

NEW MILLENNIUM CONSULTANTS



MOBILEMENTUM™

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Date: January 2002

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EXECUTIVE SUMMARY

Imagine accessing day-to-day information provided by ubiquitous wireless networks, where you're able to link your laptop, phone and personal digital assistant (PDA) to immeasurable content via your company's network. Mobile computing has become an essential component of the anywhere, anytime workforce. This White Paper will examine the benefits that can be achieved through wireless technology, how to prioritize opportunities, identify technology strategies, and set up an actionable roadmap.

Visualize content available for downloading into a wireless device so people who are mobile can have access to the latest information when they need it, and when it's the most useful to them. That's the result of an effective wireless solution. Every company needs to tackle the challenge of mobilizing its applications. It wasn't long ago when companies gushed about a world where consumers would pay for products, locate stores and download information as they strolled the boulevard via their cellular phone.

Companies were presented with grandiose visions of anywhere, anytime global wireless networks. People are still talking about wireless, however, few companies have actually moved forward with their wireless initiative. Mobile applications technology is new and not widely understood. There's a certain mythology that envelops the marketplace that prevents most companies from investing in strategies that will be viable for the long term, and vendors promoting their gadgets as mobile solutions, that make it very confusing for companies willing to invest in the deployment of mobile information systems.

Unlike the Internet, companies have had a history of wireless communications. They understand its usefulness, but they don't quite understand how to get started on the process of implementing a mobile solution. Mobile applications deployment is fairly straightforward from a technological perspective. They are simply enhancements to existing enterprise applications, under general umbrella titles such as sales force automation.

To create a mobile initiative requires a company to rethink how they communicate with their customers, workforce, and suppliers. It requires a re-examination of your internal processes.

Wireless connectivity holds the possibility of extending the office to everywhere your employee's travel and represents a sound investment opportunity. Once we've moved through developing a wireless plan, we'll outline how New Millennium Consultants can give you a hand, to help you fill in the gaps and profit from your wireless solutions.

INTRODUCTION

Today wireless communications is more about helping companies increase productivity, improve customer service, responsiveness, and increase profitability.

Companies are still not clear on how to leverage wireless technology. What is clear is that unlike the technology competition in the dot-com age, which was a sprint, wireless application technology is preparation for an endurance race. Where over the next few years' laptops, handheld computers and Web-enabled cellular phones will become more powerful, and their value will be tied to their ability to access centrally stored information, like corporate databases.

As information and communications technology continues to evolve and emerge, they become increasingly pervasive. In order to better understand the sometimes-interchangeable terms of "*Mobile*" and "*Wireless*" they must first be defined. "*Mobile Applications*" are designed to meet the many changing needs of the mobile user wherever, and whenever he or she travels, on whatever devices, at different times and in different places.

“*Wireless Applications*” are developed and narrowly focused on a wireless network and some combination of wireless devices. In most companies today, the IT department or Telecommunications organization receives requests for user support for wireless devices to access company applications that are protected behind company firewalls. This situation is similar to the early days of laptop computers, where everyone with a laptop wanted access to the applications on the company’s information network.

This avalanche of requests are inefficient and highly frustrating to the company’s IT departments and defeats the company’s ability to develop efficient operational access solutions to the network.

In the mobile communications world, the rapid convergence of mobile phones and personal digital assistants (PDA’s) are helping to provide enterprises with wireless access to their corporate data and applications. This convergence of devices has spurred the development of remote access software, which enables the enterprises to access office applications outside of the office.

INTRODUCING MOBILEMENTUM:

“*Mobilementum*” is the speed, accessibility and forward movement needed by mobile enterprise employees to access their company’s information networks. “*Mobilementum*”, is necessary for the company as a whole to benefit from the advantages of wireless/mobile solutions and support the computing needs of the enterprise, its partners, and its customers.

ADVANTAGES OF WIRELESS NETWORKING

The architecture of the mobile applications network must be open, multi-tiered, and distributed across one or more interconnecting networks controlled by the enterprise. Whereas the architectural efficiency of the wireless network is in the hands of the wireless service providers where they provide the robustness necessary for the enterprise to capitalize on the versatility of the network. The mobility offered by the capabilities of wireless devices provides the enterprise with the following operational benefits:

- *Increases productivity by reducing administrative costs, improved deployment of resources and increases success rates.*
- *Improves response times by allowing mobile professionals to quickly respond to customers’ requests, changes in inventories, problem situations and, faster dissemination of information.*
- *Enhances decision making by providing more up-to-date (real-time) information.*
- *Provides convenient accessibility anytime, anywhere to information and applications for mobile enterprise employees.*
- *Increase customer satisfaction through better responsiveness; provide predictable deliverable services, reduce complaints due to multiple site visits to the customer.*
- *Reduce response and process times by initiating orders while mobile; new developments from the field organization, and through the dissemination of information to the organization.*

SITUATION ANALYSIS

Could the benefits of wireless networking be a benefit to your company? If you believe wireless networking can benefit your company, then the next phase is to develop a plan of action that allows you to move forward with prioritizing and funding allocation. You will also need to initiate a process to examine mobile applications and wireless solutions from a business and technology perspective. The perspective of the business analysis should include the following:

- *Assemble a full project team of business managers, quality assurance, and most importantly, users.*
- *Review and inventory initiatives in progress and perform a viability assessment.*
- *Determine strategic importance to the business.*
- *Evaluate the cost / benefit of the initiative and ROI (return on investment).*

The technology perspective would include the following:

- *Evaluate the company's existing user application portfolio.*
- *Identify user experience level of mobile applications devices.*
- *Determine which technologies are required and develop a technology blueprint.*
- *Design system architecture that's flexible enough to incorporate existing information technology investment and capable of incorporating new technologies as they become available.*

BUSINESS INSIGHTS

Identify Viable Initiatives

The initial step in the business analysis is to assemble an inventory of company initiatives, projects and ideas. Most companies today have workforces that are increasingly mobile, and most of their activities and processes can leverage mobile application solutions. Implementing a mobile solution represents a significant challenge for most companies; however, the opportunities for improved productivity are extensive.

Enterprise Business Applications (EBA's) or Mobile Enterprise Business Applications (MEBA's) are a set of software applications that provides functionality and service for key Front- and Back Office initiatives of virtually any enterprise. MEBA's can be categorized into three distinct but inter-related and interdependent application areas.

- *Front-Office Applications*
- *Back-Office Applications*
- *E-Business Applications*

Front-Office Applications refers to functions such as customer relationship management (CRM); sales force automation (SFA), call center applications, marketing automation applications, and customer support and service applications. These CRM applications underpin the enterprise's ability to sell to, market to, and support customers. These applications provide the enterprise with a competitive advantage that helps manage and retain customer relationships, and maximize revenues.

Back-Office Applications are those applications like enterprise resource planning (ERP), supply chain management, financial management and human resources planning applications; and legacy or line-of-business applications for functions like billing, and order processing. ERP applications support operational requirements, and are a primary source of functionality and information for any enterprise. They play a major role in Internet-based procurement, supply chain management, and business-to-business related applications.

E-Business Applications exist as Internet-centric applications that provide or integrate with both front-and back-office applications. E-Business applications can be stand-alone applications or they can extend the functionality and reach of front and back office applications via the Internet.

The extent of the opportunities discovered may require you to do a reality check. As you peruse the list of ideas, projects and initiatives, be sure to question yourself as to whether or not mobile solutions are the right approach? Or are there other avenues to achieve your objectives that are more cost-effective. One way to do a reality check is to perform a “Feasibility Evaluation” using the following six characteristics associated with being the key driving factors of Mobile EBA’s.

- ***Initiate immediate execution: The ability to execute activities whenever and wherever an employee may be located and a direct response is essential to the business.***
 - ***Replicable processes: Processes that lend themselves to easily being automated and are simple and stable.***
 - ***User experience: For optimal interaction, mobile applications should be comfortable, convenient, and intuitive, ROI is quickly achieved when users understand the technology and are willing to learn new approaches to doing business.***
 - ***M-Commerce applications: The phenomenon of using wireless mobile devices such as digital phones and PDA’s to search the Internet, access data and information, and conduct purchasing or business transactions.***
-
- ***Mobility of employees: Their work is away from the office or desk or they travel frequently.***
 - ***Enterprise information is needed: The unpredictable time element of the needed information, and actual up-to-date information is needed.***

Mobile Enterprise Business Applications (EBA’s) is the concept of enabling core enterprise applications to be available to employees, partners, and customers almost anywhere. Global enterprises are using the services of front-office applications to optimally manage customer relationships via their external sales forces.

EVALUATE STRATEGIC CONSEQUENCES & COST BENEFIT EVALUATION

The previous exercise identified the business initiatives. In order to identify the strategic importance of the individual initiatives you will need to prioritize and assess the needs of each area.

Let's investigate an example of a Management and Support initiative that is primarily internally focused with an objective of improving the effectiveness of mobile employees and senior management. It improves administrative and internal management processes, and introduces new technologies that will for all intents and purposes, become the standard used throughout the organization.

The perception is this is a comparatively low-risk project, with an opportunity to secure a competitive advantage, and be perceived as an industry leader. These points place the project in the Operational Excellence quadrant.

STRATEGIC ASSESSMENT

For each initiative a high-level cost/benefit can be done or you can break it down further as required by your organization. By using a four quadrant grid, plotting the relative cost/benefit of each business initiative shows its impact on the enterprise with its ease of implementation, and four classifications emerge:

(i) "Instant Wins" are easy to implement and have high business benefits. (ii) "Low Hanging Fruit" have less of a business impact, but they are also easy to implement. (iii) "Must Haves" provide a host of benefits but are difficult to implement; and finally (iv) "Money Losers" they deliver fewer benefits than other initiatives, and their difficult to implement. The strategic assessment exercise helps in the ranking of the various initiatives

and provides a starting point and an avoidance mechanism for the enterprise initiatives.

RETURN ON INVESTMENT (ROI)

The assessment of any project should be based on its merits for ROI. In nearly all cases people focus solely on cost savings or expenses in ROI analysis. However, there are three main categories of ROI to consider: Market Position, Financial Leverage, and Earnings.

Market Position can be impacted in a positive way when mobile applications are employed by the enterprise. There are a number of advantages to being first to deploy mobile application in the market place. The increase in productivity by the mobile workforce is one of the results of being a market leader in the deployment of mobile applications. Time to market will be greatly improved through the use of technological capabilities and it will also provide you with a competitive advantage and organizational awareness of the use of wireless technology.

Financial Leverage contains elements like working capital and market capitalization as components of Return On Investment (ROI). Back office operations like financial management, billing, order processing, and collections can dramatically improve by employing mobile applications to these functions. Your outstanding income (receivables) can be reduced, having a direct and significant impact on your company's working capital.

The innovation shown by your company by using mobile application technology can have unexpected positive consequences other than the effect on working capital. You can be seen as an industry leader, which enhances your company's image and translates into better valuation and market capitalization.

Earnings are revenue and expenses driven.

Wireless applications initiatives are transforming operations and seeing dramatic business results through reduced expenses and increased revenue. Breakthrough mobile and wireless applications now span entire organizations, and empower mobile employees by giving them better access to information on-site. Mobile workers perform their work more effectively and are able to cross sell other solutions.

This tight integration between mobile employees and the enterprise's systems streamlines services, improves planning, forecasting, product design, and customer retention, which improves market share and boosts revenues.

Wireless and mobile applications increase the productivity of mobile employees while reducing operating expenses. Operational overhead can be reduced through automating processes to improve their overall efficiency using mobile applications which will result in lower administrative expenses, contributing to cost savings.

There are numerous models and case studies for determining ROI, including soft impact and intangible models. However, by integrating those models with your overall evaluation process, you will be able to effectively determine your ROI. By combining your high-level ROI and cost/benefit analysis, the building blocks are in place to review the technology issues and draw up a blueprint to implement your wireless/mobile applications initiative.

THE TECHNOLOGY CONSIDERATION

The technology of wireless initiatives will have a critical impact on your existing applications portfolio and infrastructure. The approaches to implementing mobile applications have evolved through three distinct generations (i) Device-Centric, (ii) Applications-Centric and (iii) User-Centric. Enterprises pursuing mobile deployment must recognize that software based on the development paradigms of earlier generations will likely be caught in a technological dead end, with no ability to evolve or extend into the user-centric paradigm.

Based on a short list of mobile initiatives developed by the enterprise, it's now possible to identify and determine application and architectural approaches for mobile applications interfaces. Some enterprise organizations have started to create their own front-end mobile applications that interact directly with the back-end systems and databases. However, most of these companies are learning firsthand about the challenges and complexities of going mobile.

Fortunately, there is an alternative to creating mobile applications from scratch; user experience platforms provide a complete set of tools for designing, integrating, managing and evolving mobile applications.

Another option is to use a "sync engine" which interfaces with device data formats off line without server intervention. Communications using this method is secure and does not impact firewall configuration or connectivity because the exchange of information takes place when connected directly to the enterprise's network. This connection can prove to be an economical method of accessing non real-time information and avoiding some wireless network cost.

“A sound mobile and wireless architecture can enhance efficiency while delivering greater versatility”

It’s our belief that your technology architecture and your wireless architecture should be closely linked. It should incorporate the technology your company has in place today, and leverage your development capabilities by expanding its use for a better return on your prior technology investments.

Given the significant technical challenges associated with building and deploying mobile applications, most organizations would be wise to invest in a user experience platform based on the user-centric development paradigm to quickly and easily deploy mobile applications that will meet the needs of users as needs and devices evolve. However, a great deal of the accessibility and mobility can be delivered based on existing technologies.

THE DIAGRAM FOR SUCCESS

To develop a clear direction when planning for success it’s a good idea to have several implementation phases varying in length between 60 and 120 days. The diagram for success that follows outlines some typical objectives and activities for a nine months time frame.

0–3 Months, the focus in the initial three months should be to guarantee the benefit to the company. The mobile initiative should begin by providing simple basic mobile applications that leverage existing Intranet functionality, and focuses on the low hanging fruit or quick wins. It’s critical during this phase to resolve issues as fundamental as connectivity and security.

This is also the time to build the user support organization for front office applications as people get acquainted with the new devices and make the comparison to existing applications.

3–6 Months, in phase two of the project it becomes more important to control and manage the processes. Once the first applications are deployed the request for enhancements begin, that makes it all the more important to have a process in place for prioritization, cost containment, budget management and overall expense ownership. In this phase connectivity and security issues are resolved and you can concentrate on functionality. Concurrently, you should consider deploying enterprise PIM (Personal Information Manager), along with a common notification solution.

6–9 Months, the third and final phase of the mobile application initiative, is a time to reflect and review the technologies and architecture deployed; it would also be prudent to evaluate new industry developments and incorporate new technologies as necessary.

RESULTS & CONCLUSIONS

The preceding process has allowed you to identify near-term enterprise initiatives, and link a technological approach to the business perspective that allows you to get on track to developing mobile applications (“*Mobilementum*”) for the enterprise.

This step-by-step approach, outlined in the preceding processes has another benefit to the enterprise, it allows for the assembling of expertise that was previously spread throughout the organization and leveraging that expertise to guide the internal decision and resource-allocation process.

The upshot of a well-planned and analyzed wireless deployment means your company can build the foundation for bringing **“Mobilementum”** to your company and increasing productivity, while enhancing efficiency.

The diagram for success provides a framework for you to deliver **“Mobilementum”** to enterprise employees. Now if you are ready to consider wireless and mobile applications solutions for your company, consider New Millennium Consultants **“Mobilementum”** solution.

WHAT NEW MILLENNIUM CONSULTANTS OFFERS

New Millennium Consultants **“Mobilementum”** solution assists businesses make the leap from wired to wireless technology. Our proven process of analysis, review, recommendation and implementation saves you time and money while enhancing your productivity well into the future. With over twenty years of proven success in the wireless communications industry, New Millennium Consultants is truly your wireless expert.

Our approach can help your company define and focus on operational improvements that will enhance your chances in the mobile economy. As an outside source we'll provide an objective and cost effective solution for your company using our tools to help you identify a diagram for success that lets you deploy solutions with confidence and certainty. Take the direct route to your wireless solution with **“Mobilementum”** and start to enjoy the benefits of wireless mobility without the sizeable investment in technology.

Working with New Millennium Consultants, we are adept at bringing together divergent interest towards a common goal; we can guide you through the maze of issues and challenges through our phased approach in just four to eight weeks. We start with an Analysis, to uncover strategic wireless/mobile initiatives to coordinate and focus subsequent activities.

In the Current Situation phase, we assess what your company is doing today and how it can be enhanced. It's during this phase we also review your current applications and technology infrastructure to determine the impact it will have on the wireless/mobile initiative.

In the ensuing phase we identify and prioritize projects and determine which business initiatives should be highlighted. This is also the point we originate an outline of the new technology architecture and develop the proof of concept.

In the Business Case Development phase we provide the support for the decision making process, ROI, and design the metrics to track improvements. The final phase, Implementation, the long-term and short-term action plans are developed that support the enterprise's strategic vision. This phased approach addresses the key strategic issues surrounding wireless and mobile applications initiatives and uses a proven business development methodology created from:

- *A comprehensive strategic framework that addresses the enterprises concerns*
- *A well thought-out set of procedures and robust analysis mechanisms.*
- *A focal point on business value and time-to-results*
- *Proof of concept that anticipates the business impact*
- *Support for the decision making processes*

New Millennium Consultants has worked with the top wireless Industry vendors forming alliances and assisting in the evolution of the wireless industry, we have been at the forefront as technology advances and keep pace with new technology development.

WIRELESS MADE RELEVANT

At New Millennium Consultants we believe wireless is another vehicle that enables enterprise employees and supply chain partners to respond rapidly and effectively to gain access to critical information whenever and wherever they need it to strengthen customer relationships.

New Millennium Consultants helps you look at wireless technology from a business viewpoint and build on the needs of your company.

In order to deliver the wireless mobility your company and employees need, our goal is to help you get the most from your current technology and capabilities, rather than starting from scratch. This results in improved market position, reduced cost, enhanced revenues, and financial leverage. In short, **“Mobilementum”**, which makes wireless relevant.

CONTACT US :

To learn more about how New Millennium Consultants **“Mobilementum”** can help your company, please contact us at:

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