ENTERPRISE MOBILITY EXCHANGE

NEW APP WORLD
HOW TURNKEY SOLUTIONS ARE ENABLING BUSINESSES

Sponsor:

powwow® mobile

OCTOBER MARKET REPORT

FOREWORD

The need for functional enterprise applications to handle daily work tasks has exceeded the number of capable developers and designers. To that end, new solutions are disrupting the development cycles and flipping application architecture upside down.

No code, low code, and turnkey apps are overtaking the industry, enabling businesses and citizen developers alike to create the mobile solutions needed to push enterprises forward.

This report will highlight the capabilities turnkey solutions are providing and how they're helping to digitally transform the IT industry.

TABLE OF CONTENTS:

October 2017

THE ENTERPRISE APP CHALLENGE

Applications are the systems that run a technical world, and are the foundation of how much business gets done. These subsets of software, however, did not gain mainstream notoriety until development and deployment of mobile devices in the enterprise. Enterprise mobility has been implemented over the last few decades to create a more productive work environment, but the hardware is essentially worthless if users can't access various workflows to realize productivity.

As is the case with any technology, especially when it's being created and adopted in the business world, challenges arise more often than not when it comes to mobile applications, and if not handled properly, can completely alter the direction of how business-critical work is or isn't done.

The major issue facing enterprises when it comes to mobile app development today, however, is an "Us vs. Them" mentality. Many organizations feel they have the skills to properly design, develop, and deploy a usable mobile application to their employees, but don't realize the time required to do so, which leads to enhanced cost. This comes in comparison to out-of-the-box solutions, including low- or no-code apps that may come with a price tag the IT department wasn't ready to budget for.

But these are challenges that need to be met in some form, or organizations are at risk of falling behind competitors within their industry. The overwhelming majority of IT decision-makers told Enterprise Mobility Exchange the mobilization of legacy systems is a major need, with 87% saying their company needed three or more workflows to become mobile-enabled *(Figure 1)*. More than a third said the time it took for an enterprise app to go from concept to completion was a digital transformation eternity, as 39% claimed it took more than nine months for a complete rollout of an enterprise app *(Figure 2)*.

> "UNTIL THE ORGANIZATION CHANGES AND BEGINS TO FOCUS ALL LEVELS OF IT ON EXPERIENCES OVER FUNCTION, WE WILL CONTINUE TO SEE LOW ADOPTION RATES FOR INTERNALLY DEVELOPED APPS."
>
> **MIKE JENNETT, VICE PRESIDENT, IDC RESEARCH**

FIGURE 1:

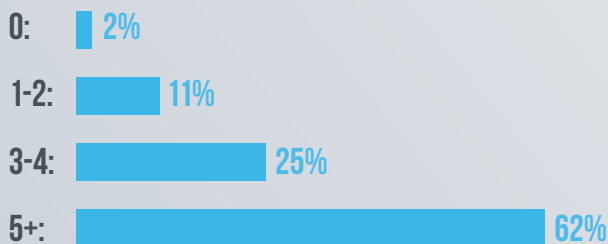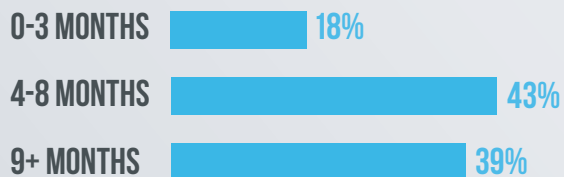## HOW MANY WORKFLOWS DOES YOUR COMPANY NEED TO MOBILIZE?

0: 2%

1-2: 11%

3-4: 25%

5+: 62%

FIGURE 2:

HOW LONG IS THE PROCESS FOR YOUR ENTERPRISE APP TO GO FROM PROPOSAL TO MARKET?

0-3 MONTHS 18%

4-8 MONTHS 43%

9+ MONTHS 39%

"To create compelling enterprise apps we have to see a transformation take place in the IT organization," said IDC Research Vice President Mike Jennett. "For too long, IT organizations have focused on functionality, timelines and budgets, often forsaking the user experience in an effort to get as much data into the app as possible. This leads end users and customers to find alternatives to the apps provided by IT. Until the organization changes and begins to focus all levels of IT on experiences over function, we will continue to see low adoption rates for internally developed apps."

Nearly half of IT executives recognize enterprise app abandonment is an epidemic, and it's because workers are consumer-first, employee second, and expect their user experience to mirror the same.

Some 48% of IT decision makers said enterprise apps are abandoned because they're either too hard or confusing to use, or lack the necessary functionality *(Figure 3)*. Consumers also said they now expect mobile apps and their pages to load within four seconds, down from six seconds just two years ago[1]. Considering employees are consumers first, that mindset transfers directly to the workspace. If this app doesn't work as quickly or functionally as one would like, they'll find a different means to that end.
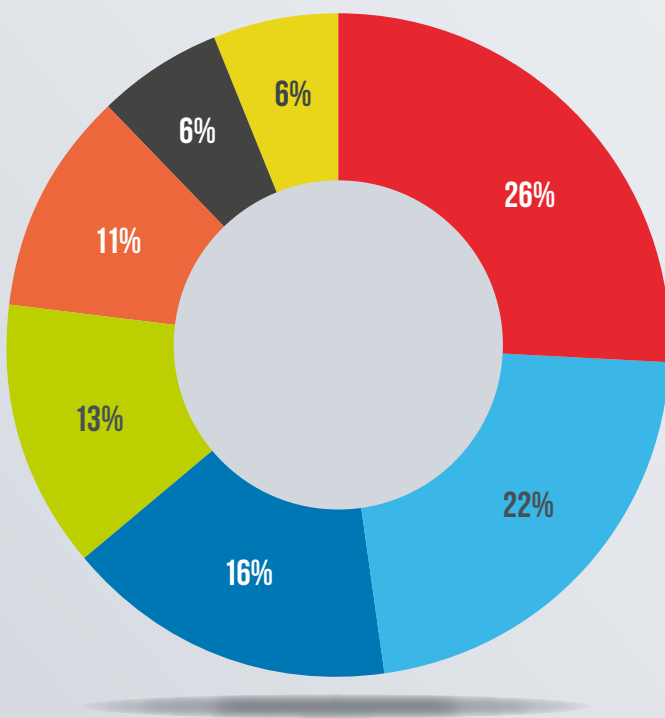

FIGURE 3:

WHY ARE ENTERPRISE APPS ABANDONED?

- Enterprise apps are too hard or confusing to use
- Apps lack the necessary functionality
- Back end data has not been properly designed for mobile consumption
- Apps aren't available on the right devices
- Apps are missing native performance or native look and feel
- Apps are not well promoted or easy to find and install
- Apps are no longer needed when they are finally complete

What does all of this lead to for the enterprise's consumer-minded workers trying to find more efficiencies through their mobile devices? An increase in shadow IT – and the ugly potential for hacks that come along with it.

IT administrators across the globe now shudder when they hear the term, "there's an app for that," because it's a true. The consumer world of apps is light years ahead of where the enterprise IT department could hope to be, which means end users are finding methods to be efficient through third-party solutions.

When an employee's work-related email app won't function properly on their device, it only takes a few seconds to transmit sensitive data through a variety of other means – messaging, file-sharing, etc. More than two-thirds of enterprise app downtime or abandonment is reported by the end-user, not the IT administrator, making the deployment of fixes and upgrades a reactive approach, rather than a proactive one.

The challenges of designing, developing, and deploying enterprise apps are plentiful. The time to look toward the future of mobility may be at hand for enterprises large and small.

[1] Mobyaffiliates

THE FUTURE OF APPS IS TURNKEY

The low- and no-code enterprise app movement, also known as Rapid Mobile Application Development (RMAD), is creating a disruption in the way enterprises enable mobile productivity for their workforce. From single-use expense approval apps that are just taps away from completion for the employee, to deeper data needs that connect to the enterprise's data center in real time, mobile apps are giving businesses and their users the ability for better work in the palm of their hand.

"The trend is certainly moving toward that," said Murali Nathan, Solutions Architect for Avery Dennison. "Much larger companies are getting into this space, creating a suite of apps that handle multiple use cases. There's a lot of potential for well-integrated and better performing apps, especially with Machine Learning and Artificial Intelligence on the rise, as well as IoT entering the picture."

With the tools in place and a template to work with out of the box, the company's IT team doesn't need to be saddled with months of coding and developing. RMAD lends itself to both high-level and citizen developers, putting the power of possibility in the hands of the workforce that needs to be most comfortable with the product on a daily basis.

"I think that over time low and no code tools will become more diverse in minimizing the gap between them and native applications," said Brad Shafton, Director of User Experience for Hologic. "With that in mind there will always be intricacies that can only come into play when you are working with your own code. A lot of this depends on what you're trying to accomplish. The timeline demands on application development necessitate that we look at these tools, but professionals will continue to be pushed to better understand not which is the right fit for their corporation, but what is the right fit for any given project."

Not using the tools built for future success will keep teams treading in quick sand. Analysts agree that mobile transformation sees a seismic shift approximately every six months; about the same amount of time it takes for an enterprise app to be conceptualized, built, and deployed to the workforce. By the time the finished result lands in the hands of its users, they've moved on to something faster, better, and more effective.

"It seems we're skipping a generation of improvements and already going to the next phase," Nathan said. "AI, machine learning is making development easier. It's a mind shift on how you want to address some of these things. Does a developer want to go through these improvements one-by-one, or have machine learning do it for you? By the time we get to the end result, the rest of the world will have bypassed you."

> ## "THERE'S A LOT OF POTENTIAL FOR WELL-INTEGRATED AND BETTER PERFORMING APPS, ESPECIALLY WITH MACHINE LEARNING AND ARTIFICIAL INTELLIGENCE ON THE RISE, AS WELL AS IOT ENTERING THE PICTURE."
> **MURALI NATHAN, SOLUTIONS ARCHITECT, AVERY DENNISON**

SECURITY REMAINS FUNDAMENTAL

> **"IN A NUMBER OF SITUATIONS THESE TOOLS MAY ACTUALLY HELP WITH SECURITY. THOSE THAT DO NOT ALREADY HAVE INTEGRATIONS WILL BE PRESSURED TO DO SO AND ALLOW COMPANIES TO BRING IN ADDITIONAL SECURITY WITH LESS DEVELOPMENTAL WORK."**
>
> **BRAD SHAFTON, DIRECTOR OF USER EXPERIENCE, HOLOGIC**

Security is top of mind no matter the technology; anything less is a blissful ignorance toward the protection of enterprise data, regardless of industry. That said, mobile apps – no matter how they're created, used, or consumed – have become a main entry point for hackers, and companies are in need of layered security protocols immediately.

Even the federal government is understanding of the security net needed to be cast across the mobile horizon. In September 2017, the Department of Homeland Security launched a Mobile Application Security (MAS) project, which awarded $8.6 million in contracts to a handful of solution providers to focus on the research and development of continuous validation and threat protection for mobile apps and integrating security throughout the mobile app lifecycle.

"Adversaries can use a compromised or vulnerable mobile app as an avenue to target and gain a foothold in a user's device," said Acting Under Secretary for Science and Technology William N. Bryan when the funding was announced. "The Mobile Application Security project will deliver innovative security solutions that will ensure apps used by government personnel and the public are secure."

Just as hackers and those with malicious intent want to have at government files and data, sensitive information in the private sector is also running at a premium. As of July 2017, the average cost of a record containing sensitive information in the United States was $225, proving enterprise mobile security and the apps associated with it must be secured to the absolute maximum.

"Security concerns are going to vary by the industry, and the application's purpose," said Shafton. "I can think of a lot of great use cases for no code in informative situations where security is not a concern. With that in mind, in a number of situations these tools may actually help with security. Those that do not already have integrations with leading identity providers will be pressured to do so and this will allow companies to bring additional security in with less developmental work."

While RMAD tools are being built with inherent security layers and protocols, buffering an enterprise's multitude of endpoints with additional security products can only help the IT team's cause.

"Security is always a concern when sending data out to devices," said Jennett. "Luckily with the maturity we are seeing in the mobile space, security is now becoming a baseline feature for applications and networks. However, IT leaders need to ensure that any app going into their toolbox easily integrates with their existing security, whether that be through their Mobile Threat Management software or EMM software, or their existing security infrastructure for their network."

THE ROAD AHEAD

Digital transformation is the all-encompassing umbrella used to encapsulate any form of enterprise-wide technological innovation. Within that, however, is application transformation – the movement of mobilizing legacy apps, decreasing the number of enterprise apps overloading users, and even moving apps to the cloud to ensure compliance and governance standards are met.

"We're beginning to see a shift from mobile-first to digital-first, which encompasses all aspects of DX from data to experience," Jennett said. "Because of this,

mobile apps will start to fall by the wayside as digital experiences that adjust to the device will become the norm. As more users move to multiple devices, whether that be phone, tablet, laptop, or some combination of the three, it will be up to IT to provide experiences that work seamlessly across those devices from both an experience point of view as well as a data point of view."

As mobility continues to find its footing with myriad technologies – cloud, AI, IoT, etc. – there's no question that apps are here to stay. According to research and analyst firm Gartner, more than

half of all business-to-employee mobile apps will be created by enterprise business analysts using codeless tools.

"Conventional mobile application development platforms (MADPs) are rapidly introducing graphical tools for the design of screens, workflow and data sources to reduce the scope of possible projects," the firm stated. "The use of codeless tools for the rapid development of straightforward projects by IT and enterprise business analysts will become an alternative to outsourcing, limiting the use of development partners to more advanced projects."

SPONSOR SPOTLIGHT

PowWow Mobile is redefining the mobile enterprise. Our rapid mobile app solution, SmartUX™, enables organizations to simplify and extend business apps to mobile by modernizing and streamlining existing processes to deliver new and intelligent "enterprise to edge" experiences. Built on best of breed open technology, SmartUX provides a low-code, drag and drop environment for rapidly creating and deploying secure cross-platform mobile apps.

With unmatched accessibility and ease-of-use, PowWow Mobile facilitates collaboration between IT and the business, significantly reducing app backlogs and accelerating time to value.

powwow®
mobile

ABOUT ENTERPRISE MOBILITY EXCHANGE

Enterprise Mobility Exchange is an online community for global mobility professionals and business leaders who are leveraging mobile technology and services to improve operational efficiency, increase customer acquisition and loyalty, and drive increased profits across the entire enterprise.

At Enterprise Mobility Exchange we're dedicated to providing members with an exclusive learning environment where you can share ideas, best practices and solutions for your greatest mobility challenges.

You will receive expert commentary, tools and resources developed by experienced mobility professionals and industry insiders.

With a growing membership and global portfolio of invitation-only meetings, Enterprise Mobility Exchange ensures you keep your finger on the pulse by delivering practical and strategic advice to help you achieve your business goals.

MARKET REPORT OFFERINGS FOR 2017

Each month our editorial team produces an exclusive Market Report, which receives extensive exposure and promotion through a multi-channel marketing campaign. These reports each focus on a different topic within enterprise mobility. They are vendor-neutral and turn-key; we write the content, we deliver you the leads. You build your sales pipeline.

Our next Market Report offerings include:

NOVEMBER
Positioning the Enterprise: Taking a Lead with Mobility

DECEMBER
Looking Ahead To 2018: The Enterprise Mobility Exchange Analyst Insights Report

JOIN THE DISCUSSION ON SOCIAL MEDIA!