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What Is a Mobilized Business?

A mobilized business operates at the full potential of its people. It allows you to tap into talent and capabilities—no matter where they are. It unleashes your people, letting them be flexible and responsive to the demands of your business.

*—Mary McDowell, Executive VP and General Manager
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Mobility. The word has been around for the past few years, typically used in connection with cellular or mobile phones, and more recently with mobile email. But when it comes right down to it, what does mobility mean?

Ask ten people for a definition of mobility, and the majority will mention “freedom of movement.” Mobility is the freedom to collaborate and transact business outside traditional work places and times. The overwhelming use of mobile phones and other wireless devices indicates that today—more than ever—workers are staying connected while they are on the go.

Consider this scenario: Your client, located three time zones earlier than you, contacts you at the beginning of their business day with an urgent request for the latest technical details and pricing on your product. Their corporate purchasing group is going to make the buy/no-buy decision at the end of their business day. You have been trying to close this account for months. But, it is 8:00 pm in your time zone, and you are at your daughter's last concert of the season. The information you need is at the office, over 30 minutes away.

Will you have to miss your daughter's concert to take care of this important business activity? Not if you work for a mobilized business.

You grab your mobile device, access the corporate network, pull the latest technical and pricing data from the product database, and email the information to your client. You call the client to let them know they will have the details in their inbox in a few minutes and wish them well in the meeting. And you return to enjoying your daughter's concert.

Perspectives on Mobility

Ask a CEO what mobility is, and she may say that it is the ability to respond to pending emails while on the way to the airport. For sales representatives, it is the ability to access important information while visiting customers. For a knowledge worker on a virtual team, it is the ability to make it to his son's basketball game at 4:00 pm but still receive and review that important document by the end of the workday. Mobility enhances productivity by adding flexibility to traditional work routines so that they can be done at the right time regardless of location. Essentially, mobility makes it easier to manage the complicated and ever-increasing demands of both work and personal life.

Mobility means different things to different people. Like the group of blind people, each touching a different part of the elephant and interpreting it as a rope, a tree trunk, a pot, a basket, a plowshare, and so on, each person in an organization will form an opinion of mobility based on his or her predominant perspective. It takes careful planning, investigation, and communication to help all the functions see and understand the whole mobility elephant.

What Mobility Is Not

When the talk turns to mobility, some false assumptions tend to surface. One notion claims that mobile workers are not as available as their office counterparts. But technology enables mobile workers in the same way it enables office workers. Mobile workers have access to teleconferences, net meetings, conference calls, and contact through their mobile devices, so they can participate equally in business and decision-making processes.

At Nokia, the use of teleconferences and online meeting tools has grown dramatically. In 2002, Nokia employees clocked an average of one million teleconference minutes per month. In mid-2005, that number had increased to eight million conference minutes per month, resulting in reduced travel time and costs as well as increased involvement in decision making.

In a mobile business, you are free to work where, when, and how it makes sense.

But lack of availability is only one of many often incorrect assumptions about the use of mobility in business practices. The following table presents comments typically heard when people start talking about a mobilized business.

Comment	Assumption	Reality
Your company is mobile? You must use a lot of independent contractors and home office workers.	The workforce is composed of a loose or virtual collection of self-interested workers.	Mobility allows greater access to people with the right skills to solve a business problem—no matter where they are located.
My department decided to get everyone these fancy phones that can access the customer support database from anywhere in the region. They're trying to suck every minute they can out of us!	Management thinks their workers are not working hard enough and do not manage their work time well enough.	Mobility is not intended to increase workloads; it helps a worker become more efficient and productive with the time they have dedicated to work.
Now that my boss can reach me anytime, does that mean I'll always have to answer his calls—even if it's late at night?	Workers will have to be available to work anytime... the line between work and personal life is gone.	Mobility does not extend the work day—it provides greater ability to flex work time around a worker's personal schedule while maintaining the worker's productivity.
How will we be able to build relationships or get to know our colleagues if nobody is in the same place?	Relationships cannot be built unless people are face to face.	Mobility can increase the ability to build relationships by providing a means to initiate and maintain communication and information exchange at a moment's notice, even when the workforce is separated.

Mobility in and of itself is neither positive nor negative. Rather, it represents a fundamental shift in the way we look at work and doing business. People's attitudes and assumptions are largely determined by the way mobility is presented to them.

Nokia's Perspective on Mobility

At Nokia, we see mobility as the next step in the natural evolution of doing business. Figure 1 illustrates the evolutionary path that Nokia's business infrastructure has taken over the last 10 years.

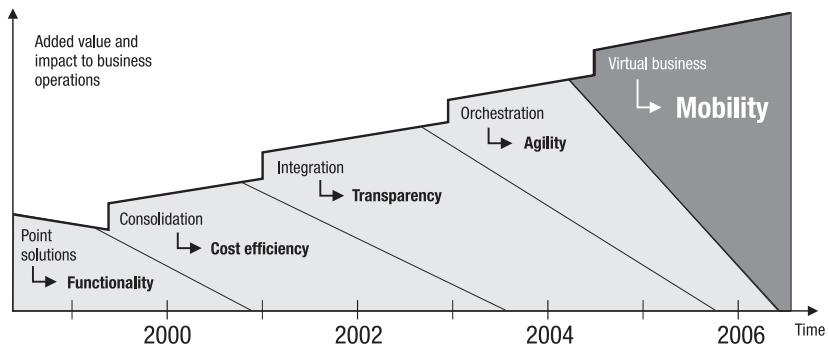


Figure 1. Mobility is the next step in business infrastructure evolution.

As with many other organizations, in the mid-1990s Nokia's infrastructure was a loose collection of *point solutions* that supported individual business units. For example, almost every business had its own email and ERP systems, as well as its own IT organization. With cost efficiency in systems driving our efforts, we *consolidated* our application and IT development into one internal service provider organization that cooperated closely with different business units. Around the same time, Nokia experienced a logistics crisis, which prompted us to begin developing a corporate-wide SAP implementation that would replace all existing ERP systems. Most of Nokia's current global system platforms were created during this consolidation phase.

In the early 2000s, we began concentrating on internal and external *integration* as a means to transparently manage our business throughout the value chain. During this phase, we realized the importance of developing new business capabilities

through concurrent IT and process engineering. To accomplish this, we expanded the scope of our IT organization to include business process development, thus consolidating process and system development. We also pursued e-business integration with our customers' and suppliers' systems, resulting in RosettaNet, Nokia's solution to exposing appropriate online systems to its external partners.

Starting in 2003, Nokia began an evolutionary phase called *orchestration*. The main driver for this phase was agility in adapting to change. In this phase, Nokia invested heavily in modularizing processes and platforms, with the goal of staying competitive and productive while adapting to new situations. Internally, this investment improved our capability to reorganize quickly if Nokia decided to fundamentally change its business structure to adapt to changing market directions. Externally, we focused on selecting the best partners to work with to quickly adapt to changing market conditions.

Nokia sees mobility as the key driver for *virtual business*, the next evolutionary phase in business infrastructure. We strongly believe that new ways of working that are free from traditional constraints of geography and time will play an important role in further enhancing our productivity and competitiveness by enabling a virtual business environment.

Mobility is communication on the go, with access to the right information at the right time.

While each company's experience is unique, most companies have walked some part of this evolutionary path. Anyone who has been in business for the last 10 to 15 years can attest to the forces that have driven companies along this path. In terms of technology, the following transitions have influenced strategic infrastructure decisions:

- Paper to digital vehicles in business processes
- Proprietary to standards-based applications
- Proprietary, closed network architectures to open, IP-based connectivity

Additionally, and just as importantly, changing perspectives on how business is done are rapidly eroding traditional concepts of work, as illustrated in the following table.

Concept	Traditional view	Emerging view
Where work takes place	The office	Where it makes most sense
How performance is measured	Hours logged	Results achieved
How teams collaborate	Permanent physical location Entire team in one location	Virtual spaces Temporary physical locations across geographies
Space and facility requirements	A cube for each worker	Flexible meeting and work spaces
Organizational models	Strict departmental hierarchies	Worldwide virtual teams that form as needed to address specific initiatives

Evolving Toward a Mobilized Business

Changes in working patterns and behaviors fostered by mobile voice—getting access to the right people when they are needed—are strong indicators that the shift to mobile business practices is already underway. Increased offerings of mobile data services are furthering this trend:

- Many businesses have become *laptop mobile*, freeing their workers from their desks.
- The growth of wireless access is rapidly increasing workers' ability to access company information anywhere.
- Upcoming higher bandwidth and capacity in mobile data services will accelerate demand for access to richer information and will amplify the need to change existing business practices.

Obviously, mobile ways of working are quickly becoming a reality. But what are the key changes that mobility brings to work? Mobility enhances business-wide processes and infrastructure, enabling workers to move freely yet sustain and/or increase their productivity (see Figure 2 below):

- Location and time of day are no longer obstacles to doing business.
- Information input and output are possible regardless of the device that employees use to access it.
- Access to information, whether online (wireless) or offline (synchronized copies), is available as needed.

In short, mobility means that business processes, infrastructure, and culture all support flexible and efficient ways of getting the job done.

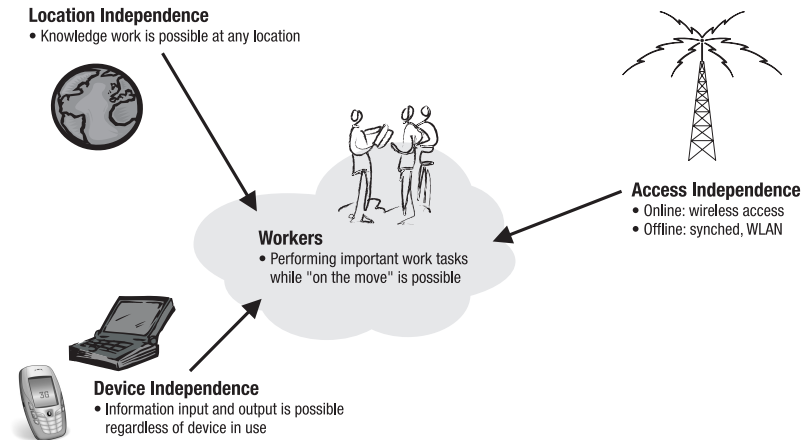


Figure 2. Mobility means access, device, and location independence.

How Mobility Changes Traditional Business

The overriding effect of mobility on traditional business practices is that it removes location from the process of delivering critical, relevant information to workers. At Nokia, we are finding that increasing a worker's mobility triggers a gradual shift away from traditional work practices:

- Working physically in the office during set daily hours will shift to working wherever and whenever needed.
- Traditional performance measurement based on supervised presence will change to dynamic, task-based measurement.
- Direct supervision will evolve into mentoring, coaching, and connecting people.
- Establishing teams in the same physical location will move toward orchestrating virtual groups of specialized individuals.
- Allocating office space based on status and corporate hierarchy will move toward allocating space to facilitate functions and tasks.

In addition, mobility has the potential to trigger advances in other technologies. And, by its very nature, it will reinforce current trends in organizations to move away from rigid, centralized hierarchies to looser groups that rely on inexpensive, ubiquitous connectivity to get things done. With these thoughts in mind, we share Nokia's insight into how mobility will increasingly change traditional business in the following ways:

- The way we work
- The way we value work
- The way we manage work

Trends Toward Business Mobility

Mobility is already a part of doing business today, and its role will only become stronger. The most prevalent example today is mobile email. While a relatively small slice of the current business mobility market, mobile email is on the verge of significant growth—perhaps even becoming a mass-market commodity for organizations around the globe over the next few years. In fact, it is estimated that there are currently 650 million corporate email boxes worldwide, but only a fraction of those have been mobilized. Just as email transformed how we do business, the use of mobile email, paired with access to calendar information, corporate networks, and the internet, will free workers from the need to be in a certain location to get their jobs done.

New mobile business solutions like Fixed-to-Mobile Convergence (FMC) voice solutions are also becoming more popular. These solutions integrate mobile and fixed-line networks (the corporate desk phone), providing enterprise telephony services to mobile workers regardless of their location, access technology, and communication device. Essentially, FMC removes the need for an office phone number because the worker's mobile device can receive calls wherever the worker is, with the call being routed over the most cost-effective network (corporate when in the office; external when out and about).

These two examples, out of many others, illustrate that the emphasis on work is shifting from a specific place or time to having access to the right people and information at the right time. Where you are is not so important as who or what you can access.

The Way We Work

Mobility changes the way we get our work done by affecting traditional concepts of place, time, interaction, information, and technology. Essentially, mobility enables pervasive connectivity, which opens up new work patterns for accessing, processing, and exchanging information. The consequences of pervasive connectivity and easy access to information include the following:

- Separating place from information in business practices and processes (the ability to work almost anywhere)
- Changing the concept of work from hours spent in the office to tasks performed to keep the business working efficiently
- Changing the role of physical corporate facilities to support work wherever it takes place
- Increasing time spent working in virtual, global teams that are formed as needed
- Increasing reliance on virtual collaboration infrastructures
- Increasing accountability for decision making through immediate access to quality information
- Accelerating the flow of information in business processes
- Placing higher burdens on technology infrastructures

The Way We Value Work

Mobility also changes the value that we place on work by focusing on the relevance of workers' knowledge and the contribution of their activities to meeting business goals:

- The value of work will shift from the place of work to the knowledge of the worker.
- Workers will concentrate on high value-adding tasks that quantifiably and positively affect the business.
- People will be able to work collaboratively or individually in environments that stimulate their creativity.
- Productivity expectations for traditional downtime (commuting, traveling, working off-site, and so on) will increase.
- Team dynamics will be based on high individual performance, and the role of virtual teams will increase with the emphasis on task achievement.

The Way We Manage Work

One of the greatest impacts mobility will have on traditional business practices is in workforce management:

- As the workforce becomes more mobile and physical presence is removed from the work equation, direct supervision of employees will diminish.
- Work tasks and performance measures will need to be clearly defined as the amount of physical interaction between managers and workers decreases.
- Businesses will need to emphasize personal accountability and individual decision making because mobile workers will decide how, when, and where they complete their tasks.
- Managers and employees will need to develop stronger relationships of trust to maintain productive work environments.
- As teams become more mobile and virtual, management responsibilities will focus on connecting people and information, orchestrating relationships, and facilitating collaboration as a mentor or a coach.
- Increased expectations for availability, accountability, and productivity will eventually erode the barrier between work and personal life, forcing businesses to place greater emphasis on the balance between the two.

Keeping an Eye on Governmental Direction

By the time governments begin to embrace and integrate new technologies into their operations, you can reasonably assume that those technologies have been in use long enough to be deemed firmly established. For example, since many transactions with governmental organizations are shifting toward electronic and IP-based systems, you could say that we are well into the e-world. Given that wireless technology is emerging in many local governments and military organizations, you could hypothesize that we are not far from entering the m-world. Businesses prepared for this eventuality will be best positioned to take advantage and even steer the development of these technologies for their own benefit. They will also be ready to adjust their policies if legislators should tighten the regulations on mobile or virtual working relationships to protect citizens.

Components of a Mobilized Business

Mobilizing a business is not a matter of simply equipping the sales force with gee-whiz handheld devices. Evolving to a mobilized business requires a holistic approach. Ignoring any of the components shown in Figure 3 could seriously jeopardize the potential gains of transitioning to a mobilized business.

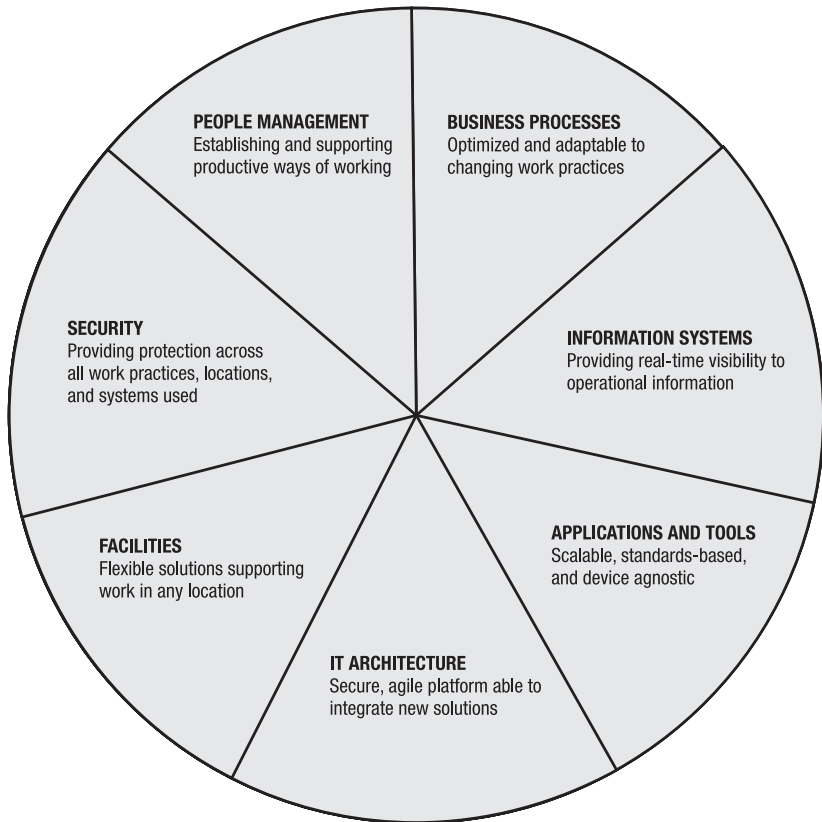


Figure 3. Components of a mobilized business.

A successful mobilized business will account for these components in the following ways:

- Business processes and systems allow the organization to access and interact with corporate information on an as-needed basis from selected mobile business devices.

- Scalable, standards-based applications and tools enable routine and specialized work tasks on mobile devices.
- The IT architecture provides secure access to information over a robust mobile device platform that fully integrates with existing solutions and mobile technologies.
- Well-defined security policies and their enforcement ensure that corporate information remains confidential and protected regardless of location.
- Flexible workplaces and workplace solutions facilitate and support mobile workers while in the corporate office, at home, in transit, or at a remote site.
- People management practices support and encourage 1) new ways of working and 2) the management and development of mobile workers and virtual teams.

These components all fall within the commonly accepted categories of people, business, and technology. Any mobility initiative must successfully address these three different perspectives. These perspectives and the consequences of ignoring them are summarized in the following table.

	People	Business	Technology
Major interests	Simple, intuitive solutions I choose when, where, and how I work	Growth, productivity, competitive advantage, improved customer service, return on investment, and usage metrics	Cost efficiency in implementation and use Continuity among technologies to protect investments Project is under control
What they want	Appropriate and easy access wherever I am	Cost-effective solutions that meet business and user needs	A scalable, secure, and interoperable infrastructure that meets business and user needs
Consequences of ignoring perspective	Lack of adoption, resistance, low usage levels Benefits of mobility are not realized	Lost opportunities to reduce costs, increase worker productivity, and establish competitive advantage through a more responsive customer service system Business case often not achieved	High implementation, integration, and operational costs Information security risks

As Nokia has begun evolving toward more mobile ways of working, focusing on each of these areas has helped us maintain a balanced approach between the people involved in our business, the processes that enable that business, and the technology that facilitates communication on the go. We have learned that focusing too much on any one area minimizes the benefits derived from the other areas. Keeping this holistic approach in mind has kept us from wandering too far from the path.

The Executive's View of a Mobilized Business

From an executive's point of view, evolving to a mobilized business would result in an organization with the following characteristics:

- Mobile technologies are an integral part of the corporate IT infrastructure.
- Corporate information is appropriately secured across locations, systems, and work practices.
- New capabilities are achieved by adding mobile elements to business processes.
- Global and intercompany task forces can form quickly and work efficiently.
- The role of the corporate office and dependence on a nine to five time window diminish, providing the freedom to work where and when it is most convenient.
- Physical space is used for productive face-to-face work.
- Employees have more balance between work and personal life.

The following chapters expand this view of a mobilized business, providing the background, understanding, and tools needed to successfully assess an organization's mobility needs and to prepare solid mobility solutions.

Things to Consider

- Mobility is the next step in the natural evolution of doing business. In some ways, mobility is already a part of doing business, and its role will only become stronger. Is your business ready to become more mobile? Why?
- How far is your business already mobilized? How far do you want to go?
- How will access to the right information at the right time regardless of location give you a competitive advantage?
- Mobility is more than gadgets and technology: it is a fundamental change in the way we work and manage work. As you begin to explore ways to incorporate mobile elements into your business, carefully consider the impact that mobility will have on workers, processes, and the IT infrastructure.
- How do you intend to balance your mobility strategy between people, processes, and technology?
- Think about your organization. What would business decision makers want from a mobility initiative? What would their concerns be? Apply the same questions to a typical end user and to your IT director.