Exploration Of ERP Execution And Growth Of Smes In AP

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Abstract: The study encompasses the ERP technology and its significance in the organisations of Andhra Pradesh. The advantages of ERP technology and the challenges that are faced in the implementation of ERP have been discussed in the study. The study also comprehends the disadvantages that ERP provides to the SMEs in Andhra Pradesh. The present status of ERP in SMEs of Andhra Pradesh has been discussed in the study. Key attributes related of the ERP and its implementation has been analysed in the study. The gap that exist between the different pieces of literature written in this context have been tried to be analysed. The impact of ERP on the SMEs productivity and its different aspects has also been incorporated in the study. The study has also tried to provide numerous ways through which the ERP can be smoothly adopted in the organisations of Andhra Pradesh. The ways through which the challenges can be mitigated regarding the implementation of ERP have also been conferred in the study.

Keywords: ERP, Implementation of ERP, Challenges, Incorporation techniques, Research Methods

1. INTRODUCTION

Enterprise resource planning refers to business software that incorporates the management of the organisation through the use of unsegregated applications which assist in managing the business and automating several tasks related to the official work. This comprises of the utilisation of technology, services and the human resources department. The study encompasses the usage and significance of ERP software and the ways in which ERP is incorporated in the organisation. The benefits and disadvantages that the ERP poses on the organisation has been discussed in the study. The use of ERP in small and medium enterprises in Andhra Pradesh has also been tried to be analysed. The study has also tried to analyse the gap that ERP software poses to the organisation and the ways through which these gaps can be overcome. The research methods have been used to get an insight into the software and the literature that have been published in accordance to it. The present status of ERP, implementation methods and the understanding of the key attributes of ERP has been comprehended in the study. An estimation of the firm performance and productivity that ERP provides has been discussed in the study.

ERP and SMEs

ERP is a software application that falls under the segment of enterprise application. This software has been designed to assist the large size businesses in their mundane and back office tasks. Applications that assist in managing the business procedures and leads to automation of the back office procedures along with the integration of human resources, services and technological aspects. According to Seethamraju (2015), the application is seen to be widely used in the organisations as it can perform actions such as planning, advancement, manufacturing, marketing under a single database and graphical user interface. Small and medium sized enterprises are seen to be implementing ERP software. The small businesses are seen to use the version of application which is lightweight and only customised to serve specific functions of the businesses. As stated in the works of Kilic et al. (2015), most of the SMEs are seen to incorporate ERP so that the older software can be replaced, or ERP applications can be utilised. SMEs are mainly seen to use this software to remove several accounting and other software and provide a single database for all purposes that are involved in everyday tasks.

ERP systems and their significance in SMEs in Andhra Pradesh

The government of Andhra Pradesh has incorporated ERP systems to ascertain transparency in its operations and provide more effectual transactions in their financial systems. This has paved a way for ERP systems to be implemented in operations of government that would lead to improvement of existing systems and provide accountability in every transaction that occurs within the government. According to Girish et al. (2015), the organisations in Andhra Pradesh, both large and small scales have also taken the initiative and started the implementation of ERP systems in order to improve their financial and overall business structures. The SMEs are indulging in adoption of ERP systems as the non-standard, misinterpreted and the disrupted flow of information through the organisations have led to greater losses to the organisations. The smaller ERP packages are being created with technology becoming less and less expensive. The organisations are seen to use the small sized ERP systems that suit their needs and minimises their efforts. As stated by Vadivelu et al. (2018), there are also some challenges that are faced in the implementation of these systems in the business. ERP provides a single database platform for all the activities of the organisations with increased efficiency. This would lead

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Advantages of ERP in an organisation

The first advantage that ERP software provides to an organisation is the increased effectuality of the organisation. The system minimises the need for inserting the information manually and obliterates the need for performing repetitive tasks. The software has also been seen to streamline the procedures of businesses that lead to increasing the efficiency of the information and departments of the organisations. The other advantage that this software poses is the increased gratification and targeting of the customers (Ram et al. 2014). As a result of streamlining and centralisation of the information, the sales and marketing team get an easy access to the information related to the customer. This assists in the creation of stronger relationships with the customers, both locally and internationally. The contact sector of ERP helps in ascertaining that the customers receive adequate information and the interaction related to the organisation is properly carried out. According to Peng and Gala (2014), data security is another concern that assists the organisation to maintain confidentiality of information. The security, accuracy, and preciseness related to the security of data are ensured through firewall implementation and other resources. ERP system also helps in improvement of the functions that occur within departments of the organisation. The hassle of several spreadsheets, emails and others are removed by the implementation of ERP software. The capabilities of reporting along the organisations are enhanced and the response to complicated requests is performed easily. In the views of Altamony et al. (2016), the software also assists in making the system flexible, robust and uncomplicated. This leads to responding adequately to the several needs of the organisation and also provides the businesses an advantage to easily adopt different technologies and changes as per the needs of the market.

Disadvantages of ERP in an organisation

The first disadvantage posed by the ERP system is the increased cost of installation of the system. The consultants and experts that are involved in the installation of the system are seen to take more than half of the budget of the system, which incurs heavy expenses on the organisation. As stated by Erturk and Arora (2017), employee training is another aspect as the employees need to be trained which requires some cost. The complete success of the system depends on the employee’s knowledge of the system and experience. The sharing of information between departments of the organisation is slower which leads to decreasing the effectuality of the organisation. The complex usage of the system leads to provision of special training that creates a barrier for the employees. Disruptions in the recruitment of administrators who are not experienced regarding ERP systems can lead to poor services and changes in business practices. This leads to inadequate utilisation and efficiency of the ERP system. The changes needed in the system and services are not visible at the time of implementation, but these take long amount of time to be detectable. The deployment of the ERP systems takes a large amount of time and may take up to 3 years to be completely functional (Salim et al. 2015). The customisations that are needed in the ERP systems may be higher, but this also creates a chance for the project to get slower and have difficulty in up gradation. There might be several indirect costs that would be needed in the ERP projects such as infrastructural costs, WAN costs and others. The transfer of data from the older systems to the new ERP system is difficult to be achieved and also take a lot of expenditure to be consumed.
Identification of the present status of ERP implementation in SMEs

Andhra Pradesh government is trying to improve and increase the enactment of ERP businesses in the organisation. The government is trying to encourage the ERP systems by placing emphasis on the vendors to produce ERP systems that can support SMEs. This is being done to decrease the price of ERP software so that the people can afford it and their workforce can handle the new system that has been incorporated. According to Mishra (2016), several policies by Indian government has been introduced that would lead to enhancing the growth of small and medium enterprises through the process of encouraging a clustered industrial advancement. The ERP systems have not been successful in several organisations of Andhra Pradesh. It has been seen that the rate of failure of ERP systems is approximately 40%, which is a huge number as per the context of SMEs (Saini et al. 2014). Despite this fact, the SMEs of Andhra Pradesh are still trying to incorporate the system into their mainstream to improve and enhance their processes. The risks that are created in the ERP systems in SMEs of Andhra Pradesh are primarily due to the interdependency of the procedures on each other such as relational databases, reengineering and others. As stated by Jayaram et al. (2014), the change management procedures and models are not properly implemented in the SMEs of Andhra Pradesh and they try to recruit new employees for the system, which decreases the motivation of the existing employees. This leads to decreasing the productivity of the employees. There are organisations such as Telco, Cadburys, Rallis and others that have already adopted the system, but these fall under the segment of first-tier organisations. As opined by Kaur et al. (2016), the SMEs, despite risk aversion are eager to execute the system into their businesses as they want to handle the pressure from their competitions such as MNCs. Peer pressure is also a reason that is leading SMEs to implement this system. Accumal between large organisations and SMEs are increased through ERP systems. This is the main reason that the SMEs are adopting ERP.

Identification and estimation of the key attributes for ERP implementation in SMEs

SMEs are known to have lesser budget and physical as well as financial constraints. Due to this aspect of the SMEs, several systems have been created by taking care of the size and other constraints of the SMEs. The ERP systems require large amount of time, resources and commitment from the organisation in which they are implemented. The SMEs have a lack of these resources, which create hindrance in the implementation of the system in SMEs. As commented by Haddara (2014), the ERP systems need adequate workforce, training and the commitment from the upper hierarchy of the business. These constraints are also seen to play a larger role if the customisation of the system is needed. The other key attribute of ERP systems is the large amount of time that it requires for customisation and implementation. This time which is invested in the ERP system may hamper the business of SMEs as they have a smaller workforce and other resources. The SMEs are seen to prefer ERP systems at a lower price which can solve their business issues in a short amount of time but it becomes troublesome for the vendors to provide customised ERPs at a lower price, which creates a barrier for the SMEs. As stated by Helo et al. (2014), to meet the demands of the SMEs, several vendors decrease the size of ERP and provide customisations as required by the businesses. This cuts down the price and time required for implementation of ERP system. Less complicated and pre-configured systems are being created by the vendors to meet the demands of SMEs. Modular design of an ERP is a key attribute of the system. As provided in the works of Klos and Trebiina (2014), the modular design helps in incorporation of various functions such as accounting, distribution and others. The transparency in financial prospects would be provided by the SMEs, which would assist in improving the services and efficiency of the organisation. The most significant aspect involved in implementation of an ERP system is the centralised database which is provided by it. The database leads to lesser redundancy and risks of inconsistent information in the system. As stated by Ali and Cullinane (2014), several vendors are seen to provide finance services to the organisations that make the software and implementation affordable to the organisations. Monthly payments provided by vendors ease the procedure of implementation of ERP systems. The vendors are also seen to have fast tracking options that assist in reducing the increased pricing involved in the process and increased time and effort. The vendors have also seen to make the software available in such a way that they are ready to be used in a few weeks rather than a time of several years. Identification and impact of ERP implementation on firm performance through productivityERP systems are stated as systems that tend to increase the cooperation among several groups and departments of the organisation. This assists the organisation to take accountability over each of its actions. Several organisations are seen to have implemented ERP systems whereas several systems have not implemented these systems. According to Qrunfleh and Tarafdar (2014), there are several sectors that have found to have improved performance whereas some sectors are reported to have not favoured by the ERP systems. The first benefit that the system provides is the reduced price of the regular activities. The people who are employed to perform mundane tasks can be used to address other important tasks of the organisation. This leads to decreasing the cost involved and the workforce required to perform everyday jobs that are repetitive in nature. As stated by Nijhia and Mwirigi (2014), ERP allows the organisation to integrate their opportunities of combining every procedure into a single platform and also enhancing every field of the organisation. This leads to easing the procedure of human resources, accounting and others, which, in turn, leads to improving the workflow and productivity of the organisations in Andhra Pradesh. The production levels of the organisations are also seen to increase as a result of implementation of ERP systems. Transparency is regarded as the most accentuating feature of the system. The costing and accountancy are seen to be more efficient as a result of ERP software (Rajan and Baral, 2015). The costs of the organisations are seen to be more efficiently managed and the complete organisation is effectively managed. The other striking feature that ERP systems produce ERP systems that can support SMEs.
systems provide to the SMEs is the abundance of information that is available on the system. This availability of information assists the organisations to improve and retrieve real-time information which leads to taking accurate information at real-time. The financial data processing is increased through the ERP systems. The financial capability and the long and short term goals can be easily implemented through this system. As opined by Galy and Sauceda (2014), tracking and monitoring is an important aspect of strategic planning and organisational growth in the organisation. The ERP systems allow tracking the progress of each activity and function, which helps to understand the pace of the organisations and the steps they need to take to enhance productivity. The investments that are needed to be made related to employees can also be seen through tracking of the activities and progress of the employees. The optimal utilisation of the organisation’s financial strength is ascertained by the different functions of ERP systems. In the words of Lu et al. (2014), the greatest issue that an organisation can face as a result of implementation is the long amount of time that is needed. This is seen to disrupt the organisation’s regular activities. There are several organisations that are not sure of the objectives that they need to achieve in the long term. A change in the long term goals can lead to customisation in the ERP system software. This can lead to incurring high expenditure to the organisation which can disrupt the finance of SMEs as their financial capability is low. Gap in previous literature The previous pieces of literature that have been mentioned written have not been able to implicate the ways through which the ERP implementation can be done easily in the SMEs of Andhra Pradesh. As seen in the work by Deshmukh et al. (2015), the literature has not been able to provide a clear insight on the needs of SMEs, specifically in Andhra Pradesh. The types of literature have been successful in depicting the challenges that are faced by the organisations to implement ERP, but proper suggestions have not been provided in the study regarding the ways these can be overcome by the SMEs. In the work of Gupta et al. (2018), the literature has not been able to suggest changes and steps taken by the government to improve the implementation and the ways the failure rate of the ERPs can be reduced. Research methods to be used for overcoming the gaps in previous literature The research methods that have been used in the study to overcome the gaps in previous literature are the primary and secondary research methods. Primary research method comprises of collection of raw data regarding the topic. The secondary research method aims to find the findings and analysis from the available research data that has already been collected by several researchers. The primary research method would include quantitative analysis and the secondary method would comprise of qualitative analysis (McCusker and Gunaydin, 2015). The quantitative analysis would assist in understanding the current state of the ERP implementation in SMEs of Andhra Pradesh. This would comprise of surveys and interviews from the employees that are in the higher hierarchy of the organisation. This would help in understanding the problems and ways that they think might help in implementing the technology of ERP in their SMEs. The secondary analysis would be conducted through researching the articles, reports, journals and websites related to ERP implementation. This would assist in understanding the ways in which the technology can be made more feasible for SMEs in Andhra Pradesh. The articles would also assist in understanding the SMEs needs and requirements. Ways to overcome the gap The primary research that would be conducted in the study would assist in understanding the viewpoints of the employees and the higher hierarchy employees regarding implementation of ERP system. The first way to overcome the gap that have been found in the literature is to understand the challenges that employees face in the implementation of ERP systems. The administrative views of SMEs would help to get an insight into the problems faced by them in implementing the system. This would assist in capturing the areas that would be needed to improve to overcome the gap. The first step that can be taken is to understand the SMEs in Andhra Pradesh and their needs. The government would then be needed to establish relations with the best vendors of ERP systems. The government would then be required to go through the analysis and needs of SMEs and order the vendors to produce systems that meet the needs. Only the systems that meet the needs of SMEs would be needed to be made. This would lead to lowering the prices of the systems and also lesser customisation would be needed, which means less financial expenditure for the organisations. This would help most of the SMEs to afford the system. A thorough research through articles, journals and others would assist in understanding the reason these systems fail. These reasons would then be tried to overcome through proper strategic planning. The system that would be made should not take years to implement. The vendors would be advised to make systems in ways that they can be used and implemented within weeks. This would decrease the other operational losses that are caused by implementing ERP. Training needs to be provided to the existing employees of SMEs, so that their productivity, motivation and dedication regarding the organisation is not decreased. Ways to properly implement ERP in SMEs of Andhra Pradesh ERP has seen to provide solutions to various problems and functions of the organisation. The main issue in ERP is to recognise the problems that the ERP system would solve in the organisation. The clear identification of the objectives needs to be understood before implementing the system. The Key Performance Indicators (KPIs) are evaluated in order to understand the problems that are faced by the small and medium enterprises in Andhra Pradesh. This need to be clarified before the implementation as the cost of customisation of ERP systems is very high. As stated by Kiran and Reddy (2019), any interventions in the systems later can lead to incurring losses by the organisations as they would be investing a large amount of their finance in the system. The future projections of the organisations are also needed to be rectified so that the scalability and problem identification is clearly done. The main aim of the systems in small and medium business enterprises can range from accountability in financial transactions, organic expansion, increasing financial viability and others. It has been seen that 62% of the ERP implementations take more time to implement and 75% of the total projects involve larger budget than expected. The ERP essential list needs to be generated as per the budget and time of the project. The organisations that are situated in Andhra Pradesh need……
to invest a great amount of time for researching the adequate systems for them and the vendors that would prove beneficial for the system (Bhattacharya and Chellasamy, 2016). The customisation of ERP systems are expensive so the organisations of Andhra Pradesh need to be clear about the customisations they would need. The future requirements of the organisations are also needed to be understood by the organisation when customising the system. The customers are seen to prefer cloud options and SaaS ERP over traditional ERP systems. These aspects need to be understood by the organisation before implementation. As stated by Girish et al. (2015), an analysis of the significant data needs to be made by the organisation so that the software is not burdened with unnecessary data. Infrastructural changes are required by the organisation for adequate implementation. The tools and infrastructure pave the way for successful utilisation of ERP software. Proper tools and infrastructural changes are needed to be made by the SMEs so that they fully utilise the software. The employees working in SMEs of Andhra Pradesh need to be aware of the changes and they are needed to be provided proper training for the software (Gummadi, 2015). This would lead to proper adjustments of employees to the system without compromising their productivity and motivation towards the organisation.

CONCLUSION

ERP is a significant and beneficial application that assists organisations to work with more productivity and ease their automation tasks. It is primarily a management software that encompasses functions such as marketing, accounting and others. This decreases the workload of mundane tasks in the organisations and reduces the cost involved in the repetitive tasks of the organisation. The government of Andhra Pradesh has been trying to incorporate ERP systems in businesses. The businesses and SMEs are also eager to adopt the technology due to its advantages, but some challenges make it difficult. ERP tends to increase the efficiency of the organisation and making stronger relationships with the customers. Data security is also ensured through ERP systems and a single platform is provided for several activities. The cost involved in implementation is high and time taken to implement is also large which creates a challenge for SMEs as they are not financially and employee wise strong. Several activities are affected by its implementation in SMEs. The primary and secondary research technique has helped to understand the gaps in literature and the ways these gaps can be overcome.

REFERENCES


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