Point of View

The new economics of IT

Harness the power of the perfect IT storm

Executive Summary

Traditional approaches to IT are rapidly being rendered obsolete. It's a process brought about both by the accelerating rate of technology disruption and by increasing user expectations. Old IT perspectives are no longer sufficient for the cloud-first, digital-first world. A new perspective is needed, one that calls for two distinct approaches: a predictable approach to optimize core IT systems, and an exploratory approach to innovate the business with new technology.

Avanade calls this new perspective the New Economics of IT. It defines the creation of value through new IT approaches used to maximize efficiency, increase agility and speed innovation. And it creates a new vision for IT—one that includes liquid applications, intelligent platforms, and connected ecosystems—to drive higher levels of efficiency, agility, and innovation. The technologies that make this possible, long predicted but sometimes slow in coming, are now at critical mass. Their continued innovation is happening at an accelerating pace. Now, not one or more years from now, is the time for enterprises to put them to use.

This Point of View describes the perfect storm facing IT leaders, how the visionaries among them are navigating the raging waters to deliver new value to their businesses, and how you can, too.

The Challenge

IT leaders are now experiencing a perfect storm created by the once-in-a-career convergence of unprecedented levels of technology disruption and the increasing expectations of digitally savvy stakeholders.

The technology disruption is no longer coming only from cloud, big data, mobile and social, but also from new digital technologies including wearables, the Internet of Things (IoT) and artificial intelligence, which are arriving at an increasing pace. But it's not just about the IT systems, it's also about the methods and tools: IT leaders believe that modern software engineering approaches (89%) and process automation technologies (92%) are key to addressing the emerging requirements of the digital business.[1]

It's little wonder then that 65% of IT leaders believe that the conventional systems and approaches typically in use today are not fit for purpose for solving the emerging requirements of the digital business.[1]

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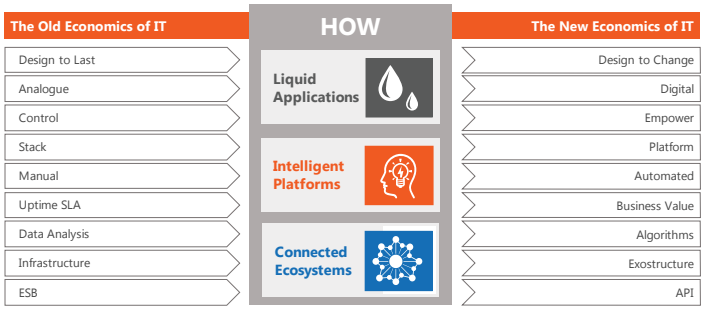
1 Source: "IT Modernization : Critical to digital transformation ", Research conducted by Vanson Bourne on behalf of Avanade, March 2017



Two approaches are better than one

IT leaders face two sets of challenges: One is to manage, maintain, and secure core IT systems better than ever before. The other is to experiment with new technologies to identify new opportunities and new ways of doing business. Call them "optimizing the core" and "innovating the business."
These two sets of challenges require two approaches to IT:

- **A predictable approach (Mode 1)** that emphasizes reliability, cost-efficiency, and an IT-centric culture. It's based on plan-driven and approval-based governance and long cycle times. Here's where IT finds better-faster-cheaper ways to do the things that keep the business running.

- **An exploratory approach (Mode 2)** that emphasizes agility, revenue, brand, customer and a business-centric culture. It's based on empirical, continuous governance and short cycle times—days instead of months. Here's where IT has a new freedom to fail—yes, fail—because experimentation is cheaper and faster than ever before, so every failure gets the enterprise closer to a potentially game-changing success.

Think of these approaches as right brain/left brain, or what Gartner calls Bimodal IT. However you think of them, 93% of IT leaders believe their organization needs to both the predictable and exploratory approaches– in order to meet the emerging requirements of the digital business.[1]

The perfect storm hits IT

- CIOs expect 41% of their revenue to come from digital by 2020[1]
- 66% of CIOs say there's a talent crisis right now[1]
- By 2020, 30% of web browsing sessions will be done without a screen.[2]
- Business leaders predict more than two-thirds of organizations globally will be using intelligent automation by 2020.[3]
- By 2020, anything other than a cloud-only strategy for new IT initiatives will require justification at more than 30% of large-enterprise organizations[4]
- IT budgets may rise by just 2.2% in 2017, forcing IT to repurpose existing funds.[5]

1 "Building the Digital Platform: The 2016 CIO Agenda", Gartner, October 2016
2 "Top Strategic Predictions for 2017 and Beyond: Surviving the Storm Winds of Digital Disruption", Gartner, Oct 2016
3 "Productivity plateau: What's holding you back?", Research conducted by Wakefield Research on behalf of Avanade, June 2017
4 "Predicts 2017: Cloud Computing Enters Its Second Decade", Gartner, December 2016
5 "The 2017 CIO Agenda: Seize the Digital Ecosystem Opportunity", Gartner, December 2016 "

Moving from the old to the new economics of IT

A new technology vision is fueling the new economics of IT. It's not an economics that an accountant would recognize; rather, it's one that leads to a new perspective on how we approach IT. Underlying this vision are technologies that contribute to **liquid applications, intelligent platforms, and connected ecosystems**.

Liquid Applications

Liquid applications are built using modern software engineering techniques. Unlike multi-year system implementations, they're distinguished by their modular architectures, next-generation integration techniques, and cloud-first, mobile-first orientation. They are realized through new development approaches that incorporate smaller,
reusable components to continuously deliver software with agility and speed. And they're designed to be changed rather than designed to last, so IT can use them to empower the business—not control the business—through applications for the digital world.

Intelligent Platforms

Intelligent Platforms manage the complexity of modern software development and operations. They are built on intelligent automation, context-aware and self-healing capabilities. These are managed platforms on steroids, capable of analyzing and identifying their own defects and repairing themselves or advising support engineers on the best courses of action. Intelligent platforms create continuous improvement in quality, reduce costs and boost uptime while making it possible for IT to deliver business growth.

Connected Ecosystems

Modern IT systems are inherently networked and connected in ways that include virtual organizations, collaboration tools that connect companies and their customers and partners, IoT and IT consumed from both private and public cloud environments. Because so many of the resources are located beyond the borders of the enterprise, "infrastructure" isn't a sufficiently inclusive term. Rather, the enterprise needs an "exostructure" strategy that focuses on interoperability. Such a strategy can tie together the increasing number of partnerships, tools and services in the ecosystem, enabling the enterprise to securely leverage services from the cloud rather than having to bring them in-house.

A new technology vision powered by liquid applications, intelligent platforms, and connected ecosystems is fueling the new economics of IT.

The new economics of IT overcomes today's business issues

Liquid applications, intelligent platforms and connected ecosystems help to implement the dual approaches of IT, ensuring predictability and enabling exploration. The enterprise can use these approaches to create value by maximizing efficiency, increasing agility, and fostering innovation. These goals are inter-related, not isolated. For example, by maximizing efficiency and increasing agility, the enterprise can leverage its savings in budget and personnel to invest in higher levels of innovation.

Goal #1: Maximizing Efficiency
IT leaders observe that they spend too many resources on running core IT systems. The first goal of the new economics of IT is to maximize efficiency by creating predictable IT services that manage, maintain and secure core IT systems in ways that reduce the cost of IT to the business.

The technologies and methodologies that contribute to this goal range from cloud, software-as-a-service and hybrid IT to managed services, service management and change management.

Avanade supports its clients with a range of service offerings that deliver on the promise of maximizing efficiency. We provide managed services that increase the security, stability and availability of business systems to deliver a proven ROI.[5] IDC research demonstrates that Avanade's Managed Services deliver an average ROI of 433%. We use Avanade's Intelligent Platforms and integrated tools to drive cost avoidance. We deploy proven approaches for optimizing and modernizing applications not just to the cloud, but to the right cloud: public, private, or hybrid.

For example, when a global consumer-products manufacturer wanted to deliver information on any device, anywhere, at any time to its 47,000 employees in 75 countries, it turned to Avanade. We responded with a unified communications and collaboration cloud strategy, intelligent platform, and transformation and managed services. We beat the company's anticipated time to migrate by 58%, shifted the culture and reinvented productivity with high adoption of Skype for Business, and delivered a cloud platform that puts the company firmly on the path to a digital workplace.

5 Source: IDC Whitepaper Sponsored by Avanade 'Using Avanade's Managed Services to Unlock Business Value' Document #US41895316

Goal #2: Increasing Agility
As traditional IT methods become obsolete, IT leaders know they don't have the methods and tools to respond fast enough to current needs. One way to do so is by achieving the second goal of the new economics of IT: to increase agility by using new methods and tools that empower both the predictable and also exploratory approaches.

The technologies and methodologies that contribute to this goal include DevOps and Agile, the cloud and portals, liquid applications, automation, orchestration, and change enablement.

It is equally important to use modern software engineering approaches whether the target is mode 1 (predictable to optimize the core) or mode 2 (exploratory to innovate the business). In particular, organizations must avoid using segregated technologies and approaches in mode 2 that are not compatible with mode 1. This avoids technical debt building up from the lack of integration between the predictable and exploratory approaches.

To boost our clients' agility, Avanade delivers managed services and an Agile, continuous delivery DevOps model based on intelligent platforms in the cloud. We provide application modernization for faster results with fewer risks, liquid applications that replace obsolete application layers, and self- service business-oriented provisioning and management to empower connected ecosystems.

For example, when an international energy company wanted greater business agility than its legacy trading platform could provide, we deployed our Avanade Application Managed Services for more than 100 custom applications, along with our services for application development, and for application and infrastructure modernization and migration. The company benefited from a 50% reduction in downtime incidents, a 60% reduction in average time needed to resolve downtime and, as a result, a 50% increase in trading volume.

Goal #3: Speeding innovation
Too often, technology seems to be used least where it's needed most: to spur the business innovations that are crucial to maintaining competitive advantage in an increasingly tough business climate. The third goal of the new economics of IT is to speed innovation using exploratory techniques that enable enterprises to adopt and adapt to new opportunities.

Key technologies and methodologies relevant to speeding innovation include design thinking, cognitive computing, cloud APIs and hybrid cloud, liquid apps, the Internet of Things, artificial intelligence and the ability to fail fast and learn fast.

In the cloud first digital world, the new economics of IT defines the creation of value through new IT approaches used to maximize efficiency, increase agility and give the freedom to innovate.

Avanade helps speed the innovation of its clients by challenging the underlying assumptions about what drives success. We unlock the core by using cloud APIs and mobile front ends around core systems to create liquid applications. Our proven approaches reduce risk and drive iterative projects. We create connected ecosystems using Microsoft private, public, and hybrid cloud technologies. And we harness the leading technologies, from the Microsoft, Accenture and Avanade ecosystem, to drive client benefit and competitive differentiation.

An international mining company wanted an "IT of the Future" platform with which to make the company more agile and enable it to innovate faster while also reducing costs and improving quality. Avanade responded with a combination of cloud strategy, application modernization and optimization and brought to bear our expertise in Internet of Things, DevOps and Agile. As a result, the customer expects to increase agility with a new cloud model and to speed innovation with automated tools that leverage IoT.

We did it for them, we can do it for you

To learn more about how Avanade can help you to take advantage of the new economics of IT, visit: http://www.avanade.com/economicsofit

Or follow us on social media #NewITeconomics

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About Avanade
Avanade is the leading provider of innovative digital and cloud-enabling services, business solutions and design-led experiences, delivered through the power of people and the Microsoft ecosystem. Majority owned by Accenture, Avanade was founded in 2000 by Accenture LLP and Microsoft Corporation and has 30,000 professionals in 24 countries. Visit us at www.avanade.com

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