

Businesses which adopt new working processes based on wireless technology can steal a march on their competitors.

Unwired for business

Eugene Chua

In today's wired workplaces, employees are stymied by multiple layers of burdensome paperwork and disconnects between themselves and the information they need.

Advances in wireless technologies have now made it possible, however, to develop compelling mobile solutions across a variety of industries. Forward-thinking companies are unlocking the real value of wireless by developing mobile solutions that deliver the right information to the right people at the right time. Whether immediately addressing customer service errors that put relationships at risk, or cutting through manual, time-consuming work processes, mobile solutions are often at their best in chaotic work environments where timely access to enterprise information is critical. This ability to optimise employee performance and enhance customer service means that companies are achieving remarkable gains in accuracy, speed, and productivity.

These organisations are at the forefront of the wireless revolution. They are already reaping the tangible benefits of current implementations, and more importantly, are readying their companies to continue to lead the revolution. Deloitte Consulting has developed an *mTransformation* model to help organisations understand the potential of wireless solutions, for both positive and disruptive impact. This approach allows organisations to make the most of the opportunities and address the threats presented by the wireless revolution.

Step one: wireless enablement

The first step most organisations take is to extend existing processes, products and services by wireless. This is a relatively easy step to take since it involves the application of existing technology

solutions in well-defined roles. It also causes minimal impact to existing processes, employee roles and responsibilities (thus enhancing adoption rates).

Customer-facing processes, such as customer self-service, are excellent candidates for step one and are justified by increasing 'stickiness' or competitive positioning for a premium market segment. These initial implementations generally yield short-term return on investment, but more importantly, build the skills and experience that lay the foundations for future evolution.

The financial services industry has been an early adopter of wireless solutions, with numerous deployments of wireless banking and brokerage services. For example, the Bank of Montreal wanted to expand the reach of wireless financial services in North America and decided to launch a wireless banking and brokerage solution that could be used by other financial service providers and retail merchants.

The Bank of Montreal chose a neutral device platform where the application interfaces directly with the bank's core processing systems, providing better-than-web response time. The current solution is available for use with Palm devices or through WAP-enabled digital mobile phones. Customers view a log-in screen, where both banking and brokerage customers enter an account number and PIN to access accounts. After successfully entering their PIN, customers can choose from a variety of functions, including:

- viewing of account balances & transaction history;
- bill payment;
- fund transfer between accounts; and
- viewing of stock and mutual funds quotes.

The new service, called Veev, has been well received with more than half

of the users accessing their account every day from a mobile device: customers check stock values, request custom stock quotes and transaction history. The Bank of Montreal is now looking to roll out additional services using the same infrastructure, extending reach and stickiness beyond purely financial applications.

Step two: wireless reinvention

Wireless technologies present unique opportunities to rethink various processes. For example, wireless solutions can be utilised to enable the automated tracking of goods and resources in manufacturing plants.

Processes based on 'reporting back' or 'checking in' can also change. For example, anyone in an organisation can access information wherever and whenever they need it. Distinctions based on 'field' versus 'back office' change. Now the field can access the same systems and data as those in head office.

The manufacturing industry is an early adopter of mobile supply chain solutions. Ford provides an excellent example of wireless reinvention. Inefficient tracking of more than nine million components for Ford's cars and trucks in its two million square-foot Van Dyke facility in America was costing Ford millions of dollars, resulting from delays in the delivery of products, excess and obsolete inventory, and interruptions of the JIT (just in time) manufacturing process.

Ford chose to implement a real-time locating system (RTLS) by WhereNet. The solution comprises wireless tags, fixed position antennae, and web-enabled software which locates and tracks inventory. Each container loaded with parts is tagged with a WhereNet transmitting tag when it is received (each WhereTag has a bar code that is associated with the product ID of the item).

Wireless strategies

Every four minutes, the tag transmits its location to continually update the warehouse management system. Antennae positioned throughout the factory receive tag transmissions, and then deliver tracking information to a computer. The system then identifies the location of the tag within ten feet of its exact position.

The solution is further leveraged among all Ford facilities when a container tagged at the Van Dyke facility is shipped to another assembly plant where another WhereNet RTLS picks up the tag transmissions and begins tracking as the racks reach the docks. The

centric organisation will determine their degree of success in the marketplace.

Faced with the need to recoup their large investments in 3G licences and infrastructure, mobile operators must look to aggressively develop new value-added services. And in an effort to explore the opportunities that wireless discontinuity brings, mobile operators have started to establish themselves in the consumer m-commerce space.

One of the areas that they may be able to target is the payment structure, which facilitates the growth of m-commerce. Mobile operators may be able to

although Europe and Asia are moving quickly to develop a standardised m-payment solution.

It will be extremely difficult for any one player to provide a comprehensive end-to-end solution. The competitive landscape of the wireless and m-commerce space will necessitate active partnership and alliance strategies among key mobile operators, payment operators, and content providers. The winners will have the ability to develop and implement effective regional strategies and innovative business models that address unique societal and technological characteristics to develop compelling customer experiences, and, in the process, dominate the wireless and m-commerce market space.

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benefits are significant: Ford projects that it will recoup its investment within 12 months with net profit value (NPV) at about ten times the initial multi-million dollar installation cost.

However, implementation at this stage becomes complex and organisations contemplating undertaking these types of solutions need to consider the implications. These include application design (as the user interface must be intuitive with minimal navigation) and device selection.

Step three: wireless discontinuity

In this stage, new business models emerge that could not exist without wireless tools and technologies. For next-generation networks, the once well-defined value chain evolves into a complex value network, creating uncertainties for operators' customer and revenue models. The expectation of high bandwidth, combined with potentially ubiquitous access to the internet, opens up the value chain to a completely new set of participants, and fundamentally alters existing business models. Operators' agility in moving from a voice-centric to a data- and customer-

leverage their own core competencies, which include the transaction capability to accommodate and clear both micro- and macro-consumer payments; an established consumer and merchant relationship base; and control of the medium through which consumers conduct transactions and view content.

This simultaneously presents a significant threat and to players in the credit card industry. These new entrants are a significant threat to traditional payment operators, which may be disintermediated if they do not quickly and effectively develop new and innovative wireless payment structures, establish themselves as m-payment leaders, and integrate themselves into the standard setting procedures already being established.

M-payment solutions are in the early stages of development. Consumers and merchants require a solution that is secure, reliable, standardised and integrated with other payment architectures. Most importantly, they will require a solution that can be used for purchases either over the internet or at the point of sale. Currently, there is a lack of compatible solutions across all regions,

Think now, act now

While we have presented the framework as three distinct stages — wireless enablement, wireless reinvention, and wireless discontinuity — an organisation may find itself simultaneously undertaking a variety of initiatives that fall into different stages of *mTransformation*.

This further accentuates the need for a bold vision that clearly establishes an organisation's wireless imperative. Companies must not look only at their existing competitors, but also understand which new entrants are coming in and changing the rules of the game. Organisations must then assess their readiness to transform themselves and the opportunities presented by the new players. ▼

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