Mobile Computing: Business Applications and Chartered Accountants[1]

The Mobile Revolution in India

Mobile computing is a new paradigm of computing, which is rapidly gaining momentum. Mobile computing is not just about using mobile phones but it is about computing on the move using wireless connectivity. The National Policy for Electronics 2011 states that IT and Telecommunications are the twin sectors that best epitomise what modern, resurgent and young India is capable of accomplishing. The policy lauds the achievements in the recent past in the IT and Telecom as spectacular and unprecedented in India's history and forecasts that the future holds even more breathtaking possibilities. This is opening out new opportunities hitherto not envisaged. As of September, 2011, India has over 850 million mobile subscribers with over 90% of villages having mobile coverage. A growing number of private sector services are now being provided either online or via mobile phone. The National e-Governance Plan, is facilitating increasing number of government services to be provided online. An m-governance policy has also been drafted covering services provided via mobile phone. Core banking enables banking from anywhere and basic banking services can be accessed via the mobile phones. E-Services are becoming seamlessly linked through mobile, Internet and other modes of delivery. A pan India Broadband Plan has been initiated with the objective of providing broadband connectivity across the country by 2014, which will propel the mobile revolution in a big way.

Evolution of Mobile Computing

Mobile computing is enabled by use of mobile devices (portable and hand held computing devices) such as PDA, laptops, mobile phones, MP3 players, digital cameras, tablet PC and Palmtops on a wireless network. At its annual symposium, Gartner unveiled its list of the 10 most strategic tech trends of 2012 and the top two in the list are: Media Tablets and beyond and Mobile Centric Applications and interfaces. The prediction is that the growth of media tablets will result in replacement of the era of PC dominance with windows as the single platform in a post-PC era where Windows will become one of a variety of environments IT will need to support. Mobile-centric applications and interfaces would lead to building of user interfaces for multiple screen sizes and operating systems increasing the need for new types of tools that can accept data from various applications and usable on multiple devices. By 2014 mobile web users are expected to surpass desktop web users. The proliferation of smart phones, tablet computers, and mobile devices in the workplace emerged for the first time as the top business technology concern for CPAs and financial executives, according to the 2011 Top Technology Initiatives Survey by AICPA.

Chartered Accountants as knowledge workers at a personal level are using mobile computing in their own way through smart phones, tablets and broadband wireless connectivity. However, it is important to take the use of mobile devices to next level of using it within their firm and also for providing consulting/ assurance services to clients. This requires understanding how mobile devices are changing the way every type of business operates and how mobile computing can be used to improve business processes and offer new products and services.

Business Applications of Mobile Computing

Mobile devices provide the capability to conduct business anywhere and enable users to seamlessly communicate and access information whether they are in the office or anywhere. Mobile computing is changing the business landscape. The change driven largely by video, web-browsing, gaming, and other entertainment related applications is one of the hottest trends in the consumer sector. Mobile computing is rapidly moving from gadget status to a must-have for consumers compelling more and more business services to be offered through this mode. As enterprises rush to encash the cost benefits of global business operations, mobile devices become increasingly indispensable.

Mobile computing enables enterprises to connect with their employees at all times resulting in increased productivity and a better return on investments. Some examples of business applications are:

- There is increase in workforce productivity as mobile device enables employees to work from anywhere, anytime by accessing and updating information as required. For example: employees can read/respond to emails using laptops, PDAs or smart phones from office, residence and even when on the move.
- Customer service can be improved by responding to customer queries on site or off site. For example: customer complaints can be accessed and responded by accessing past/latest information of client as required.
- Incident management can be improved by resolving problems faster without limitation of time as the concerned employees can attend to these regardless of their location. Further, escalations can be updated in real time which ensures timely resolution of

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problems. For example: Computer breakdowns can be serviced by service engineers from their desks/ outside by logging into the specific computer, identifying problem and resolving it online.

- Business processes can be transformed by using mobile devices. Enterprises can reengineer core business processes. The new and reengineered processes can focus on 'utilise the key' features of location and time independence. Enterprises can focus on providing customers and employees with access to information in different ways and provide the latest information. This enables employees, customers, and businesses to be available to one another as per their choice. For example: billing can be done by employees using hand held devices at customer site and the information updated online and deliveries to customers can be speeded up.
- Enterprises can dynamically modify and update their offerings and offer new products and services altogether. For example: enterprises can implement telecommuting with flexible working hours and locations allowing for cost savings and better efficiency.

Implementing Mobile Computing

Enterprises implementing mobile computing have to focus not only on their employees but also on their customers, business partners and service providers to realise the benefits. The key consideration in implementing mobile computing is to focus on improvements in core business processes and functions. This could cover: customer relationship management, supply chain management, procurement process, human resource and payroll systems, system and business process integration, knowledge management, etc.

Enterprises planning to implement mobile computing have to consider it at a strategic decision rather than as technology or operational decision. The four key aspects to be considered are the economic, technical, process, and social dimensions.

The economic dimension has to focus on the "why" aspect such as the business drivers, costs, competition, customers, employees, convenience, and cost benefit analysis. The technical dimension has to focus on the "what" aspect and consider the underlying technologies and the key deliverables. The key issues to be considered relate to the mobile devices or gadgets to be used/accessed, programming, databases, networking, security, and architecture of information systems including wireless networking and security. It is important to prioritise these technical drivers as per their relative importance while planning the migration. The process dimension has to focus on the "how" aspect and has to consider the new of model of conducting business transactions by ensuring quality and managing the changing relationships of the business with the customers and employees using mobile technology. The social dimension has to focus on "who" aspect and has to consider key players involved such as clients, employees, and other users of the business and how they influence, and are influenced by the transition to mobile platform.

Mobile Computing and Chartered Accountants

IT has created the knowledge worker and this workforce is significantly more mobile and enterprises need to create ways for their employees to get the work done. Mobile computing enables the knowledge worker to work as per their timetable, anywhere, anytime. Chartered Accountants as knowledge workers at a personal level are using mobile computing in their own way through smart phones, tablets and broadband wireless connectivity. However, it is important to take the use of mobile devices to next level of using it within their firm and also for providing consulting/assurance services to clients. This requires understanding how mobile devices are changing the way every type of business operates and how mobile computing can be used to improve business processes and offer new products and services.

Mobile computing involves some unique security considerations that can be mitigated through appropriate security measures such as configuration, policy and training. Mobile devices offer a wealth of connectivity, delivering great opportunities if used with proper security measures. Mobile devices tend to be even more personal than personal computers. However, most enterprises are permitting usage of mobile devices for accessing enterprise data. This requires an effective system of mobile device management as these devices hold both personal and corporate data. Hence, it becomes critical for auditors to determine if the enterprise has a mobile device security policy which clearly defines the data classification permitted on each type of mobile device, control mechanisms required based on the data classification, extent to which general use of personal devices is permitted within work-place, technical controls, back up of data, data management, security features, etc.

"It's only a matter of time before mobile connectivity is as indispensable as the telephone. Chartered Accountants are impacted by usage of this technology by their clients. As increasing number of software applications on accounting, compliance and office automation are available through mobile technology, chartered Accountants have to acquire the requisite skill-sets to ride this technology wave to make effective transition to a successful future."

Conclusion

Mobile computing gives users the freedom to roam with access to data and services at any time and place. Most of the high-end ERPs and business software applications for SMEs have in-built capabilities of mobile computing enabling users to access data. Used with proper security, enterprises can harness the power of this technology to create innovative opportunities for improving the quality and efficiency of business processes and services. Mobile devices are increasingly acquiring the must-have status for enterprises on account of the increasing acceptance as business tools. Surveys have shown that forward-thinking CA firms are already connecting to their professional colleagues and clients with mobile devices, their staff are bringing them into the office, and it's is expected that it's only a matter of time before mobile connectivity is as indispensable as the telephone. Chartered Accountants are impacted by usage of this technology by their clients. As increasing number of software applications on accounting, compliance and office automation are available through mobile technology, chartered Accountants have to acquire the requisite skill-sets to ride this technology wave to make effective transition to a successful future. ■