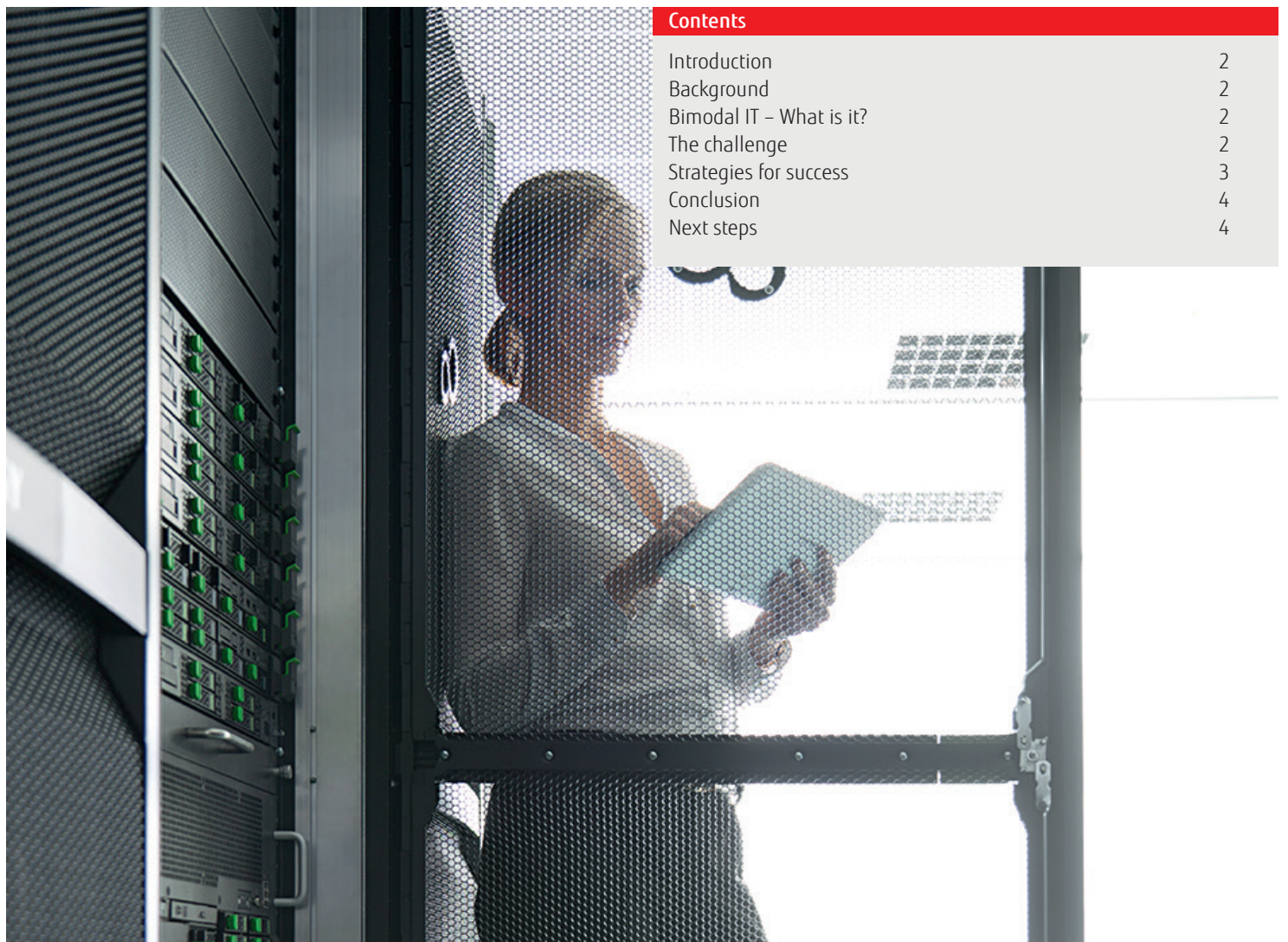FUJITSU

White paper
The organizational impact of Bimodal IT

The cost-effective, quick and easy-to-implement nature of cloud computing is hard to ignore. As a result, we're seeing ever more businesses moving into the cloud and away from traditional IT infrastructures.

Contents

White paper
The organizational impact of Bimodal IT

Introduction

The cost-effective, quick and easy-to-implement nature of cloud computing is hard to ignore. As a result, we're seeing ever more businesses moving into the cloud and away from traditional IT infrastructures. Analyst Gartner predicts that, by 2016, cloud services will make up the bulk of organizational IT spend. By the end of 2017, it expects that nearly half of all large enterprises will be using hybrid cloud, a combination of public and private cloud services.

Moving to the cloud, however, doesn't mean that businesses are abandoning legacy IT. Traditional enterprise servers, storage devices and networking equipment – managed either in-house or by third-party providers – are still vital in many cases to maintain long-established operations or to provide a testing ground for development projects. This two-pronged, often two-speed approach – cloud and legacy – is what Gartner calls "bimodal IT". And, while bimodal provides numerous benefits, it also poses many new challenges for the organizations that adopt it.

We put together this report to help such organizations understand what those challenges are, and how to best prepare for and manage them.

Background

Before cloud computing, businesses generally understood how IT operations and management fit into the organization. The CIO was in charge of guiding the company's technology vision and the IT department handled the day-to-day responsibilities of operating and maintaining the company's technology infrastructure. Any other department with a technology problem or need knew where to turn for help and depended on the internal IT team to resolve those issues.

With the emergence of pay-as-you-go, as-a-service cloud technologies, though, that way of doing things has quickly changed. The sales department, for instance, can quickly and easily set up a CRM system simply by signing on to a service like Salesforce.com® – no lengthy interdepartmental meetings or cumbersome IT procurement process needed. And any technology issues that might subsequently arise can often be handled by the outsourced provider, rather than by the company's own IT team.

In many cases, in-house IT might not even be aware of such a move, as deploying a cloud-based service doesn't require their help. The result

is that, in a growing number of enterprises today, IT deployments can exist in many different silos rather than being managed by a single department. This can prove to be a recipe for confusion. That's where a new vision for a bimodal IT model comes in.

Bimodal IT – What is it?

Bimodal IT, as Gartner has defined it, is "the practice of managing two separate, coherent modes of IT delivery, one focused on stability and the other on agility." Mode 1, which generally applies to legacy in-house infrastructure, puts an emphasis on safety and accuracy. Mode 2, on the other hand, typically exists in the cloud, where the focus is on agility and speed.

For many businesses, this dual model can deliver the best of both worlds. But it can upend — for better or for worse — long-established practices in a traditional IT department, as well as in other parts of an organization.

In the worst-case scenario, the IT team can find itself suddenly all but superfluous as an increasing share of its responsibilities is shifted to myriad subscription services managed by other departments via user-friendly interfaces and portals.

Fujitsu partner Brocade® calls this the "IT Relevance Gap" and points to the reliance on legacy network architectures as one of its main causes – that 's why its approach to the "New IP" is a roadmap to closing this gap.

The best-case option can open up new roles and opportunities for the IT department, if it recognizes the need for change and views this challenge creatively and proactively. Other parts of the business also benefit from having more nimble and responsive technologies at hand.

The challenge

The most important thing to remember at the outset is that transitioning to bimodal IT and increasingly moving to the cloud is a multi-year journey. Changing your organization to one that's optimized for the future rather than the past will be a work in progress for quite a while.

Consider, for example, how an early 20th-century passenger airline operator might respond if it suddenly was brought into the 21st century and handed a fleet of modern aircraft. There is no way that company could effectively make use of its new equipment from day one. Instead,

it would need time to train its people to fly and maintain the modern planes, build new facilities, set up ticketing operations and market its services to the world.

That's an apt analogy for the situation facing many traditional IT departments today. In just a few short years, a bulk of the services they used to provide has moved off site and onto the cloud. That's leaving them uncertain about what their roles should be going forward.

Like the airline dropped into a new century, today's IT organizations will need to acquire new skills and take on new responsibilities to stay relevant in the bimodal era. Why? Because, while it might be easy for other departments to deploy cloud services on their own as needed, it's not always easy for them to do it right. There are real and substantial barriers that can get in the way of a move into the cloud. And this is where the IT team can help, by acting as facilitators and enablers.

Strategies for success

Rather than fighting to preserve its domain, IT needs to recognize that cloud services in some instances are simply a better choice than building and deploying technology in-house. But those services will still need to work effectively alongside vital legacy systems, and should be rolled out in a way that makes sense for the business as a whole. This is where the IT department can provide invaluable guidance, by helping to create a company-wide technology roadmap and making sure all of the new cloud-based pieces are cost-effective, efficient and properly managed.

To do this, IT needs to talk with other departments and ask the right questions: How high up in the technology stack will each cloud deployment go? Which party will handle monitoring and management of each layer? What are the costs and benefits of each solution? How will the different parts — legacy and cloud — work together as a coherent whole?

More than a few cloud deployment projects have fallen to the wayside when organizations don't make the effort to answer such questions in advance. For instance, a cloud solution in which both the in-house IT department and the service provider insist on taking on full responsibility for monitoring or security will end up with lots of duplicated effort — and few cost savings.

Instead of getting into turf wars with cloud providers, IT teams should look for new ways to manage demands and add value to those services for their organizations. If they fail to do so, other departments will simply bypass IT altogether and implement solutions without their help. And that response can have costly repercussions for a business. In one case, a company found that its various departments were paying for a total of 14 different instances of the same cloud-based software. Two of those weren't even being used. Helping their organizations to avoid such wasted effort and cost is one area where the IT department can provide valuable guidance and support.

Of course, this will require new levels of communication with other departments and new ways of working. By getting out into other areas of the company and making a point to be on hand whenever technology decisions are being made, IT can evolve into a much-needed partner and facilitator of change. The goal should be to evolve into a gateway, rather than a barrier, for technological change across the organization.

Cloud-based services have become popular in large part because using them is easy, intuitive and customer-focused. Forward-thinking IT departments will need to adopt a similar mindset, and find new ways to make their legacy infrastructure and integrated services similarly user-friendly. In the evolving world of bimodal IT, their imperative — as one expert has noted — is "adapt or die".

Conclusion

Enterprises moving toward a bimodal IT model can ease their journey by carefully considering the potential impacts of change on every part of their business. This includes asking plenty of questions about such things as:

- What are the company's short-, medium- and long-term technology needs? How will these affect operations in each different department? What does the roadmap look like?

- Which solutions would be best left in-house, and which would be better — faster, easier, less expensive, more secure — in the cloud?

- Which approaches best manage potential risks and meet regulatory and legal requirements?

- What will the chain of command look like for each part of the technology roadmap? When any part of the system doesn't work as needed, who will be in charge of getting it up and running again?

- How will responses be escalated, if needed?

- How can the organization avoid needless waste and duplication of effort?

- What retraining or reorganization might be needed to help the business best achieve its technology goals?

- Whether legacy or the cloud, where can the IT department create added value for the company?

Transitioning successfully to a blend of old and new technologies, and staying agile and ready to adapt to changing circumstances, requires nothing less than cultural change across the entire enterprise. Only an organization that is ready and willing to change, that is open to new ways of thinking and working, will be able to make the leap.

Next steps

Bimodal IT enables enterprises to have "the best of both worlds" but it's a model that requires planning, preparation and smart thinking. At Fujitsu, we understand the challenges involved in this multi-year journey and can help our customers find the best path forward. Our approach toward bimodal architecture and integration helps organizations achieve the right balance of legacy and hybrid cloud services, while our governance framework ensures that businesses can also stay flexible and adaptable to changing needs over time.

For more information about the Fujitsu approach to managing bimodal IT, visit our website at www.fujitsu.com/us.com.