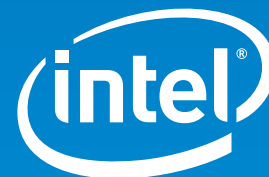




# IT@Intel

# Intel IT Performance Report

2012 Mid-Year Update



## Creating a Culture of Possibility.

Eight months into my first year as Intel's CIO, I see solid evidence that Intel's global IT organization is continuing to deliver exceptional business value. Aligned with Intel's top priorities, we are executing with increased velocity, even as tremendous change and growth compete for our resources and mindshare.

Business opportunities emerging from tectonic shifts in the IT industry—such as cloud, IT consumerization, big data, and social computing—continue to motivate us. These shifts are challenging IT to evolve from enabling and implementing technology to becoming a strategic business partner, providing insights and integrated solutions that will drive revenue and profitability.

To make this transition at Intel, we are pursuing an agenda of continuous innovation and culture change within our IT organization—developing the skills and leadership behaviors required for this new era of computing. We are increasing business acumen at all levels of our organization and encouraging a culture of possibility thinking, which includes challenging the status quo, taking informed risks, and increasing collaboration across organizations. These behaviors drive the innovation necessary to deliver continuous business value from IT.

In this mid-year report, we share highlights of our progress and key learnings from our strategic initiatives in **cloud computing**, **IT consumerization**, **business intelligence**, and **enterprise risk**. We also discuss our accomplishments in **social computing**, as a fifth strategic initiative, and include some early successes in creating a culture of possibility thinking inside Intel IT.

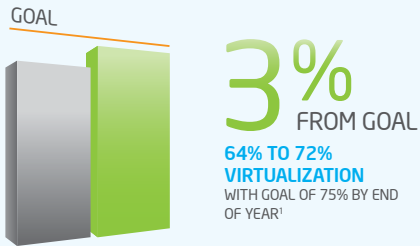
As you might expect in an IT organization of 6,000+ people, this report provides only a brief glimpse into how Intel is transforming IT to achieve the next level of business value. For a more in-depth account, look for our Intel IT Annual Performance Report in January 2013. In the meantime, I invite you to explore our IT best practices at [www.intel.com/it](http://www.intel.com/it) and to share your insights with me on Twitter, @kimsstevenson.



Kim Stevenson  
Intel Vice President and Chief Information Officer

# Driving Business Value Through Our Strategic Initiatives

## Intel IT's Progress on Strategic Initiatives: First Half of 2012



ADDITIONAL SAVINGS FROM OUR ENTERPRISE PRIVATE CLOUD



250 NEW BUSINESS IDEAS FROM INTERNAL CROWDSOURCE FORUM

# 2,750,000 HOURS

PRODUCTIVITY GAIN FROM OUR BRING-YOUR-OWN-DEVICE PROGRAM

Source: Intel internal, July 2012.

<sup>1</sup> Percent of applications virtualized in our Office and Enterprise data center environment at the end of August 2012.

### Cloud Computing

Halfway through 2012, we continue to deliver increasing levels of agility and efficiency to Intel's business groups through our private cloud, realizing another USD 3 million in cost savings this year. We are also making significant progress in our development of interoperable public-private (hybrid) clouds based on open industry standards and software.

We deployed our first open source private cloud environment in production—enabling us to advance our cloud beyond compute infrastructure as a service to include storage- and network-consumable web services.

As we expand the use of open source, we expect to make future services available at a faster pace and at a lower cost. Through improved automation and optimizations, we can now deploy an infrastructure service in five to 10 minutes. At the same time we are improving other key IT operations metrics such as utilization and availability.

To support Intel's growing software development teams globally, we have implemented our first fully integrated, secure public-private hybrid cloud. This approach enables us to launch capabilities in remote regions where we have no data centers.

Additionally, we launched our first production pilot for platform as a service, also using open source software on a self-service extensible application hosting environment. This foundation will help enable application developers to go from innovative idea to production in less than a day.

#### See More Online:



"Best Practices for Building an Enterprise Private Cloud" (white paper)



"Extending Intel's Enterprise Private Cloud with Platform as a Service" (white paper)

### IT Consumerization

To advance Intel's vision of the compute continuum and further boost employee productivity, we are continuing to make improvements in seamless, secure access to corporate and personal applications and services across a range of devices. A good example is our mobile app program. To encourage faster, more efficient development, we created a framework that includes specific capabilities, tools, and resources. Using this framework, we have developed customer relationship management, social media, and travel tool apps, such as location-based and context-aware apps that help employees navigate Intel sites. In addition, we have another 14 enterprise apps in production and more in planning. We're also helping employees keep devices in sync by implementing an app for file synchronization in the cloud.



As part of embracing IT consumerization, we are enabling wireless connectivity for personal devices through free on-campus Wi-Fi\* separate from the enterprise network. We are also continuing to make progress in our successful, ongoing bring-your-own device (BYOD) program. By proactively evaluating consumer devices, such as Ultrabook™ devices, we're able to recommend the ones that provide the best, secure user experience. So far this year, we've seen a 14 percent increase in the use of personal devices. With approximately 19,000 employees participating in our BYOD program at mid-year and realizing an estimated average savings of 57 minutes per day, we have achieved a total productivity gain of approximately 2.75 million hours thus far in 2012.

#### See More Online:

-  "Building a Mobile Application Development Framework" (white paper)
-  "Pre-Evaluating Small Devices for Use in the Enterprise" (white paper)

## Business Intelligence



Our advanced, predictive business intelligence (BI) solutions continue to yield significant business value. These results are accomplished by taking small teams skilled in business analytics and focusing them on high-impact opportunities that return upward of USD 10 million for Intel in six months or less. For example, we developed an advanced BI solution for our sales and marketing organization that mines large data sets to identify the most promising reseller business partners. During the solution's initial trial in the Asia-Pacific region, we identified resellers that have significant new revenue potential.

We are now applying what we learned from deploying these advanced BI solutions to even higher impact opportunities where analytics have the potential to provide five to 10 times the value of our current solutions.

To capitalize on these high-return business opportunities, we continue to develop our big data infrastructure and visualization

tools, focusing initially on security and manufacturing use cases. We are also implementing a BI self-service approach that speeds the delivery of information to our users while giving them autonomy to discover new possibilities and insights.

#### See More Online:

-  "Roadmap for Transforming Intel's Business with Advanced Analytics" (white paper)
-  "Mining Big Data in the Enterprise for Better Business Intelligence" (white paper)

## Enterprise Risk and Security

To improve employee productivity and business agility while reducing risk, we continued the design and first production implementations of our information security strategy: Protect to Enable. This included developing new capabilities that enhance business flexibility and enable us to focus on rapid detection of compromise using more dynamic and granular controls.

## Innovating the Business through Possibility Thinking

Recognizing the importance of IT innovation, we're taking proactive steps to reward IT employees for embracing possibility thinking. Our culture of informed risk-taking and creative thinking challenges employees to question "can't be done" thinking and replace it with "if it could be done, what would we need in order to do it?" Engaging in possibility thinking is resulting in bolder thinking and some great results.

To encourage possibility thinking, we implemented a program called "Bright Spots" that showcases employee ideas and results. We also highlight employee ideas that aren't successful, but produce key learnings that could positively influence future projects.

A good example of a Bright Spot is our IT On the Go vending machines. Recognizing that employees need PC peripherals even when our service centers are closed or technicians are busy, we began piloting vending machines as a more efficient way to distribute 23 common products, including batteries, mice, keyboards, headsets, adaptors, and more. This 24/7 access to the items employees need most results in greater convenience and a reduction in non-technical work and volume at PC service centers.






A good example is our High Trust Zone architecture for our highest-security virtualized server environment. Using our granular trust model, we developed a set of processes and policies designed to classify risks and apply more stringent controls than those developed for our Internet-facing applications. In addition, we implemented extensive security monitoring that includes new network monitoring tools to provide comprehensive host and network intrusion detection. Being able to virtualize high-security mission-critical applications without burdening less sensitive data and applications now puts us at 72-percent virtualization in our office and enterprise environment, well on track for our goal to increase from 64 percent to 75 percent this year.

To better support IT consumerization and our BYOD program, we are progressing with the design and implementation of our unique trust calculation with an initial release into production in the second half of this year. This solution dynamically adjusts user access and monitoring based on user privileges, data, application, device

type, and location. Intel IT won a 2012 CIO 100 award for this innovative approach.

#### See More Online:

-  Protect to Enable – Increasing Productivity while Decreasing Risk (video)
-  "Virtualizing High-Security Servers in a Private Cloud" (white paper)
-  "Improving Security and Mobility for Personally Owned Devices" (white paper)



## Social Computing



Social computing is completely changing the way knowledge is shared, empowering people with information that was once held by only a select few. It has also become a pervasive way to connect and collaborate with experts, employees, and customers inside and outside of Intel, as well as a way to reach new markets and audiences. To this end, we're delivering a common set of social computing services, tools, and support across Intel to increase efficiency, value, and usage.

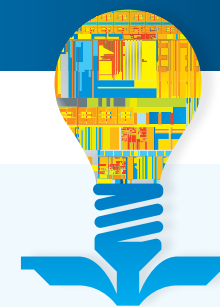
Internally, we are experimenting with techniques such as crowdsourcing and

gamification for collaboration on ideas to improve Intel, advance our business, develop new products, and optimize product forecasting. Recently, over 4,500 employees participated in a crowdsource forum on new business opportunities, generating over 250 ideas.

Externally, to drive greater brand relevance with 18- to 30-year-olds, we are collaborating with Intel's corporate marketing group on an experimental online news magazine, *iQ by Intel*. Through this magazine, hundreds of leading Intel engineers and thinkers select and share information and have discussions on technology and trends. Understanding the audience, we optimized the site for viewing on touch-friendly devices such as tablets and smartphones. In the first month, we posted 50 stories and recorded over 38,000 visits and 500 shares.

#### See More Online:

-  Social Media Support Strategies for IT (radio show)
-  Becoming a Social IT Organization (CIO blog)



## Join Us in Possibility Thinking.

Look for more information on Intel IT's strategic initiatives in our next Annual Performance Report. Visit [www.intel.com/IT](http://www.intel.com/IT) in January 2013.

Share your IT innovations and best practices with us in our Open Port community at [communities.intel.com/community/openportit](http://communities.intel.com/community/openportit)

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