The Mobile Revolution:

How It Can Empower Your Workforce and Engage Your Customers

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Executive Summary

Cloud and mobile, when used together, can be agents of dramatic change. Every business is considering how it can leverage cloud-based technologies. One of the driving forces behind cloud is the ubiquitous nature of the technology. This makes cloud and mobile inextricably linked. If you are considering a cloud-based strategy, then this strategy must include mobile.

"If you don't have a mobile strategy, you don't have a future strategy."

Eric Schmidt, Google, Executive Chairman

An effective Mobile Strategy will lead to a more empowered and efficient workforce; however, creating an effective Mobile Strategy for your business is widely recognized as a difficult task. Consequently, what should be included as part of this strategy and how should organizations go about creating their Mobile Strategy?

This paper will analyze the Mobile Revolution that we are currently living through, suggest areas where you could consider applying mobile to your business, and present a seven-step framework for implementing a Mobile Strategy within your organization.

Introduction

We are all addicted to our phones—sports scores, instant messages, Facebook updates, photo sharing—so much so that the primary purpose of a phone, talking to people, now seems a secondary function. Data revenue is expected to surpass voice revenue by Q4 of 2013.

Witness the panic that even a temporary separation from our devices can cause. There's a term for it now: 'Nomophobia'. Cisco recently reported that 90% of US mobile phone users under age 30 suffer from this no-phone anxiety—not only when they are without their mobile devices, but even when they merely anticipate having no access.

The devices that we take for granted in our everyday lives are more powerful, flexible and have more features than the technology that is required to use in the office. Additionally, while we upgrade our phones every 2 years for devices bursting with new features, the humble office PC is depreciated over 3-4 years, and often sees more service than that.

This was a very different situation, even 5 years ago. Email was the primary enterprise mobile requirement and RIM was the safe choice for every CIO. Now, even the most agile of organizations are struggling to keep pace with the challenges and opportunities that this dramatic shift brings.

To not consider harnessing the power of mobile is no longer an option; however, developing a coherent Mobile Strategy is not an easy task. With years, if not decades, of investment in an IT infrastructure not designed with a mobile workforce in mind, the inertia of the status quo can stifle even the most visionary of organizations.

This whitepaper looks at the benefits that can accrue to organizations that capitalize on the capability mobile can offer, and outlines an approach that businesses can adopt in order to empower their workforce.

The Mobile Revolution

Ten years ago, Palm Pilots were a staple of any enterprise. E-mail was very 1.0, and for something urgent, there was SMS.

The Blackberry was a disruptive tool simply by incorporating features from Palm Pilots onto phones, and throwing in email. Suddenly, we were all addicted to our "Crackberries". What we were really addicted to extended beyond the features of messaging and email; for the first time, contacting colleagues and business associates was not restricted to business hours. We became more accessible and more connected than ever before.

> "Traffic from wireless and mobile devices will exceed traffic from wired devices by 2016."
>
> Cisco, 2013

Today, with the arrival of the "smartphone", corporate reach has virtually no limits. Through the use of mobile applications linked to the enterprise systems, data capture, work-flowed processes and information retrieval, we are operating 24x7 on a global scale.

A "smartphone" sits absolutely at the intersection of technology, mobility and user experience, and is the beneficiary of trends in each of these areas. Users have the ability to access advanced features like GPS positioning, image capture or device-device integration, from anywhere at any time, with a personalized experience. With continued advances in device capability, falling prices and upgrades to communications networks (such as 3G/4G), the pace of these trends is only likely to accelerate.
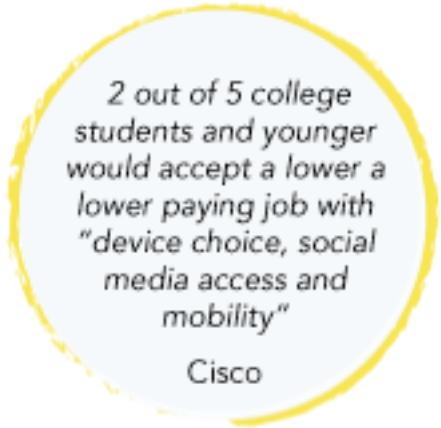
> "The number of mobile-connected devices will exceed the world's population in 2013"
>
> Cisco

The statistics relating to adoption and usage are stunning:
• In 2012, 50 times more mobile phones were sold than PCs (350m PCs vs 1.7b mobile phones)
• The number of mobile-connected devices will exceed the world's population in 2013
• Traffic from wireless and mobile devices will exceed traffic from wired devices by 2016
• 50% of the world's population will own a smartphone by 2017

Make no mistake, there is a revolution happening, and it is certain to impact every business. Its extent, and whether its effects will be positive or negative, will depend upon how proactive business owners and executives choose to respond.

What it Means to Your Business

Statistics show that an increasing number of organizations are considering how to leverage cloud-based technologies; however, fewer show that organizations are considering a Mobile Strategy. Given that one of the key benefits of the cloud is the anytime, anywhere access that it allows, this seems shortsighted of many businesses. A Mobile Strategy should be an integral part of any cloud strategy, but given some of the key differences (e.g. technology, distribution, user-experience) there are good reasons to treat it as a distinct component.

2 out of 5 college students and younger would accept a lower a lower paying job with "device choice, social media access and mobility"

Cisco

The goal of any Mobile Strategy is twofold: it is either to empower the existing workforce, engage better with customers, or both. Allowing employees to perform existing or new functions in new ways, from different places or at any time, can have a dramatic impact upon your business' efficiency. On the other hand, building relationships with your customers in a unique way, or even carving-out a new market can bring enormous benefits to the top line.

No two businesses are identical, so consequently a "one-size fits all" strategy isn't going to work; however, there are some basic exercises that any business can do by asking themselves the following three questions:

How can I make existing processes more efficient using mobile technology?
This could be by allowing field users (e.g. salesmen) to enter appointment details, customer orders, or travel expenses from the field, as opposed to returning to the office to complete their admin. It could also be freeing supervisors from their desks, approving tasks from anywhere or allowing managers to use "dead time" on the train to catch up on status.

How can I enable new processes using mobile technology?
This is a harder question, and will be highly dependent upon the industry, but every organization will have ideas on "new ways to do things". For example, at iBE.net we have a customer who is going to use our system to allow remote workers to book time to a task (prior to that it was too administratively complex to require the entry of timesheets). For the first time this organization will have visibility of the true cost and profitability of these tasks. The same company is also interested in the GPS feature to direct and track remote workers to customer sites more effectively.

How can I engage with new customers by using mobile technology?
Or, how do I engage with existing customers in a new way? This is what Starbucks has done with their mobile app. Earlier this year they announced that 3 million, or 1 in 10 transactions are now carried out using their mobile app each week. In doing this they have created an entirely new way of interacting with their customers. For your business, it may be very different, ranging from online surveys, customer approval of work carried out, or push notifications on order status. Organizations are even creating corporate branded mobile games to aid brand building.

Still, it is not simply process improvements or customer engagement that can have an impact on your business. Your Mobile Strategy can also have a significant impact upon your staff. A study by Cisco determined that 2 out of 5 college students and younger would accept a lower paying job with "device choice, social media access and mobility". The new generations of workers, who have grown up owning smartphones as teenagers, have a very different set of priorities from their predecessors.

A Blueprint for Change

Many organizations may be panicked into making a risky or expensive decision regarding their Mobile Strategy, not wanting to be left in the enterprise slow-lane. But, a reactionary decision designed to bring fast results can often cause longer terms issues. A strong Mobile Strategy requires a structured, strategic approach. A potential approach is outlined below.

Step #1: Define Problems and Opportunities

The first step seems an obvious one, but is frequently overlooked in an organization's haste to be seen as a leader to its customers or employees. The old cliché of, "You will never get to where you need to be if you don't know where you are going," is particularly true in this instance.

A basic SWOT analysis will help organizations rationalize their thoughts and avoid the trap of treating mobile as "a solution looking for a problem".

The way to avoid trying to solve a problem that doesn't exist is to define your current problems and opportunities and limit the scope of your Mobile Strategy to those problems and opportunities. Be innovative, look at what competitors are doing, and take

input from across the entire workforce, since those engaged in the task may have the best ideas on how to improve it..

There is very good reason for this first step. Any strategy which does not have the business' real needs or goals as its foundations will not engage the workforce, and will result in a poor adoption and potential failure.
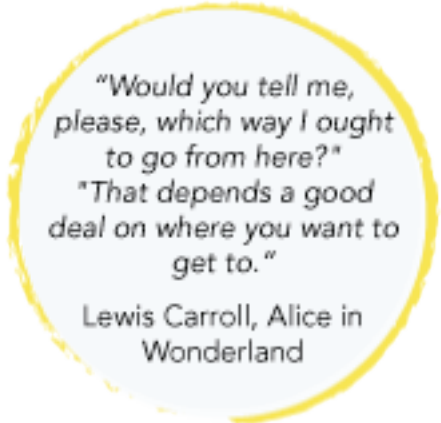
Step #2: Strategy

Gartner's 2013 report on "The Mobile Imperative: Mobile Application Strategies and Architecture" very helpfully suggests that there are "no simple answers" in this area. This represents a problem given that this is the core for any "Blueprint for Change", which serves to prove that any organization should not take this step lightly.

As mentioned in the introduction, Mobile Strategy cannot be taken in isolation. With businesses racing to the cloud, the consumption of cloud-based services needs to be an integral part of their Mobile Strategy. Equally, aspects of the Mobile Strategy such as security can have a significant impact on the cloud-strategy. In this step, the over-arching direction of the company needs to be defined, so that projects can be delivered under this umbrella.

The most important part of any cloud or Mobile Strategy is the starting point. With most organizations having invested significantly in their IT backbone over the last two decades, a "clean sheet of paper" approach is something that no CFO wants to see. Businesses must assess their starting point with regard to process coverage, infrastructure, and maturity of its current capabilities. A Mobile Strategy will also need to co-exist with any ongoing business or IT initiatives.

With the starting position established, the mobile strategy can be constructed by addressing the following areas:

i. Users: The audience for the functionality to be deployed. This will be the entire workforce (with an application like mail), or sections (like sales for CRM functionality), or levels (like execs for dashboards or approvals). However, don't forget the applicability of your Mobile Strategy to business partners like customers (in order to view A/R or service records), or suppliers (in order to stock or payables data).

> "Would you tell me, please, which way I ought to go from here?"
> "That depends a good deal on where you want to get to."
>
> Lewis Carroll, Alice in Wonderland

ii. Infrastructure: Both the client and back-end technology that will be deployed. Integration with existing IT infrastructure is key (hence the need to establish a starting point), as well as the ability to deploy and support mobile apps.

iii. Functionality: What processes will be mobile-enabled and what content will be deployed.

No strategy discussion could be complete without a reference to BYOD (Bring Your Own Device), however a full analysis is beyond the scope of this paper. What is key is to understand the trade-off that CIOs need to make. On the positive side, BYOD has the ability to:

• Create greater satisfaction and therefore productivity from the workforce by using their own device in a location and time of their choosing
• Increase the footprint and accelerate adoption of any Mobile Strategy
• Reduce CapEx requirements as well as ongoing administration costs

The following issues need to be addressed:

• Unless standards are applied, there will be a proliferation of platforms that will need to be supported which will increase costs
• Security, both the ability to access corporate data as well as the safety of any sensitive data stored on the employee's device
• Lack of control and enforcements of corporate standards

Also, an important component of any strategy is the risk that the organization is prepared to bare. Being on the "leading edge" as opposed to the "bleeding edge" is of significant preference to some organizations, but the danger of waiting too long to achieve the organization's vision presents a real dilemma.

Step #3: Conceptual Design

This step may be skipped if the strategy is developed to a very low-level, however since it is likely that different expertise is required for this step, we have separated it.

A conceptual design is a high level design that will define the scope of the projects and should address the following areas:

i. Platform: If the strategy did not define the platform for the devices it must be defined here. In the views of many, Apple and Android have "won", so a Windows or RIM based platform decision should be questioned. In a BYOD environment, a range of devices will need to be supported, so including an HTML5 option within the supported platform would be sensible.

Android accounts for 74.4% of the worldwide mobile market, while iOS accounts for 18.2%.

Gartner, May 2013

ii. Standards: In order to achieve a coherent vision, it is important that all entities across the landscape communicate in the same way. Defining server-side services, and standardizing API calls, message structure and return codes, is vital to the scalability of the mobile strategy.

iii. Third Party Services: It is unlikely that all of the mobile-enabled functionality can be achieved "in-house". Consequently, a way of accessing third party services will need to be defined, together with the associated security options.

iv. Distribution: This will be dependent upon the platform(s) chosen, but how an app gets into the hands of a user, and how it is subsequently refined and updated will have an impact on the strategy, so needs to be defined here.

Step #4: Define Projects & Prioritize

With the over-arching Mobile Strategy defined, organizations can then look to the Problems and Opportunities defined in Step #1 in order to define a candidate list of projects that are able to meet the organization's goals.

Projects should not be overly ambitious, and should be split into phases or releases where possible. An "MVP" (Minimally Viable Product) approach will ensure that functionality is put into the hands of the users as soon as possible, after which assessments can be made upon its effectiveness. Spending a year of development in order to deliver a full-featured application is less preferable to spending six months to an app with basic functionality launched. This is an area where the 80:20 rule works.

"Everything is possible given infinite time and money"; however, resources are always a limiting factor. The list of candidate projects should be evaluated based upon the following criteria:

• Important
• Urgent
• Risk

Step #5: Roadmap

With the projects defined and prioritized, a Roadmap can be created for the deployment of the company's Mobile Strategy. It is important that this Roadmap is realistic and achievable, else the level of buy-in to the Mobile Strategy will not be great. Some of the items to consider when creating the Roadmap include:

i. What can be achieved given the available resources (staff, budget)?
ii. How much parallel development is possible?
iii. What timeframes make the most sense for each of the projects?
iv. What groups can be targeted as early adopters?
v. How can the release of projects be timed with corporate milestones and market trends?
vi. What localizations are needed for different groups?

Once the Roadmap has been agreed upon, it should be published in order to gain acceptance and commitment from the workforce.
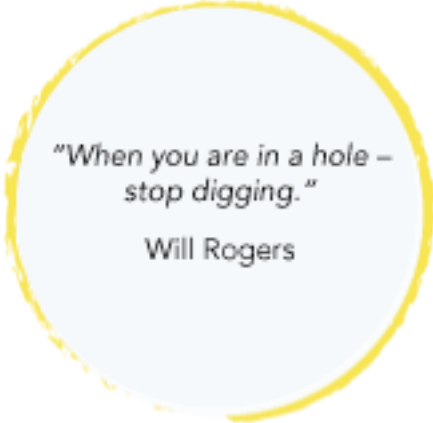
Step #6: Project delivery

Developing a repeatable process for project planning and delivery should be the core competence of any IT department. The development of mobile projects should be no different from traditional development projects. Standards should be adhered to, and methodologies followed. The one difference would be in the user's experience.

Step #7: Assessment and Correction

A critical part of the approach to a successful, ongoing Mobile Strategy is an organization's ability to determine the success of each stage of the Roadmap, and make adjustments where necessary.

"When you are in a hole – stop digging."

Will Rogers

The assessment falls into two categories, Internal and External. Measurement is the most important component of Internal assessment. Create a set of criteria like user engagement, productivity, error rates or cycle times, and measure each on a regular basis. Analysis of these categories will indicate what is succeeding and what is not. Try to solicit honest feedback from the users of the application. Changes in the business climate like an acquisition would also fall into this category.

The responsibility for external assessment lies with the owner of the Mobile Strategy. He or she needs to be a watcher of the market and familiar with the current trends. Any changes in assumptions made in the creation of the Mobile Strategy, or any shifts in technology, will need to be incorporated into the Strategy. For example, a Mobile Strategy based upon RIM technology, created for all of the right reasons at the time, today may not seem as logical.

In order to make corrections, the results of this analysis need to be re-incorporated into the Mobile Strategy, and from there, the Roadmap and Projects need to be re-appraised.

Conclusion

The Mobile Revolution is upon us and every business needs to plan for it. It has the ability to dramatically change how organizations work. When employees can access data, respond to questions, and complete tasks form anywhere at any time, the possibilities for re-engineering processes are huge. Using technology can create new ways of interacting with customers or even carve out new markets, and this can transform a business.

Unfortunately, mobile technology also has the power to consume huge amounts of company resources only to deliver a few disconnected applications that have poor adoptions rates. The corporation not only spends money unnecessarily, but also loses ground to its mobile-enabled competitors.

As has been recognized by Gartner, creating a successful Mobile Strategy is not an easy task. By following the steps laid out in this paper, organizations stand a much better chance of achieving a coherent, scalable and sustainable Mobile Strategy that will adsorb the shocks that changes in technology or the business environment will bring.

About iBE.net

Founded by 20-year ERP veterans, iBE.net (Integrated Business Environment) is creating mobile and cloud-based business management software for companies that have outgrown QuickBooks but are not ready to tackle the likes of SAP or Oracle ERP solutions. Unlike other solutions on the market, iBE.net has been designed from the ground-up using the latest technology to offer enormous flexibility and broad out-of-the-box functionality across a range of industries.

For more information, visit www.iBE.net. Twitter: @iBErevolution.

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