

EMPOWERING DEFENSE ENTERPRISE MOBILITY

TREND REPORT

The Department of Defense is in the midst of a major IT overhaul as it develops an integrated, enterprise-wide IT network, the Joint Information Environment (JIE). Instead of having service-centric systems that hinder interoperability, the JIE will combine and consolidate core IT systems. Chairman of the Joint Chiefs of Staff General Martin Dempsey has said achieving the JIE is essential for realizing a future joint force capable of managing the emerging international security environment.¹

A vibrant mobility ecosystem is a key element of this project. In fact, the Defense Information Systems Agency (DISA) identifies mobility as the primary benefit of the JIE in its Strategic Plan for 2015-2019.²

Recognizing the value of enterprise mobility for DoD, Government Business Council (GBC) and Verizon undertook a research campaign involving secondary research, a survey of defense managers, and a live discussion of the findings with a panel of experts in the defense community.

THE VALUE OF MOBILITY

In today's world, where more people in the U.S. are expected to access the internet through mobile devices than desktop computers in 2015, developing comprehensive mobility services is a requirement just to remain relevant.³ For DoD, allowing seamless access to information flows via mobile devices for those in garrison and in the field also promises to enhance mission effectiveness and help maintain technological superiority. According to DoD's Mobile Device Strategy Version 2.0,

"from office productivity to tactical operations, the potential for mobile devices to strengthen the DoD workforce is manifold."⁴

DoD personnel themselves envision significant benefits from expanded mobility services. 84 percent of defense managers surveyed by GBC identify at least one benefit of mobility, and a majority single out remote data entry and access as the top benefit. Many respondents also indicate more efficient operations (48 percent) and increased information sharing (46 percent) are important benefits.

BENEFITS OF MOBILITY

53% Remote data entry and access

48% More efficient operations

46% Increased information sharing

40% Enhanced responsiveness

40% Greater tactical IT capabilities for warfighters

21% Attracting/retaining personnel

4% Other

6% None of the above

11% Don't know

83%
of respondents identify at least one benefit of mobility for their service/component

Percentage of respondents, n=305
Respondents were asked to select all that apply

1 Joint Information Environment White Paper, Joint Chiefs of Staff, January 2013.

2 DISA Strategic Plan 2014-2019, Version 2, DISA, May 2014.

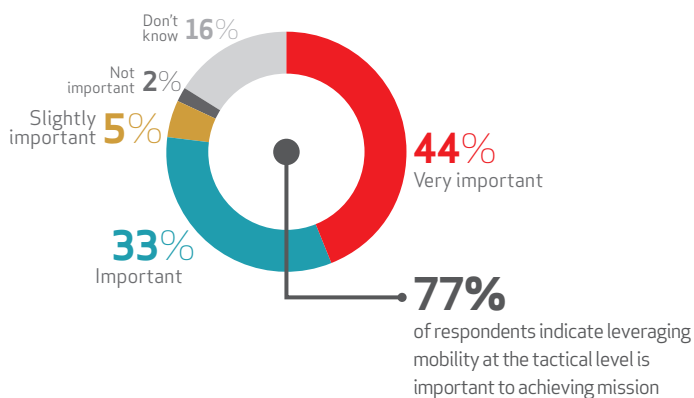
3 "Most will access Internet via mobile devices by 2015, IDC says," ComputerWorld, September 2011.

4 Department of Defense Mobile Device Strategy, Version 2.0, Office of the DoD CIO, May 2012.

That remote data entry and access tops the list of benefits for DoD managers surveyed indicates that leveraging mobility in the field is paramount for the Pentagon. Enhanced mobility will help DoD personnel be more efficient and productive in office settings, but they believe the biggest added value lies in the tactical realm. In fact, more than three quarters of GBC's survey respondents (77 percent) say the ability to leverage mobility at the tactical level is important or very important to achieve mission.

The panel emphasized mobility's value in theater in particular. Lieutenant Commander Vince Taylor, U.S. Coast Guard Branch Chief for Support and Logistics, Enterprise Information Systems Infrastructure Product Line, Telecommunication and Information Systems Command described the Coast Guard's mobility goals as attaining "one comprehensive, holistic model for our users," and ensuring "the ability for our end users or our first responders out in the field to be able to focus on the job itself, saving people's lives, as opposed to trying to figure out how the information systems they're using work."

HOW IMPORTANT IS THE ABILITY TO LEVERAGE MOBILITY AT THE TACTICAL LEVEL TO ACHIEVE MISSION?



Percentage of respondents, n=303

At an October 23 event in Washington D.C., a panel of experts from inside and outside the government defense community elaborated on key mobility benefits for DoD. Sonya Clark, Vice President of Defense and National Security, Public Sector Markets for Verizon Enterprise Solutions, said the ultimate goal is to create an agile force and "grant secure access to strategic assets." With mobility, she continued, "you are adding capability to the mission without burdening the mission."

Linus Barloon II, former USAF (Maj, Ret) and Senior Cyber Security Engineer at the Virginia Tech Applied Research Corporation, stated that reaching a point with mobility where agencies have "the ability to collaborate in the same environment with a technology-agnostic perspective for devices will allow for faster decision making, more collaboration, and more situational awareness on either the battlefield or in a regular operational mission."

In addition to enhancing mission-effectiveness, panelists discussed the potential cost savings of expanding defense mobility services. Robert Anderson III, Chief of HQMC C4/CV (Vision and Strategy Division) at the U.S. Marine Corps pointed out that whereas the current "average cost is \$480 a device" for the Navy, he believes "the average cost is going to be right around \$40 a year" for a new roll out. "We will save the taxpayers \$144 million a year."

The panel and GBC's survey respondents clearly believe that DoD will yield significant benefits from enhanced mobility services. The real question surrounding defense enterprise mobility, however, is how not why.

CHALLENGES TO EXPANDING MOBILITY

The department has made significant progress creating an initial mobility ecosystem in FY 2014. DISA rolled out a mobile device management system, a mobile application store, and expanded its classified mobility pilot programs.⁵ Moreover, DISA plans to support up to 2,000 mobile devices capable of securely transmitting classified information as early as February 2015.⁶ However, DoD continues to struggle to scale comprehensive mobility services to the enterprise and policies still differ among the service branches.

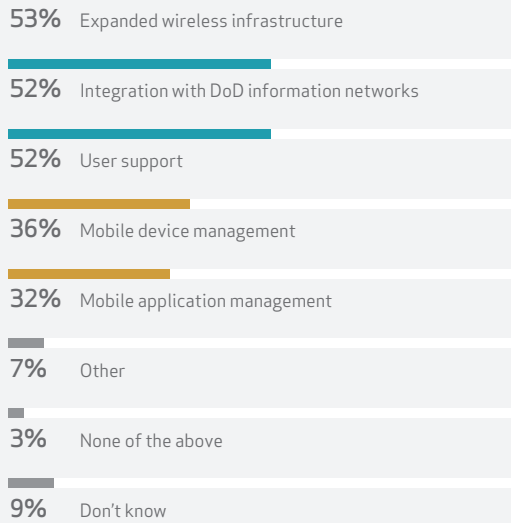
GBC's survey respondents reveal that there are indeed fundamental challenges to DoD's enterprise mobility project. In particular, majorities of respondents say that DoD needs to improve wireless coverage (53 percent) and user support (52 percent), as well as expand integration with DoD networks (52 percent), for its unclassified mobility services.

When asked about significant hurdles to fully leveraging mobility services, nearly two thirds of survey respondents (64 percent) point to budget constraints. Majorities also indicate that compatibility with legacy IT infrastructure (58 percent) and security (54 percent) are serious challenges. A large minority (47 percent) suggest that a cultural resistance to change is an additional issue.

⁵ "DISA Rolls Out Version One of Unclassified Mobility Capability," Signal, AFCEA, February 2014.

⁶ "DISA takes early step toward finding secure mobile contractor," C4ISR & Networks, November 2014.

WHICH UNCLASSIFIED MOBILITY ELEMENTS DO YOU FEEL NEED THE MOST IMPROVEMENT?



Percentage of respondents, n=304
 Respondents were asked to select all that apply

The October 23 event panel elaborated on these obstacles and more. Clark pointed out that a major challenge is simply keeping up with the pace of technological change. “A lot of times, the solution, once it goes through that full [accreditation] process, lacks the same amount of relevance it may have had.” Anderson added that the pace of technological development has rendered even the most recent policy publications obsolete. “Because [common] operating systems are becoming so good, really we need to go back and look at [recent policy publications] again even though they’ve just been signed.” To achieve state-of-the-art mobility services, DoD will have to figure out how it can streamline set-up and accreditation processes.

This, however, is no simple task. For Barloon, installing the systems and processes needed to ensure the integrity of mobile devices and data is a major challenge in and of itself. “It’s not just as simple as installing a mobile device management system, installing an app store and installing services; it’s installing those things and then training the administrators to use those capabilities... and then training users.” Each of these steps can be complex and generates risk.

LCDR Taylor added that another main challenge is avoiding end users “having to learn six to seven different interfaces” to use the IT services they need to do their jobs. “When we started down this avenue of mobility, we started building out a complete new infrastructure in addition to what we’ve previously had.” In effect, “we’ve taken a new component called mobility and bolted it onto

the side” of the existing IT infrastructure. The key, he continued, will be putting all the pieces into a single, integrated suite of IT tools.

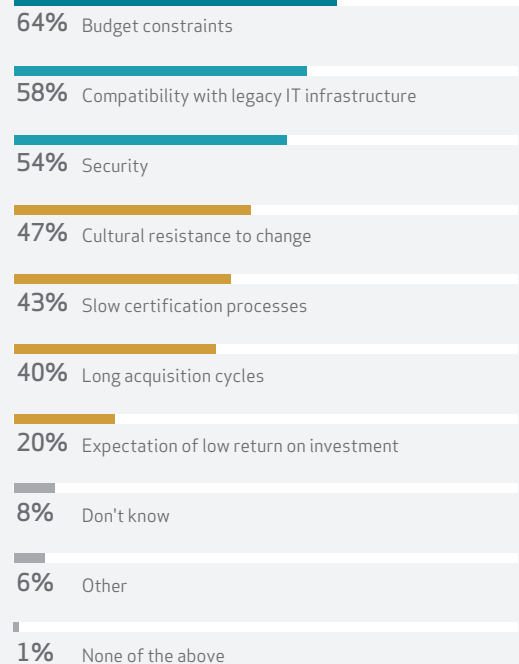
MOVING MOBILITY FORWARD

GBC and Verizon’s research campaign indicates that expanded, enterprise mobility will greatly enhance mission effectiveness for DoD. Whether end users are in the field coordinating airstrikes, rescuing civilians lost at sea, or in garrison collaborating wirelessly with colleagues, mobility can help the defense community become more productive at lower cost.

But as the survey and panel discussion revealed, achieving comprehensive, enterprise mobility is a tall order for DoD. To get there, the Department should focus on:

- Further developing its basic IT infrastructure to seamlessly integrate mobile networks and services. Here, a particular emphasis should be placed on enhancing interoperability across DoD components and services to extend the benefits of mobility into joint operational environments.
- Enhancing understanding of how end users actually operate mobile devices in all relevant settings in order to optimize and streamline security protocols and support systems.
- Determining core security principles against which all mobility services can be measured.

CHALLENGES TO FULLY LEVERAGING MOBILITY SERVICES



Percentage of respondents, n=304
 Respondents were asked to select all that apply