



By:

Muhammad Faizan

01-116222-017

Sobia Amir

01-116222-022

BS Supply Chain Management

Supervisor:

Hafiza Ghosia Awan

Department of PM & SCM

Bahria Business School

Bahria University Islamabad

Spring-2026

**“Enhancing Supply Chain Management Performance through E-
Procurement Digitalization by Integrating Odoo ERP: A Case Study of
Mughal Steel Limited”**

Viva-Voce Examination**Viva Date**14/5/2026

Topic of Research:Enhancing Supply Chain Management Performance through E-Procurement Digitalization by Integrating Odoo ERP: A Case Study of Mughal Steel Limited

Names of Student(s):**Enroll #**

- Muhammad Faizan
- Sobia Amir

01-116222-017

01-116222-022

Class: BS SCM 8**Approved by:**

Hafiza Ghosia Awan**Supervisor**

Dr. Muhammad Naveed**Research Coordinator**

Dr. Riaz Ahmed**Head of Department****PM & SCM**

ACKNOWLEDGEMENTS

First and foremost, we would like to express our deepest gratitude to Almighty Allah, the Most Merciful and the Most Compassionate, for granting us the strength, wisdom, patience, and determination required to successfully complete this project. His countless blessings, guidance, and mercy have enabled us to overcome challenges and remain motivated throughout this academic journey. Without His will and support, the completion of this work would not have been possible.

We would also like to extend our heartfelt appreciation and sincere thanks to our respected supervisor **Ma'am Hafiza Ghosia Awan**, for their invaluable guidance, continuous encouragement, constructive feedback, and unwavering support throughout the development of this project. Their knowledge, expertise, and willingness to share valuable insights played a vital role in shaping our understanding of the subject and improving the quality of our work. Their mentorship inspired us to think critically, work diligently, and strive for excellence at every stage of the project.

Furthermore, we would like to express our profound gratitude to our beloved parents for their unconditional love, endless prayers, moral support, and sacrifices. Their constant encouragement and belief in our abilities have been a source of motivation throughout our academic journey. They have always stood by us during difficult times and provided us with the confidence and strength needed to pursue our goals. We are truly indebted to them for everything they have done for us.

We would also like to acknowledge and thank our teachers, classmates, friends, and everyone who directly or indirectly contributed to the successful completion of this project. Their cooperation, suggestions, encouragement, and support were greatly appreciated and helped us achieve our objectives.

Finally, we are thankful to our university for providing us with the opportunity, resources, and learning environment necessary to complete this project successfully. This experience has enhanced our knowledge, skills, and understanding, and we hope that the work presented in this project will prove to be meaningful and beneficial.

TABLE OF CONTENTS

CHAPTER	TITLE	PAGE
	ACKNOWLEDGEMENTS	III
	LIST OF TABLES	VII
	LIST OF FIGURES	VIII
CHAPTER ONE: INTRODUCTION		1
1.1	Introduction	1
1.2	Background of the Study	2
1.3	Problem Statement	4
1.4	SMART Objectives	4
1.5	Scope and Limitations	5
1.6	Justification	5
1.7	Budget and Resources	7
1.8	Project Schedule	8
1.9	Ethical considerations	8
CHAPTER 2: LITERATURE REVIEW		9
2.1	The E-Procurement and the advantages of it.	9
2.2	ERP Systems in Procurement integration.	10
2.3	Procurement Performance Measures (KPIs)	10
2.4	Problems with the ERP/E-Procurement Adoption	11
2.5	Related Studies	12
2.6	Research comparison	14

2.7 Research Gap	17
CHAPTER 3: METHODOLOGY	18
3.1 Research Design	18
3.2 Data Collection Methods	18
3.2.1 Interviews	19
3.2.2 Document Review	19
3.2.3 Observation	19
3.2.4 Research Comparison diagram	20
3.3 System Implementation Tools.	20
3.4 The basic features are configured in the following manner:	20
3.5 Testing (User Acceptance Testing - UAT)	21
CHAPTER 4: ANALYSIS	22
4.1 Description of the Current Procurement System	22
4.1.1 Current Procurement Workflow	24
4.2 Data Analysis Techniques	24
4.2.1 Observation-Based Analysis	25
4.2.2 Interview-Based Thematic Analysis	26
4.2.3 SWOT Analysis	27
4.2.3.1 Strengths	27
4.2.3.2 Weaknesses	28
4.2.3.3 Opportunities	28
4.2.3.4 Threats	29
4.2.4 Gap Analysis	29
4.2.5 KPI Comparison	31
4.3 Data Collection Methods and Findings	31

4.4 Requirement Definitions and Specifications	32
CHAPTER 5: IMPLEMENTATION OF RESULTS	34
5.1 Effectiveness of the Tools Used for Data Analysis	34
5.1.1 Method of Conducting Interviews	35
5.2 Proposed Changes and Implementation of the Model	35
5.2.1 Odoo ERP Modules Used	37
5.3 Expected Impact of Odoo ERP	39
5.4 Cost–Benefit Analysis	40
5.4.1 Cost–Benefit Comparison	40
5.5 Final Recommendation	41
5.6 Future Outlook	42
CHAPTER 6: LIMITATIONS, CONCLUSIONS AND RECOMMENDATIONS	43
6.1 Limitations	43
6.2 Conclusion	44
6.3 Recommendations	45
REFERENCES	48

LIST OF TABLES

CHAPTER	TITLE	PAGE
	Table 1.1: Proposed Budget and Resources	7
	Table 1.2: Total Budget Estimate Odoo ERP	8
	Table 1.3: Project Schedule	8
	Table 2.1: Research Comparison	16
	Table 4.1: Gap Analysis Between Current and Proposed Processes	30
	Table 4.2: KPI Comparison Between Current and Proposed Odoo ERP	31
	Table 5.1: Odoo Purchase Module Workflow	38
	Table 5.2: List of Proposed Procurement Process	39
	Table 5.3: Cost-Benefit Analysis	40
	Table 5.4: Cost benefit comparison	40

LIST OF FIGURES

CHAPTER	TITLE	PAGE
	Figure 3.1: Researcher Comparison Diagram	20
	Figure 4.1: Existing Procurement Process of Mughal Steel Limited	24
	Table 4.2: KPI Comparison Between Current and Proposed Odoo ERP	31
	Figure 5.1: Proposed Odoo Based Process	36
	Figure 5.2: Future Enhancement Odoo ERP	42
	Figure 6.1: Monitor Procurement KPIs	46