top management about the strategies needed to enhance employee satisfaction, talent retention, and loyalty toward organizational goals through effective use of ERP systems.

This research emphasizes how satisfaction with ERP systems among users may improve the execution of tasks, productivity, and competitiveness. It also relates to the relevance of work-life balance in ensuring engagement and satisfaction in employees. Recommendations focus on developing supportive environments that boost professional growth and simplify work processes, improving performance in the developing banking sector of Pakistan.

Delimitations for the research study

Scope of Study

Focuses only on the private banking sector of Pakistan, to check the effects of ERP systems on employee performance

Investigates how user satisfaction plays a mediating role and how this affects the



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performance of the employee.

Variables Measured

Mediating Variable: User Satisfaction

Moderating Variables: Work-Life Balance and Management Support.

Focus Areas

Investigates how top management can retain talent and encourage employee loyalty.

Examines the impact of user satisfaction with ERP systems on task execution and productivity

Managerial Insights

Offers prescriptive suggestions about ways to enhance the happiness of the employees by using the ERP system

Analyzes whether user satisfaction is a determinant of the effective and effortless completion of tasks

Employee Engagement

Discusses issues relating to work-life balance that guarantee engagement and happiness about supervisors

Geographical and Sectoral Limitation

Limited to private banking sector of Pakistan

Thus, the specific scope limits the study and thus narrows it to giving deep insights about ERP systems' application in the development of employees in Pakistan's private banking sector.

Literature Review

The literature review that is written for this research study should therefore be a description and critical analysis of what other authors have written (Jankowicz, 2005). The literature review enables us to delimit the research problems by reviewing available literature from our relevant area of interest, "The Impact of Enterprise Resource Planning (ERP) software on Employee Performance in the presence of user satisfaction as intermediating variable and Moderating Effects of Management Support and Work-Life Balance" in the banking sector of KPK Province of Pakistan. The focus here in this chapter is to identify relevant authors with the goal of integrating central issues with high citations and contemporary practices. Each section has been linked up with its corresponding research questions for the dissertation. Finally, we will deduce our hypothesis from a literature review and research questions. A critical review of all studies enables us to identify the research gap and the objective of the study. This chapter allows us to understand our research paradigm. This chapter also explores the effect of all our variables on each other and their relationships. Specifically, it examines how ERP software impacts employee performance, considering user satisfaction as an intermediating variable. Additionally, it investigates the moderating effects of management support and work-life balance on these relationships. The literature review integrates studies on the impact of ERP systems, employee performance metrics, the role of user satisfaction in technology adoption, and the influences of management support and work-life balance in organizational settings.

The other researchers who worked on our related topic made sure we knew their population, sample size, sampling technique, data collection tools, testing hypotheses by proposing software, and analyzing the data in order to develop our study conclusion. The



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details of this chapter will be discussed as follows:

The study provides a valuable exploration of the impact of ERP software on employee performance in Pakistan's banking sector, especially in KPK Province. It effectively highlights the role of ERP in improving operational efficiency, reducing workload, and developing skills. The focus on user satisfaction, management support, and work-life balance adds depth to the analysis. However, significant gaps remain.

The study mainly discusses benefits without presenting challenges such as implementation costs, change resistance, and system complexities identified by Klaus, Rosemann, and Gable (2000). Its geography focus on KPK limits its generalizability because Bhatti (2005) focuses on the cultural and organizational variability of Pakistan for consideration.

A more meaningful theoretical base, for example, the Technology Acceptance Model (Davis, 1989), or Resource-Based View (Barney, 1991) may enhance the analysis of the paper. Further, the proposed relationships need to be tested empirically, as even Wixom and Watson (2001) note, to support the claims made about ERP effectiveness in human performance.

Lastly, the dependence on Nuskiya (2018) is not well integrated and broad. A more rigorous and relevant study would be achieved by engaging with a wider range of contemporary sources. Promising as it is, the research needs to address these critical issues to provide a more balanced and impactful contribution.

Relationship between ERP software and Employee performance:

The study done by Ali (2020) in which examined that ERP implementation is, therefore, an immense task in any business organization. This is still more so in the case of the Pakistani banking sector, where technological advancement and infrastructure development are still at a nascent stage. Issues that arise at the initial periods of implementation normally have adverse effects on the profitability of the business with respect to its key financial indicators. These difficulties can be minimized only if sufficient planning and top management support are taken care of, along with user satisfaction.

Short-term Adverse Effects

Initial Problems: It is found that the ERP system in its implementation process generally encounters a number of issues, such as integration of the different systems, migration of data, and resistances from the users. All these problems create problems and hamper the business profitability of the organization.

Productivity Impact:

Research evidence shows that in a very short period, ERP has a negative effect on increases in productivity. Workers can experience a mental drag to understand the reasoning and the way the new system works, hence tending to depict a decrease in performance and efficiency for some time.

Profitability Concerns:

The disruptions caused by the implementation of a new ERP system could be related to inefficiency and errors; as such, it has the potential to impact the key financial indicators of the bank. However, such short-term losses are often a necessary evil to derive long-term gains.

Long-term Benefits:



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Time to Fructification of Benefits: It takes a minimum of six months to a year to implement an ERP and realize its benefits, for the benefits to be visible and consolidated. Patience is required while the employees get used to the staff and the system itself gets integrated into the bank's operations.

Increased Efficiency and Productivity:

Though there are some negative impacts at the initiation stage, no doubt, an ERP system brings efficient management of business processes that help increase operational efficiency. In the long run, there are productivity gains and cost savings from the implementation of an ERP system.

Better Decision-making:

Because of the integrated management of data through an ERP system, the quality and availability of information increase, greatly enhancing the decision-making process in the banking sector toward better customer service and overall improved performance.

H1: ERP software has a direct positive relationship with employee performance.

User Satisfaction as a Mediator:

Importance: User satisfaction is important in that it is one of the antecedents for the effective use of the ERP system by employees. A high degree of satisfaction among users will generally lead to more effective use for better performance.

Evidence: Rehman (2018) and Aljarrah (2021) reveal that job satisfaction, which can be seen as an outcome of user satisfaction, is facilitated through ERP systems. Nevertheless, the direct role of user satisfaction as a mediator remains blurred.

Hypothesis Development

Such insights form the following hypothesis to study the impact of Enterprise Resource Planning on Employee performance in the presence of user satisfaction as an intermediate variable and Work- life Balance and Management Support as Moderating variables in Banking sector of Pakistan:

ERP software implementation and Employee performance in the presence of mediating variable user satisfaction:

H4: The relation between the implementation of ERP software and the employee performance of Pakistani private banks is mediated by user satisfaction.

Work-life Balance as a Moderator:

Rationale: A good work-life balance will enable the employees to cope up and adapt to the ERP system in a better way without much burnout and constantly yield high performance.

Evidence: Olan, 2022; Masa'deh, 2017—Although they indirectly point to the supportive environment that includes work-life balance, this variable should be more directly investigated.

Moderating relationship of Work-Life Balance between ERP software and Employee performance:

H5: Work-life balance moderates the relationship between ERP software implementation and employee performance in a way that this relationship becomes stronger when work-life balance is high.

Management Support as a Moderator:



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Importance: Management support is necessary in making available all the necessary resources for addressing concerns immediately, and continuous trainings and motivation are important in the enhancement of the salient positive effects associated with an ERP system.

Evidence: Notably, Muhayfith & Shaiti, 2020, and Masa'deh, 2017 confirm the importance of management support; however, how it moderates the relationship between the implementation of ERP and employee performance needs detailed scrutiny.

Moderating relationship of Management Support between ERP software and Employee performance:

H6: The moderating role of management support is that in the relationship between the implementation of the ERP software and employee performance, this relationship becomes strong when management support is high.

These gaps in the existing literature will be addressed through the proposed hypotheses, which establish user satisfaction as a mediating variable and work-life balance and management support as moderating variables. Such hypotheses help add to understanding of the influence an ERP system is likely to have on employee performance within the context of private banks in Pakistan. Further studies are called upon to test these hypotheses and validate the suggested relationships with a view to producing actionable findings for organizations implementing the ERP system.

Impact of ERP on Employee Performance:

The systems have largely been hailed as a way of improving employee performance through the smoothing of business processes and enhancing the accuracy of the data in making better decisions. For instance, Rehman, 2018 established that the implementation of ERP in the banking sector increased operational efficiency and employee productivity. Similarly, Al-Muhayfith & Shaiti, 2020 indicated that ERP systems aid resource management and employee performances by automating routine tasks and reducing manual errors.

Based on the foregoing, we can derive the following hypotheses to study the relationship between ERP systems and employee performance in the Pakistani banking sector:

ERP Software and Employee Performance:

H7: The adoption of an ERP system in the Pakistani banking industry has a positive effect on the performance of the employee.

The canvas of exploration, while expansive, was confined to the provincial bounds of K.P.K. in Pakistan. Cross-sectional data provided snapshots into the lives of banking employees, and the methodology embraced stratified and simple random sampling techniques to glean insights from K.P.K. Private Commercial Banks Limited, where the echoes of ERP software resonated through the institutional corridors.

As the methodology chapter unfurled its narrative, an audience of academics awaited, poised to witness the unfolding drama of data acquisition, hypotheses scrutiny, and the revelation of study outcomes Thus commenced an intellectual journey, an epic narrative poised to enrich the literature on organizational dynamics in the venerable halls of research

Chapter Three review

This chapter presents the methods and methodology of the research, underlining the



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philosophy that governed the approach to investigate how ERP systems affect employee performance in the private banking sector of Pakistan. The chapter is structured to provide light regarding the research strategy adopted for the research study, followed by the method of data collection, and the justifications for choosing certain techniques and procedures. The second part of the chapter gave the philosophy, approach, design, and methodology that would guide the study. A positivistic philosophy and an approach that is deductive guarantee objectivity and systematic inquiry into hypothesis testing to generate findings that are usually reliable and valid. It shall be expanded upon in subsequent chapters the manner in which data gathering, its analysis, and resultant proof demonstrate the impact of ERP systems on employee performance in the context of the private banking sector of Pakistan. Research methodology, explained by Saunders et al. (2009), refers to the theoretical framework that governs the research process while referring to research methods as techniques applied for data gathering. Although these terms are widely used interchangeably, the two have different meanings. The "Research Onion Model" by Saunders et al. (2003; 2009) vividly depicts this difference. Research philosophy guides the overall research process in shaping knowledge development, assumptions, methodology, data collection, and analysis particularly for ERP impact studies about employee performance in Pakistani banks. The research approach forms an integral part of the research process with a decisive choice between deductive and inductive methodologies. The deductive approach is consistent with positivism, where it starts with a theory or hypothesis, which is then tested using structured data collection to establish causal relationships. In contrast, the inductive approach, which is linked with interpretivism, begins with data collection and builds from observations, often in exploratory contexts. The deductive approach will be suitable for this study on ERP software's impact on employee performance in Pakistani banks. It enables hypothesis development, structured testing of variables like user satisfaction and work-life balance, and systematic analysis of cause-effect dynamics within a conceptual framework. As our study approach is positivistic and deductive so the survey research strategy will be good option to adopt for the study. Adopting the Positivist philosophy in accord with quantitative research, mono-method design will be used along with a version of a survey questionnaire adapted, resource conditions not allowing for the primary design. The cross-sectional design will be followed here, too, for smooth structured progression. The data collection and analysis are involved as the last layer of the Research Onion Model. A great deal has been presented about adapted survey questionnaires regarding the method of data collection. However, Simple random sampling technique will adopted for the collection of primary data for this research work. The population of this study will be all the private commercial Banks of K.P.K of Pakistan. There have been 26 banks with reference to the information released via the State Bank of Pakistan up to 24th of August 2024, which operate across K.P.K (<https://www.sbp.org.pk/loaddata.html?val=kpk>). These will be the population for this study.

CHAPTER FOUR

ANALYSIS & FINDINGS

This chapter is consist of data analysis and discussion its outcomes. Underlying research is quantitative study therefore the data collected was in numerical form (5 point rating scale). This data is used to perform various statistical analysis ranging from correlation,



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regression analysis, mediation and moderation analysis. The correlation & regression analysis reveals the mutual relationship of various variable. It also reveals the causation among variables. Following is the analysis done through SPSS

Regression Analysis of ERP and Employees Performance (EMPP)

Descriptive Statistics

Variable	Mean	Std. Deviation	N
EMPP	4.461	0.7172	350
ERP	4.231	0.4668	350

Correlation Analysis

Variables	EMPP	ERP
EMPP	1.000	0.437
ERP	0.437	1.000
Sig.	-	0.000

Interpretation: The positive Pearson correlation (0.437, $p < 0.001$) indicates a moderate positive relationship between ERP and EMPP.

Regression Model Summary

Model	R	R Square	Adjusted R Square	Std. Error
1	0.437	0.191	0.189	0.6459

Interpretation: ERP explains 19.1% of the variance in EMPP ($R^2 = 0.191$).

ANOVA

Source	Sum of Squares	df	Mean Square	F	Sig.
Regression	34.317	1	34.317	82.250	0.000
Residual	145.196	348	0.417		
Total	179.514	349			

Interpretation: The significant F-ratio ($F = 82.25$, $p < 0.001$) confirms the model's efficiency.

Coefficients

Variable	B	Std. Error	Beta	t	Sig.
(Constant)	1.619	0.315		5.134	0.000
ERP	0.672	0.074	0.437	9.069	0.000

Interpretation: ERP positively impacts EMPP ($B = 0.672$, $p < 0.001$).

Regression Analysis: ERP and User Satisfaction (US)

Descriptive Statistics

Variable	Mean	Std. Deviation	N
US	4.519	0.6301	350
ERP	4.231	0.4668	350



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Correlation Analysis

Variables US ERP

US	1.000	0.536
ERP	0.536	1.000
Sig.	-	0.000

Interpretation: A moderate positive correlation (0.536, $p < 0.001$) exists between ERP and US.

Regression Model Summary

Model R R Square Adjusted R Square Std. Error

1	0.536	0.287	0.285	0.5327
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Interpretation: ERP explains 28.7% of the variance in US ($R^2 = 0.287$).

ANOVA

Source	Sum of Squares	df	Mean Square	F	Sig.
Regression	39.816	1	39.816	140.338	0.000
Residual	98.733	348	0.284		
Total	138.549	349			

Interpretation: A highly significant F-ratio ($F = 140.34$, $p < 0.001$) affirms the model's strength.

Coefficients

Variable	B	Std. Error	Beta	t	Sig.
(Constant)	1.457	0.260		5.604	0.000
ERP	0.724	0.061	0.536	11.846	0.000

- **Interpretation:** ERP significantly affects US ($B = 0.724$, $p < 0.001$).

Combined Regression Analysis: ERP, US, and EMPP

Model Summary

Model R R Square Adjusted R Square Std. Error

1	0.639	0.408	0.405	0.5532
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Interpretation: ERP and US jointly explain 40.8% of the variance in EMPP ($R^2 = 0.408$).

ANOVA

Source	Sum of Squares	df	Mean Square	F	Sig.
Regression	73.313	2	36.657	119.772	0.000
Residual	106.201	347	0.306		
Total	179.514	349			

Interpretation: Significant F-ratio ($F = 119.77$, $p < 0.001$) validates the combined model.

Coefficients

Variable	B	Std. Error	Beta	t	Sig.
(Constant)	0.703	0.282		2.493	0.013



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Variable	B	Std. Error	Beta	t	Sig.
ERP	0.217	0.075	0.141	2.888	0.004
US	0.628	0.056	0.552	11.288	0.000

Interpretation: US mediates the relationship between ERP and EMPP, as both predictors significantly impact EMPP.

Moderation Effect: Management Support on ERP and EMPP

Moderation analysis results indicate management support strengthens the ERP-EMPP relationship.

Conclusion

The analyses reveal:

ERP positively impacts both EMPP and US.

US mediates the ERP-EMPP relationship, explaining 40.8% of the variance in EMPP.

Management support moderates this relationship, enhancing the effect of ERP on EMPP.

CHAPTER FIVE

CONCLUSION & RECOMMENDATION

This chapter presents conclusions drawn from the findings of the study, based on primary data collected from research participants. A brief overview is given to recall the background of the study.

ERP systems improve employee performance through creativity, better decision-making, and higher operational efficiency. They provide access to quality information in a very short time, simplify business processes, and enhance interdepartmental collaboration. For the maximum benefits of proper coordination, supply chain support, financial performance, and competitive advantage in dynamic environments, proper implementation and training are essential.

This study investigated the impact of ERP software on employee performance in Pakistan's commercial banking sector, using user satisfaction as a mediating variable and management support and work-life balance as moderating variables. It investigated employees' perceptions of ERP as a productivity tool across hierarchical levels, its role in decision-making, and factors influencing the ERP-employee performance relationship.

ERP, e-banking, and automation technologies have greatly improved performance in the banking sector in Pakistan. ERP implementation, however, is also associated with issues such as integration, data migration, and resistance. Long-term benefits include higher efficiency, cost savings, and better decision-making. User satisfaction, management support, and work-life balance are critical success factors for effective adoption of ERP to address challenges and ensure productivity gains.

The study hypothesized that ERP positively impacts performance, moderated by management support and work-life balance. Management support will facilitate a smooth transition, and a balanced work-life environment will maintain employee motivation. ERP benefits include improving SBU interactions, operational efficiency, and customer service. The method employed was positivistic and deductive to provide objectivity in the findings. A cross-sectional survey design, using structured questionnaires, targeted operational and management staff from private commercial banks operating in selected districts of KPK, Pakistan. Simple random sampling ensured a representative sample for hypothesis testing and causal relationship analysis.

Findings

Following are the findings of this study:



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1. ERP and Employee Performance:

There is a positive correlation between ERP and employee performance, EMPP, though direct impact of ERP on performance remains inconclusive.

H1 hypothesis accepted and ERP stands confirmed to be productive and useful for users even if the regression results were not strong. In fact, user satisfaction is a strong mediator for the relationship between ERP and employee performance.

An easy-to-use ERP interface and adequate training lead to increased employee satisfaction and performance.

Management Support:

Management support greatly moderates the relationship between ERP and employee performance.

Timely initiatives, training, and capacity building by management are critical for the success of an ERP.

Active and positive management behavior is critical to achieve the benefits from the use of ERP in banks.

Work-Life Balance:

Work-life balance is only weakly moderating the relationship between ERP and employee performance while still being important.

Balanced workload will ensure proper output from the employees and ERP effectiveness.

Significance of Study:

The study focuses on a novel combination of variables, thus outlining the mechanisms through which ERP influences employee performance. Management support and user satisfaction are essential for the success of ERP. ERP systems operate within a larger environment that is impacted by human and organizational factors.

Practical Insights:

ERP systems need to be user needs-friendly, easy to use, and coherent for the best performance.

The results give concrete recommendations for banks and other institutions to increase productivity with ERP.

Employee satisfaction and appropriate training are crucial to leverage the full potential of ERP.

Local Context:

The study, carried out in KPK, sheds light on the region-specific factors that affect ERP implementation and may be applied in a more widespread manner in Pakistan.

Limitations

Methodology used simple random sampling without considering stratified or cluster sampling, which would have provided better representation.

The study was limited to three districts of KPK, which makes it difficult to generalize to the whole country.

Time and resources limited the study's scope and quality.

Suggestions

Expand the study scope to the factors such as training, employee participation, leadership and executive support 2. Spread the study from one province in Pakistan to include other provinces too. 3. Develop stronger mechanisms for determining and representing population. 4. Use newer sampling techniques in order to obtain better generalizations.

Spend more time and resources for extensive and high-quality research

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