



Enterprise Mobile Computing - Factors to Consider when evaluating the BUILD Vs BUY decision

ZSL Inc.
85, Lincoln Highway,
Edison, NJ 08820
Phone: 732-549-9770
Fax : 732-767-6644
Email: info@zslinc.com

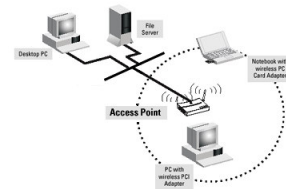


What factors you need to consider when deciding whether to build mobile solutions yourself or purchase solutions from the provider.

Introduction

Mobile technology and wireless technology is quoted as the linkage solution for business transactions by "The Trade and Popular press" recently in their cover stories. With all of the exhilaration about mobile computing and its frequent association with the Internet, there is no surprise that there are a lot of misconception about what wireless is and does.

The most common misconception is that wireless means the Internet. Wireless refers to transmission of data through the airwaves without the use of wires between the mobile handheld computing device and the main computer system. The Internet is a global network that provides access to information and applications using a browser or web navigating application.



To dismantle these misconceptions and understand what mobile computing can offer, it is important to recognize that mobile computing is not one technology. It is a range of solutions that enable user mobility by providing access to data anytime, from any location.

Organizations are as unique as individuals... they have different backgrounds, goals, needs and interests. All organizations must implement effective wireless and mobile technology to remain competitive. Such systems are necessary to ensure that all relevant corporate data is preserved and rendered readily available to the mobile workers on the field.

Because of this common need, most organizations are faced with the question of "build" vs. "buy". Both building a customized in-house solution and buying from a solution provider offer advantages and disadvantages. Before making the right choice its important to consider a number of issues with respect to long term and short term strategies.





HOW TO GET STARTED

SOURCE - Your guide to realizing your business potential through mobile solutions



Examine your organizational processes

It's important to understand how employees and customers work, to ensure the success of your mobile solution. Analysis of business processes, information flows and underlying IT infrastructure ensures that bottlenecks are avoided.

Focus on your priorities

You need a clear idea of your priorities, in order to identify which elements of your solution should be implemented first. Once this information is collected, areas for improvement can be isolated quickly.

Set out your strategic goals

By implementing mobile solutions what are the key issues in your organization that you hope to resolve? Are you aiming to improve working practices, reduce operational costs, or streamline the supply chain? Which employees need better access to information? It's time to sell the idea to your key stakeholders, once you have established your goals.

Assemble the team

There are many decisions to be made that will need involvement from IT, telecom, finance, information security and business teams. Project leaders must be appointed to schedule tasks, plan the pilot and solution rollout.

Design the solution

Your team needs to create detailed designs showing how the mobile solution will integrate with the existing and new IT infrastructure to address the daily needs of each employee, incorporating the most appropriate options for synchronizing information. Choosing devices that will best suit your needs would be the next step. Ensure employees are kept informed of the changes and a training programme is implemented to ensure rapid user acceptance.

Run a pilot

Running a pilot to test the solution before rolling it out to the entire organization is recommended, although not essential. If you do intend to run a pilot, you'll need to test the devices on five to 50 employees, depending on the size of your organization.

Study the results

It is important to evaluate the results of the pilot. Feedback from users should always be encouraged and implemented to improve user experience.

Deploy your solution effectively

You need to enhance elements of the solution and deliver additional training and documentation before production rollout, after running the pilot. It is critical that feedback from users is integrated through every stage of the deployment. Productivity and efficiency gains should now be measured against the original projections. Once the platform is successfully in place you may want to consider adding additional mobile functionality such as new line-of-business applications.

Comparison – Build Vs Buy approaches to Solution Implementation

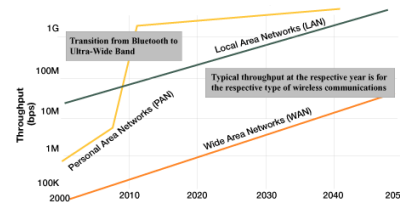
Before going into the factors that need to be considered, it's important to consider the pros and cons of software implementation.

Features	Build	Buy
Develop in-house domain expertise	Yes	No
Control over resulting system	Complete	Limited
Ownership of final products	Yes	No
Quickly respond to problems	Yes	No
Resolve problems independently	Yes	No
Relative Cost	High	Low
Possibility of successful implementation	Low	High
Requirement – Internal Resource	High	Low
System Implementation time	Long	Short

Factors to Consider

Determine – Wireless Imperative

Many companies move towards wireless decision by examining external developments that might impact their operations and competitive positions. This helps them to develop appropriate inventories of potential wireless solutions for consideration by their leadership teams. Related questions include



- What are the leading points about how new wireless technologies will generate value for companies in your competitive field?
- How are others using wireless technologies to restructure the way business is done or to build value?
- How are your competitors using wireless solutions to reduce costs and add value? Specifically what are they doing with wireless technologies?
- How might your competitor's move shift your customer's expectations?

- What advantages does wireless technology have for your value chain? Would this change your business model?
- To be successful with whom should you partner with? Where will you need to outsource?

These questions help you in identifying whether you need a wireless strategy and vision now or can you afford or wait.

Evaluate – Potential Wireless Solutions



Mobile technology is becoming more complex. There are more wireless solutions to evaluate. It is very important to choose wireless solutions, which is relevant to your operations. Issues to consider here include,

- Where in the process there is a physical disconnect between your workers and information they need to complete their job?
- For field employees, in which areas of your business do they need faster access to company information so that they may respond effectively to unanticipated developments?
- Where can mobile solutions extensively improve company's overall performance?
- Where can mobile solutions generate new opportunities?
- Mobile solutions should address which need of your business? Sales Force Automation? Customer Service? Field Service? Plant Monitoring? Supply chain? Customer access?
- Being wirelessly enabled, which aspects of your relationship with key stakeholders can be enhanced?
- How can wireless technologies make your key stakeholders more effective and productive?
- How wireless technologies can help your organization communicate with your customers? Can you be available when the customer needs you?

Determine – Priorities and Benefits

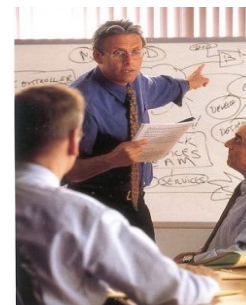
After evaluating the potential wireless solutions, you need to prioritize possible investments, calculate the costs and benefits linked with specific wireless solutions.



- In which areas of your business are mobile solutions most urgently needed? What will be the improvement over current situation if we deploy mobile solutions? What are the costs and payback associated with implementing mobile solutions?
- Of each potential mobile solution what would be the return on investment either through revenue enhancement or cost efficiencies? To what degree might wireless investments result in diminishing returns?
- To get maximum return on investment who in the company should get wirelessly enabled first? Which stakeholders will benefit most from each potential mobile solution?
- What are the opportunity costs of moving ahead with wireless mobile solutions? What are the costs of not moving ahead?
- Can we gain market share with implementing wireless mobile solutions? What happens if your competitors implement wireless solutions before you? How important is the investment to you now?

Implementation Considerations

Organizations should consider various factors for wireless implementations. *Decision-making authority, productivity enhancements, Geography-based reporting, security issues, and the mobile solution should fully integrate into existing IT infrastructure.* To determine what is best for your organization consider,



- What is your reach of wireless vision? Are you going to mobilize your entire enterprise or only focus on specific functional areas?
- Will you search out and invest in wireless initiative with fastest payback and adopt quick-wins strategy?

- Will the mobile solution integrate into your current initiatives like field service, supply chain and CRM? Do you have the resource to integrate these initiatives?
- How ready is your organization to adopt a comprehensive wireless vision?

Build Option

"Build" can be defined as using internal resources or hired external resources to develop the mobile solution, performing all stages of development including analysis, design, testing, deployment and maintenance.

Benefits

Larger companies tend to lean toward build solutions because they have adequate resources to undertake large projects. By internally building mobile solutions the organization can enjoy benefits like

- Can directly control the process.
- Own the resulting system.
- Develop excellent expertise in the domain knowledge.
- Extract better value from your IT resource.

Challenges

The biggest challenge for build in house options is that it requires large up-front monetary and technical investment that can be difficult for small and mid-sized organizations.

Internally built systems challenges also can be

- Extremely costly due to emergence of unforeseen expenses.
- Frequently fail.
- Require a resource investment that is outside the core business focus of the company.
- Sourcing of components from multiple vendors.
- Multiple processes and support contacts (application, integration, device, network etc.)

Outsourcing Option

"Outsourcing" can be defined as purchasing products or services from an external party to deploy, integrate and maintain a mobile solution.

Benefits

Smaller companies tend to buy software systems to minimize the up-front implementation costs. Several other benefits include

- Control capital costs.
- Bought mobile solutions quickly yield a broad array of features.
- "Per user monthly fee" increases affordability.
- "Pay as you go" increases flexibility and scalability.
- Deployment is quick and faster.
- System reliability
- Technical support is available when you need it.
- Dealing with single vendor can avoid finger pointing between multiple vendors, frameworks and support models.

Challenges

With these incredible benefits available especially for small and mid-sized organizations there are some challenges as well for outsourcing.

- Outsourcing makes the organization beholden to the vendor for business-critical solution enhancements, often requiring expensive, vendor-implemented customization. As a result, the down-stream costs of the bought solution can grow.
- Can the outsourced solution integrate into existing systems?
- Will the data remain secured and confidential?
- Will the outsourced solution add value to your organization?

Choosing an outsourcer who demonstrates commitment, intelligence and a sense of responsibility can help organizations with significant cost savings and flexibility.

Total Cost of Ownership

Total cost of ownership is the first major factor to consider when evaluating the build vs. buy decision. Companies must consider both the short-term and long-term costs of creating, maintaining, supporting and updating a mobile solution. While an internally developed solution may look more cost effective in the short term, software and hardware vendors must keep in mind the extended costs of choosing to build a mobile solution on their own. To thoroughly assess the total cost of ownership in associated with mobile solutions, companies should look at several major cost categories: initial system development; application updates and ongoing costs; as well as the costs of delaying implementation of a solution, which include support costs and lost revenue.

Conclusion – Making the Choice – Build or Buy

To be the best you need to focus on your "core activities" that contribute to your bottom line. Many organizations have learned the hard lesson that expending resources to build in-house expertise in non-core activities can cause you to lose competitive edge in the market.

Key questions to ask yourself before making the choice

- Will the solution provide a competitive advantage?
- Can you build it?
- Can you build it for less money?
- Can you build it fast enough?
- Is this the best use of your internal resources?
- Are you willing to take on the risks involved in building it yourself?
- Is building solution part of your core competency?
- What are your competitors doing?

Even though the answers to these questions will not always produce a clear answer to the question of buying versus building mobile solutions, answering them will help you make a more educated decision on which is better for your organization. Increase your chances to make the right decision for your current situation by answering these questions first.

About Z* Mobile Framework

Even though there are a lot of challenges for mobile solutions, the good news is that ZSL is making mobility easier and safer, as well as more manageable, reliable and affordable for small and medium businesses than ever before.

Key features include

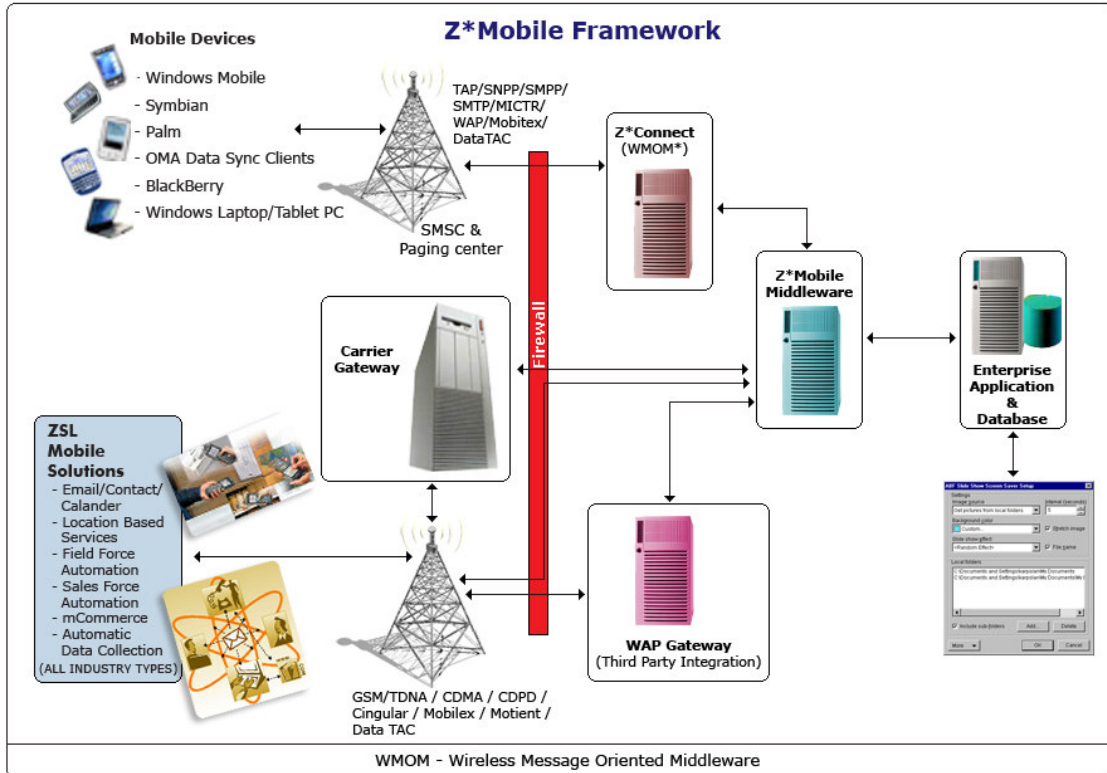
- Anywhere, anytime, any device Access to the business data.
- Task list or sales appointments browsing while on the go.
- Real Time sales and information update.
- Remote Status update.
- Pushing critical information over SMS or WAP Push.
- Offline or Disconnected area client to hold the data for later synchronization.
- Secured access to the corporate email, calendar and contacts.

Supported Devices:

- Palm OS based Handspring or Palm Devices
- Win CE/Pocket PC OS based Handheld
- WAP and J2ME Phones
- RIM's Blackberry Smart Pagers

ZSL realizes that field workers are mobile by definition. ZSL uses technology to make field workers more focused and successful. ZSL's solution is customized in such a way that mobile workers get the direction they need and managers get the information they need. The bottom line is increased profits.

Z*Mobile Framework provides a platform for delivering Web-based content and applications to mobile devices rapidly and cost-effectively with minimal recoding. With the emergence of enterprise-class devices with integrated wireless access, staying always connected with the resources wherever you are is very much a reality today. Z*Mobile Framework makes these devices even more valuable by enabling mobile workers to receive up-to date information securely anytime and anywhere.



About Z*Connect

Z*Connect is a world-class software platform that provides alerts and notifications over Short Messaging Service (SMS), Multimedia Messaging Service (MMS) and traditional paging networks. It is protocol independent and delivers messages to both SMS and any other wireless devices. This platform provides PushAdapters over Java messaging framework for different SMS and email protocols. Alerts and notifications generated by server applications are delivered to mobile devices (including Smart phones and pagers) using the push adapters. These easy-to-use adapters are designed to shield developers from the details of protocols and enable quick development of wireless-smart applications.

Mobile Sales Force Automation

Today's mobile sales professionals are dealing with increasingly demanding customers, and more and more complex products. Customers expect fast response to requests for custom orders or configurations, demanding high performance from their suppliers. To deliver the high performance they expect your mobile sales force needs to be armed with the right information, at the right time so they can turn every customer interaction into business.

Z*Mobile framework provides

- ✓ Quick Access to Information
- ✓ Shortened Sales Cycle
- ✓ Sync Capability
- ✓ Always On Sometimes Connected

Expansion in the capabilities of Sales force automation applications holds great promise for improving the efficiency of mobile sales professional and reducing the overall cost of sales.

Mobile Field Force Automation

Wireless technology has emerged as a potent enabler of industry convergence. Mobile field workers are the early adopters of wireless technology. Mobile workers need to send and receive the information again and again to be more efficient. Trips back to the service depots to get the required information wastes time and delay the work process. Wireless FFA closes the information gap between the service organization and the field force representative by augmenting every component of the field service cycle, from initiation to closure of a service request.

Z*Mobile Framework provides real-time ROI benefits for your Field Force

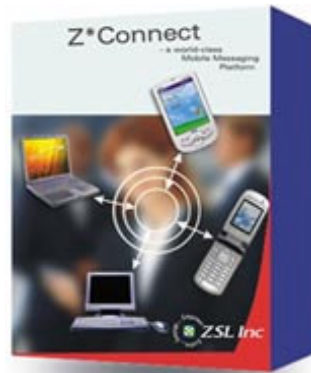
- Fleet management
- Inventory and asset management
- Warehouse automation
- Asset tracking
- Quality Control (tracking and counting articles)
- Packaging
- Security and access control
- Hazardous material management
- Advertising and promotion
- Delivery
- Smart-card-based payment systems

Z*Connect (SMS Gateway) Named One of the Best Midmarket Products of the Year by CMP's VARBusiness Magazine

Z*Connect was named as a VARBusiness Best Midmarket Product of the Year by CMP Media's VARBusiness magazine. ZSL was named as one of the five top companies in the Mid-Market, Linux and Open Source categories.

Z*Connect is a world-class software platform that provides alerts and notifications over Short Messaging Service (SMS), Multimedia Messaging Service (MMS) and traditional paging networks. Developers can create wireless-smart apps quickly and easily with Z*Connect's adapters and software developer kit, which supports GSM, TAP, SNPP, SMPP and SMTP.

Z*Connect is featured and profiled in the special August 7 VARBusiness "**Best of the Midmarket**" issue.



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