

# Reinventing Business with Cloud Integration: The Cost - Effectiveness of Replacing Legacy Applications

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**Abstract:** Any company's financial systems and CRM call for several business operations that must be carried out on schedule. Eventually, most of the time the software applications will operate under custom/legacy application, fulfilling these purposes. This study aims to investigate the several negative effects that we could experience when we have too many legacy applications in the financial systems and CRM and possible solutions for them. Once the backbone of many companies, legacy systems have lately grown to be a major obstacle to innovation in the fast - paced corporate climate of today. Often firmly rooted in the operations of a company, these antiquated technologies provide difficulties with scalability, adaptability, and connection with contemporary alternatives. This article investigates how legacy systems hinder the capacity to adopt new technologies, react fast to market changes, and properly use data, therefore impeding organizational innovation. It looks at the inefficiencies of keeping and running legacy systems including technological obsolescence, security concerns, and high running expenses. Moreover, the research emphasizes how these systems affect the capacity of a company to create an innovative culture since their management often calls for large resources and leaves little space for technical development or experimentation. By means of case studies and industry analysis, the article addresses possible ways to overcome the constraints presented by legacy systems: gradual system modernization, cloud migration, and adoption of agile approaches. In the end, the report emphasizes how companies should change their IT systems if they want to stay competitive and keep promoting digital age innovation.

**Keywords:** Oracle Applications E - Business Suite, Organizations, SOA, methodologies, Legacy Systems, Integration, Costs, Solutions, Case Studies

## 1. Introduction

Designed to run effortlessly across all company domains, from Sales, Service, and Marketing to Financials, Human Resources, Supply Chain, and Manufacturing, Oracle Applications E - company Suite is the only complete and integrated collection of enterprise applications available in the industry. It gives businesses a whole 360 - degree perspective of their finances, customers, and supply chains, therefore offering the fastest path to premium business intelligence. In a competitive market, this improves profitability and speeds up, more informed decision - making.

Usually only departmental business procedures are automated by application software. Oracle E - Business Suite automates all aspects of business. From development, marketing, selling, ordering, planning, buying, manufacturing, fulfilling, servicing and maintaining, to handling finance, human resources, and project management Oracle E - Business Suite provides a complete and integrated service. For great capability, one had to decide in the past between an integrated suite and best of breed. One can now have an integrated suite developed on unified information architecture with the capability one required in every individual application thanks to Oracle. These programs link corporate operations both inside and outside of departmental, geographic, and line - of - business boundaries. With Oracle E - Business Suite's depth of product functionality and breadth of product offering, one can take his/her business further by automating processes across the enterprise.

## 2. Understanding Legacy Applications

Though the new and effective technology is available, legacy applications—the age - old ones—are still being used since they still satisfy user needs.

Legacy Applications have mostly negative effects in:

- 1) They are very tough to maintain, because the practices, standards and methodologies used for the development are old and outdated.
- 2) They are somewhat difficult to improve and adapt into evolving criteria.
- 3) The age old and obsolete software and hardware used in these systems restrict them to be not scalable.
- 4) Because of differences in the technologies between these old systems and the modern ones, they are somewhat difficult to combine with other systems.
- 5) A major disadvantage of legacy systems is human resource scarcity since working on these systems requires extremely particular knowledge. The availability of professional resources in the old and outdated hardware and software applied in these systems would be somewhat limited.
- 6) Legacy systems for example Parallel processing, SOA (Service Oriented Architecture) for multi system integration, Graphical User Interfaces, Object oriented programming, Client Server architecture, Web enabled services, vendor managed inventories (VMI), Advanced Demand forecasting, advanced pricing, High efficient inventory management etc. The latest concepts and technologies are unavailable in Legacy systems for example.
- 7) Too many interconnection points inside the company between the important tasks may prove to be a major

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hazard since they produce great delays and erroneous data in one source system could cause the problem exacerbated when supplied to other systems inside the firm. Turnaround times for issue resolution will be quite high in these situations. This fuels problems with client satisfaction.

The legacy systems are clearly quite slow. In our fast - moving and always expanding industry, this results in extremely poor performance and great consumer unhappiness, therefore severely hurting the company. Many drawbacks would follow from handling the several purposes of the Organization using different legacy applications, including data consistency, integration problems, distributed decision making in every system which could lead to erroneous results, higher expenses for maintaining each application.

**Effective Strategies to Overcome Disadvantages**

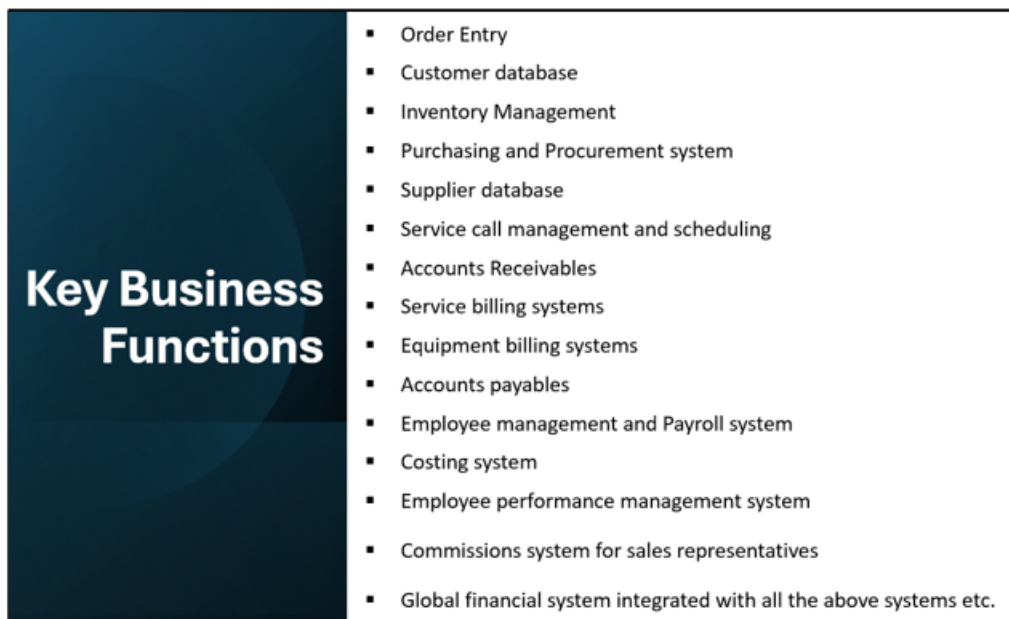
- **Legacy Transformation**, by using the existing legacy assets and changing the existing old interfaces and providing new look with the use of latest technologies.

This will improve the look and feel of the application and will be appealing to the customers. And the use of latest technologies will in turn increase the system performance, usability and other key aspects that improve the customer satisfaction.

- **Legacy modernization** is the integration, migration, or replacement of the old systems with the most recent and effective technology accessible.
- **ERP Business Suites**, Changing the current legacy systems with world class ERP and or CRM suites like SAP, Oracle Apps etc. to maximize the proven and effective off - the - shelf technologies.

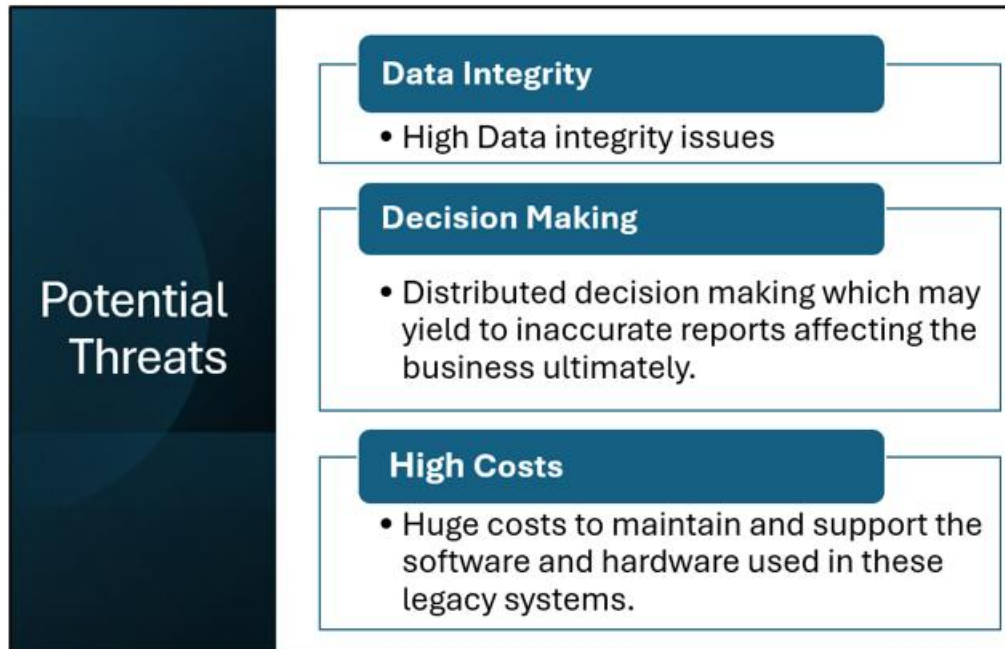
Let’s consider an example of a manufacturing firm, operating in two operating units (two different continents). The company manufactures products, sells them and provides service to these items.

For every one of the following main corporate activities, the company has separate legacy systems in one of its operating divisions.

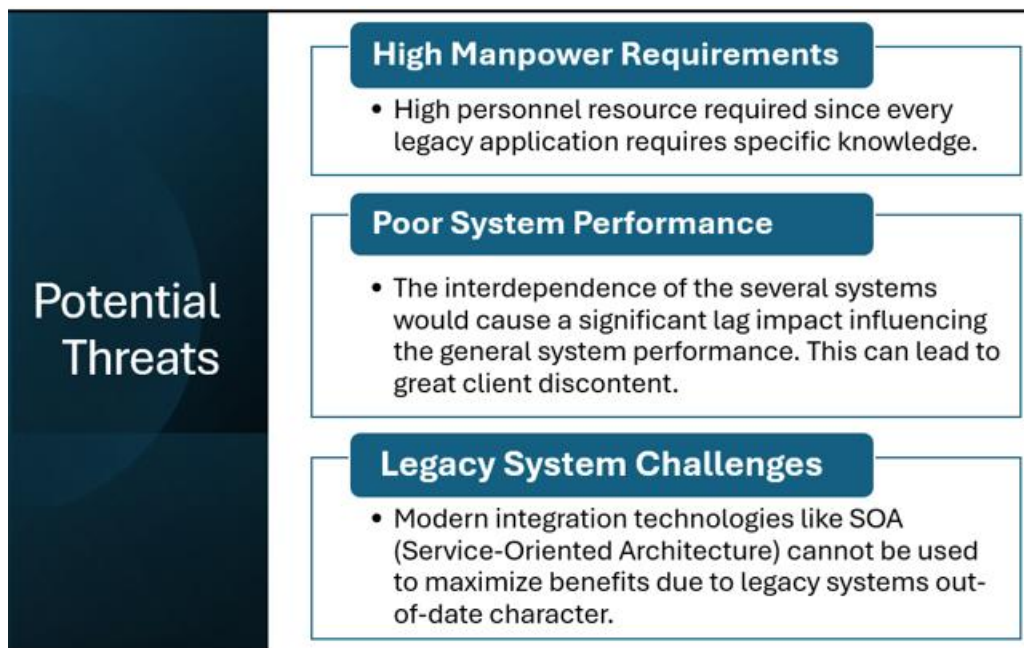


**Figure 1:** Key Business Functions Source: Authors’ own processing.

**Potential Threats**



**Figure 2:** Potential Threats Source: Authors' own processing.



**Figure 3:** Potential Threats Source: Authors' own processing.

Many Big Companies are unable to cope with the fierce competition they face from all around due to issues in operating their company using IT systems, even with a great possibility of Globalization. And this turns out to be the main obstacle in reaching fast expansion. Analyzing the underlying causes of these issues and offering a fast, precise, lasting remedy is thus desperately needed. Key integration points as of right now are:

#### **Strategies for Overcoming Company Challenges**

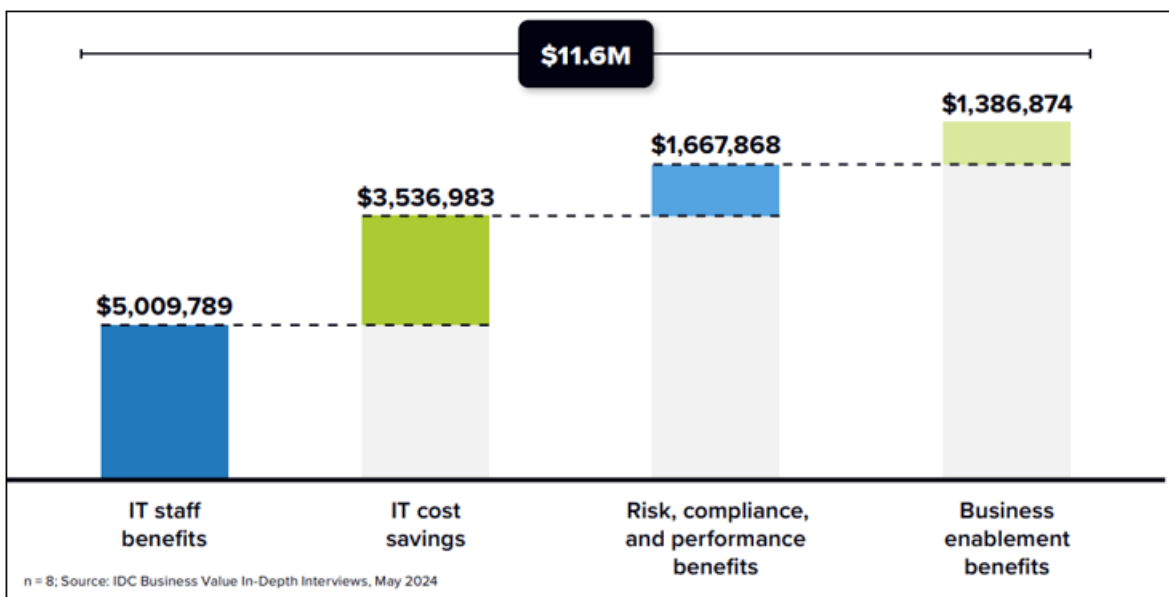
In the other operating unit, the company has adopted an off-the-shelf latest and efficient proven ERP software available in the market which appropriately suits their requirements and

fulfills the above business functions with few minor customizing. The disadvantages of using the legacy systems are restricting the company from changing their business processes to fit to the current market trends.

With the replacement of legacy systems, the essential aspects' rough projected cost benefit analysis, based on this extensive data set and employing a specialized Business Value methodology, shows that IDC calculates that these customers will achieve benefits worth an annual average of \$11.6 million on a per organization basis (\$491, 000 per 1, 000 organization users of OCI) and five - year ROI of 393% by [2]:

**Table 1:** Cost benefit analysis Source: Authors’ own processing.

S. No	Consideration	Description	Amount
1	Cost reduction	Cost benefit with reduction of legacy system support experts with the cloud ERP - OCI	\$5, 009, 789
2	IT Cost Saving	IT Cost saving after adopting OCI	\$3, 536, 983
3	Risk, Compliance & Performance benefits	Risk, Compliance & Performance benefits after adopting OCI	\$1, 667, 868
4	Business enablement benefits	Business enablement benefits after adopting OCI	\$1, 386, 874



**Figure 4:** Average Annual Benefits per Organization Source: (IDC Business Value, n. d.). [2]

**“Maximizing Success Through Customer Satisfaction”**

The implementation of high speed and effective system—the order fulfillment cycle time was considerably lowered—has greatly raised the customer satisfaction.

Let us now evaluate the two functioning divisions in several spheres.

**Table 2:** Key Aspects Source: Authors’ own processing

S. No	Key Aspects	Operating Unit in which ERP implemented	Legacy Operating unit
1	Data Integrity	High	Very Low
2	Ease of Maintenance	High	Very Low
3	Ability to Enhance	High	Very Low
4	Scalability	High	Low
5	Abundant availability of expert and skilled human resources in the market	High	Low
6	Maintenance costs	Low	High
7	Flexibility to accommodate process changes	High	Low
8	Performance in terms of speed	High	Low
9	Integrated and accurate Decision making	High	Low
10	Process control	High	Low
11	Support from Suppliers	High	Low
12	Customer Service and Satisfaction	High	Medium
13	Availability of Global Standardized processes	High	Low
14	Latest business concepts	High	Very Low
15	Modularization	High	Medium
16	Web based front end user interfaces	High	Low
17	Management decision support reporting	High	Low

With a wide range of benefits offered, by ERP and CRM packages, one of the Leading Document Companies implemented them in one of its operating unit and this has proved to one of the best decisions made by the company, yielding them enough monetary benefits.

There are far more people employed in the legacy systems in different jobs than in the ERP and CRM combined. And this

deployment resulted in a significant cost save, few million of dollars.

The availability of expert resources in the market in ERP and CRM is very high and as a result the company could get rid several consultants with specialized knowledge in the old legacy system.

The main element for their success is the mapping of the needs into the new package, therefore realizing the business requirements. Though the initial cost of deployment is a bit greater than the benefits observed with the improvements of the system for organizational business processes and to withstand the competition from other organizations is considerably more. The system's adaptability to match the change readily gave the business advantage and returned millions of dollars of profit back to the investment.

The utilization of high speed and effective system—ex: the order fulfillment cycle time was considerably shortened—has resulted in high customer satisfaction.

The highly connected data allowed the company create accurate and integrated demand forecasting and material requirements planning; by preventing overstock, material requirements planning has avoided millions of dollars in

losses. It enabled very reduced buying costs and more accurate estimates, which helped the business to save millions of dollars by cutting waste.

Above all, the important integrated data is available easily for the organization to validate the growth with accurate reports and management decision support reports to comprehend the present position and then to work towards building new strategies of growth. This provided an advantage for the business to lead the sector with appropriate demand patterns and client preferences and forecasts, so enabling it to compete.

**Exploring the Availability of Off - the - Shelf Software for Business Functions**

ERP software availability data below addresses all the below modules as well as many other module availabilities.

**Table 3:** Module Availability Source: Authors' own processing

S. No	Function	Highly efficient, Robust Off the Shelf ERP software (Available/Not Available)
1	Order Entry	Available
2	Order fulfillment system	Available
3	Customer Management	Available
4	Inventory Management	Available
5	Purchasing and Procurement system	Available
6	Supplier management	Available
7	Service call management and scheduling	Available
8	Accounts receivables	Available
9	Service billing systems	Available
10	Equipment billing systems	Available
11	Accounts payables	Available
12	Employee management and Payroll system	Available
13	Costing system	Available
14	Employee performance management system	Available
15	Commissions system for sales representatives	Available
16	Global financial system integrated with all the above systems	Available

**Success Stories**

Many businesses and corporations who replaced their legacy systems with the newest technology hardware and software have prospered.

**How Businesses Drive Multimillion - Dollar Profitability Through Strategic IT Investments**

A few examples of such organizations

- Accenture
- Tata Steel
- EA Games
- GE Capital, GE Healthcare, GE Commercial Finance
- Cisco Systems
- McGraw Hill
- IBM
- Microsoft
- Amazon
- Oracle
- EY
- Deloitte
- PWC

Refer to [9] for additional success stories and customer information.

**Predicting the Evolution of Enterprise Resource Planning (ERP) Software: Market Trends and Growth Forecast**

Here is a projection of growing ERP market worldwide based on the advantages and success stories firms and organizations are experiencing. The graph below shows how companies have started a drift toward the use of off - the - shelf software to replace legacy systems from long ago. Grandview Research projects that the worldwide ERP market size, estimated at USD 64.83 billion in 2024, will rise at a CAGR of 11.7% from 2025 to 2030. With a CAGR of 14.8% [1], Yahoo notes that the worldwide ERP software industry was valued at USD 63.33 billion in 2022 and is predicted to reach USD 187.79 billion by 2030 [4].

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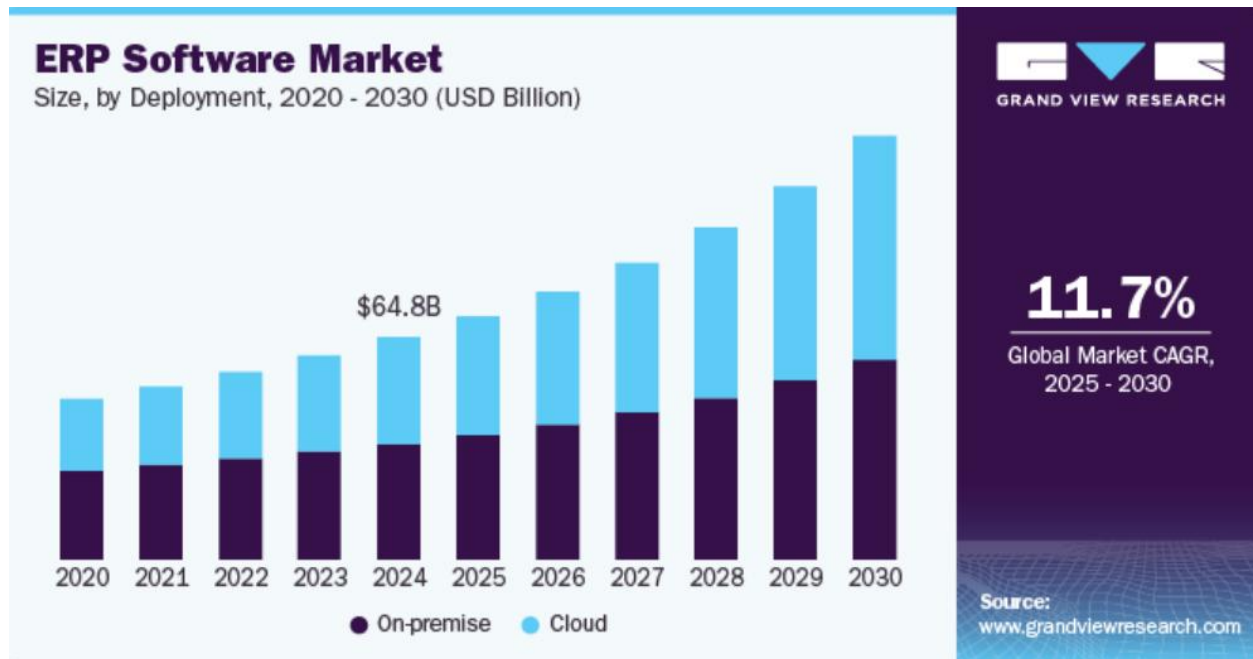


Figure 4: ERP Market Growth Source: (grandviewresearch, n. d.).

### The most effective approach to address the drawbacks and mitigate the risks associated with using legacy systems in the case study.

Based on the facts of availability of the off - shelf system above. Doing thorough research on the viability of replacing the legacy systems with off - the - shelf, proven ERP or CRM software would help one to address the aforesaid issues. In this situation, changing from legacy system (s) to ERP or CRM software might be a quite good way to solve all the above issues and get high client satisfaction.

### 3. Conclusion

Legacy Transformation, Legacy Modernization, Replacing the existing legacy systems with ERP and or CRM software are the best possible solutions to overcome the disadvantages that are caused by Legacy systems.

ERP and CRM software replaces out - of - date or legacy systems gives companies the chance to increase operational efficiency, streamline decision - making, and stimulate creativity. Moving away from inflexible, antiquated technologies can help companies to get more scalability, agility, and integration capacity. These contemporary solutions not only simplify procedures but also give access to sophisticated technologies including analytics, machine learning, and artificial intelligence—all of which are vital for remaining competitive in the fast changing corporate environment.

Accepting legacy modernization helps companies to overcome the limitations of obsolete technologies and open the path for development, better client experiences, and ongoing success.

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