



It's Time to Seriously Assess Your
Mobile App Strategy

FROST & SULLIVAN

Frost & Sullivan White Paper

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INTRODUCTION

Are you managing your mobile enterprise apps—or are they managing you?

Mobile enterprise applications are exploding in number and variety across the North American business sector. More companies than ever are harnessing mobility in innovative ways to better engage with their customers, workers, and partners. As a result, companies that aren't yet optimizing their mobile efforts are putting themselves at real risk and possibly losing revenue. While they're lagging, their competitors may already be well along the mobilization curve and reaping the benefits of:

- Happier customers
- Expanded market share
- More efficient business processes
- Increased employee satisfaction
- Improved supplier relations
- Increased sales

Having said that, it's understandable that many of today's businesses are overwhelmed when it comes to determining when and how to properly create and implement effective mobile software applications. The rapid growth trajectory that is currently in place for mobile apps can result in denial, confusion, and even disarray.

This paper will examine seven steps for developing a current, secure, and well-managed mobile app portfolio.

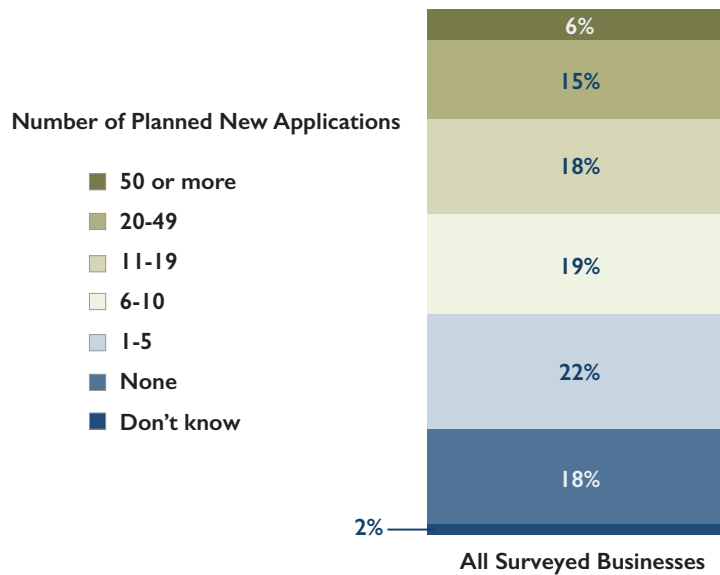
IT'S NOT YOUR IMAGINATION – MOBILE BUSINESS APPS ARE EVERYWHERE

Mobile devices—the latest smartphone, the cutting-edge wearable, the lightest tablet—seem to monopolize the attention of today's press. However, devices are simply the engines for what really counts—the software applications that help today's businesses succeed. From basic navigation apps to complex workforce optimization solutions, mobile software is viewed as a vehicle for driving real and positive change in today's business sector.

Not surprisingly, the mobile business app market is on an impressive growth trajectory. Frost & Sullivan surveys a sample of North American businesses each year,¹ and responses reveal that 62% of organizations already have at least six employee-facing mobile apps deployed. An impressive 26% of companies self-identify as heavy users, with 20 or more software applications available for their workers to use on their mobile handhelds. Mobile app use is not confined to a small group of workers; rather, it is widespread across multiple employee types—from C-level execs to mid-managers to field service techs.

And no matter what size they are, they're not done yet. In the next 12 months, 80% of businesses plan to keep adding new mobile worker apps to their portfolios.

Exhibit I: Mobile Applications Growth Plans, Next Twelve Months



Source: 2015 Mobile Enterprise Applications Survey, Frost & Sullivan

There are a number of factors driving this strong level of interest in mobile apps, including:

- **Employee expectations** – Today's employees take mobile apps for granted in their personal lives, and they are impatient to experience the same level of convenience and assistance in their jobs.
- **The promise of increased worker productivity** – Companies believe that real-time visibility and information exchange will result in more productive employees and more efficient work processes.
- **Desire to innovate** – Line-of-business (LOB) heads view mobility as a means of differentiating against their competitors, and have become more vocal in demanding mobile solutions for their workers and their customers.
- **Enriched customer engagement** – Customers are able to get the product, service and/or information they want more quickly via a well-designed smartphone or tablet app, and are more satisfied as a result.

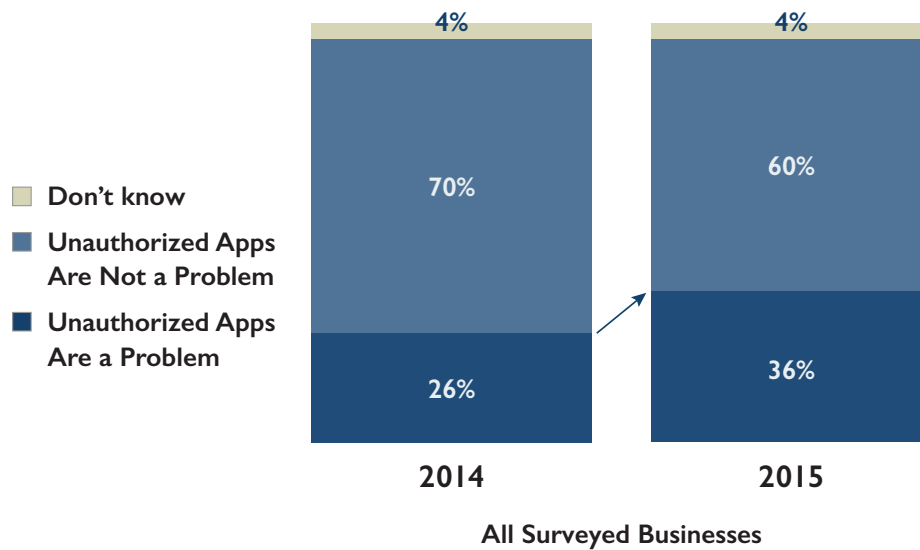
Fragmented App Strategies

Clearly, businesses are sold on the mobile app value proposition. However, there is concern that mobile applications strategies are not being well thought through at the individual company level.

For example, impatient individual employees and LOB heads may begin using mobile devices and/or apps that haven't been reviewed or approved by their IT organization:

- BYOA (Bring Your Own App) results in employees introducing their own mobile apps into the company ecosystem. While this may improve one worker's—or one department's—effectiveness, it can inject an unstable element by bypassing the IT organization, which is tasked with not just coordinating mobility efforts across the various LOBs, but also for ensuring data security and optimal backend integration. **More than one-third of businesses already consider employee use of unauthorized mobile apps to be a problem.**² Without a formal, up-to-date mobile application strategy, renegade apps can inflict serious damage.

Exhibit 2: Employee Use of Unauthorized Mobile Apps as a Problem, 2014 vs. 2015



Source: 2015 Mobile Enterprise Applications Survey, Frost & Sullivan

- Then there is the BYOD (Bring Your Own Device) dynamic, which can further amp up the confusion level around mobile applications by causing inconsistent app performance across multiple mobile form factors and operating systems.

Company executives can also contribute to a fragmented and disorganized mobile app environment by not taking a proactive stance and requiring a strategic action plan.

Bottom line: An increasing number of managers, employees, and customers understand the transformative power of mobile business applications; however, companies often lack a roadmap for a successful strategy and implementation plan. Unfortunately, taking a reactive, laissez-faire attitude toward mobile business apps carries distinct risks, including:

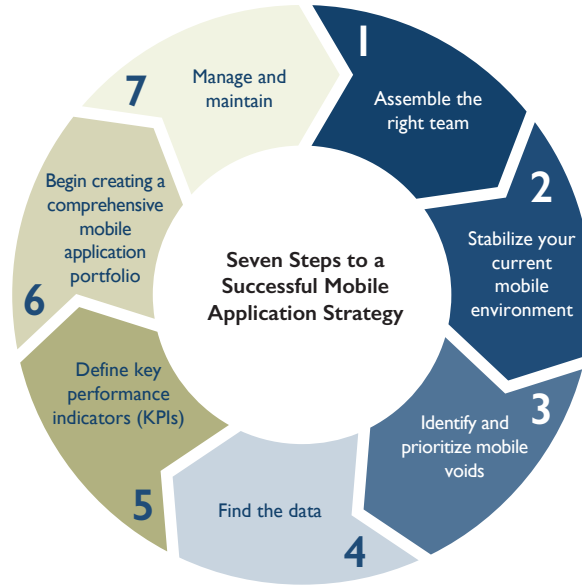
- Security breaches that reveal corporate and customer data
- Lost profitability
- Inefficient business processes
- Dissatisfied employees and customers
- Financial and/or legal exposure due to non-compliance with regulations

IT'S TIME TO ASSESS AND UPDATE

Whether you've already begun mobilizing your software solutions or are still sitting on the fence, it's time to hit the pause button, assess your situation, and plan mobile app deployments in a proactive and organized fashion.

Successful mobility strategies are always anchored to real business need and to measurable goals. Following the seven steps outlined below will put your company on track to mobility success:

Exhibit 3: Seven Steps to a Successful Mobile Application Strategy



Step One: Assemble the Right Team

To truly understand your current state of mobilization—and then plan in an organized and realistic manner—you have to bring the right stakeholders to the strategy table. When assembling the optimal mobile strategy team, representatives from both the IT organization and impacted lines of business should be included—and they should be ready to truly collaborate.

- The days of impatient LOB executives trying to end-run around IT are over. IT absolutely has to be part of this conversation in order to ensure that backend integration, data security, and overall app coordination are handled correctly.
- The LOB will be the go-to source for identifying critical workflows and pinpointing where mobilization can help address impediments, and increase productivity and revenues.
- Your finance department should also be involved in order to maintain fiscal discipline and run the requisite profitability analyses.

Another key decision-making party is the actual end user of the mobile solution. Your mobile employees can provide valuable perspective and input throughout your mobile strategy discussions. Their participation early on can also assist in increasing worker acceptance and cooperation when new apps and devices are actually deployed.

Step Two: Stabilize your current mobile environment

Do you fully understand your company's current mobile ecosystem? If not, it's time to perform a comprehensive assessment of your mobilized environment. That means identifying the following current components:

- What specific mobile applications are being utilized? Have they been authorized by your company? List both the hard (quantifiable) and soft benefits they are providing. What is it costing to run these apps? Who's using them? How are employees and/or customers accessing these software solutions? On which form factors and mobile operating systems do these apps run?
- What mobile devices are your employees actually using on the job—smartphones, basic feature phones, tablets, ruggedized mobile computing devices, wearables? Are these company-provided devices, or are employees using their own personal devices? Will your apps be used by other parties—supply partners, contract workers, etc.—with an even more diverse assortment of devices and operating systems? Which manufacturers and mobile operating systems will need to be supported?
- What, if any, type of mobility management process or system is being utilized? What are your performance analytics capabilities?

After defining the mobile apps, devices, and oversight that are currently in place, an in-depth audit of data security mechanisms and policies is imperative. Does your company have an official mobile security policy? Has it been effectively communicated to employees? Is there someone on staff that has clear accountability in this area?

Mobile security is a fast-moving target, requiring regular assessment and updates. For example, are your mobile apps vulnerable to leaking information at any point as real-time customer and company data speeds back and forth between the worker's handset and HQ backend systems? Or, if a mobile device is misplaced or stolen, can your IT staff quickly and remotely lock down functionality and wipe all data? What authentication and encryption processes have been built in? Are they sufficient?

Only after you have a clear, up-to-date view of your current mobile environment, can you accurately identify the new work that needs to be done.

Step Three: Identify and prioritize mobile voids

Now you can begin building your mobile application strategy blueprint.

Did your initial assessment reveal any obvious gaps in apps, devices, analytics, or security?

When defining mobile gaps and voids, consider surveying your employees and department heads for recommendations. Delve into relevant benchmarking studies to identify best practices by competitors. Identify company, department and workflow pain points.

The mobile application recommendations that fall out of this research and discussion usually segment into three major areas:

- First, if there are already mobile apps (authorized or not) in use, they each need to be approved, or marked for discard or refresh.
- Second, companies may be tempted to simply mobilize exactly what they have on their desktop computers. Sometimes this works; often it doesn't. Every single task handled on a desktop computer does not necessarily need to be addressed on a mobile handheld device. Simply duplicating a desktop software application can result in a clumsy, crowded solution that no one wants to use.

- Third, new territory is explored. Think beyond simply porting a desktop app. Instead, start fresh by examining current job functions and business processes, and identify those that can be transformed using mobile technology.

This last area—delving into how your company operates and how those processes can be truly updated and optimized using mobile technology—is where real transformation can take place.

For example, consider the remote field sales employee. Real-time access to backend systems can provide current pricing data, product availability, marketing collateral, and customer contract terms—all on the sales rep's mobile device. Geolocation would let him or her know the best route to the next appointment. Artificial intelligence can provide proactive reminders and even calculate the success probability of a particular price quote. Mobile payment would allow quick and accurate invoicing. Mobile checklists and forms can eliminate after-hours data entry and leapfrog past intermediary staff personnel straight to the manager's own mobile handheld.

That's just one sample of a key business challenge that can be disrupted, reconfigured, and optimized via mobile software applications.

Of course, when identifying mobile voids, the pros and cons of available mobile device form factors and operating systems should also be addressed. In this BYOD world, mobile apps should be designed, developed, and tested across multiple mobile platforms. Determine the value of open versus closed OS ecosystems, and recognize that decisions in this area will impact speed to market and ongoing management requirements.

After calculating estimated financial impacts, the strategy team should then prioritize its recommendations regarding applications and the devices they will run on, and assemble its initial application strategy roadmap.

Step Four: Find the data

One of the biggest challenges in mobile application development is finding and accessing the necessary data. Continuing with our sales rep example, the company can't transform the selling process unless it can first locate those price points, customer contracts, product inventory, sales and marketing materials, etc., it wants the rep to access.

Companies typically have legacy systems that are brimming with valuable backend data yet are completely blocked off and difficult to mobilize. Valuable information can be located behind a firewall or in the cloud. It can be scattered among various LOBs.

The important action steps here are to find the data and then determine how to create access for a mobile application.

Step Five: Define key performance indicators (KPIs)

Goals should be formalized as part of the mobilization strategy, and quantitative KPIs should be defined and used to objectively measure results against these goals.

Quantitative metrics can be difficult to pinpoint and develop, but they are critical to measuring the post-deployment impact of individual mobile applications. These metrics should reflect corporate priorities and objectives.

Sample KPIs include:

- Revenue growth
- Expense reduction
- Customer satisfaction levels
- Operational efficiency
- New customer acquisition
- Churn rates
- Mean time to repair
- Employee satisfaction
- Cash flow

Companies must give their success criteria some real thought and focus on identifying a manageable number of key metrics; too few KPIs will tell an incomplete story and too many will just overwhelm the evaluators and probably end up being ignored.

Step Six: Begin creating a comprehensive mobile application portfolio

Once the app roadmap is authorized, IT should work closely and collaboratively with impacted LOBs to create and deploy the approved solutions.

If mobilizing existing desktop apps, the focus should be on minimizing any operational disruption, implementing a secure solution, and ensuring easy and convenient access by the mobile worker. The newly mobilized apps should work on multiple mobile devices and operating systems, and run seamlessly on the company's preferred platform(s). They should also be compatible with any MDM (mobile device management) system that is in place.

If deploying brand new apps, a first question will be "build or buy?" The answer is often "both." An array of prebuilt, off-the-shelf application solutions are available and can be somewhat customized to satisfy specific company needs. Often these commercial apps are cloud-based and managed by a third party.

Or a business can decide to create a fully customized mobile solution that directly addresses the unique problem at hand. In this situation, open-source platforms (as opposed to proprietary technologies) can provide a number of benefits, including:

- Easing developer discovery
- Providing increased flexibility
- Leveraging existing developer skills
- Enabling greater agility
- Reducing development time and expense

IT will be expected to furnish or outsource the necessary developer skills.

In either case—build or buy—the company must keep in mind that mobile is vastly different from desktop when it comes to development priorities. The requirements that will ensure smooth mobile deployments include:

- Professional integration with the necessary backend systems
- Strong data security
- Expert leverage of mobile APIs, such as camera, accelerometer, GPS, etc.
- Proper use of device battery
- Ease of use, including regular evaluation of and attention to the UX (user interface)
- An ability to work on the mobile platforms and device form factors of choice

With mobile applications, it is also better to resist the temptation to over-engineer. Focus on doing one thing very well, rather than trying to pack too many capabilities into one app.

Step Seven: Manage and maintain

Once the mobile application is created, the company needs to develop a strategy to deploy the solution. SDLC (systems development life cycle) management must also be built in.

Controlled pilots should be considered before rolling out any complex app. A month-long limited rollout is usually sufficient to uncover any serious difficulties or concerns.

Even when apps are fully developed and deployed, the mobilization effort does not end. Mobile software applications must be actively managed in order to ensure ongoing optimal performance.

DO YOU NEED A PARTNER?

Developing a successful strategy around mobile applications obviously demands a significant amount of time and energy. And, frankly, the effort never really stops, as mobile solutions require 24/7 care and maintenance in order to stay current, effective, and secure.

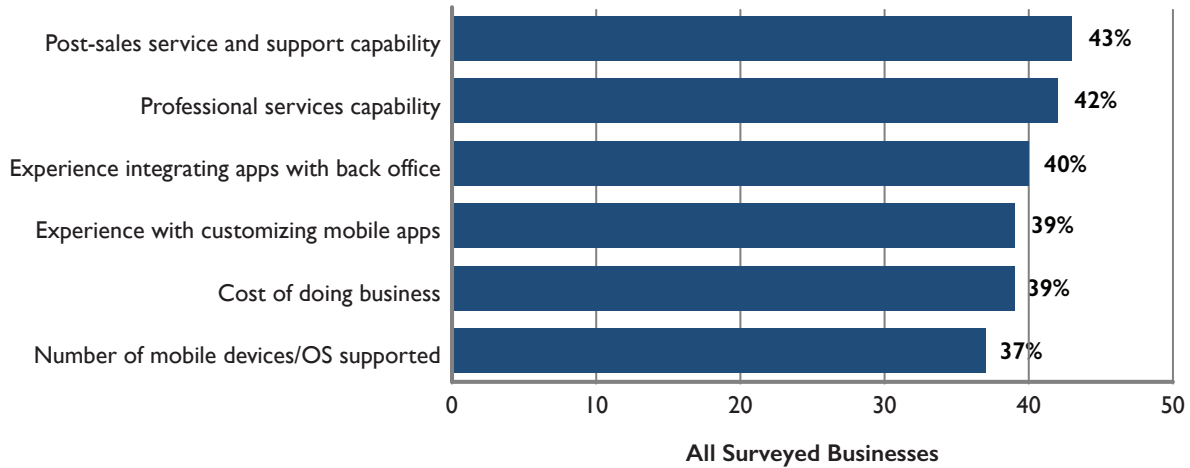
If you're looking at mobilizing and thinking, "We need help," you are not alone. When asked about using third-party partners to help with selecting and implementing mobile business solutions, only 17% of surveyed companies state that they prefer not to use a partner at all. That leaves 83% who recognize the need for outside assistance.³

Why are businesses willing to bring in third parties to help with their mobilization effort? According to today's companies, two of the biggest barriers to deploying mobile business apps are their lack of internal mobility expertise and the lack of a sufficient number of IT personnel to tackle the job. An outside expert neatly neutralizes both of those concerns.

But what should you look for when evaluating a potential partner? Based on company responses to the most recent Frost & Sullivan mobile apps survey, the top criteria for selecting a mobility partner include:

- Post-sale service and support capabilities
- Professional services capabilities
- The partner's level of experience with backend system integration
- The partner's ability to create customized mobile apps

Exhibit 4: Top Criteria for Selecting a Mobility Partner



Source: 2015 Mobile Enterprise Applications Survey, Frost & Sullivan

If your own employees do not have the necessary level of mobile app development expertise, you may need to hire a partner to ramp up your staff or to handle the project directly. Just ensure that your partner has the pedigree to understand the pitfalls of mobile. Otherwise, starting over can be very expensive.

Compared to only a couple of years ago, today's organizations are bringing a much more mature perspective to the important task of selecting a partner. Simply put, they are choosing to focus on factors other than only cost. They realize that it is vitally important to select a mobility partner that can expertly support an initiative from its initial planning stage, through deployment, and into the post-rollout phase.

TAKING THE FIRST STEP

Before embarking on a deep assessment of your own mobile application strategy, it would be wise to evaluate your internal resources and decide whether outside assistance is advisable. If the answer to this question is "yes," then the earlier you bring a professional services partner into your mobilization assessment process, the more knowledge and experience you can leverage.

One resource to consider is Samsung Business Services. Samsung Business Services supports an organization's mobility life cycle through a comprehensive suite of services. Samsung Application Support Services include strategic design, consultation, training, development and other services customized to address specific business needs. More information on Samsung's Mobile Application Support Services can be found at <http://www.samsung.com/us/business/services/samsung-business-services/application-support-services/>.

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¹ "2015 North American Mobile Enterprise Applications: Opportunities Within Enterprises," NFB4-65, Frost & Sullivan, October 2015.

² Ibid.

³ Ibid.

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