



**ENTERPRISE
APPLICATIONS**

REBUILDING FOR THE DIGITAL AGE



 **HEENA JHINGAN**

CIOs are increasingly focusing on applications that are customer-centric and enabled for mobility and the cloud



The enterprise applications market in India is growing steadily in terms of overall size and penetration across various sectors. As per IDC, the market was pegged at \$400 million in 2013 and is expected to grow at an average of about 12.8% till 2016.

According to Manoj Khilnani, Country Marketing Head - Enterprise, BlackBerry India, despite economic uncertainties, large organizations and mid-size companies continued to steadily increase their software investments in 2013 so as to respond in time to the changing market dynamics and enhance their competitive edge. Large organizations continued to be

the primary drivers of enterprise application spending. In 2014, mobile enterprise applications will emerge as the force that will drive enterprise mobility into the future, creating new ways of working and transforming existing business processes.

As analyst firm Gartner calls it, the 'nexus of four forces' (the convergence and mutual reinforcement of four interdependent trends social interaction, mobility, cloud, and information) will have a significant impact on the growth of the applications market as well.

Till a few years back, enterprise solutions were marketed in the areas of

enterprise resource planning (ERP), customer relationship management (CRM), human capital management (HCM) and supply chain management (SCM) applications with niche vendors providing these solutions. However, trends like consumerization of IT and enterprises embracing mobility and cloud, the vendors are now compelled to offer more comprehensive solutions that can be seamlessly integrated with security and mobile device management pieces.

Rajamani Srinivasan, Lead MD office, SAP India makes interesting observations about the way enterprise



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Vice President, Application Business,
Oracle India

software adoption has shaped up in India. He says that the market has shown significant growth in the adoption of technology. Indian enterprises too are accelerating the adoption of technologies in globally emerging areas like mobility, in-memory computing and analytics, which increase the velocity of doing business.

"While enterprise software has been deployed in verticals such as consumer packaged goods, retail and automobiles, it is the newer verticals that are fueling growth for the segment, including government, healthcare, education, agro-based industries, e-commerce and telecom. At this point of time, one sector which is investing a lot in enterprise software is the government, be it municipalities or state utilities, there is a heavy focus on enterprise apps," he notes.

Cloud: beyond productivity

One of the most disrupting technologies for the industry has been cloud. As per software vendor SAP that claims to be the world's second largest enterprise cloud business, it has the largest subscriber base with more than 35 million cloud users worldwide and over one million in APJ.

Srinivasan of SAP says, "As a part of our strategy, all of SAP core offerings are now converging to run on one unified SAP HANA Cloud Platform. We have seen a triple digit growth in our cloud business in India in 2013 and our aspirations are much higher."

At Zoho, the enterprise cloud application emerged as one of the fastest growing divisions in 2013. "Some enterprises want to migrate from their existing non-cloud applications while others want to adopt cloud enterprise applications for their new projects, especially for the sales, marketing and support software needs," informs Hyther Nizam, Vice President, Product Management, Zoho.

Industry experts say, adoption of cloud computing as a business model is definitely growing and happening in line-of-business functions like HR, procurement, sales and marketing etc. Organizations are much more open to

cloud solutions here, apart from the infrastructure side of things. This will be one of the biggest growth drivers in 2014 and beyond.

Ramesh Babu, Chief Delivery Officer & Business Head - ERP on Cloud, Ramco Systems Limited, agrees, saying that there has definitely been a surge in demand for cloud applications from enterprises.

He explains, "Large enterprises that are already running on an existing legacy systems are now eyeing the cloud space, to minimize their increasing IT expenditure, both in terms of software and hardware. They now prefer to opt for the cloud for additional modules to co-exist with their existing applications. For instance, large enterprises which are already tied to a legacy ERP choose to go the cloud way when they set up new subsidiaries or need to connect their extended ecosystem. This trend is now commonly known as 2-tier ERP deployment. The vendors continue to invest in product development bringing out newer solutions on cloud like dealer management solution (DMS) helps organizations connect their network of suppliers and vendors with a common ERP."

Saying industry is definitely seeing a critical mass building around adoption of cloud-based enterprise applications, Sunil Padmanabh, Research Director at Gartner India, explains that all these years the Indian enterprises needed solutions that were simple and customizable, which is now possible through cloud. "So much so that now rival vendors can co-exist in a system providing different components of a solution, for instance an enterprise can be using payroll management from SAP and another HCM component from another vendor. The enterprises now evaluate not just best of breed, but also best in class solutions."

So, when PSUs like Bharat Petroleum start relying on cloud for things like talent management, it is a clear indication, that cloud based applications are moving beyond pilot efforts.

"In fact Indian CIOs and CFOs are getting more familiarized with SaaS,



Our workflows can be accessed on employee owned devices, and are controlled by authentication.

Vipin Kumar,
Group CIO, Escorts



Explosion in the number of devices, ubiquity of broadband and consumerization of IT are shifting the balance in software purchasing.

Ramesh Babu,
Chief Delivery Officer & Business
Head - ERP on Cloud, Ramco Systems



THE EXPLOSION IN THE NUMBER OF MOBILE DEVICES, THE UBIQUITY OF BROADBAND CONNECTIVITY AND THE CONSUMERIZATION OF IT ARE SHIFTING THE BALANCE IN ENTERPRISE SOFTWARE PURCHASING FROM THE SOFTWARE VENDOR TO THE INDIVIDUAL USER

impressed by the ways it has shrunk deployment time from months and years to a matter of few hours or weeks," Padmanabh adds.

Another trend that the industry is witnessing in this space is that organizations are looking at revamping their CRM. The adoption of CRM apps is much faster in both B2B and B2C segments.

"In B2B, organizations want to use CRM to connect with their dealers and distributors to bring them on one common value chain. While in B2C, telecom, consumer products, media and retail are actively looking at CRM adoption," says Srinivasan of SAP

Says Sunil Jose, Vice President, Application Business, Oracle India, "CRM is now a matter of greater strategic

planning, especially in the context of digital landscape in the world of Internet of things where social integration becomes one of the differentiators here."

Research firm IDC predicts that social collaboration software is set to grow by 40% until 2016. According to IDC, companies will increasingly want to integrate and even embed social software into all enterprise applications, so it is essential for vendors to provide open APIs and capabilities to put social software into the enterprise workflow.

Explaining that social is emerging as the new consumer channel, Padmanabh says that enterprises are focusing on strategies on having structured, meaningful interpretation from these channels. For this the integration has to be done effectively.

However, it will still take two to three years for social to mature. "It in fact will be the last of the four forces to mature and will heavily depend on cloud and mobile for its growth. Cloud is an important vehicle for delivery of social mechanism. Now that cloud has somewhat matured, the next year will be focused on building mobile capabilities and leveraging information."

All said and done, inhibitions about cloud and security concerns around it are gradually diminishing, not disappearing though.

In the midst of a massive transformation with the realities of cloud computing, penetration of mobile technologies along with BYOD (Bring your own device) schemes and with enterprise software becoming more and more collaborative with the external world, the cloud vendors offering public cloud, will be forced to look at stringent certification processes on their data centers and get certified to ensure fool proof security, while private cloud operators will be forced to adopt similar steps to provide confidence to their customers. BYOD is seen as a trend even with Indian customers and there is a need for these organizations to implement device management and security management solutions that can centrally monitor and control the software downloads and protect data.

Mobile & analytics

Babu of Ramco Systems reasons, the explosion in the number of mobile devices, the ubiquity of broadband connectivity and the consumerization of IT are shifting the balance in enterprise software purchasing from the software vendor to the individual user. These trends are forcing software companies to change nearly everything—from the way they develop products to how they price, sell, deliver and service them.

Last year, India became the third largest smartphone market after US and China. This clearly brings higher influx of smartphones in both consumer and enterprise space (BYOD). With increased inflow of devices, organizations have started to look at making their enterprise applications available on multiple

ERP: KEY FOR E-GOVERNANCE



According to Gartner, ERP in the government sector in emerging Asia-Pacific countries is on a growth path, slated to grow at 17% from 2013 through 2017.

Gartner estimates that approximately 90% of the government organizations have deployed an ERP system, and that over 70% of these deployments are not state-of-the-art ERP systems. The challenges in these deployments continue to be web-enablement, legacy integration complexities, extensive customization, change management issues, country-specific localization and poor end-user adoption. All these have led to limited ERP value realization and delayed the next level of ERP innovation required to establish a strong ERP foundation for e-governance.

Gartner's discussions with government organizations in emerging APAC countries have revealed that, when ERP is implemented effectively, government

organizations can potentially save 25% to 40% on delivery time for deploying citizen services.

Recommendations

- Use pace-layered application strategy to assess the maturity of business processes and ERP systems to support e-government/ e-governance and to build robust change management processes.
- Incorporate the impact of Nexus of Forces (mobile, cloud, social, information) in your ERP strategy.
- Select ERP vendors and system integrators that have proven credentials in providing solutions and services to government organizations/agencies.
- Evaluate whether shared services will lower administrative costs and achieve economies of scale.



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Murli Mohan,
General Manager,
Dell Software Group



The thrust on building customer-centric applications with usability at the core will surge ahead in 2014.

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platforms and this provides great opportunity for enterprise developers. Gartner projects that by 2017, 25 % of enterprises will have an enterprise app store for managing corporate-sanctioned apps on PCs and mobile devices.

In the year ahead, Mobile ERP will see a surge in demand. This can be attributed to two major factors — increasing number of new-age mobile workforce and demand for service improvement and better interaction with customers. Already, fully functional ERP and HCM offerings on mobiles and tablets are available in the market.

Vipin Kumar, Group CIO, Escorts, believes mobile technology has completely changed the way blue collared employees in an enterprise were treated. "All our workflows are mobile enabled and can be accessed on employee owned devices. These workflows are controlled by authentication and employee profiling. This has made the lives of employees simpler; they can access information and get approvals on the go—all this in a secure manner."

While technologies play their role, information forms the fulcrum around which everything revolves. The industry's focus is on leveraging the information for enhancing customer experience.

The age of the customers is forcing firms to redefine how they engage with digitally empowered customers. According to Forrester, 87% of Indian CIOs say that addressing customers' rising expectations and improving satisfaction is a high or critical priority. For this, CIOs must shift their organizations' focus to target the customer experience, altering governance processes, job descriptions and IT performance metrics.

The research agency also finds that customer engagement will drive Business Intelligence and analytics investments. About two-thirds of Indian CIOs plan to increase spending on business intelligence and real-time customer and business analytics. Indian companies must understand rapidly changing customer behavior to better win, serve, and retain customers — but CIOs must focus on ROI and link spending to clearly defined business outcomes.

Murli Mohan, General Manager, Dell Software Group, says, "Big data is increasingly playing an important role in various verticals such as automobile, retail, government, banking and financial services and telecommunication, vendors see a huge opportunity to enhance their offerings by being mobile enabled, scalable solutions and increase local support to drive their own growth which reflects in the industry's growth as well."

The CIOs are now harnessing the information for predictive analysis and to further develop customer loyalty and other engagement strategies, Jose says.

Padmanabh says going forward, industry will see greater integration between different systems, and for example, ERP-CRM integration delivered through cloud can give a complete view of an organization's order to cash and procurement to payment cycles and hence have a positive impact in company's topline and bottomline.

Going forward

In midst of the mega and micro trends, Mehul Doshi, Country Manager - Servers, Fujitsu India, observes the crux of the matter is that CIOs are looking at solutions that offer high scalability, real time data analysis, flexibility, end to end visibility, last

but not the least operational excellence. "Automation, customization and optimized resource allocation is what they primarily look at while picking products.

So, far, enterprise apps have played and will continue to play vital role in enhancement of enterprise mobility. In 2013, awareness about enterprise apps was still limited and organizations were looking at deploying standard apps. However, in 2014 the requirements of organization will become more specific and clear as they start taking decisions around MDM solutions. Interestingly, IDC finds that by 2016, 20 percent of enterprise bring your own device (BYOD) programs will fail due to enterprise deployment of mobile device management (MDM) measures that are too restrictive.

Enterprises will focus on having applications that are exclusively based on their requirements. Customized coded enterprise-apps will result in increased work efficiency of employees. In addition, well designed business-to-consumer apps will also deliver a great user experience to clients. Overall, enterprise-focused app development is going to get bigger in 2014. At the same time, industry will see enterprises adopting and securing the most popular productivity apps for internal use.

"In 2014, the cloud adoption trend is expected to continue with enterprises looking for applications with in-built analytics and mobile access. The thrust on building customer-centric applications with usability at the core will surge ahead in the year to come. 2014 will see more of user-centric technologies gaining center-stage, such as mobility, gamifications and social media integration," says Khilnani.

Though currently more number of applications are server aided, in the near future, more and more applications will move to the web. To illustrate further, the applications will be supported on the web browser enabling easier management and productivity across multiple platform of devices. As per Gartner predictions, improved JavaScript performance will begin to push HTML5 and the browser as a mainstream enterprise application development environment through 2014. The developer focus will be on creating expanded user interface models including



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richer voice and video that can connect people in new and innovative ways.

The industry will also start seeing enterprises adopting more applications that help improve employee productivity. The next evolution will be in the end-user experience not restricted to mobility like email and social media, but applications in the areas of ERP, CRM, SCM, sales force automation, unified communication and billing. With increasing requirements for security in instant messaging, enterprises will also start evaluating secured instant messaging options restricted for work use.

The applications of the past focused primarily on function rather than the form or design language. There will be increase in intuitive business applications, which will be able to run on multiple devices and platforms. Finally, as more companies adopt cloud based offerings, integration and compatibility become important factors. There will be more focus on developing applications which can integrate with other applications and services.

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