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## An Era of Cloud ERP: Significant Differentiation with Premise ERP

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*Abstract-* This paper is the outcome of research in ERP solutions. It talks about how changing in technology is affecting the overall growth of IT industry specifically ERP solution providers. It also gives insight on how different types of organizations are adapting to the change in technology for their betterment. The insights are based on the thorough analysis of the past and current situation in the ERP market. It tries to differentiate cloud and on-premise ERP solution on various parameters. This document also gives the answer to the future of this market segment.

*Index-terms:* cloud ERP, premise ERP.

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# An Era of Cloud ERP: Significant Differentiation with Premise ERP

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## I. INTRODUCTION

The birth of Cloud Computing opened up many doors for businesses to cut their cost in investing for computing resources. Cloud industry has grown remarkably since then worldwide Public IT Cloud Service Revenue in 2018 is predicted to be \$127B [1]. So the question is whether this transformation of moving ERP from the Organization's premise to the Cloud sustain or not.

## II. THE CURRENT SCENARIO

There is a race among companies to move to cloud and why not, it has been providing great results. Now as there is increase in potential customers, the Cloud ERP providers are also increasing. This situation is similar to current E-commerce industry wherein with the increase of internet users there has been an increase in terms of the number of players in the market. We are moving to perfect competition kind of a market. In 2015 the investment in On-premise ERP declined over 30%. This speaks volumes of what the current scenario is and where the future is heading. Customer satisfaction becoming the main goal of most of the companies there is a need to make the process of production to delivery more and more quick. Current

On-premise solutions are not helping this cause. Thus companies are reaching out to specialized ERP providers. Finance, Accounting, Sales, Production are major areas where companies are looking for cloud ERP's[2].

## III. SME'S PERSPECTIVE

Small and medium sized enterprises (SME's) are gaining most out of Cloud ERP. First and foremost they don't have enough capital to invest in On-premise ERP because they them self are not sure about their existence. They are more focused on their core business processes. In the beginning cloud providers believed their market was large enterprises (LE's) but most of the LE's had enough money and support staff to maintain On Premise ERP they never looked for other solutions. Moreover LE's were not ready to have their data on the third party's premises. This led to realization of ERP providers to focus on SME's. Considering Indian market, with Startup India program lots of SME's have developed. This will just cause an increase in demand for cloud ERP solutions. Almost 60% of Indian SME's have already implemented Cloud ERP and market is only growing. Thus Cloud ERP is expected to grow in SME's segment [3].

## IV. LONG TERM VIEW

Microsoft scaled up its R&D in cloud and spent 90% of R&D budget on cloud research in the year 2011. Microsoft has always been a company which has an eye on the future and keeps on innovating. This trend kept on following and they became 4th largest company to spend on cloud. Google and Amazon followed the footsteps of Microsoft and they also came up in the rankings in terms of spending on R&D in the field of cloud. Following is a table which shows the ranking of these top cloud provider companies [4].

Table 1: Ranking in Terms of Spending on R &D in Cloud

Year	Microsoft	Google	Amazon
2013	5	12	22
2014	4	9	14
2015	4	6	7

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Now this spending is for a reason, they see a huge opportunity in terms of business. This rise in the market of cloud services is also observed by other major companies and they are also trying to catch the same train which

Microsoft did. This situation will prove to be a sea of opportunity for other player wanting to enter the cloud market [5].

## V. DECLINE OF ON-PREMISE ERP

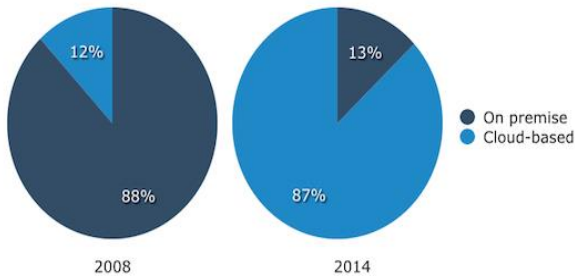


Figure 1: Decline of On-Premise ERP

According to Softwareadvice.com there has been a considerable change in deployment preference of various ERP solutions. Organizations are willing to deploy cloud based ERP solutions. There has been a great decline in demand for on-premise ERP solutions. This change has occurred within the gap of four years. This trend will sustain for coming years. This decline is mainly because organizations preferring cloud solutions over on-premise solutions. There is also lack of innovation in the field of on-premise solutions

## VI. THE CONCERN

History says no change in IT has been smooth every new technology or concept has its own ups and downs. So what is the concern with cloud ERP? Well the concern with cloud ERP is the Security. As stated earlier LE's were concerned about their data going to the third party, because of this reason cloud ERP was not successful in that segment of the industry. SME's a small scale industries they are not much worried about their data but what if any one of it becomes a big company? Will it trust the cloud ERP vendor? These questions will be answered in the coming future. But there is a huge speculation that security concerns may hamper the growth of Cloud ERP providers.

## VII. THE FUTURE

As the cloud ERP market takes its steps towards Perfect competition market, the only beneficiary from this kind of situation will be the customers. The law of demand and price in perfect competition says that as the demand curve would be elastic. Customers would have many options to choose from and the ERP

providers would fight for the market share. Now the fight for the market share would be based on price of the ERP solution unless some provider comes up with a ERP solution which has some unique feature. Now this will only disrupt the market and small players in the market would merge or get acquired by the big players in the ERP industry. The same story will repeat as in the case of current E-commerce industry where small players are being acquired by companies like flipkart and amazon. The LE's will not be affected by this change caused in ERP industry because they will keep using their On-premise ERP.

## VIII. CONCLUSION

SME's are the major contributors to cloud ERP and will continue to be the same. The only difference is now they have less choice while in future they will dictate terms and they will be the price makers. The growth of cloud ERP will depend on how Start-ups and other SME's grow further. The economic situation of the world will also play an important role. With Cloud ERP provider there is a need to innovate and attract customers towards them to increase the market share. On premise ERP will not become extinct LE's will be their biggest market.

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