IBM Institute for Business Value

Continuing the IT infrastructure conversation

Why building a strong foundation requires more than technology

Today's ongoing IT infrastructure dialogue between business and IT executives is about more than technology – it's about the future of the business. To better understand this changing conversation, we surveyed 750 IT executives, which resulted in two reports. In our first, we identified two groups: "Strategic IT Connectors," a small number of leading organizations already working in tandem with their line-of-business leaders on challenges relating to the next generation of IT infrastructure needs, and "Siloed IT Operators," who lack strategic preparedness and connection to the business.[1] In our second report, we look at how IT organizations can increase the value they provide to the business by repositioning the role of IT as both a trusted advisor and a valued service provider, collaborating across the ecosystem, and developing the right mix of skills and capabilities to meet changing IT infrastructure needs.

Toward a higher goal

According to our survey, more than 70 percent of companies recognize that IT infrastructure plays an important role in enabling competitive advantage or optimizing revenue and profit. However, despite this recognition, only 22 percent have a well-defined enterprise IT infrastructure strategy. In addition, only 23 percent are successful at collecting, analyzing and documenting performance measures.

Setting strategic direction and measuring results, both important management practices, remain elusive to the majority of IT organizations.

Overview

Amid a backdrop of rapid technological advances, the IT infrastructure conversation has matured, broadening from the solitary topic of technology to include the future of the business itself. As part of this, IT organizations must evolve and serve both as valued service providers and trusted advisors. Here in our second IT infrastructure report, we address their progress in this area, as well as the importance of collaboration among the IT function and other parts of an organization. Specifically, we examine how these groups can work together to capitalize on IT trends for competitive advantage and deliver the capabilities for business success today and well into the future.

Under ongoing construction: The business/ IT relationship

Almost half of IT executives in our survey cite keeping up with the increasing pace of business requirements as a significant business support challenge, while 42 percent wrestle with the need to better manage upgrade cycles. In addition, 40 percent believe non-IT functions will be involved in cloud computing decisions in the next three years. IT leaders also understand that business users will want to be active in other areas traditionally considered IT's purview, including end-user devices, security and even IT architecture.

Despite the growing need for business and IT to work together, gaps still remain. Only 30 percent of IT executives believe they are successful at collaborating with the business to provide IT infrastructure solutions to support business needs, and only 34 percent believe their organizations look to IT to provide expertise in selecting technology services, such as cloud computing. In today's continually evolving IT environment, companies must work to build stronger bridges across this divide to effectively drive business strategy.

Skills at the heart of the IT infrastructure

Both Strategic IT Connectors and Siloed IT Operators agree that cross-domain knowledge (e.g., server, storage, network) is important in supporting an IT infrastructure. However, their paths diverge when it comes to other key skills. Strategic IT Connectors identify business knowledge and analytics among their top three skills. In contrast, Siloed IT Operators rank analytics and business knowledge at the bottom (see Figure 1). This highlights Strategic IT Connectors' recognition that a deep understanding of business issues is central to developing both an IT infrastructure strategy and a strong relationship with the business.

Skills and capabilities needed to support IT infrastructure (top eight of ten)

Siloed IT Operators			Strategic IT Connectors
Cross-domain knowledge (e.g., server, storage, network)	1	1	**Business knowledge**
Database knowledge	2	2	Cross-domain knowledge (e.g., server, storage, network)
Application development	3	3	**Analytics**
System programming/management	3	4	System programming/management
Open source/open standards	5	4	Infrastructure security
Infrastructure security	6	6	Open source/open standards
Analytics	7	7	Application development
Business knowledge	8	8	Operating system

Figure 1: IT executives from Strategic IT Connector organizations place greater importance on business knowledge and analytics skills.

Source: IBM Institute for Business Value, IT Infrastructure Study. Q10. What are the 3 most important skills or capabilities necessary to support your IT infrastructure? Select up to 3. (Strategic IT Connectors n=124, Siloed IT Operators n=148).

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We also found a majority of IT executives do not believe they are prepared to address the changing learning requirements associated with today's technology shifts. Only 13 percent indicated they are successful at developing and maintaining the skills and capabilities needed to meet changing IT infrastructure needs. Rapidly changing technologies, the need to better understand business requirements and (in many industries) the aging population of individuals who have primary responsibility for IT infrastructure all represent real risks for organizations looking to use IT infrastructure as a competitive weapon.

Conclusion

From our research, one point stands clear: Developing a successful IT infrastructure requires more than leading technology. It requires an IT organization efficient in service delivery and continuous improvement that captures good practices, fosters connections between experts in multiple disciplines and actively collaborates with business leaders.

There is plenty of opportunity for a new IT conversation to evolve. However, it requires that organizations consider not only future technologies, but also the current corporate culture and management systems that influence organizational decisions.

How can IBM help?

Infrastructure matters for optimizing business outcomes. Cloud, big data and analytics, mobile, social, and security are changing the world. New trends and technologies are putting significant demands on the underlying IT infrastructure. This is causing IT leaders to revisit their IT choices and rethink how they manage infrastructure. Organizations need an open, agile and security-rich infrastructure that can deliver speed and scalability. They also need "anytime, anywhere" access to data and the ability to seamlessly allocate resources to accelerate innovation.

Reference

1 Dyer, Nate; Pamela Hurwitch; Eric Lesser; and Jacqueline Woods. "The
   IT infrastructure conversation: New content, new participants, new
   tone." IBM Institute for Business Value. July 2014. https://ibm.com/
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