



CLOUD ERP AS A SIMPLIFIED SOLUTION TOOL TO ENHANCE BUSINESS PROCESSES IN SMES IN INDIA: FACTORS FAVOURABLE TO CLOUD ERP IMPLEMENTATION

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Abstract

Nowadays the relevance of traditional ERP and on premise ERP has moved out, and awareness regarding Cloud ERP as a platform for efficient business process has increased. Many factors which influences the running of business processes can be enhanced through the implementation of cloud ERP. The possibilities of cloud ERP as a business solution is increasing because of many flexible factors which is not available in traditional ERP tool and on premise ERP. This study focusses on various aspects of business processes in SMEs and the areas in which cloud ERP can contribute.

Key Words: Cloud, Cost benefit, SME

Literature review:

Till today, there is no precise definition of Cloud ES. However, ERP III definition has been widely used by researchers to describe Cloud ES (Saeed, Juell-Skielse & Uppström 2011; Wan & Clegg 2010). Currently, ERP III is defined as a flexible, yet powerful information system incorporated with web-based SOA and Cloud Computing, which enables virtual enterprises to offer increasing degrees of flexibility, agility and dynamic amorphousness (Wan & Clegg 2010). However, such definition was later challenged by Rafiq (2011), noting that Cloud ES is different from the ES which was launched years ago. The significant difference between Cloud ES from On-Premise ES is users accessing services through the cloud from Cloud ES provider only for the components relevant to their business, and it could be bought on a pay-and-go basis, without the need to purchase whole

ES (Amir M. Sharif 2010). In fact, it is the shortest possible route to a new ES and it is a cost-effective way of allowing multiple users to gaining access to the same resource without having to upgrade a server or spend a fortune on new equipment (Rafiq 2011). This concept is further supported by Lenart (2011).

Ultimately, with the flexibility and capability of Cloud Computing, it enabled ES to be delivered via the Internet and accessible to wide variety of users at a much lower costs. With organisations having to reduce most of their IT budgets during economic turmoil, Cloud ES concept is certainly an option that attracts the attention of Academia and Industry. However, the scant research done in this area has limited the development of theoretical definition on Cloud ES.. Most researchers (Buyya et al. 2009a; Mell & Grance 2011; Vaquero et al. 2008; Wu, M 2011) also noted that there is no unified definition that is commonly acceptable in the Cloud Computing research.

Cloud ES holds a different meaning to the practitioners. The current Cloud ES definition is mainly vendor-driven (Schubert & Adisa 2011). The actors in the Industry such as IT analysts, users, and Cloud vendors are in a disagreement on what constitute Cloud ES. Despite the benefits that many Cloud ES vendors are hyping, some IT industry analysts (Beaubouef 2011) believed that Cloud ES have been lacking in providing a fully integrated system as compared to On-Premise ES. Cloud vendors sometimes failed to distinguish between Cloud ES and hosted ES (Web-based ES). Furthermore, many ES vendors simply shift their old systems to the cloud and claimed it to be Cloud ES.

Saeed et. al., (2011) perceived that cloud users are basically interested in the value creation of Cloud ES in terms of increased efficiency and reduced IT investments. Interestingly, amongst Cloud vendors and IT analyst there seems to be contradictory opinions. Plex.com (2009) for instance, defines Cloud ES as a hosted service delivered over the Internet. This notion is refuted by some industry analysts saying that a hosted deployment is different from a cloud deployment (Johnson 2011). These differing views amongst Cloud ES vendors and Industry analysts on understanding Cloud ES have triggered the need for further study on the definition of Cloud ES.

ERP Disadvantages

Direct Cost

This is by far the biggest disadvantage to ERP software. The up-front cost of the entire implementation process can be prohibitively high, especially for small-to-medium-sized businesses. This includes the full process of planning, testing, configuring and customizing the software as well as the cost of actual implementation.

Indirect Cost

Financial cost is not the only associated expense with ERP implementation. Businesses must also take into account the opportunity cost of manpower and time necessary for a successful deployment. Planning out a realistic timetable will give you a better idea of whether or not the cost is worth it for your company.

Customization

While this is a potential advantage, it can just as easily become a disadvantage if handled incorrectly. In summary, when making a decision about which platform is right for your business, it's important to consider potential disadvantages as well as advantages. Experts like Mr. Kimberling recommend making an honest assessment of your organization's needs and problem areas and then seeking out an ERP system that will give your business the most potential to improve.

Benefits of cloud ERP

From retail to manufacturing and beyond, cloud ERP offers distinct advantages to the majority of organizations. While ERP in any form is a valuable data-management tool, many

businesses find that cloud ERP solutions meet their needs especially well.

Like standard ERP systems, cloud-based ERP offers data management for all stages of your organization. You can use cloud ERP for huge number of business-related tasks, from budgeting and payroll to customer care management, inventory tracking, sales analysis and complex manufacturing processes.

The flexibility, accessibility and mobility of cloud ERP sets it apart from other systems. Because it's administered off site and delivered and accessed via the cloud, cloud ERP systems are typically easier to use and much faster to deploy than traditional options. When considering cloud ERP software, take into consideration the presence – or absence – of the following ERP software features.

1. Accounting and Financials

Cloud ERP helps you manage all of your business's accounting and financial challenges. From payroll, purchasing, acquisitions, sales data and all phases of financial reconciliation, ERP provides a reliable, solid and intuitive framework through which employees can perform duties easily and thoroughly.

2. Human Capital Management

With ERP, you can optimize staffing levels, administer employee benefits, analyze individual performance and much more. This provides valuable information you can use to attract, build and maintain a strong team.

3. Sales and Inventory Management

Inventory management and sales analysis is among cloud-based ERP's greatest advantages. ERP's functionalities allow you to reduce expenses, maximize use of staff time, automate the majority of data-driven tracking processes, determine and maintain optimum inventory levels and more – all while ensuring flawless accuracy and thorough tracking of stock, as well as expense and profit management.

4. Supply Chain Management

ERP's benefits also carry over to the supply chain. ERP allows you to easily order stock, schedule deliveries, track time spent from order to fulfillment and manage and minimize costs associated with the supply chain.

5. Customer Service Management

Many organizations take advantage of cloud ERP's remarkably strong customer service tools. With ERP, you can set up and manage off-site call centers, create and deploy customer satisfaction metrics, devise customer-centric policies and measure customer satisfaction. These capabilities ensure your team meets the needs and exceeds the expectations of customers.

6. Integration Capabilities

Cloud ERP provides powerful integration capabilities. While all ERP systems integrate into your existing structure in order to properly collect, analyze and administer data solutions, cloud-based systems are particularly valuable. They provide faster, more seamless integration, which ultimately leads to a more intuitive system, better workflow and improved collaboration processes.

7. Support

Another major advantage of cloud ERP solutions is the comprehensive tech support. With software in the cloud, business owners don't have to worry about updates, patches, improvements or troubleshooting. The ERP provider includes system maintenance in your product. By eliminating these concerns, cloud ERP provides a significantly more reliable work platform.

8. Materials Management

Materials management is a vital component of the manufacturing process. With ERP, you can easily determine supply and demand needs, which gives you the information you need to find and maintain proper materials balance and ensure your processes are smooth, efficient and cost-effective.

9. Manufacturing and Distribution

ERP's modules easily manage all facets of manufacturing and distribution. The system simplifies order management, invoicing, purchasing, product and inventory tracking and inventory control. It also allows you to schedule and manage manufacturing processes. This saves time, eliminates unnecessary staff hours and ultimately ensures a more productive environment.

With cloud ERP, you can streamline production, manage data and optimize all levels of your organization's performance. The system ensures efficiency, targets and strengthens weak areas

and ultimately gives you the information and tools you need to build a stronger business.

For most companies, the advantages often outweigh the disadvantages. The potential for totally streamlined business functions and boosts in productivity over the long-term makes finding the right ERP suite a worthwhile investment of time and resources.

Cloud ERP has been proven to reduce costs in many ways because it:

- Avoids upfront costs for all computing infrastructure such as hardware and data servers
- Reduces IT support services because IT support is provided by the data center
- Eliminates paying upfront for application software licenses in favor of a monthly fee
- Shrinks the cost of maintaining and supporting those applications since the cloud vendor handles the updates and upgrades

The most important benefits of Cloud ERP go beyond cost-savings and include:

- Paying only for the computing resources needed
- A fixed monthly rate so companies can use their cash on other business initiatives
- Taking advantage of Cloud ERP applications faster since installation of hardware and software on servers or user devices is not required
- The ability to adjust the amount of cloud service as a company's computing or storage needs fluctuate
- Enjoying the confidence that the data has been backed up and there is a disaster recovery plan
- Avoiding attacks on the company's server because the data is not stored locally, but in the cloud
- Accessing the system from anywhere makes it easy for a company to expand geographically since the Internet is everywhere and there is no need to implement hardware and software at remote locations

Scope of cloud ERP in SME :

SME has to analyze three perspectives in the ERP software on cloud that will ensure better and hassle free usage. The first perspective is

focused on Economical View which deals with financial issues as cost play the major role in decision making.

The second perspective is Technological which deals with technical evaluation of the software towards adoption of the software in the company. The third perspective alerts on People concerned with the effect that selection and adoption of ERP will have on the people within the organization and their adoptability towards the software.

The various areas of business process of SME in which the usage of cloud ERP can be implemented are as follows:

a) Cost Reduction: Traditional ERP is more complex in its structure and it can be implemented only after having the support of strong hardware infrastructure.

b) Reduced IT infrastructure: Since there is no need of heavy investment in hardware installation in all departments, the IT infrastructure cost is also reduced.

c) Operational cost: The cost incurred in maintaining the system infrastructure and the related software is also less, which increases the relevance of cloud ERP.

d) Data backup and Recovery : Assured backup of data and in case of data loss or tampering, efficient recovery should be possible.

e) Low IT Manpower : The IT manpower needed to maintain the ERP software goes down as it is the task of the vendor to manage the required infrastructure.

f) Availability (24X7): Readiness and accessibility. The services available on demand and 24X7 on the Internet

g) Platform Independence : The ERP software can be accessed at any location and compatible to the digital devices.

h) Data Security: The data can not be accessed by unauthorized persons on the network and within an organization.

Cloud ERP as a solution for SMEs in India:

The main constraint of Small and Medium level enterprises in India is the cost involved in production. Since the demand varies seasonally and there are fluctuations in price also in the

market the cost involved during the production is also critical.

Small and Medium Enterprises (SME) play an important role in the development of a country. There are around 26 million MSME units in India, of which 13 million are SMEs. SMEs contribute nearly 45% share of manufactured output, accounting for 40% in overall exports of the country and providing employment to about 32 million people.

The main issue regarding production function is lack of IT support in many business process areas of SME. So from the study what we can infer is that Cloud ERP can act as a miniature but still a strong solution for the problems faced by SMEs in India. The problems like lack of IT support in business process, Forecasting problems, Cost of production etc can be eliminated or at least reduced by the implementation of Cloud ERP. The main attraction is that majority of the features of traditional on-premise ERP are accommodated in cloud ERP that too at lower cost. The features included in Cloud ERP is limited but still it is largely helps many business processes which Indian SME units currently have. Thus cloud ERP can act as a solution tool to overcome production cost related and IT support related issues of Indian SME units.

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