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ENTERPRISE MOBILITY

Building Tomorrow's Enterprise





Executive Summary

1.	Enterprise mobility helps organisations increase efficiency and enhance brand presence <ul style="list-style-type: none">• Enterprises are facing challenges in improving asset productivity, employee satisfaction and profit margins• Device ubiquity provides access to a wider set of customers for creating engaging and enriching interactions• Enterprises are launching mobile applications to increase brand recognition by way of presence on various application stores• Enterprises can now build solutions for those at the bottom of the pyramid
2.	In the Post digital era, enterprises expect round-the-clock decision making <ul style="list-style-type: none">• Mere availability of information on various aspects of the enterprise is not sufficient anymore• Connectivity and ability to act on the information regardless of time or location has become a critical need for enterprises• Mobility solutions are serving this need• Various types of stakeholders have differing expectations from 'Mobility' solutions
3.	Consumerisation of IT is driving Enterprise mobility <ul style="list-style-type: none">• Explosion of connected devices in the consumer space has spurred demand for such solutions in the enterprise space• Employees across many more line functions and levels are getting connected due to availability of cheaper devices, often owned by the employee
4.	Smaller players have captured strong positions in the Enterprise mobility landscape <ul style="list-style-type: none">• Small, focused players have the first mover advantage, capturing a significant proportion of the value• Traditional IT players were slow to react - now they are finding their feet with multiple alliances and acquisitions taking place• Consulting organisations are also making a play, adding application development capabilities to offer more holistic solutions• Enterprises continue to look for a player with end-to-end capabilities



5.	Enterprise mobility would be a USD 140 billion opportunity by 2020
	<ul style="list-style-type: none">• The market is expected to reach around USD 140 billion by 2020, growing at a CAGR of ~15 per cent• Consulting, application development, and security are expected to be the high growth opportunities• North America and the EU markets are expected to account for around 70 per cent of the opportunity by 2020• Financial Services – Banking and Insurance along with Retail have been the leading adopters of enterprise mobility solutions
6.	Enterprises are demanding capex-light commercial models from providers
	<ul style="list-style-type: none">• Service providers should adopt revenue sharing and transaction-based commercial models aimed at reducing initial investment• IT players should adopt product approach in place of project approach for developing and supporting enterprise mobility solutions• Players would have to rely on alliances and acquisitions for improving the breadth of offerings and building capabilities quickly
7.	Indian players should build enterprise mobility capabilities quickly through acquisitions/alliances
	<ul style="list-style-type: none">• Players need to build capabilities quickly – as market consolidates, opportunities for acquiring/forming alliances would decrease• NASSCOM and the government need to act as enablers, helping with the unmet needs of the players; acting quickly to ensure that India attains pre-eminence in this space

Enterprise mobility – A new paradigm for growth

Enterprise Mobility (EM) can be defined as the use of mobile technologies by an enterprise to create an on-demand channel for communicating and remaining connected with suppliers, partners, employees, or customers irrespective of their location.

In today's challenging times, enterprises are always on the lookout for ways to reduce their costs and gain market share. Enterprise mobility helps organisations meet their need for improving operational efficiencies and employee productivity, and opening new avenues for revenue growth through product innovations. EM also meets the organisations need to empower their customers through engaging applications and improved services quality, and providing solutions for those at the bottom of the pyramid.

Various stakeholders, though, have their own perspective of the EM concept. From the viewpoint of the enterprise, it refers to an ability to communicate with its customers, suppliers, and employees, allowing them access to the IT systems and processes that were previously much more restricted in the access





that they provided to various classes of users. From EM vendor's perspective, it is aimed at either extending the existing IT systems of the enterprise to a mobile state, or developing new solutions aimed at improving enterprise performance which would not be possible on any channel other than mobile. Finally, from an end user's perspective, it is a means to stay connected and to communicate quickly and effectively with the enterprise to either add flexibility to their work schedule, or to take advantage of a host of 24x7 services depending on whether the users are internal or external.

Enterprise mobility as a concept and as a set of solutions is not new and has been in existence for many years. However, these solutions were developed for specialised use cases. In addition, the underlying systems relied more on closed, highly customised solutions with little or no interoperability with other such systems. In the 'post digital' scenario, this has changed significantly. EM solutions are no longer restricted to specialised use cases and are widely accessible across the enterprise, cutting across line functions and various hierarchy levels.

EM has seen a substantial push due to various consumer-led technologies. The ubiquity of powerful smartphones and tablets that have advanced features for connectivity, productivity or scheduling, with a host of sensors such as GPS, camera, NFC amongst others, at mainstream price points has been one of the main drivers for EM. The adoption of such devices in enterprises, starting with the C-Suite, and extending downwards has led to an increased demand for new EM solutions. This has pushed enterprises to look for specialist service providers who can meet this demand. In addition, the availability of high speed connectivity has led to even data-intensive applications such as unified messaging, real-time telematics, and analytics becoming accessible over the mobile medium, driving innovation from developers in this space.

Significant opportunities for new players in the near-term

Due to consumer technology-led evolution of enterprise mobility, there are parallels between the solution development that has taken place in the enterprise and the consumer spaces. The nascent nature of the market and the fast evolving mobile technologies led to the initial opportunity being taken up by smaller specialist organisations operating in the mobile space, such as Appcelerator, Sencha and Kony. Larger players offering traditional IT services were largely caught off-guard. In addition, smaller more nimble players like Ivy Mobility and Geodesic were able to react to the changing requirements and grew as the market evolved. This trend is expected to continue in the near-term, as larger players begin to operationalise their strategies.

Some large players have already responded by undertaking a host of acquisitions to quickly add capabilities. Some notable acquisitions are those of Sybase and Syclo by SAP.

Thus, as the EM space matures and becomes a significant area, in the longer term up to 2020, the opportunities for smaller players may diminish and become limited to niche areas in the marketplace.

In addition to the IT service providers and EM specialists, significant progress has been made by consulting organisations. With EM being a nascent market and enterprises looking to develop their



mobile strategies, demand for consulting services has been high. This is expected to continue until EM becomes more standardised and the internal expertise levels of enterprises rise. Therefore, over the period up to 2020, consulting is expected to demonstrate strong growth rates.

End-to-end play to become critical

Since the initial years of the EM market evolution, enterprises have had to transact with a wide spectrum of players for implementing EM solutions. These usually range from platform providers and application developers to providers of device management and security solutions, amongst others. This has significantly added to the complexity for the IT department, which is often responsible for rolling out such solutions. The need has therefore arisen for players that are capable of addressing all the challenges related to EM and offer an end-to-end solution. The present player landscape is expected to evolve in this direction. Players are looking to increase their breadth of capabilities and the various alliances and acquisitions taking place point to this trend.

Even consulting organisations that usually exhibit a standalone stance have looked to add capabilities by acquiring development houses that would offer them a deeper hook into the client as well as an ability to offer implementation-based solutions.

Thus the market is expected to coalesce around combinations of organisations that may have formal structures (linked through ownership) or less formal structures (such as partnerships and strategic alliances). These organisations would be expected to have a significant breadth of capabilities and offer end-to-end solutions to clients.

Adoption of EM solutions has been quite skewed thus far, and is expected to normalise up to 2020

The adoption of enterprise mobility services is significantly skewed across industries. Industries having high number of customer transactions, such as banking, insurance and retail have seen higher adoption of EM solutions in the initial years. Most of the solutions that have been deployed in such industries have thus been on the consumer side. The other industries that have seen early adoption have been manufacturing, with telematics in the supply chain and machine to machine-based solutions on the shop floor, as well as the FMCG and pharmaceutical industries which have used EM for sales force automation. Going forward, the government sector is expected to be one of the largest adopters of EM as many more initiatives are rolled out providing public access to government services and information through mobile devices.

The adoption has also been skewed across various geographies, with North America and Western Europe reporting much greater uptake of EM solutions. In fact, this skew holds true even within organisations with many of them having differential rollout time frames for various geographical entities within their overall network.

However, as the time frame moves towards 2020, the differences in adoption across industries and geographies are expected to be less marked. This is evident from various surveys and reports as well





as interviews taken as a part of this report which point towards mobility being one of the top priorities of CIOs across industry segments.

Growth in the EM market is expected to be high with creation of new opportunities taking place

Enterprise mobility is expected to translate into a significant opportunity for IT players, with the market estimated to reach around USD 140 billion by 2020, exhibiting a CAGR of approximately 15 per cent. North America is expected to remain the largest market, with APAC expected to grow the fastest at around 21 per cent.

The existing spending by enterprises on EM is expected to grow to 10-12 per cent by 2020, compared to less than 5 per cent at present.

Across services within EM, there is expected to be a substantial increase in the creation of new opportunities, especially in consulting, application development, testing and security services. In the initial period, the largest proportion of the solutions being deployed by enterprises are linked to extending the existing IT systems to a mobile environment. Going forward however, this is expected to change as more innovation takes place and solutions not possible on traditional IT systems but built around mobile platforms become more prevalent.

New ways of doing business are coming about and present a steep learning curve for EM vendors

One of the main barriers faced towards implementation of EM solutions by enterprises has been justifying the initial cost. However, this issue is expected to lessen as service providers respond with innovative commercial models that lessen the initial impact and look to convert capex-based models into opex-based models. Commercial models based on revenue share, number of transactions undertaken, hybrid usage and output linked and pay per (server) use are some of the variants that have been implemented by various players across the EM industry. Going forward, it is expected that the industry would move away from the traditional fixed price or subscription-based models towards these.

However, such a change would also push the initial investment and risk towards the EM vendor. Thus, resource optimisation would become critical for such vendors going forward in order to ensure that profitability is not impacted.

EM is also expected to lead the shift away from project-led approach, to a product-led approach for many service providers. Significant focus would be required for deployment and support of EM solutions due to the presence of multiple platforms and device types running heterogeneous versions, as well as complex levels of support required from multiple levels of users ranging from IT departments to end users.

As the skill requirements posed by EM particularly on the sales and development side differ from those in the traditional IT set up, the need for players to develop EM-specific capabilities is expected to increase significantly. This is partly required to be done in-house through addressing the skill and training needs for talent.



Indian players need to develop capabilities by forming alliances and undertaking acquisitions

The enterprise mobility market is still in the early stages of evolution. Many Indian IT players such as Infosys, TCS, Wipro, CanvasM, and iGATE are establishing EM capabilities and have executed several assignments. However, many of these players are relatively late entrants in the market and hence, need to enhance their market position through acquisitions and alliance formation.

Indian players are increasingly coming under threat from players across the value chain that have picked up significant development capabilities through acquisitions e.g. consulting houses. As the markets evolve towards various combinations of players offering as close to an end-to-end solution as possible, Indian players also need to position themselves in a similar manner.

At present, there are several smaller players like GoDB Tech, MobileOne, Rapid Value that have developed significant capabilities in EM. As the market matures, they are going to look at being acquired, or forming alliances with larger players which would provide them the systems and processes enabling them to scale up to the levels required by enterprise customers. Indian players therefore, need to act in the near future to acquire some of these players and build significant scale to capture the market share and also defend in areas where they have been traditionally strong.

Further, they need to look at incorporating partnerships and strategic alliances into their go-to market strategy. This would allow them to demonstrate more end-to-end capabilities to the enterprise customer.

Mid-sized and smaller players need to focus on specific industry verticals such as mobile checkout solutions, TMT and healthcare where the market is underpenetrated and white label solutions are in greater demand. Additionally, they can target niches in device management, application management, information management and mobile application testing, that are underpenetrated and expected to have a high growth up to 2020.

Imperatives for wider stakeholder groups

Indian players can become dominant in the enterprise mobility space. However, for this to happen, IT players, NASSCOM and the government would need to work in harmony. It is clear that the players themselves need to drive this opportunity. Increased effort is required on developing innovative mobility solutions and enabling clients to realise the benefits of enterprise mobility. The players need to focus on forming alliances/undertaking acquisitions for effectively addressing as many EM needs of their client as possible. To address the talent requirements, they need to focus efforts on training and re-skilling their staff as well as form partnerships with academia to develop focused programmes that can produce trained candidates at the entry level.

NASSCOM needs to facilitate the development of EM by bringing the industry together much in the same way that it did for IT services. It needs to provide a platform for sharing of ideas and innovations in the EM space. This could be through thought leadership as well as industry conventions aimed at bringing EM stakeholder groups together. Also, it needs to encourage the development of industry standards



which would help in overcoming the challenges faced by enterprises in adoption of EM solutions. This should be implemented through industry consortiums. Further, it needs to liaise with the government to foster the development of policies that would be conducive to the growth of EM.

The EM stakeholders need to work with the government to ensure that the full potential of enterprise mobility is realized. The government's role would become important in ensuring that the basic building blocks for EM are in place. This includes network and infrastructure support, creating mobility guidelines and security policies, and providing agency support.

In addition, the government can play an active role in providing certifications and in international lobbying and negotiation. Also, the government needs to develop a cohesive strategy for various levels of governance viz. central, state, municipal, village, that would encourage the adoption of mobility solutions. The implementation of this strategy would not only lead to a market opportunity for players but would also engender a more efficient and transparent government, leading to better services for the citizenry.

Thus, the various stakeholders need to work together to ensure that the enterprise mobility potential for Indian players is fully realised.

NASSCOM[®]

International Youth Centre
Teen Murti Marg, Chanakyapuri
New Delhi 110 021, India
T 91 11 2301 0199 F 91 11 2301 5452
research@nasscom.in
www.nasscom.in