International Journal of AI, Big Data, Computational and Management Studies
Noble Scholar Research Group | Volume 1, Issue 3, PP. 41-49, 2020
ISSN: 3050-9416 | https://doi.org/10.63282/3050-9416.IJAIBDCMS-V1I3P105

Enterprise Resource Planning (ERP) Systems as Catalysts for Supply Chain Optimization: A Multi-Case Evaluation

Venkatesh Prabu Parthasarathy
President and Key Executive MBA (Pepperdine Univ.) Supply Chain Transformation | Digital Transformation, AI Implementation |IOT/ML Implementation Leader, Lake Forest, California, USA.

Abstract: Operational excellence and improved supply chain are now possible thanks to Enterprise Resource Planning (ERP) systems in various sectors. In this paper, I examine the impact of ERP systems on improving supply chain processes, using cases from manufacturing, retail, and logistics. This investigation explores how ERP links supply chain elements like procurement, production planning, inventory management, and logistics, and it includes studying any improvements found after ERP has been implemented. Using information from earlier than 2020, this research explores how ERP systems are integrated, their barriers to using them, their chief success elements, and what data is collected after they are established. It examines how supply chain processes are changing with the help of automation, clear visibility, timely synchronization, and the advanced analytics provided by platforms such as SAP, Oracle, and Microsoft Dynamics. Interviews, reports on performance, and an analysis of system architecture support the qualitative and quantitative case study. Data reveals remarkable improvements in order fulfilment times, the rate at which stock moves, accurate demand forecasts, and the overall ability of the supply chain to survive. The report finds that ERP systems make business processes consistent and support important supply chain transformations. Recommendations are available for people who want to use ERP systems to align all supply chain operations.

Keywords: Enterprise Resource Planning, Supply Chain Optimization, Sap, Oracle, Microsoft Dynamics, Inventory Management, Real-Time Data.

1. Introduction

1.1. Need for ERP in Supply Chain Management (SCM)

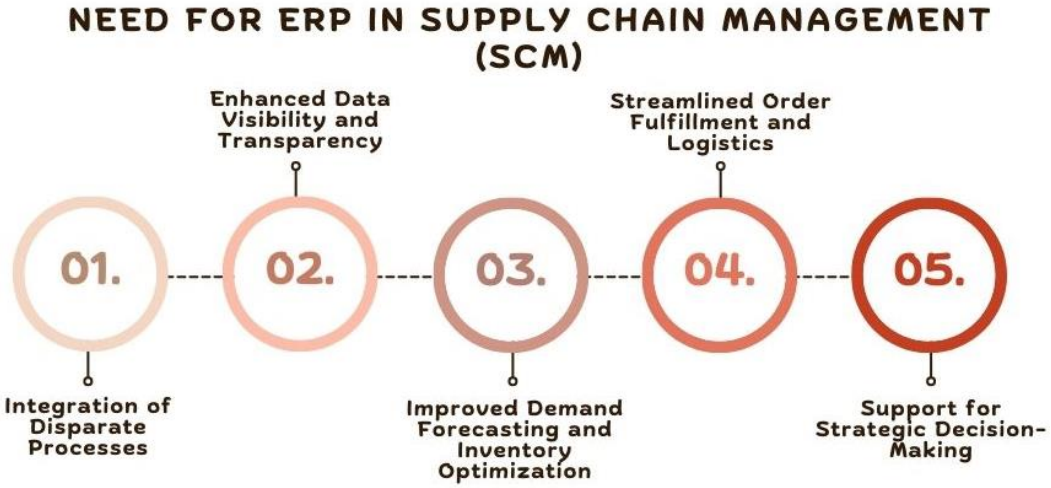

Figure 1: Need for ERP in Supply Chain Management (SCM)

- **Integration of Disparate Processes:** Functions that make up supply chains include procurement, production, inventory management, logistics, and sales. [1-4] Since different systems or departments usually coordinate these functions, the data is not unified, and operations remain separated. ERP systems bring all these different processes together in one place, making it easy for information to pass smoothly and for tasks to be coordinated easily. This reduces delays, inconsistencies, and repetition, making the supply chain better managed.
- **Enhanced Data Visibility and Transparency:** It is important that all parts of the supply chain supply data quickly and correctly for effective management. These systems ensure you can view real-time data on stock availability, current order standing, how well suppliers perform, and predictions of future customer demand. Thanks to this transparency, stakeholders can always keep an eye on activities, find trouble areas quickly, and decide accordingly. More visible data helps suppliers follow industry guidelines and improves their work with partners.

- **Improved Demand Forecasting and Inventory Optimization:** The main factor in managing stock effectively is estimating buyers' demands and matching the store's inventory levels to those demands. Based on historical sales data, ongoing market trends, and analytics, ERP systems accurately project upcoming demand. Using this helps businesses prevent stock outs and overstocks, reduces carrying expenses, and ensures enough products are on hand. An ERP system helps optimize stock, which benefits cash flow and makes customers happier.
- **Streamlined Order Fulfilment and Logistics:** How SCM arranges order processing and logistics determines how fast and well orders are delivered. Using ERP, order tracking, shipment scheduling, and route planning now happen automatically, preventing errors and making things faster. Thanks to ERP, firms can use their vehicles more efficiently, select the best delivery pathways, and offer real-time shipment monitoring, leading to faster and more reliable supply chains.
- **Support for Strategic Decision-Making:** Besides running the company efficiently, ERP systems help managers make strategic choices by providing detailed analyses and dashboards. By bringing all supply chain information together, ERPs make it more convenient to explore different scenarios, consider costs and benefits, and identify risks. The knowledge gained from this approach makes it possible for companies to adjust to changes and improve relations with key partners and new ideas that bring an advantage in the market.

1.2. Evolution of ERP Systems

ERP systems have developed significantly since they first appeared in the 1970s as Material Requirements Planning (MRP). At their core, MRP systems manage manufacturing by checking the amount of materials needed and figuring them out from the forecast and how much is in stock. Initially, these systems handled just production schedules and storage, but they formed the base for upcoming broader resource planning tools. Because business situations became more involved and linked, traditional MRP systems no longer worked well on their own, and companies needed wider integration.

The 1980s and 1990s saw ERP systems expand to involve more modules aimed at different areas of a company beyond just manufacturing. Bringing together modules for Financial Management, Human Resources, Procurement, and Customer Relationship Management (CRM) in one piece of software allowed businesses to automate workflows and exchange details among departments. Because of this approach, the departments worked more effectively together, avoided repeating each other's tasks, and improved the accuracy of the data.

Adding Supply Chain Management modules to coursework allowed organizations to harmonize their entire supply chain processes with smart planning, inventory control, and logistics management. Cloud computing introduced a new transformation to ERP in the early 2000s. Compared to the traditional approach of running ERP on a company's computer, the cloud method boosted access, grew with the company, and was also more affordable.

Thanks to cloud-based ERP, businesses can start using the tools faster, receive automatic updates, and allow team members across the globe to access the software remotely. Thanks to the cloud, small and medium-sized businesses could now use the advanced planning tools that large firms had access to in the past. Now, along with other benefits, modern ERP systems use advanced analytics and BI to help organizations make decisions based on data from all business areas. ERP systems keep improving by becoming more integrated, flexible, and intelligent, which positions them as important drivers of digital transformation in modern business.

2. Literature Survey

2.1. Theoretical Foundations

Several main theories base ERP implementation on its strategic, technological, and operational aspects. The Resource-Based View (RBV) is one of the main theories, as it believes that using ERP systems can help companies become and stay ahead in the market. Since ERP handles various operations, increases how info is exchanged, and benefits strategic planning, it is seen as a significant and special resource for a business.

[5-8] TAM is a significant theory that studies how users react and interact with new technology. TAM points out that usefulness and ease of use drive end-user acceptance of an ERP system, so interfaces should be simple, and proper training should be provided. Besides, the SCOR model explains how ERP systems play a key role in helping businesses plan, get goods from suppliers, manufacture, distribute, and process returns, all in line with good practices and targets.

2.2. ERP and Supply Chain Integration

Many studies have noted how ERP is helping supply chain management and pointed out that experts such as Davenport (1998) and Klaus et al. (2000) first explained how ERP supports global supply chain partners to cooperate and be transparent. ERP connects all the parts of a company and allows partners to coordinate their efforts smoothly. Real-time data sharing, boosted order accuracy, and enhanced sustainable purchasing and inventory management have become possible with these systems.

The table below lists which ERP modules are used for which supply chain functions. Using the procurement module increases efficiency in manning vendors and simplifies expenses. Using the inventory module makes sure inventory is managed properly, helping save on storage costs, whereas using the logistics module makes sure orders are tracked automatically and the supply chain progress is visible in real-time. All things considered, ERP systems support the necessary agility, responsiveness, and robustness in any market situation.

2.3. Empirical Evidence from Industry

Studies have found ERP to significantly improve how businesses manage their supply chain. Al-Mashari's research found that inventory turnover rates climbed by about 30% in the manufacturing industry after using ERP, thanks to better data sharing and immediate tracking of goods. Nah et al. (2001) found, in the retail industry, that using ERP improved forecasting demand, stock control, and replacing stock, making customers happier and avoiding stockouts. At the same time, Markus et al. (2000) investigated the logistics field. They found that using ERP meant a major decrease in delivery delays and mistakes in order processing, proving that ERP supports smooth logistics and helps avoid obstacles in day-to-day work. They show how ERP systems help many industries and why they are key in maintaining complex supply chains.

2.4. Challenges in ERP Implementation

Though ERP systems have many promising features, they often encounter difficulties during the implementation stage. An important problem is that it costs too much to acquire, set up, learn, and upkeep software, making it difficult for SMEs. Employees' resistance to new changes at work is a major obstacle to many organizations since people are often unwilling to change their old habits. Resisting changes may result in delays, decreased system usage, and project failure. Poor data migration often causes the new ERP system to receive unreliable, duplicate, or inaccurate data from the old system. These challenges are clearly shown in Figure 2, which gives an overview of the main problems with ERP implementation. Proper action toward these challenges requires careful preparation, special change management steps, and powerful leadership.

2.5. Gaps in Literature

Although recent studies give important information on ERP use in supply chains, some issues still require more exploration. Interestingly, few multi-case assessments have been conducted that compare different sectors' use of ERP under a range of operations. Such comparative studies might expose important practices that work for different industries and issues that appear regardless of industry. Most current studies concentrate on short-term effects without considering important future factors such as profitability, the stability of the system, and progressive improvement. Removing these gaps would lead to a better sense of how ERP works and enhance the building of frameworks needed by industry and long-term strategies.

3. Methodology

3.1. Research Design

A mix of quantitative and qualitative multi-case studies was applied to understand ERP implementation fully. This design helps to understand the numbers and context behind them, [9-12] making it useful for analysing ERPs in different settings.

- **Automotive Manufacturing:** Managing the supply chain and complex automotive production schedules, ensuring deliveries are made on time, and ensuring ERP handles key tasks in the industry. The case study looked at how ERP helped the company organize its production, manage its inventory, and deal with suppliers. Order fulfilment rates and

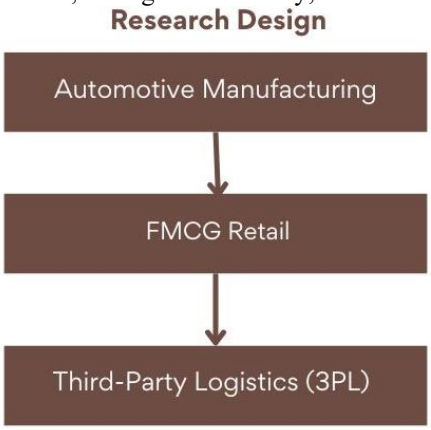

Figure 2: Research Design

  Inventory turnover were measured numerically, while employees' opinions about better processes and the user system were collected through interviews.
- **FMCG Retail:** Retailers of fast-moving consumer goods should be flexible with demand and manage their stock well. The study's main objective was to explore how ERP systems improved forecasting, re-stocking processes, and

sales handling at the point of purchase. The stock out rates and sales data showed success, and staff and managers were advised about how users felt, what needed explaining, and any challenges during the implementation process.

- **Third-Party Logistics (3PL):** Third-party logistics providers must use ERP to take care of warehousing, tracking orders, and transporting goods. In the 3PL case study, it was found that ERP helped to make logistics clearer, shorten wait times, and improve the way customers are served. To gather data, the researchers measured the success of actions such as lowering shipment error rates and improving the speed of deliveries while gathering opinions on how the ERP helped coordinate different supply chain partners for better and more reliable service.

3.2. Data Collection

In order to study ERP implementation well in different industries, data was collected from interviews with experts and reviewing reported results. The variety of information improved the credibility and detail of the study's conclusions.

- **Primary Sources: Semi-Structured Interviews and System Usage Logs:** Essential data was gathered via semi-structured interviews with the ERP users, project managers, and IT team members. From these interviews, we

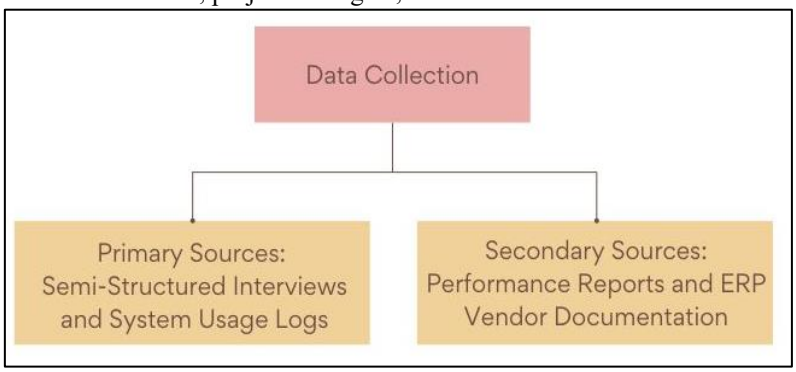

Figure 3: Data Collection

- Gathered useful insights about how people use the ERP system, the problems encountered, and what they think are the benefits. Additionally, the logs of ERP system activity were reviewed to measure the use of the modules, count how often they were used, and spot recurring actions by users. A better sense of how ERP systems were adopted and put into practice was possible because of this approach.
- Secondary Sources: Performance Reports and ERP Vendor Documentation: The ERP Action Data Set also contained reports from the case organizations that covered their performance details before and after the ERP was implemented. Through these reports, we could easily see improvements in how much stock was moved, the efficiency of accepting orders, and cost savings. We looked through the vendor documents to grasp how the systems are generally used, what can be customized, and how. It allowed us to see whether the systems were being exploited as well as they could be and if the applications did what the vendors advised.

3.3. Case Study Protocol

We produced a case study protocol so the information could be directly compared. It created a uniform plan for processing and analysing data by looking at three important areas for assessment. [13-17] we examine which ERP system was installed, how the organization looked before and after it started using ERP and its performance after implementation.

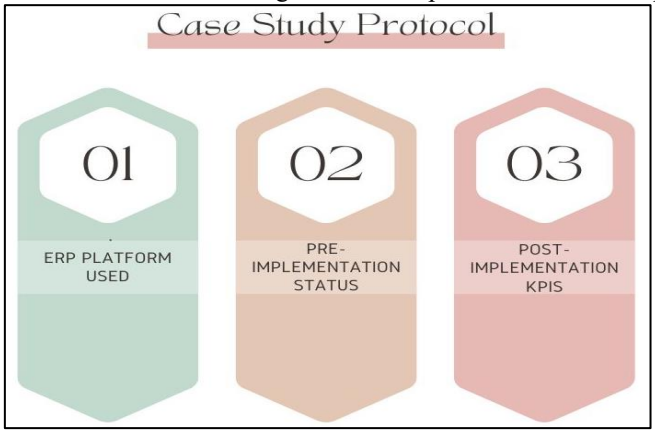

Figure 4: Case Study Protocol

- **ERP Platform Used:** The first step in building a case study was to find out what ERP platform the firm used, such as SAP, Oracle, or Microsoft Dynamics. I found out more about what the system can do, how easily it adapts, and what it

can handle. Analysing the platform helped us see if its features satisfied industry needs and if the kind of ERP influenced the implementation's success.

- **Pre-Implementation Status:** Before implementation, the status of each organization was examined to set a starting point for comparing results. For example, we reviewed the current IT setup, assessed business process growth, examined data management habits, and evaluated if people in the company were ready for change. We needed this information to understand how much change would be needed and to identify the first problems the ERP solution was expected to fix.
- **Post-Implementation KPIs:** The system's performance after implementation was measured using important KPIs related to each industry and business function. Businesses checked these things: how quickly their products moved from the shelves, how much time it took to process orders, the cost of sourcing supplies, and how pleased their clients were with the service. Comparing pre-implementation figures and later results from using KPIs helped identify how much ERP made a difference and confirmed how effective implementation had been.

3.4. Analytical Framework

Both qualitative and quantitative methods were combined within this analytical framework to analyse the outcomes of ERP implementation in numerous industries. The framework's purpose is to properly analyse information gathered through case studies by combining the analysis of themes and statistics to fully identify the results of ERP systems in both practical and measurable aspects. Researchers transcribe interviews and use thematic coding to spot regular trends, what users think, and key obstacles or advantages of implementation.

Because of this approach, researchers have a better chance to examine how organizations function, are used by employees, and respond to changes. At the same time, data from the system, performance reports, and KPIs are compared and studied using statistics to observe system improvements accurately. Facts like how fast inventory goes, how fast orders are handled, how costs decrease, and how satisfied customers are all point to the ERP's success. Cross-validating results increase the certainty of conclusions made using both data types.

The framework also analyses how ERP use differs by industry to discover the similarities and the specific advantages or obstacles in the automotive manufacturing, FMCG retail, and third-party logistics sectors. The comparison clarifies which factors are important in different situations, such as the intricacy of the supply chain or the culture inside the organization. Because of this approach, the influence of both special features of ERP software and its implementation techniques on the final results can be more clearly understood.

This wide-ranging approach allows organizations to make useful, specially tailored suggestions for their particular needs, leading ERP projects to better results in the future. As a result, this framework allows the study to consider numerous aspects of ERP implementation, including what users think, updated processes, accurate results, and supporting research and business-related decisions.

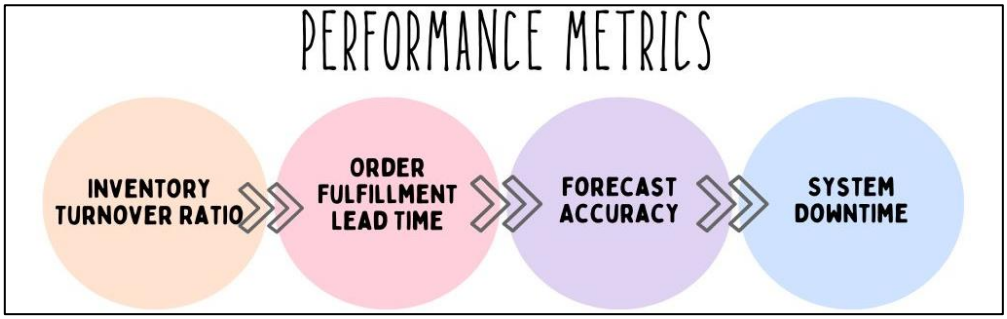

Figure 5: Performance Metrics

3.5. Performance Metrics

- **Inventory Turnover Ratio:** The Inventory Turnover Ratio determines the number of times an organization sells and replenishes its stock in a particular period. A company with a high turnover ratio manages inventory well, pays less for storage, and avoids expired products. Because of ERP, improvements in this metric show better guesses on demand, efficient monitoring of stock levels, and improved ways to use ma.
- **Order Fulfilment Lead Time:** Order Fulfilment Lead Time covers everything from someone placing an order to receiving their product. This measure is necessary to understand the supply chain's speed and how content customers are. With ERP systems in place, lead times are shortened since ordering is automated, departments interact more efficiently, and there's up-to-date data on inventory and logistics positions. In industries that depend on speed and reliability, faster lead times usually improve competitiveness and service levels.
- **Forecast Accuracy:** It explains how precisely forecasts match the real figures of sales or usage. Well-made forecasts help you organize production, control your stock, and avoid unwanted situations where your stocks are either too low

or too high. They enable better forecasting by allowing historical sales, trends, and outside issues to influence their advanced tools. Seeing this metric improve means the organization can predict what is needed in the market, manage resources more effectively, and avoid paying for items that aren't sold.

- **System Downtime:** When parts of the ERP system are not working, System Downtime records when business continuity is affected. Ensuring constant business operations is only possible by minimizing the time spent fixing problems. An ERP system is considered successful in part when it is reliable and maintained well; giving it support and ensuring robust infrastructure all help reduce downtime. Having fewer interruptions allows users to rely on the system, as data is available and operations do not pause.

4. Results and Discussion

4.1. Case Study

Table 1: Performance Improvement Summary

KPI	Case 1 (Automotive)	Case 2 (FMCG Retail)	Case 3 (3PL Logistics)
Inventory Turnover	18%	25%	12%
Lead Time	20%	18%	15%
Forecast Accuracy	22%	28%	19%

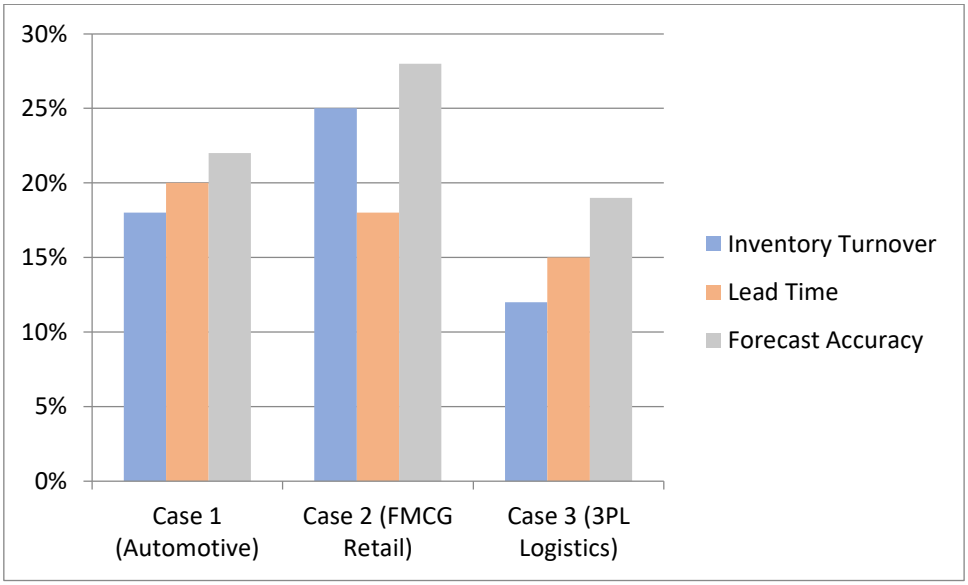

Figure 6: Graph representing Performance Improvement Summary

4.1.1. Case 1: Automotive Manufacturing (SAP ECC)

Before adopting the SAP ECC ERP system, automotive manufacturers struggled with problems that made it hard for them to perform well and profit. One of the main concerns was that many products were being rejected because the company's processes and quality control were inefficient. For farmers, it increased the amount of waste, added to production costs, and reduced the number of crops harvested. Also, purchasing at the firm was decentralized, meaning that department leaders or plant managers made the decisions at each level.

As a result, the company faced spiked raw material fee delays with stock from various suppliers and had difficulties using the supply chain efficiently. Having a single system made it hard to negotiate lower prices with vendors and take advantage of bulk deals. Because of all these issues, the company struggled to maintain its competitiveness and stable supply chains. The arrival of the SAP ECC platform brought about important changes.

By bringing its procurement under one centralized system, the company could better monitor its purchasing activities and organize its suppliers better. With everything handled through a single office, the company could focus on large orders, negotiate better with suppliers, and successfully reduce raw material buys by 22%. In addition, the ERP system's built-in production planning and quality monitoring features helped the firm decrease its amount of scrap. By checking production processes in real-time, it became easy to spot early on any mistakes or problems that helped fix them before too much waste was created.

Not only did this cut scrap, but it also improved production speed and the number of items made. The system also enabled real-time data, making it possible for departments to make more informed decisions and better manage procurement,

production, and inventory. As a result, the supply chain ran more smoothly, risks were reduced, and more resources were used effectively. The example shows that effective use of ERP in automotive manufacturing helps improve productivity, reduces costs, and builds the base for on-going success.

4.1.2. Case 2: FMCG Retail (Oracle NetSuite)

Before it began using Oracle NetSuite, the FMCG retail company regularly faced problems with inventory management that prevented it from running smoothly and delivering satisfying service to customers. Stock outs often occurred in the company, leading to fewer sales and fewer buyer complaints. Stock outs mainly happened because replenishing stocks was done manually, without any connection to the newest sales information. Because the tracking and replenishment were done by hand, outlets struggled to quickly bring back popular goods and oversaw ineffective stock use. It led to a drop in customer trust and resulted in too many products being stocked, which tied up money the company could have used in other ways. With Oracle NetSuite, many critical functions in the supply chain were automated and brought together.

The company could more accurately expect customer needs by looking at old sales data, patterns beyond the calendar year, and special offers using automated demand forecasting. The system updated stock levels at all retail locations by including real-time POS data in the ERP. As a result, they could make quick and well-informed decisions to refill shelves, which greatly lowered the risk of running out of items. Because of this, the company reduced stock out situations by 30%, making products much more available to customers.

Additionally, Oracle NetSuite improved how orders are handled, resulting in an 18% faster processing time. This resulted in faster delivery from when orders were placed until the product was ready, helping the company be more responsive to what the market needed. As a result of the system, suppliers could handle their goods better, and retailers had more control over what they received. These improvements make customers happier as products are more available and service is faster. Thanks to ERP, improvements in manufacturing and distribution led to more sales and less revenue loss from lacking stock. This case shows how modernizing FMCG retail with ERP systems relies on better forecasting, more automation, and successful integration.

4.1.3. Case 3: 3PL Logistics (Microsoft Dynamics)

Operational inefficiencies throughout the company were damaging its ability to provide good service and control costs. Planning deliveries inefficiently caused the company to waste fuel, took longer than needed, and made the fleet less useful. Manual, unchanging, and automatic route planning meant drivers couldn't respond quickly to road changes. Shipment tracking was not complete, meaning the company could not know where each delivery was at any given moment. As a result, the company's internal actions and customer communications suffered since consumers had limited awareness of their shipments. Because of all these issues, the firm's monthly expenses grew, and its customers became less happy, making the company less competitive.

Upon rolling out Microsoft Dynamics ERP, the company introduced GPS tracking as a main highlight in its logistics system. As a result, routes could be adjusted according to actual traffic, the weather, and the most urgent items to deliver. Rerouting vehicles while driving saved fuel and increased both flexibility and delivery timelines. Because trucks were fuller and routes were better planned, the company enjoyed a 15% increase in efficient fleet use, translating into lower costs. Also, with the ability to watch real-time shipment progress, the logistics team could predict delays, talk to customers when needed, and handle scheduling as needed.

All storage, inventory, and transport functions were unified when Microsoft Dynamics included logistics and warehouse management features. Because of this connection, the company had more accurate stock levels, made fewer errors during handling, and could better match its supply chain with partners. When the supply chain was more visible across the network, the firm provided better service, improved customer relations, and supported expansion. Overall, the 3PL provider gained from the ERP system, seeing definite betterment in costs and consistency in services.

4.2. Cross-Case Analysis

- **Process Standardization:** Standardizing processes was a key benefit ERP systems provided in every case. The introduction of ERP platforms enabled organizations to organize the work process consistently in many locations and departments. Because tasks were now carried out the same way, this led to fewer inefficiencies and less confusion from having different ways to do things. Adopting workflow standards made it easier to coordinate, communicate clearly, and follow the rules my employer and government set. In the end, having a consistent process allowed the company to run more smoothly and made it possible to maintain planned changes.
- **Real-Time Data Availability:** Many organizations emphasize the importance of realizable data in boosting their performance. ERP made it possible for decision-makers to access current and accurate information pulled together from many parts of the business. Being visible allowed the company to manage inventory, handle orders, and organize logistics better, helping it respond faster to any needs or problems in the market or supply chain. Real-time data

helped managers identify problems early, adjust their plans fast, and maximize resource use. Since data moved more smoothly, firms could respond faster to new situations and what their customers wanted.

- **Reduction of Manual Errors:** ERP implementation reduced most errors by allowing software to handle regular and repetitive work. Things such as data entry, managing stock, and handling orders can be error-prone, causing more serious issues for the business. Using modules and automated workflows helped ERP systems reduce mistakes, leading to a more reliable and accurate workflow for data. Automation improved the workflow and allowed staff to spend time on more valuable tasks. Lighting up the path helped to cut down on mistakes, resulted in more savings, and boosted the company's trust in system reports, thus improving overall performance.

4.3. Critical Success Factors

The key factors we discussed greatly impacted the success of ERP implementations during these case studies. Management's commitment was at the top of what made our business succeed. Without active leadership from the top, the ERP initiatives would not have succeeded. With support from leaders, the company distributed the necessary resources and ensured the project didn't lose priority when competing against other business goals. Also, the company's leaders actively supported the change, dealt with employees who opposed the change, and helped build a team that could accept and use new procedures and tools. Having powerful executives champion the initiative eased disagreements and caused adoption to move faster. The efficient involvement of ERP consultants was very important.

Expertise from internal and external professionals allowed the appropriate customization of the ERP system for every company. Because they were experienced, they found and settled issues fast at the beginning, reducing dangers and making sure proper methods were used. The consultants were successful at helping technical teams connect with users by changing complicated systems into practical business answers. With their direction, workflows, and configurations were adjusted, helping the ERP absorb and respond to real operations. In addition, making the system fit the company's needs and teaching staff were seen as vital for ERP success. While generic ERP modules can do many things, making them fit a company's unique business needs makes them easier to use and more helpful.

By being customized, the system supports old or new working methods with no interference. It was as vital that staff be properly trained to ensure they could manage the ERP system easily and effectively. Training sessions reduced users' fear of new technology and encouraged them to use it. Both readying the software and ensuring users became familiar with it ensured the ERP was reliable and welcomed over the long term.

5. Conclusion

ERP systems make combining business functions like procurement, inventory, logistics, and sales easier, which helps streamline supply chain operations. Because data is now integrated, organizations can make better and faster decisions. The analysis across automotive manufacturing, FMCG retail, and 3PL logistics shows that companies using ERP systems generally achieve higher inventory turnover levels, faster order fulfilment, and improved forecasting capabilities. It shows that with ERP, companies can run more efficiently, reduce costs, and satisfy customers better as processes become standardized, tasks are automated, and data is always up to date. As a result, investing in ERP solutions allows companies to gain an advantage in supply chains that are becoming more complex and difficult to manage.

5.1. Managerial Implications

The findings showcase some important lessons for managers. It is important to tie ERP implementations to an organization's key goals to ensure that technology helps reach important business targets and has a noticeable effect. Top leaders ensure the organization meets its needs and encourage a culture comfortable with change. It is important to have continuous training and set in place thorough change management programs to overcome employees' resistance and help them effectively use ERP tools. Constant review of the KPIs after the system is deployed is key to finding out what's working well and what needs to be updated to justify future funding. Those in charge should take a proactive approach, relying on data provided by ERP systems to keep improving how things are done and maintain flexibility in supply chains.

5.2. Limitations

Even so, the lessons from this research are limited by a few factors. Because the research examines only three industries, it is uncertain if the conclusions can apply to different types of organizations. Moreover, many of the facts included here are reported by companies that might introduce errors or misinformation. Future work in this area would be improved using more participants and reliable data. There is a need for new research examining how ERP systems affect supply chain results and a company's growth over many years.

In addition, more ERP platforms include Artificial Intelligence (AI) and the Internet of Things (IOT), making automation, forecasting, and instant monitoring possible. Finding out how these technologies change the capabilities of ERP systems could be very informative. Adaptation models created for different industries allow businesses to set up ERP systems to fit their

needs and help everyone accept and use them more. For most, ongoing studies are necessary for businesses to know what is changing in ERP and benefit from it.

Reference

1. Akkermans, H. A., Bogerd, P., Yücesan, E., & Van Wassenhove, L. N. (2003). The impact of ERP on supply chain management: Exploratory findings from a European Delphi study. European Journal of Operational Research, 146(2), 284-301.
2. Antero, M. C. (2015). A multi-case analysis of the development of enterprise resource planning systems (ERP) business practices. Frederiksberg: Copenhagen Business School (CBS).
3. Madu, C. N., & Kuei, C. H. (2005). ERP and supply chain management. Chi Publishers Inc.
4. Stefanou, C. (1999). Supply chain management (SCM) and organizational key factors for successfully implementing enterprise resource planning (ERP) systems. AMCIS 1999 proceedings, 276.
5. Davenport, T. H. (1998). Putting the enterprise into the enterprise system. *Harvard Business Review*, 76(4), 121–131.
6. Klaus, H., Rosemann, M., & Gable, G. G. (2000). What is ERP? Information systems frontiers, 2, 141-162.
7. Fui-Hoon Nah, F., Lee-Shang Lau, J., & Kuang, J. (2001). Critical factors for successful implementation of enterprise systems. Business Process Management Journal, 7(3), 285-296.
8. Markus, M. L., Tanis, C., & Van Fenema, P. C. (2000). Enterprise resource planning: multisite ERP implementations. Communications of the ACM, 43(4), 42-46.
9. Al-Mashari, M., Al-Mudimigh, A., & Zairi, M. (2003). Enterprise resource planning: A taxonomy of critical factors. European journal of operational research, 146(2), 352-364.
10. Rashid, M. A., Hossain, L., & Patrick, J. D. (2002). The evolution of ERP systems: A historical perspective. In Enterprise resource planning: Solutions and management (pp. 35-50). IGI Global.
11. Goldston, J. (2020). The evolution of ERP systems: A literature review. The Evolution of ERP Systems: A Literature Review, 50(1), 17-17.
12. Barney, J. (1991). Firm resources and sustained competitive advantage. Journal of Management, 17(1), 99-120.
13. Bingi, P., Sharma, M. K., & Godla, J. K. (1999). Critical issues affecting an ERP implementation. Inf. Syst. Manag., 16(3), 7-14.
14. Davis, F. D. (1989). Perceived usefulness, perceived ease of use, and user acceptance of information technology. MIS Quarterly, 319-340.
15. Esteves, J., & Pastor, J. (2001). Enterprise resource planning systems research: an annotated bibliography. Communications of the association for information systems, 7(1), 8.
16. Gable, G., Sedera, D., & Chan, T. (2003). Enterprise systems success: a measurement model.
17. Shanks, G. (2000). A model of ERP project implementation. Journal of Information Technology, 15(4), 289-303.
18. Soh, C., Kien, S. S., & Tay-Yap, J. (2000). Enterprise resource planning: cultural fits and misfits: is ERP a universal solution? Communications of the ACM, 43(4), 47-51.
19. Markus, M. L., & Tanis, C. (2000). The enterprise systems experience-from adoption to success. Framing the domains of IT research: Glimpsing the future through the past, 173(2000), 207-173.
20. Kurbel, K. E. (2013). Enterprise resource planning and supply chain management. Functions, Business Processes, and Software for Manufacturing Companies. Progress in IS. Springer, Dordrecht.