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The future is here, and it's connected to the internet. Almost everywhere you turn these days, there are internet-enabled devices, appliances, even toys. While all this new technology is intended to streamline and simplify our lives, the reality is, the Internet of Things depends on the quality of the software that powers it.

We've all heard the saying, "Garbage In; Garbage Out." Our challenge in this age of ultra-connectivity is to design, develop, and test our products to be highly reliable, functional, and user friendly. Anything less, and we lose the trust of our users and, ultimately, lose in the marketplace. This eGuide will help you navigate today's constantly changing IoT landscape.

In this Internet of Things eGuide

4 Fundamental Practices for IoT Software Development

The IoT enables devices designed to make our lives easier. But IoT products are only as good as the software behind them. Learn four practices you'll need to adopt when developing software for the IoT.

3 Steps to Nurture IoT Development and Testing

As more devices connect to the internet, QA must cultivate an understanding of the IoT and how to create software for these connected items. Find out the crucial three steps for IoT development and testing.

Accountability in Testing Embedded and IoT Software Systems

Take a look at the critical systems in the world today and you'll find software. We need to do testing from a risk-based perspective and be accountable to the public by acknowledging what is tested and what is not.

IoT and the Wisdom of Mobile

The IoT has taken the world by storm and is growing exponentially by the minute. Since mobile's been around so long, can what we learned from that revolution help us in this new connected age?

The Future of Cloud Connectivity in an IoT World

When new technologies are embraced and popularized, they usually fail sooner rather than later. The IoT, new architectures, and cloud systems will take time to develop and mature, finally providing calm, consistent conditions. How should you plan to fail?

DevOps Helps Enterprises Deliver Better, Faster Software for the IoT

As the world becomes more connected, it's changing the way we do things, especially in relation to software delivery. Software development for IoT applications presents obstacles concerning security, privacy, and unified standards. But we need look no further than DevOps to find the answers.

The Buzz on the Internet of Things

What industry insiders have to say about developing and testing for the Internet of Things.

Additional IoT Resources

Invaluable resources to keep you, your organization, and your practices at the leading edge of the IoT movement.

4 Fundamental Practices for IoT Software Development

By Lev Lesokhin

Today, if you're a technology leader and work for a public company without an Internet of Things (IoT) strategy, you can wave goodbye to your share price on its way down. IoT is no longer a nascent dream. By 2017, IDC analysts predict spending on IoT technology and services will exceed \$7.3 trillion. [1] Global brands, such as Intel, already have announced significant changes to their business to focus on IoT, and as more devices "connect" the lines of autonomous provisioning, management and monitoring will continue to blur.

Is IoT Just a Fad?

Putting the hype aside, one of the most important conversations to emerge lately relates to the tactical elements of IoT. What do organizations need to address in development to make this a successful technological shift? Without precise execution, IoT could turn into a nightmare (remember the movie "Minority Report"?) Devices are getting smarter—talking to each other and cutting out the unreliable human elements, which result in higher quality and greater productivity. Embracing and successfully managing all of the technological complexity that comes with IoT are the most important steps toward its success.

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To twist the famous words stated in Forrest Gump, "Smarter hardware is as smarter software does." This implies that IoT products and services will only be as good as the software behind them. This isn't creating a new set of problems; software is already pervasive. Instead, the growing ubiquity of IoT just magnifies the potential impact of problematic software, and that is where the trouble begins.

Obstacles in Transitioning to IoT Development

First, many companies investing in IoT are not traditionally involved in computing. For example, today more than 50 percent of IoT activity is centered in industries such as manufacturing, government (smart city), and consumer products. [1] Some of these organizations suffer from a lack of proficiency in putting together such a dynamic software capability. This is often exacerbated by the fact

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