

The Value of Outsourcing Mobility during an Economic Downturn

*How to Leverage Outsourcing to Cut Mobility Costs,
Increase Efficiencies and Provide a Positive User Experience*

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1.0 Introduction

The mobile workforce is expanding and using technology to find new ways to stay productive and attentive to customers. Employees at all levels of the enterprise are working away from the office, taking advantage of increasingly sophisticated smartphones to access messaging capabilities and line of business applications such as CRM, field service management and supply chain solutions. At a time when employees are being asked to do more with less, mobility is making that possible.

The expanding use of mobile devices brings productivity gains but also presents enterprises with new challenges. One of the most daunting is how to cost effectively deploy, manage and support the devices their mobile employees are using and provide an optimal user experience, especially during a recession, when budgets are especially tight, staffing levels are flat and up-time is critical.

Not long ago, when laptops were first introduced, IT organizations faced similar problems. Now, years later, virtually every enterprise is drawing on its experience managing laptops and is implementing proven processes for deploying and managing those systems. Many organizations, for example, outsource critical lifecycle processes, such as configuring laptops with the corporate image, providing a help desk, and performing asset management and recovery and repair. By tapping external services to augment internal resources, many enterprises have found a way to manage those systems cost effectively and maintain high service levels for their employees. Similarly outsourcing offers potential benefits for mobile device management, especially because the challenges smartphones pose are even more complex than those created by laptops. For example, in addition to the standard configuration requirements for a laptop platform, smartphones require carrier service activation, which can include porting and transfer of liability, loading of line of business mobility applications, custom configurations and, in many cases, IT and end user training.

This paper looks at the challenges of enterprise mobility initiatives and demonstrates how enterprises can take advantage of mobility outsourcing to provide users the mobility tools they need while avoiding significant investment in mobility personnel, training, and processes.

2.0 Why are Mobile Devices a Priority for the Enterprise?

Today, according to IDC, 68 percent of the U.S. workforce can be categorized as mobile workers. That figure is likely to increase to 75 percent by 2011, when the number of mobile workers worldwide will reach 1 billion.¹ To keep this burgeoning workforce segment productive, enterprises need to develop and implement strategies for what in many organizations is a hodge-podge of uncontrolled devices.

When employees first brought mobile devices into the enterprise, many companies took a hands-off approach and did not closely monitor their use. As more and more employees began using sophisticated mobile devices to access corporate networks, email, and line of business applications and store valuable corporate data, enterprises found that they could no longer ignore smartphones.

¹ "IDC Predicts the Number of Worldwide Mobile Workers to Reach 1 Billion by 2011," IDC press release, Framingham, MA, January 15, 2008.

Some devices used in an enterprise are individual-liable, where users are responsible for procuring devices and paying for their plans and may be reimbursed for business expenses. Others are corporate-liable, where the corporation is responsible for the contract with the cellular carrier for voice and data services, the acquisition of the smartphone and payment of the monthly fees. Both types of devices should be managed by the enterprise.

The use of mobile devices in the enterprise will continue to grow. As it does, companies can partner with mobility experts, supplementing their internal resources with outside expertise to:

- Enhance the quality and efficiency of mobility deployments – from procurement through device disposal (recycling)
- Secure devices in a way that controls network and application access and protects valuable corporate data, in compliance with company security standards
- Provide support levels that enable users to employ their devices effectively and enjoy a positive user experience “right out of the box”
- Increase the productivity of mobile employees, as well as their ability to communicate effectively with customers, colleagues, partners and others
- Manage the costs, and specifically decrease the TCO, of mobility initiatives

3.0 Navigating the Mobility Ecosystem

One of the biggest challenges enterprises face as they attempt to control their mobility costs is a mystifying mobility ecosystem. Made up of carriers, device manufacturers, application ISVs and accessory vendors, this intricate environment offers a large number of mobile operating platforms from which enterprises and their employees can choose. As a result, many companies find that they have to support not just multiple platforms, but multiple versions as well. Acquiring and maintaining the expertise needed to support an array of platforms is both inefficient and costly.

Further complicating the efforts of enterprises looking to provide mobile devices for employees is the fact that the mobility ecosystem has traditionally focused on the needs of individual consumers, who account for most of its revenues. Targeting a market that is vastly driven by individual consumers, most of the mobility vendors have tailored their product cycles, billing processes, advertising and other promotions, as well as sales channels to meet the needs of consumers who purchase their own mobile devices. The players in the mobility ecosystem focus almost exclusively on the needs and buying habits of consumers, even though many of the people who buy individual plans are very likely to use their devices to perform their jobs. By requiring enterprises to adapt to processes and product lifecycles designed for consumers, the industry makes the procurement, management and support of mobile devices far more difficult than comparable efforts for laptops.

Consumers, for example, tend to purchase a single phone or a few phones with a family plan. Enterprises, on the other hand, have far more complex requirements. Their mobility deployments can include thousands of mobile devices – sometimes a mix of smartphones and ruggedized units, on different mobile platforms – as well as accessories needed to help them work productively.

Enterprises are less concerned with providing their users with the types of services that are popular among consumers (like games, ringtones, and entertainment and health and fitness applications). Corporations are far more interested in giving their mobile workforce secure access to specific business applications, like CRM programs and reporting software that enables them to perform their jobs effectively, and basic productivity tools like email, calendaring, and contact data. Enterprises, unlike consumers, also demand minimum service levels to support communications among their most critical business constituencies.

Yet, because most employees use devices they have purchased themselves, the market for enterprise mobile devices is still perceived as relatively small, and manufacturers continue to discontinue mobile devices on a fairly short cycle. As a result, a 12- to 18-month rollout schedule can require a company to evaluate three or more versions of a particular device, tracking hardware and software changes, performing application testing and training throughout the rollout. The lack of product stability frustrates corporate procurement planning, which demands longer term outlooks than consumers do.

Enterprises keep pushing for more business-friendly practices, while the market continues to concentrate on consumers. They need to find ways to plan and implement mobility initiatives through their entire lifecycles, standardizing on devices that will be available as long as they are needed to support their business requirements.

4.0 Upstart Aircraft: Mobile Devices for 4000

Consider a hypothetical case that highlights the challenges that arise in all phases of an enterprise mobility initiative. The IT mobility director for Upstart Aircraft, a manufacturer in California, needs to deploy 4000 mobile devices – 2800 standard smart phones for different business groups and 1200 ruggedized devices for use in two manufacturing facilities and for the field service mechanics who are regularly deployed to support the company's largest customers. The mobility director has limited funds for hiring new staff or even training IT staff in mobility best practices. And since he has only begun researching the infrastructure requirements for warehousing, kitting, shipping, and servicing a large deployment, he is not yet ready to decide whether to handle those processes internally or to outsource them.

To get an idea of what his staff could manage internally, the mobility director is considering the entire mobility lifecycle (represented in Figure 1). The services required for any successful mobility initiative start with device procurement and continue through five additional phases, some of which can occur concurrently, depending on the organization's specific needs. After the mobility director assesses the company's ability to perform the tasks required in each phase, he will compare the costs of performing them internally and outsourcing them, using the data in Table 1.

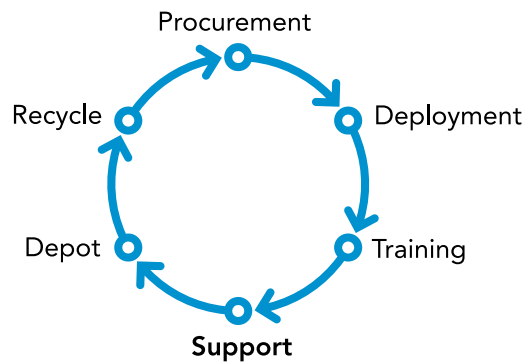


Figure 1 – Lifecycle Phases of an Enterprise Mobility Initiative

The Upstart Aircraft mobility director is evaluating his organization’s internal capability to handle the six phases of a mobility initiative. Some of those phases, such as Support and Depot are ongoing, providing the services needed to keep mobile devices up and running.

Process	Annual Mobility Costs Cited by Industry Analysts	Enterprise Mobile Annual Outsourcing Fees (based on 2-year contract)
Planning		Included in Deployment
Procurement		Included in Deployment
Deployment		\$18
Training		\$25
Device Management		\$24
Support		\$48
Device Depot		\$60
Total Annual Cost Per Device	\$554 - \$636 (Operations & Administration IT/Operations & Training)	\$174 68% - 72% Annual Savings over Typical Industry Costs

Table 1 – Typical costs of deploying, managing and supporting mobile devices internally compared with outsourcing to mobility experts

A comparison of industry estimates for enterprise mobility projects and the outsourcing fees charged by Enterprise Mobile, a leader in providing outsourced mobility services for enterprise customers, demonstrates that companies can cost effectively entrust their mobility initiatives to experts who focus on mobility and charge on a per-device basis. For Upstart Aircraft’s 4000-device deployment, the company could expect to spend \$2,216,000 to \$2,544,000 to do the work themselves. But for \$700,000 (or 68% to 72% less) they could outsource the services to Enterprise Mobile and convert their variable mobility costs into predictable costs that can be budgeted annually.

5.0 Mapping Requirements with Resources

To determine how to allocate resources for his organization's mobility initiative, the mobility director must first assess the needs of every phase and consider how to manage not only IT costs but also telecom expenses for the organization's mobile devices.

5.1 Device Procurement – Challenges and Requirements

Early on, Upstart Aircraft will have to deal with a variety of suppliers in order to outfit the company's employees with the appropriate mobile devices. Mobile carriers supply the network to enable voice and data communications. Device OEMs manufacturers offer a wide array of smartphones – and frequently add new models. ISVs provide the mobile applications the company will use for its business users. Some of the ruggedized smartphones will run a home-grown field service application, requiring resources to certify it for use on mobile devices as they come to market. During device procurement the mobility director will also want to evaluate device management software and license one to support all 4000 users, potentially across multiple platform types.

To develop a streamlined, cost effective procurement process, an enterprise would need to integrate a supply chain in its ecosystem, taking advantage of existing infrastructure and processes, where possible, and adding new infrastructure as necessary. Ideally enterprises would like to create a procurement process as streamlined as that used to purchase laptops and desktop computers and computer peripherals; however, the complex mobility ecosystem demands an understanding of the workings of more vendors.

An experienced provider of mobility services can offer a well-designed procurement process that eliminates unnecessary procurement costs while effectively addressing an organization's evolving needs. That provider can also offer leasing options designed to provide greater flexibility for companies that plan to upgrade their devices often.

Services could include:

- device selection and optimization
- device customization for different users
- device tagging, for asset tracking
- porting of telephone numbers from device on one carrier to another
- transfer of financial responsibility for a device and plan

5.2 Device Deployment – Challenges and Requirements

The mobility director for Upstart Aircraft will need to answer several questions as he plans the deployment of a fleet of mobile devices.

- What types of resources will be required to deploy 4000 devices to the mobile workforce?
- Where will the company store its mobile devices?
- Who will package and ship them to remote workers?
- How will employees obtain replacement devices when their devices break or are lost or stolen?
- Who will configure the replacement devices and load the applications that users depend on?
- Will staff be assigned to track the product plans of the wireless carriers, device manufacturers, and the ISVs who provide mobile business applications?
- Which corporate standards should be applied to the 4000 devices the company will deploy? For example, should different devices be configured with different settings, depending on the needs of the people who will use them? How will the devices be secured, and what, if any, restrictions should be placed on their use?
- How will devices be collected and repurposed when employees leave the company?

Configuring a device for each mobile worker with the appropriate settings and installing approved line of business applications is a labor-intensive effort. In many instances, it can take as long as 45 minutes for every device. For this example, a 4,000 device deployment could require up to 3,000 man hours. As a result, many organizations have trouble keeping up with deployment demands and do not fully exploit the opportunity to boost the productivity of users working in the field or on the road. Obviously, performing deployment internally would require considerable resources, including training staff to carry it out, as well as space to conduct the configuration in a controlled, secure, clean environment.

An experienced firm that specializes in enterprise mobility can offer expertise in the entire deployment process, as well as the ability to add demonstrable efficiencies.



5.3 Device Depot (Replacement and Repair) – Challenges and Requirements

After devices are configured and deployed, the need to manage Upstart Aircrafts standard smartphones and ruggedized devices will continue. The best way for the mobility manager to plan for ongoing management is to consider the types of services required and the resources needed to provide them. The mobility director will need to determine which, if any, resources are available in house, or whether a service provider could handle device replacement, exchange/repair and redeployment more cost effectively.

Answers to the following questions will help determine whether Upstart Aircraft should use their own resources to manage their mobile devices or whether they would benefit from outsourcing part or all of the depot process.

- Replacing inoperable devices – When smartphones malfunction, how will mobile workers report the problem and quickly get a replacement device imaged to match the phone it supplants? Does the enterprise have a tool that will enable technicians to remotely diagnose and resolve end user issues without requiring the device to be shipped in for service?
- Streamlining the replacement process – What process must be put in place to manage the logistics required for shipping a device to a centralized facility, procuring a replacement device, configuring it to replace the returned unit, and delivering the new device to the mobile user in a way that limits downtime? How would the cost of performing depot services in-house compare with outsourcing them? What is the impact to the business of not getting a replacement device to the end user the following day?
- Handling warranty issues – Once a device has been returned to the designated facility, who will evaluate it to determine whether it is still under warranty, and if it is not, arrange to have it repaired or recycled? Organizations often underestimate the effort required to keep users up and running. Handling calls or emails reporting damaged or broken devices is time consuming; triaging devices to determine whether they actually are broken requires specialized skills requires knowledge of all the devices an organization has deployed.
- Minimizing user downtime – In addition to being a time-consuming and sometimes frustrating experience, replacing lost or damaged mobile devices for enterprise users is expensive. When mobile devices break, users are forced to revert to slow, unproductive processes. Knowing that devices will inevitably break or be lost, how can you limit the unexpected downtime that can result in lost opportunities and decreased user productivity? While users document their need for replacement devices and wait for them to arrive, they lose valuable work time. Downtime, which is typically 3 to 5 days for corporate users who must replace a mobile device, is especially difficult for people who are accustomed to using their smartphones anytime and anywhere. In addition to limiting downtime, a sound device replacement strategy can help organizations control hardware expenditures. Device replacement costs can add up quickly. In fact, new

devices can cost significantly more than the ones they replace, especially if the original devices were purchased under a contract that cannot be replicated.

- Dealing with employee turnover – when an employee leaves the company, how will the company go about getting the device returned from the end user, have it tested and re-certified and then redeployed to leverage the investment with a new end user?

The depot process for mobile devices can create serious headaches for IT organizations, especially because it typically must support a widely dispersed workforce that cannot afford downtime when their devices become inoperable. Upstart's mobility director will likely find it more cost effective to turn that process over to outsourcing experts. They typically have fine-tuned the processes needed to resolve replacement and repair issues.

A mobility services partner could offer overnight device replacement, management of spare parts, inspection of inoperable devices coupled with root cause analysis to understand problems, and warranty and repair management (designed to hold down costs). Few enterprises are set up to provide these services today.

5.4 Training – Challenges and Requirements

Providing mobile workers with devices loaded with line of business applications is just one step in ensuring a positive out of the box user experience. Training programs designed to help users take full advantage of their devices and applications can help them gain proficiency more quickly than they could (or would) on their own. Ongoing training can help users take full advantage of their devices as additional mobile applications are uploaded to them or they move to more capable smartphones.

A firm that specializes in mobility can track device and software changes that affect the user experience and train users to employ their phones productively. Today, there is a wide array of training options, including onsite training, web-based training, reference guides, and on-device training modules. Training requirements are often dictated by how devices are employed by a company's end users.

5.5 Support – Challenges and Requirements

Based on Upstart Aircraft's experience with laptop deployments, the mobility director knows that employees will need support to help them start using their mobile devices quickly. Skilled support personnel can help an end user get back to work quickly after experiencing equipment failure, for example, and rapidly resolve problems caused by network connections or address application issues for employees to help them avoid costly, unproductive downtime. In fact, options exist today that essentially enable support technicians to completely diagnose and resolve technical issues with no end user involvement.

The answers to the following questions can help the mobility director compare the costs of using in-house resources to deliver support with the advantages of entrusting support to outside experts.

- What types of support will users need to make their mobility experience successful?
- Can it be provided through support for help desk users, or is support for individual users needed?
- What additional skilled resources will be required to provide knowledgeable support?
- Who will hire, train, and manage those resources and manage the infrastructure needed to support them?
- What are the alternatives for cost effectively supporting users without burdening the IT organization?
- What are the typical costs of hiring support staff in California (where Upstart Aircraft is located)?
- How will support be delivered for end users in different locations and time zones?
- How will you organize, understand, and report on help desk support statistics, such as number of calls, reasons for inbound inquiries, standard service level tracking, and identification of training opportunities?

5.6 Recycling and Recouping Value – Challenges and Requirements

Dealing with an enterprise's outdated mobile devices appears easier than it actually is. An outmoded device can contain sensitive corporate data that could compromise an organization, its partners, or its customers. For that reason, Upstart Aircraft wants to remove personal and corporate data before its devices are decommissioned, employing clear, repeatable processes.

Moreover, although they will one day be outmoded, the 4000 devices the company plans to deploy may still retain some value. With a little planning, the company can incorporate a process for recouping that value and applying it to the cost of new devices.

6.0 Conclusion

Outsourcing offers a host of advantages for companies looking to cost effectively deploy mobile devices and deliver an optimal user experience. By engaging the right outsourcing partner, enterprises can make significant improvements in the way they address mobility and implement the following changes.

- Eliminate much of the aggravation required to navigate the mobility ecosystem by streamlining processes, and, in turn, increase the quality of the deployment and the mobile user experience.

- Tap the talent of people who can deploy and manage mobile devices the way enterprises handle laptops and desktops and acquire mobility expertise through transfer of knowledge from experts.
- Leverage best practices and expertise without incurring the costs associated with hiring mobility experts or training current staff and reallocating resources.
- Allocate IT budget more effectively, making fixed costs variable and mapping them to actual requirements.
- Ultimately benefit from a faster, more efficient deployment, delivered by experts who implement recognized best practices to tailor mobility deployments to support corporate goals.
- Ensure that end users have the tools they need to be customer responsive.

Enterprise Mobile provides professional and lifecycle services that help companies successfully plan, launch, and manage mobility initiatives. Drawing on experience navigating the complex mobility ecosystem, Enterprise Mobile serves as a single point of accountability for organizations that want to entrust to experts the procurement, deployment, management, and replacement/repair of mobile devices such as smartphones and ruggedized phones.

By focusing strictly on mobility and all the activities required to support a successful mobility initiative, Enterprise Mobile is able to hold down costs. The company is always improving the processes and tools it uses to manage and support corporate mobility assets to streamline and speed processes. Moreover, by having the flexibility to load balance resources, Enterprise Mobile can deliver mobility services more efficiently than organizations that are still trying to understand the idiosyncrasies of the mobility ecosystem and the challenges of integrating mobility technologies and devices into existing corporate infrastructures.

[Learn more at www.enterprisemobile.com](http://www.enterprisemobile.com)

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