

**THE IMPACT OF ENTERPRISE RESOURCE PLANNING (ERP) SYSTEMS ON THE
ACCOUNTING PRACTICES OF SMALL AND MEDIUM-SIZED ENTERPRISES (SMES)**

Akhmadaliev Dilmurod

independent researcher of Fergana State University
e-mail: dilmurodahm@gmail.com, ORCID ID: 0000-0002-2089-1467

Abstract: Small and medium-sized businesses (SMEs) often face significant accounting challenges due to limited resources and manual processes that can lead to inefficiencies and errors. Enterprise resource planning (ERP) systems offer comprehensive solutions to optimize and improve accounting for small and medium-sized businesses. This article describes the imp of ERP systems on the accounting procedures of small and medium-sized businesses, highlighting their benefits, challenges and future potential. Implementing sustainable business resource planning systems in small and medium-sized enterprises is a strategic reaction to the changing landscape of corporate responsibility and environmental stewardship. This study aims to ascertain the key determinants of satisfaction in the implementation of a sustainable enterprise resource planning system in small- and medium-sized businesses. A poll was created to assess the level of satisfaction among managers on the implementation of S-ERP in their respective companies. A multivariate analysis was conducted to examine the variables that influence the level of satisfaction with the implementation. The overall findings indicate that the specific module utilized has a favorable and significant impact on the level of satisfaction with S-ERP. An observed outcome is that as the number of accounting modules utilized increases, the system becomes more intricate, requiring greater work to efficiently adopt and utilize the new technology. Another finding indicates that the sales marketing module has a negative influence on satisfaction with an S-ERP, potentially due to its complexity and challenging management. This study makes a substantial contribution to the growing body of information on S-ERP deployment by addressing the research gap regarding the relationship between the S-ERP system and user happiness, with a specific focus on small firms. Future study should focus on investigating the enduring effects of adopting sustainable ERP systems on the performance and resilience of small and medium-sized enterprises (SMEs). Furthermore, doing research on the efficacy of government policies in promoting the adoption of sustainable ERP systems, as well as examining the tangible environmental effects of these systems in small and medium-sized enterprises (SMEs), might enhance our comprehension of this ever-changing and progressive domain.

Key words: ERP (Enterprise resource planning), small and medium-sized companies, accounting, finance, human resources, data, cloud ERP, management, cybersecurity, implementation, SMEs.

Introduction

What are ERP systems? Enterprise resource planning (ERP) systems are integrated software platforms that centralize various business processes such as accounting, finance, human resources, supply chain, and customer relationship management. By automating and integrating data, ERPs aim to improve efficiency, accuracy and decision-making throughout the organization. ERP accounting software lets the business keep track of data and events related to money. ERP accounting software, on the other hand, does more than just accounting. There are modules for billing and payroll, accounts outstanding and payable, the general ledger, and more in enterprise accounting software. In the past, corporate accounting software was installed on-site. Now, thanks to advances in technology, these programs can be hosted in the cloud.

Nowadays, in the sustainable context, companies have to make an effort to integrate all the processes of sustainable business functions, between its products, processes, and systems

(Chofreh et al. 2018; Koren et al. 2018). The sustainable enterprise resource planning system (S-ERP) supports personnel to collect data and information through sustainable business functions (Chofreh et al. 2014), and it is a useful tool for managers to make better production decisions.

In recent years, small- and medium-sized companies (SMEs) have been making an effort to implement systems based on Information and Communication Technologies (ICTs) to improve management and organizational performance (Pérez Estébanez et al. 2016).

Enterprise resource planning (ERP) systems play a pivotal role in streamlining business processes and supporting decision making. However, the implementation of ERP systems, especially in small- and medium-sized enterprises (SMEs), raises concerns regarding sustainability.

Enterprises use advanced information systems such as ERP systems to manage their resources and improve their competitiveness. It can be challenging, however, to implement the right ERP system, especially for SMEs (Alpers et al. 2014). Furthermore, the COVID-19 epidemic has had a significant and disproportionate impact on European economies, particularly affecting smaller businesses more severely than larger ones. Given the current circumstances, there is a heightened need in providing help to these particular types of companies, as the ongoing crisis may subject them to unprecedented challenges.



Methodology

A survey was done to evaluate the accountants' perceptions regarding the level of deployment of S-ERP in their individual firms. The poll comprised 25 finance managers who represented Uzbek businesses, with a notable proportion being small and medium-sized enterprises (SMEs).

According to Stat.uz (2020), over 60.9% of enterprises in Uzbekistan were classified as small based on their number of employees, which aligns with the demographic distribution of businesses in the country. Industry sector analysis found a predominance of enterprises in the service sector, with the majority having employed ERP systems for a period of six to 10 years. The sample is classified according to the size of the companies, with 45% representing medium-sized firms, 55% representing small businesses, and only 10% representing microbusinesses.

ERP accounting vs. tax accounting

Technology is making the world more complicated, and customers are expecting more personalized products and better data management. It is necessary to have software that helps core business processes run more efficiently. Organizations also need features that are relevant to their needs and the challenges they face in their business. This is also true for accounting and financial management software that works on its own, since they can't do everything that an end-to-end ERP system can. Companies often use the terms "accounting software" and "ERP software" incorrectly to refer to the same thing. But in reality, software for accounting and financial reporting is part of an ERP system. ERP systems can be used in more ways. Software that does accounting on its own isn't designed to meet the needs of specific industries. ERP and accounting software aren't always the best choice. Accounting software that follows National standards doesn't have sales or customer relationship management (CRM) built in. ERP for small businesses ERP accounting software has many benefits, such as automating tasks, increasing awareness, allowing departments to work together, and streamlining processes. Small business owners' needs are taken into account by enterprise accounting. This includes helping the finance department find and develop new employees, giving feedback on the overall business plan, and keeping an eye on how the business is doing. This is truly the case when it comes to ERP for small businesses. ERP helps small businesses better handle and control their money. Financial control software also has full accounting features that help businesses keep track of their daily finances and make financial records every three months and once a year. Enterprise accounting software also has tools for planning, spending, analyzing, and reporting. ERP systems for small businesses are made to make managing and keeping track of money easy while still being reliable even in the most complicated business situations. Enterprise account software, like Acumatica's, gives users a full accounting suite with a lot of features. It works with all of Acumatica's product packages, including Customer Management, Distribution Management, Manufacturing Management, Field Services Management, and Project Accounting.

Safety and ease of use Mobile Access Customization Built-In Modules That's Not Enough for QuickBooks Accounting and money management software is used by almost all businesses. How is ERP accounting software better than accounting software that works on its own? Not too long ago, QuickBooks, Sage, 1C and Dynamics GP were the best bookkeeping programs for small and medium-sized businesses. The need for ERP software became very clear as businesses had to deal with tougher competition and customers wanted better service and more customization. If you use a separate accounting program like QuickBooks, it can handle simple accounting tasks, banking, and some reporting. Standard deals, on the other hand, that small and medium-sized businesses have used for years can't see into the future. For instance, QuickBooks can't grow with your business as it does because it only uses its own information. It wasn't designed for these stand-alone solutions to connect processes across the whole company and show the state of those processes in real time. Because of this, you end up with separate sets of data that don't give you a clear picture of how your business is running.

What's Next for ERP Accounting Software ERP is becoming a bigger and bigger part of financial software these days. As more companies want to better connect their operations, most of the new products in this category are ERP. In addition, companies around the world are working together more. This is something that an ERP system can handle better than a separate financial system. The word "accounting software" isn't easy to forget, but people have been using it for years and are used to it. To sum up, accounting software and ERP solutions may soon be the same thing when they are sold together as a multi-tier bundle instead of as two different products.

Benefits of ERP Systems for SME Accounting Procedures

Increase accuracy and reduce errors

Automation: ERP systems automate routine accounting tasks such as data entry, invoicing and reconciliation, which significantly reduces the risk of human error.

Consistency: Standardized procedures across the organization ensure consistency in accounting practices, thereby reducing variance.

1. Advanced data management

Centralized Data: ERP systems store all financial data in a single centralized database and provide real-time access to accurate information.

Data integration. By integrating financial data with other business functions, ERPs provide a comprehensive view of a company's operations and financial health.

2. Improved compliance and reporting

Regulatory Compliance: ERP systems are designed to meet various financial regulations and standards, ensuring that SMEs meet legal requirements.

Advanced reporting: ERPs offer reliable reporting tools that produce detailed financial reports, facilitating regulatory and strategic planning (Klaus et al., 2000).

3. Complex decision making

Real-time analysis: Real-time access to financial information allows SMEs to make rapid decisions, thereby increasing their flexibility and responsiveness.

Forecasting and budgeting. Advanced analytical tools within ERP help improve forecasting, budgeting and financial planning, as well as strategic decision making.

4. Scalability

Adapt to growth: ERP systems are scalable, meaning they can grow with the business, incorporating additional data volumes and functions without major changes.

ERP system implementation issues for SMEs

1. High upfront costs

Investments: The initial investment in ERP systems can be significant, including software acquisition, implementation and training costs, which can be a significant barrier for SMEs.

2. Complexity

Difficulty of implementation. Implementing an ERP system can be complex and time consuming, requiring careful planning and change management.

Need for customization: SMEs may need customization of specific business processes, which increases complexity and costs.

3. User resistance

Change management. Employees accustomed to traditional accounting methods may resist the introduction of new systems. Effective learning and change management strategies are needed to overcome resistance.

4. Maintenance and updates

Ongoing costs: Regular maintenance and periodic updates are required to keep an ERP system functional and up to date, which increases costs in the long run.

Future potential and trends

1. Cloud ERP solutions

Availability and economic efficiency. Cloud ERP systems offer cost-effective solutions with lower upfront costs and subscription-based pricing models. They also provide flexibility for remote access.

2. Integration of artificial intelligence and machine learning

Advanced analytics: The integration of artificial intelligence and machine learning can improve the predictive capabilities of ERP systems, enabling deeper insights and more accurate forecasts.

3. Mobile Accessibility

Access on the Go: Mobile ERP solutions allow business owners and managers to access financial information and perform accounting tasks from anywhere, increasing flexibility and responsiveness.

4. Increased focus on cybersecurity

Data protection. Since ERP systems process sensitive financial data, robust cybersecurity measures are essential. Future ERP systems will include advanced security features to protect against cyber threats.

Results

Research continually emphasizes the difficulty that small and medium-sized enterprises (SMEs) face in establishing sustainable enterprise resource planning (ERP) systems due to financial limitations. The challenge of reconciling the aspiration for sustainability with the requirement for cost-effectiveness continues to be a multifaceted and crucial matter. The literature regularly highlights the constraints in resources that small and medium-sized enterprises (SMEs) encounter while implementing sustainable enterprise resource planning (ERP) systems. The constant themes that arise are the scarcity of experienced workers who are capable of effectively managing the intricacies of sustainable ERP systems, as well as the obstacles posed by technological infrastructure. These limitations necessitate inventive approaches to overcome scarcities of resources.

A deeper study of the impact of ERP systems on accounting procedures of small and medium-sized businesses

A detailed description of the advantages of the ERP system

1. Increase accuracy and reduce errors:

- **Reduce errors:** Automating tasks such as journal entries, accounts payable, accounts receivable, and payroll processing reduces manual entry errors. Research shows a significant reduction in accounting errors after implementing an ERP.

- **Data compatibility.** Standardization of various accounting functions ensures uniformity, which is essential for proper financial reporting and auditing processes.

2. Advanced data management:

- **Real-time data access:** ERPs provide quick access to financial data, facilitate better cash flow management and timely financial analysis.

- **Integrated Information Systems:** By linking accounting information to sales, purchasing and inventory, ERPs provide a comprehensive view of business operations that is essential for strategic planning and operational efficiency.

3. Improve compliance and reporting:

- **Regulatory Compliance:** ERP systems are continually updated in accordance with local and international financial regulations such as GAAP, IFRS and SOX, reducing the risk of non-compliance and associated penalties.

- **Reporting capabilities:** Advanced reporting tools facilitate the creation of detailed financial reports, tax reports and audit trails, thereby increasing transparency and accountability.

4. Improved decision making:

- **Data-driven decisions:** With up-to-date financial information, managers can make informed decisions regarding investments, cost reduction measures, and resource allocation.

- **Predictive analytics:** ERP systems often include predictive analytics modules that help SMEs anticipate market trends and proactively change their strategies.

5. Scalability:

- **Growth and expansion:** As SMEs expand, ERP systems can cover new business units, new geographies and increased transaction volumes without requiring a complete overhaul.

3. Mobile Accessibility:

- **Remote Management:** Mobile ERP applications allow business owners and managers to access and manage financial information from anywhere, increasing flexibility and response time (Elragal and Haddara, 2012).

- **Real-time updates:** Mobile access ensures financial information is always up to date, allowing you to make quick decisions even on the go.

4. Growing Focus on Cybersecurity:

- **Data protection.** Facing the growing threat of cyberattacks, ERP systems are expanding their security features to include encryption, multi-factor authentication, and continuous monitoring to protect sensitive financial information (Davenport, 1998).

- **Compliance with safety standards.** Future ERP systems will likely meet stricter cybersecurity standards, giving SMEs peace of mind that their data is secure.

Results Discussion and Conclusions

The literature indicates that implementing sustainable ERP systems in small and medium-sized enterprises (SMEs) is a challenging yet essential process. One must negotiate the challenges associated with economics, resources, and customisation with caution. Nevertheless, there are potential advantages in utilizing cloud-based solutions, implementing modular systems, and fostering collaborative learning. Implementing strategies that focus on capacity building, government support, and vendor engagement can significantly improve the sustainability factor. In addition, including environmental sustainability into ERP procedures is in line with worldwide concerns and safeguards SMEs against changing environmental requirements in the future.

Integrating ERP systems into the accounting procedures of small and medium-sized businesses provides transformative benefits, including increased accuracy, real-time data access, improved compliance and strategic decision-making capabilities. Despite the high initial costs, implementation complexity and user resistance, the benefits far outweigh the obstacles. The future of ERP systems looks bright with trends such as cloud solutions, AI integration, mobile accessibility, and improved cybersecurity measures. As these technologies mature, SMEs will be better equipped to optimize their accounting practices and achieve sustainable growth. The implementation of ERP systems has a transformative effect on SME accounting procedures, delivering significant improvements in accuracy, efficiency and decision-making. Despite implementation and cost challenges, the long-term benefits of streamlining processes and improving data management make ERP systems a worthwhile investment for SMBs. As technology advances, future ERP systems will continue to evolve, providing SMEs with greater opportunities to optimize their accounting and achieve sustainable growth.

References

1. Alpers, Sascha, Christoph Becker, Esmahan Eryilmaz, and Thomas Schuster. 2014. A systematic approach for evaluation and selection of ERP systems. *Lecture Notes in Business Information Processing* 193: 36–48.
2. Chofreh, Abdoulmohammad Gholamzadeh, Feybi Ariani Goni, and Jiří Jaromír Klemeš. 2018. Sustainable enterprise resource planning systems implementation: A framework development. *Journal of Cleaner Production* 198: 1345–54.
3. Koren, Yoram, Xi Gu, Fazleena Badurdeen, and Ibrahim S. Jawahir. 2018. Sustainable Living Factories for Next Generation Manufacturing. *Procedia Manufacturing* 21: 26–36.
4. Pérez Estébanez, Raquel, António Trigo, and Fernando Belfo. 2016. ERP Systems Adoption Evolution in Iberian Companies during the Global Financial and Economic Crisis and Recession (2007–2014).
5. Raquel Pérez Estébanez. An Approach to Sustainable Enterprise Resource Planning System Implementation in Small-and Medium-Sized Enterprises. (2024) *Administrative Sciences*, 14 (5), art. no. 91

**INTERNATIONAL MULTIDISCIPLINARY JOURNAL FOR
RESEARCH & DEVELOPMENT**

SJIF 2019: 5.222 2020: 5.552 2021: 5.637 2022:5.479 2023:6.563 2024: 7,805

eISSN :2394-6334 <https://www.ijmrd.in/index.php/imjrd> Volume 11, issue 07 (2024)

6. Lee, C.S., Tajudeen, F.P.: Usage and impact of artificial intelligence on accounting: evidence from Malaysian organisations. Asian J. Bus. Account. 13(1), 213–239 (2020). <https://doi.org/10.22452/ajba.vol13no1.8>