

HPE Software accelerates HPE mobility

Using HPE mobility development tools, HPE IT adopts DevOps framework to drive quality of mobile app—without compromising launch date

Objective

Find a way to accelerate the development of a critical mobile app

Approach

Leverage HPE Software to enable a DevOps approach to automating and integrating development, functional testing, and user acceptance testing procedures, communications, and hand-offs

IT Matters

- Number of functional testers required to support the project reduced from initial projection of four or five, to two
- Time to run stress and performance tests reduced from weeks to minutes
- Defects automatically generate service tickets, streamlining hand-offs
- Automated capture of test results supports more precise and actionable data on defects
- More comprehensive testing reduced risk of missed defects

Business Matters

- Faster development times accelerated the business ROI of improved sales productivity and performance
- 16,000 sales reps now have high-quality, full functionality mobile access to critical software tool



Mobility solutions are useful productivity tools for all enterprise employees. They're particularly valuable, however, to sales reps, because they help reps stay connected while they're on the road, meeting with prospects, and visiting customer sites.

The challenge for enterprise IT organizations is to keep mobile apps current—which is why the Hewlett Packard Enterprise (HPE) IT organization recently

leveraged two mobile app monitoring solutions from the HPE Software portfolio: HPE Unified Functional Testing (UFT) & Mobile Center and HPE AppPulse Mobile. These solutions allowed HPE to adopt a DevOps approach to building and testing a new mobile app—and in turn accelerated HPE's ability to meet the needs of its sales organization with tools that enhance rep productivity and on-the-job effectiveness.

“The tools we need to accelerate mobile app development are in our own HPE Software portfolio.”

– Evan Brown, Software Developer, HPE IT

In previous years, some 16,000 HPE sales reps in 98 countries have used a traditional software application, MyComp Desktop Reporting, to track their progress against their sales goals. The application utilizes data from the compensation crediting engine to provide reps visibility into their compensation.

The desktop software has its limitations; it can only be accessed via Wi-Fi and a secure VPN connection. For this reason, accessing the software can be inconvenient for reps since much of their time is spent at customer sites. “To use MyComp Desktop, reps need to be inside the HPE firewall on a laptop or desktop,” explains Kara Maloney, Program Manager, Sales Compensation Operations Innovation, HPE.

To address these concerns, Maloney’s team launched a mobile version of the application a couple of years ago. The release was a stop-gap measure, however, with very limited functionality. It didn’t present all of the metrics sales reps need, for example, such as views of multiple fiscal years or sales team dashboards.

In late 2014, Maloney approached the HPE IT development organization to ask for a new, better MyComp Mobile app. “We wanted an app that more closely emulates the MyComp Desktop experience,” says Maloney. “We also wanted to update the user interface.”

Unfortunately, there was a problem. At the time it received the request, the HPE IT team was very busy with another looming business priority: it was preparing to separate Hewlett-Packard Company into Hewlett Packard Enterprise and HP Inc. “IT’s first response to our request was that they would not be able to help us for months, because they didn’t have the bandwidth to develop our app,” Maloney explains.

App development in a bring-your-own-device world

“When we originally evaluated the MyComp Mobile project request, our project scope included a lot of manual testing,” explains Evan Brown, Software Developer, HPE IT. “We assumed we would need to send mobile builds to our QA teams along with detailed information to help them design their tests, such as OS and device details. QA would then build and run its test scripts and report the results back to us. We would have to analyze the results and use them to generate fresh builds for testing—which any development team knows can be a very time-consuming and laborious process. And then we’d need to repeat the whole process with our beta testers.”

To add further complexity to the process, HPE supports a bring-your-own-device mobility policy. The MyComp Mobile app would need to be developed for, and tested



on, several OS platforms. Because HPE IT support policy follows a “current version minus one” approach, the app would need to run on multiple OS versions. And then there is the hardware. “The project scope also included testing the app on a menagerie of devices,” notes Brown, “including older models of popular smart phones and one device that is used only in India.”

HPE Software enables DevOps approach

Then the team re-evaluated the project to consider whether it could adopt a DevOps framework by leveraging the HPE Software portfolio: HPE Unified Functional Testing (UFT) & Mobile Center to automate mobile app functional and regression testing, and HPE AppPulse Mobile to help its developers and testers more quickly isolate, prioritize, and fix mobile app performance.

“We realized that with these HPE Software solutions, we could automate both our functional and our diagnostics workflows,” says Brown.

HPE UFT & Mobile Center, for example, allows testers to launch test scripts with a single mouse click. “It’s easy to run the same test over multiple devices and operating systems,” Brown notes, “to make sure you’re getting consistent results.”

Because HPE AppPulse Mobile delivers comparable efficiencies for mobile app diagnostics monitoring, HPE IT decided to use it to manage its beta test workflows. “The software works with both Apple and Android,” Brown says. “It captures performance information, categorizes anything that causes a slowdown or drains battery power, and presents it on a dashboard. The data it gathers is completely anonymous, so you don’t have to establish and manage complicated security protocols. And it’s a Software as a Service application, so our dev and test teams can access the data no matter where they sit.”

To drive further efficiencies, HPE IT integrated the two HPE Software mobile application performance management and testing solutions with its HPE Application

Lifecycle Management platform. With this architecture, any issue arising during testing automatically generates a service ticket and routes it for resolution.

“Running the tests was easy. We just loaded the app on our smart phones and ran the HPE AppPulse Mobile test script.”

- Kara Maloney, Program Manager, Sales Compensation Operations Innovation, HPE

After evaluating the efficiency gains it could achieve by leveraging these HPE Software mobile app monitoring solutions, HPE IT realized it would need far fewer resources to develop the app. For example, instead of four or five testers, it would be able to support the project with only two at the most. The mobile monitoring solutions would also allow HPE IT to more easily integrate its development workflows with beta testers on the operations side of the company.

So IT contacted the Sales Compensation team with the good news. “They said they’d found a way to free up the resources needed to support our project,” Maloney says. “Needless to say, we were thrilled.”

Automated workflows, automated hand-offs

Over the next several weeks, HPE IT developed the HPE MyComp Mobile app and put it through a series of internal tests. These tests range from manual usage tests, such as making sure the app logs input correctly and displays the correct data, charts and graphs for that user, to performance testing that ensures the application runs at an expected speed when downloading data and switching between pages. In this situation, this is especially important because they have to support some older phone hardware. The app goes through stress tests to see if the team can get the application to crash from standard or unusual usage patterns.

Case study

HPE on HPE
MyComp

Industry

High tech

Customer at a glance

Primary software

- HPE Unified Functional Testing (UFT) & Mobile Center
- HPE AppPulse Mobile
- HPE Application Lifecycle Management

Then Maloney recruited a team of user acceptance testers from within the Sales Compensation organization. “Running the tests was easy,” Maloney notes. “We just loaded the app on our smart phones and ran the HPE AppPulse Mobile test script.”

On the development side, the workflow was equally automated and seamless. “HPE Software solutions automated the testing itself,” Brown says. “But they also automated the hand-offs between our dev teams, test teams, and user acceptance testers.” This streamlined tasks like communicating test requirements and test results, and determining how to apply test results to subsequent app builds—in other words, tasks that can add substantial overhead to development projects.

Using HPE UFT & Mobile Center also reduced the time it took to run IT stress and performance tests from weeks to minutes, because the UFT software can run multiple tests back-to-back across multiple devices and operating systems all at once.

Another advantage of using HPE Software mobile app monitoring solutions was that conducting automated tests yielded more comprehensive information than would be possible using manual tests. “When tests are automated, you can run more of them,”

Brown explains. “The HPE Software also gives very specific information about the app functionality and performance, along with precise data about the conditions of the defect. It makes diagnosis and resolution both easier and faster.”

Perhaps the most important benefit of the DevOps strategy that HPE IT adopted, however, was the relationship it fostered between HPE IT and the Sales Compensation organization that requested the MyComp Mobile app. “It was a very positive experience,” says Maloney. “First, HPE IT was able to fit the project in, which was a pleasant surprise. Then, when they turned the app over to my team for testing, it met our specifications and the performance was already very solid. And for the minimal defects we did discover, the reporting process was straightforward and easy to manage.”

With the mobile app performance testing now complete, Maloney’s team has released the app—and HPE’s sales managers are looking forward to the positive impact it will have on their reps. “This app will help our reps become more productive, and will also serve as a performance motivator,” Maloney notes. “The HPE MyComp Mobile app is an important step forward for our sales organization, and thanks to HPE IT, we are ready to take that step that much faster.”



Sign up for updates

★ Rate this document


**Hewlett Packard
Enterprise**

© Copyright 2016 Hewlett Packard Enterprise Development LP. The information contained herein is subject to change without notice. The only warranties for Hewlett Packard Enterprise products and services are set forth in the express warranty statements accompanying such products and services. Nothing herein should be construed as constituting an additional warranty. Hewlett Packard Enterprise shall not be liable for technical or editorial errors or omissions contained herein.

4AA6-5034ENW, April 2016