Next Generation IT Operating Models

Chapter One: Disruption

There was a time when the business was at the mercy of the Information Technology (IT) department for all of its technology-enabled solutions. Now, however, businesses increasingly are discovering new, innovative technologies and becoming progressively aware of the potential of these technologies. Business-users are becoming more technology-savvy and are finding themselves capable of sourcing and provisioning their own solutions, encroaching into a domain that was once exclusively controlled by the IT department. The confluence of new technologies, alternative sourcing options and technology-savvy stakeholders is potent enough to unleash significant disruption in the way IT organizations operate.

In this point of view, KPMG LLP (KPMG) examines how stakeholder expectations from IT are changing, how these changing expectations are impacting the IT organization, and how CIOs can overcome this disruption with a new operating model for IT to drive innovation and value in these changing times.

Technology change is accelerating...

Over the last five years, there have been significant changes in the enterprise technology and applications landscape. Along with newer technologies such as the cloud, big data, and Web collaboration becoming more flexible, the consumerization of IT has also made it more accessible and usable by business users. They are also becoming more affordable (especially with cloud services, where the price of entry is significantly lower). Better security technologies and increasing consumer confidence in data protection levels have further fuelled the adoption of “aaS” models and mobility. These technologies and trends, though argued by some as just another passing wave of change in IT, are bringing varying levels of value to the business:

- Cloud computing: Like e-commerce, cloud computing has the potential to change entire business models. Organizations have started seeing significant value in cloud computing, mostly due to the cost and speed advantages that it offers over traditional on-premise models. As more “pure” cloud offerings (truly pay-as-you-go offerings) emerge, the value of cloud computing is expected to increase further, especially in some specific sectors such as financial services.
- Consumerization of IT/Mobile: The Bring-Your-Own-Device (BYOD) phenomenon and “App Stores” are fast gaining popularity, as they carry a lot of value from an end-user perspective. Although allowing BYOD means adding a lot more complexity to the enterprise IT landscape, enterprises over the world are experimenting with BYOD because the promise of access anywhere, anytime over any device is extraordinarily compelling. However, some perceive the real business value of BYOD to be still evolving. In many sectors and geographies, it is still seen as an add-on phenomenon and not a game-changing technology trend. At the same time, some IT organizations are developing internal app stores to deliver some proprietary applications to users.
• Big data: Big data is really about analytics that can be used to glean important business-related insights that can have a direct impact on enterprise strategy. So, big data technologies are becoming strategic for enterprises. Many data architecture and warehousing projects have failed in the past because of the various inadequacies in the underlying systems and platforms. To create a successful big data architecture, a lot of these legacy platforms need to be streamlined. Therefore, big data is one technology area that requires a lot of support from IT.

• Web collaboration and social media: The rising popularity of social media is changing the way businesses connect with their customers. The ability to harness the power of social media is directly affecting enterprises’ competitive positioning. Since the social media space is fast evolving, enterprises that are contemplating a social media strategy need to be fully up-to-date about the latest tools and vendors available in the market.

The disruptive potential of new technologies

Change is no stranger to the IT organization. Over the last few decades, the IT organization has indeed seen a number of changes—e.g., mainframes to client/server to laptops and 100 percent in-house delivery to strategic outsourcing. Various computing trends have evolved, along with innovations in user devices, underlying platforms, and architecture. The IT organization has faced this gradual evolution, by absorbing new technologies, learning new ways of delivering value and morphing itself to suit the changing environment. However, several factors suggest that the current wave of changes facing the IT organizations is indeed different from changes seen in the past.

Past technology waves have been evolutionary and played out over many years whereas the current trends are characterized by a rapidly accelerating rate of change. For example, Apple introduced four generations of iPads in less than three years. Smartphone manufacturers release new models every six months. Traditional technology adoption curves have been enterprise-led; however, today’s technologies are more consumer-led (BYOD, social media, etc.). For the first time in the history of the IT organization, the decision to use new technology is originating from business users, and not the CIO.

Another very important factor is the cumulative effect of these concurrent technologies. The current wave of technology innovations facing the IT organization is not incremental in nature. These new technologies are coming together to generate disruptive forces, which are catalyzing powerful changes in the way businesses operate.

…along with that, the user profile is also changing…

Along with changing technology, the demographic and social profile of technology users is also changing. Traditional stakeholders were C-level executives and other members of the management team who were largely responsible for driving cost and quality. The expectations of this user group were focused more on efficiency and cost reduction as the primary source for delivering business value. However, today, IT organizations are facing a smarter set of customers: a younger, better-exposed, and better-informed set that is demanding more autonomy and control in the way they use technology. They are also considering themselves capable of doing a lot of what was considered to be strictly the IT organization’s responsibility.

Stakeholders are becoming more tech-savvy and better exposed to new technology

Today’s business users are significant consumers of technology in their personal spaces. This relatively younger user group (large proportion of Gen Z) is using more sophisticated technologies at home—e.g., faster high-end tablets and smartphones, always-on wireless access, user-friendly interfaces, social media, e-banking, and e-commerce. As a result, they are becoming more mature and comfortable with these technologies and are often expecting similar functionality, quality and computer power from the technology at work.
Business users are also increasingly being exposed to alternative delivery models such as cloud-based models, which are not only several times more agile than traditional on-premise solutions, but also allow for greater degrees of customization. This, in a way, is accelerating the pace of change of stakeholder expectations.

**They are also becoming more aware of technology advancements**

Today’s business users are also a lot more informed about technology than their predecessors were. This increased awareness is a result of:

- Enhanced access to information through social media and the digitization of traditional information sources such as newspapers and magazines
- Greater and more targeted marketing communication from technology vendors, which is perhaps hyping up the benefits of new technology to some extent

On the whole, technology is no longer a black box; users are becoming more assertive about how IT can be used to facilitate business and demanding more transparency from IT. Businesses are encouraging more conversations on technology and how they can adopt new technologies while providing demonstrable business value.

...leading to changing stakeholder expectations

The confluence of multiple disruptive technologies and the changing profile of business users are leading to businesses viewing their IT organizations differently than they did in the past. The IT organization is no longer viewed as a small, specialized group of people with responsibility for providing the regular hardware, software, and helpdesk services. Businesses now view IT as a strategic asset and expect IT to add value as a growth enabler and a competitive differentiator.

Businesses now expect IT to:

**Provide knowledgeable guidance and seamless information**

Stakeholders now expect IT to be a trusted partner, who has a holistic understanding of the various technology options and solutions available in the marketplace and can provide the business with seamless data and information to support better decision-making. For instance, if earlier the IT organization was expected to deploy an enterprise resource planning (ERP) system, now it is expected to also drive business functions around this system. Further, if there is a potential advantage
that could be reaped by deploying a Software-as-a-Service (SaaS)-ERP system instead of a traditional on-premise one, the CIO’s team is expected to bring this option to the table, and subsequently guide the business to the most suitable SaaS vendor and solution.

**Be agile in thought and action**

IT organizations—especially those in large enterprises—have traditionally been perceived to be slow to respond to changing business needs. In the current situation, where technology is increasingly becoming user-driven, the IT organization is expected to be far more agile and responsive than it was before. This demand for agility is also a direct fall-out of IT being increasingly viewed as a competitive advantage, which if not harnessed quickly enough, will lose its edge.

**Seamlessly comprehend business needs**

With new technologies leading to a proliferation of alternative business models, communication channels, and cost structures, the business landscape is becoming more and more complicated. Since IT is now being viewed as a growth enabler, businesses expect the IT organization to be able to understand their complex needs seamlessly. In the requirement gathering phase, businesses expect the IT organization to be able to understand their complex sets of requirements without their having to simplify them in a language that the IT team understands. Businesses then expect this team to be able to provide services/solutions tailored to those requirements.

**Deliver efficiencies in cost and performance**

For CIOs, the job gets more difficult because they must continue to drive down maintenance and operations costs as a way to fund new initiatives required to meet these new expectations. It means striking a balance between business as usual and transforming the IT organization towards a different value proposition.

In the next chapter we examine the implications for the IT organization and what it means.
Chapter Two: A New Operating Model Is Required

This combination of disruptive technologies and changing stakeholder expectations has profound implications for today’s IT organization. Until recently, IT delivered value to the business primarily by improving the productivity of people and the efficiency of processes leading to lower costs. Today, the business is looking for a different value proposition from IT, one that directly impacts business outcomes and helps them become faster and more agile. This requires the IT organizations to:

**Run IT as a business**
IT has to become just like every other function and business unit by demonstrating financial discipline, becoming more transparent, and delivering measurable business value. Technology Business Management (TBM), managing the business of IT through an integrated view of technology cost, performance, supply, and demand, is gaining traction among IT organizations looking to gain a common language and principles to enable business users to better plan and manage their demand for IT resources. This approach is essential in assisting organizations making sourcing decisions because without knowing the cost of providing services internally it is difficult if not impossible to know when sourcing a service externally makes better business sense. Furthermore, without understanding the full life cycle costs of IT investments organizations cannot accurately determine their value impairing the ability to optimize the investment portfolio.

**Develop new skills**
Strong technical and project management skills are no longer enough to sustain an IT organization. New skills required include expertise in emerging technologies like analytics, mobile apps, and social media as well as non-technical skills like vendor management, account management, and product management. Many of these new skills are not found in current IT organizations and will need to be acquired either by developing internal talent or by recruiting from outside of the IT organization.

**Adopt a new proactive engagement model**
IT as an order taker is history. The IT organization can no longer sit back and wait for the business to approach with its next request. IT is expected to bring both a deep understanding of technology and specific business domain knowledge together to proactively propose solutions that will enable innovation and create competitive differentiation. This requires embedding relationship managers with the business where they can influence business strategy and promote IT capabilities.

**Clarify governance and architecture models**
The reality is that without the right architecture and governance models being put in place first, there is a high probability that the rush to embrace these new trends will result in higher IT-related spending and increased risk. As more solutions are sourced externally, newer technologies are adopted, and the business directly procures some services, synergies and scale will suffer while complexity increases. The challenge will lie in developing an approach to governance and architecture that balances the demands for speed, agility, and autonomy with the requirements for security, regulatory compliance, and compatibility. CIOs must guide their organizations to develop a governance framework that optimizes value for the enterprise at the same time it satisfies the needs of individual business units without becoming a bureaucratic obstacle to progress. At the same time they will need to create architecture models that enable flexibility without losing control, leading to increasing complexity and cost.
Meet the new operating model

The IT organization is at a crossroads—it must either adapt to this new, disruptive order or find itself increasingly marginalized and disintermediated as the business ignores IT and sources solutions directly from external providers. But the IT organization still has an important role to play in protecting the enterprise from cyber-threats, being responsible for data management and integration, and exploiting its unique position working across all business areas to optimize value.

The problem is not the IT organization per se, but more specifically the old plan/build/run model of IT development and delivery is not capable of meeting the demands for innovation, flexibility, and faster delivery cycles. If IT is going to survive and remain relevant, a new operating model is required that can leverage emerging technologies and sourcing alternatives to satisfy these new stakeholder expectations.

Initially, this new operating model is a hybrid model that retains the old plan/build/run approach to support the legacy environment and adds the capability to multi-source, integrate, deliver, and manage services to respond to the new challenges discussed above. The focus becomes one of sourcing IT-enabled solutions that deliver high quality and optimal business value at competitive costs. The next-generation IT operating model encompasses three new functions for IT: broker, integrate, and orchestrate.

The Future of IT – The “Broker, Integrate, Orchestrate” Operating Model
Broker for innovation

Most of us are familiar with using a broker, for example, a real estate broker to help us find a new home. A broker is an agent that brings market information about prices, products, market conditions, and vendors and arranges transactions between parties. In this new operating model, IT functions as a service broker bringing buyers, i.e., customers and stakeholders, together with sellers, i.e., service providers, to solve a business problem. IT will bring its knowledge of the market, technologies, and vendors together with its deep understanding of its stakeholders’ needs to help the business select the right solution and to also proactively bring IT-enabled innovation opportunities to their attention.

This approach is based on the increasing commoditization of technology and enables IT to leverage the growing ecosystem of cloud-based services. With less time spent on provisioning and operating infrastructure, CIOs can spend more time on strategy and innovation efforts, and because IT works with all of the functions, business units, and geographies, it can identify opportunities where services can be leveraged across business units or geographies, help share best practices, and work to standardize and optimize business processes.

In its role as broker, IT performs the following activities:

- Maintains a close relationship with the business to understand its strategy, processes, plans, and needs. In this model, business relationship managers (BRMs) are embedded with the business. The BRM is a senior level technology executive with extensive business and industry experience. As a partner, the BRM works closely with business unit leadership to influence strategic planning.
- Advises the business on innovation and technology enablement opportunities. The BRM also serves as a consultant to the business, raising its technology awareness and looking for ways to drive innovation. The BRM proactively brings ideas to the business for technology enablement.
- Monitors and discovers new and evolving service offerings and technologies. The IT organization conducts R&D with its own budget to discover and understand emerging technologies and services and their potential usefulness.
- Evaluates available services and potential value. As services and providers proliferate, IT evaluates them to measure performance, quality, cost, and value to create an approved list.
- Facilitates matching business needs and service options. The IT broker leverages its knowledge of business strategy, business processes, and market offerings to assist the business in selecting the most appropriate products and services to meet its requirements.

For example, HR may decide that it needs a new talent management system to support the firm’s planned aggressive growth strategy. In its role as broker, IT evaluated the leading talent management solutions including an upgrade to the existing ERP/HR system, several SaaS offerings, and two MSP providers. Because HR wants to manage the process internally and has an aggressive timetable, IT recommends one of the SaaS offerings.

Integrate services for solutions

As IT brokers solutions from multiple sources, its focus shifts from building to integrating. Whether internally or externally sourced, services will need to be integrated with each other and with existing data and services to make them usable. Additional important points of integration include architectural integrity, identity and access management, security, legal and regulatory compliance, disaster recovery, and business continuity compliance to name a few.

Over time as the volume of externally sourced services increases, IT will need to engineer a standardized approach to integration that is efficient, scalable, and responsive. Architecture, methodologies, and standard processes will become important core competencies.
In its role as integrator, IT performs the following activities:

- Manages integration architecture, tools, and methods. As more solutions are sourced externally from multiple vendors it is critically important to maintain a level of architectural integrity or the resulting complexity will quickly diminish the benefits while significantly increasing costs.
- Sources services. Acting as a general contractor, IT will assume the procurement and vendor management responsibilities preparing RFPs, negotiating fees, signing contracts, and acquiring services.
- Integrates data and services from internal and external sources. IT assembles business services from multiple-sourced components, similar to building with LEGO® bricks. It then integrates these services with existing services and data.
- Manages the portfolio for maximum enterprise value. IT because of its cross-enterprise perspective will provide a holistic approach to managing the various portfolios. Working with its business partners it will ensure that the programs with the greatest value will have the highest priority.

For example, a request from marketing for better insights into customers may involve sourcing a data analytics tool from a software vendor that will be hosted on a public cloud provided by a second vendor, with configuration services provided by a third vendor and requiring access to an existing data warehouse. IT will coordinate the three vendors’ activities, negotiate prices, establish SLAs, arrange for training, and deliver a turnkey solution directly to the end user.

Orchestrate for business value

In a world where services are multi-sourced and the service supply chain becomes complex, IT’s responsibility changes from just delivering services to the end-to-end performance of services. In its third role IT orchestrates the delivery of services and ensures that performance, cost, and quality are meeting or exceeding expectations and the business is getting value. IT’s role is to make this complexity invisible to the business.

As an orchestrator, IT performs the following:

- Manages solution delivery for performance, cost, and quality. IT ensures that the various providers deliver to their contractual commitments meeting schedules, cost estimates, and agreed-upon service levels.
- Ensures enterprise obligations are met and assets are protected. IT audits the services to ensure that they are in compliance with all internal and external regulations and policies, that they adhere to all security and data protection requirements, and are incorporated into any required disaster recovery and business continuity plans.
- Monitors and manages service performance, cost, quality, and value delivered. As services are delivered and consumed, IT monitors service levels, tracks costs against budgets, and validates that the business is obtaining the expected benefits.

Coordinates across service providers, manages escalation process and resolves issues. When performance problems or outages occur, IT takes responsibility for correcting the problem by working with the providers to coordinate the response and follow the escalation process if necessary.

In the following chapter we will examine what is really different about the new operating model.
Chapter Three: So What’s Different?

How is this next generation operating model different from today’s? Some CIOs would argue that they are already doing this. They outsourced some infrastructure and applications maintenance, have deployed a service catalog, and implemented a SaaS solution. But in most cases these have been the result of ad hoc independent actions and not part of an overall strategic initiative to remake the way that technology is procured, deployed, and managed. Moving to a new operating model is not just implementing a series of activities; it is a fundamental shift in how IT thinks, acts, and delivers value to the business.

The new IT operating model is defined by its attributes . . .

One way of looking at the differences is to examine the key attributes of an IT organization and how they look in this new operating model. The next-generation IT operating model has significant implications on the culture of the organization and is characterized by the following:

- **Enhanced transparency.** No longer operating as a black box, IT stakeholders have visibility into all aspects of IT ranging from the status of programs and projects, how priorities are set, how resources are allocated, and most importantly into the financials of IT. Stakeholders understand what services IT provides, how much they cost, and how much they consume. Running IT as a business is fundamental to this model.

- **Speed as the new value proposition.** The time of multi-year IT projects is over. Time to market has become a real differentiator for businesses and along with that comes a need for IT to deliver value more quickly. The next-generation operating model is designed to accelerate the velocity of solutions delivery and significantly reduce the time to value.

- **Innovation is both sourced and enabled by IT.** While IT has been an enabler of innovation it has rarely been the source of innovation. With less time and effort focused on infrastructure IT has more time to combine its technology expertise with a deep understanding of how the business works to bring innovation opportunities directly to business leaders.

- **Performance based on business outcomes.** With IT moving out of a pure delivery role, performance is now measured based on end-to-end service quality and IT’s direct contribution to business value including revenue generation, customer satisfaction, margin improvement, etc.

- **Stakeholder self-provisioning is enabled.** Newer technologies and capabilities in conjunction with more tech-savvy users enables the IT organization to offer an increasing array of self-provisioning and compliant services that business users can order, configure, and implement without direct IT involvement, essentially an App Store on steroids further contributing to increased speed and agility.
...and requires a different approach

An IT organization with these attributes is not the result of just changing the sourcing model or implementing ITIL processes, it results from an organizational change initiative that encompasses all of IT and the way it engages with its stakeholders. Three areas that are different from the way most IT organizations deliver value today include the IT capabilities that are critical to the success of BIO, how governance is streamlined to facilitate speed and agility, and the increased importance that architecture plays in keeping chaos at bay.

From a builder of applications to a broker of services requires new capabilities

Many IT organizations have invested heavily in an applications development capability, some even building or acquiring offshore resources. The result has been an accumulation of hundreds and sometimes thousands of custom applications in the IT portfolio. The ongoing demand for maintenance and support of these applications takes a huge chunk of the IT budget and resources. In the new model, the emphasis shifts from manufacturing bespoke applications to externally sourcing and integrating services to deliver new capabilities more quickly and at lower cost. The focus shifts from delivering projects on time and budget to delivering solutions that create value.

This has significant implications for staff positions, skills, and capabilities that require new roles that are focused on broad functional responsibilities and increased business acumen and less on narrow highly technical skills. Since a number of these new skills and roles are not currently found in most IT organizations, talent management will become a critical priority for CIOs. The following capabilities take on much greater importance and must become core competencies:

- **Business relationship management.** Brokering solutions and driving innovation requires a much closer collaboration between IT and the business units. Business Relationship Managers (BRMs) are the critical link bringing a combination of technical and industry domain expertise to educate their business partners about technology capabilities and limitations, help plan strategy, identify opportunities, evaluate alternatives, and select optimal solutions hand-in-hand with business unit leadership. Ideally, BRMs understand their business partners’ needs before they do and proactively recommend new services and capabilities.

- **Solutions architecture.** With the focus on combining and integrating externally-sourced components and services, the role of solutions architect becomes critically important. These solutions architects bring broad and deep technical skills and experience with heterogeneous environments to develop an overall vision for a solution that fits within the enterprise architecture and integration requirements. Solutions architects also work closely with BRMs to prototype potential new capabilities to drive innovation.

- **Vendor management.** As more services are sourced externally the number of potential vendor relationships increases significantly and with it the need to develop, manage, and control vendor contracts, relationships and performance. An integral part of the broker role is the evaluation of vendors from a holistic perspective and the development of strategic relationships. A mature vendor management office helps organizations create a more sustainable multisourcing capability to help meet business objectives and drive the most value from vendors.

- **Service management.** The past few years have seen IT organizations embrace ITIL to one degree or another, adopting processes to improve operations and start the transition to a service delivery organization. The requirements for service orchestration take this to a new level demanding service managers take full responsibility for the end-to-end performance of business services even though many of those services are delivered by external providers. Furthermore, they are responsible for constantly looking for ways to streamline services to make them more efficient, improve quality, and expand their adoption across the enterprise.
Governance tuned for speed and agility

Over the past decade, many organizations have made significant progress in developing, implementing, and improving their governance of IT. Industry standard governance frameworks like COBIT and ISO 38500 have provided direction and leading practices to gain more control and improve the return of IT investment decisions. This has often meant chartering steering committees, implementing more formal processes, and mandating business cases, but in an environment where speed and agility are top priorities all of this governance can suddenly become a barrier to progress as investment proposals are developed and work their way through various committees and reviews. From opportunity identification to approval and funding the process can easily take weeks or even months just to get to be able to start the project.

The challenge is to recast governance in a way that resolves the inherent conflict between the market demand for speed and the need to maintain appropriate controls. In this new operating model, governance evolves from being a rigid process with strict rules and a posture of avoiding risk to a more fluid process with boundaries and a posture of managing risk. At the same time it pushes decision making closer to the point of impact while ratcheting up accountability.

For example, when it comes to employees bringing their own devices to work (BYOD), rather than a blanket ban or specifying a single acceptable device, companies like Intel have developed a clear set of guidelines and held employees accountable for following them. Before anyone can use personal devices to access corporate data at Intel, they must attend several awareness classes and sign a new end-user agreement (EUA) that specifies their rights and responsibilities.

Flexible architecture keeps chaos at bay

Remaining competitive in today’s dynamic global market requires businesses to continually spin out more and innovative business models and processes. At the same time externally sourced services and solutions continue to proliferate, creating a potential perfect storm of chaos and complexity. A robust commitment to architecture and standards is required or all of the potential benefits of speed and agility will be more than offset by higher costs, inefficiencies, and greater risk. But like governance, architecture must become flexible to ensure it remains aligned with the overall business objectives and does not become a barrier to opportunities. Architectures must adopt modularity to meet changing business needs and facilitate software re-use. At the enterprise level, architecture must address the transition from legacy systems, streamline processes, and automate routine functions.

These are just some of the ways that the new operating model differs from the old. In the next chapter, we look at some of the things that CIOs can do today to get started on this path.
Chapter Four: How to Get Started

CIOs have a short window of opportunity to take the leadership position in this transformation and maintain control over technology acquisition, deployment, and spending or face IT disintermediation as business stakeholders take things into their own hands and increasingly bypass IT governance, infrastructure provisioning, and technology procurement processes.

The challenge for CIOs is enormous, the stakes are large, and change efforts of this magnitude take years, but transforming the IT operating model can be done. Complicating the effort is that IT must continue to support the existing portfolios, including retained infrastructure and legacy applications, during the transformation. This means that for a period of time IT will be operating a hybrid model comprising both the project-oriented plan-build-run approach with the next generation broker-integrate-orchestrate approach.

CIOs must initially socialize the concept with the IT leadership team and get them onboard and committed to the concept, and then work with the executive leadership team and business unit heads to help them understand how things are going to change and sell them on the benefits. The latter may be the biggest obstacle, especially if the IT/business relationship has not historically been good. Once there is commitment from the leadership team, there are a number of activities that CIOs can embark on now to position the IT organization for change and begin the transformation. Following are the five steps to get started on.

Step 1: Open IT Inc.

Running IT as a business is a pre-requisite for the Broker/Integrate/Orchestrate operating model. If IT is not perceived as being a transparent, credible, and reliable provider of services at competitive prices, then it is unlikely it will succeed in making the transformation. The first step is to assess the maturity of IT as a service delivery organization and its approach to Technology Business Management (TBM). Some questions to ask:

- Does IT have a defined catalog of standard services?
- Does IT have a good understanding of its costs at the service level?
- Does IT monitor the demand/consumption of services at the service and customer level?
- Does IT provide customers with detailed invoices of their IT expenses on a regular basis?
- Does IT have a strong relationship management and account management capability in place?
- Does IT have a strong measurement system in place for continuous improvement?

Step 2: Embrace the cloud

Cloud technology has matured to the point where cloud-based alternatives, either public, private, or hybrid, are viable for most situations. CIOs need to embrace the cloud and implement a cloud governance framework and defined process for leveraging the speed, agility, and cost benefits inherent in cloud technologies. Some questions to ask:

- Is there a cloud strategy (clear, measurable business and IT goals)?
- Is there a cloud governance model defined and integrated with IT governance?
- Does IT have experience with cloud technologies?
- Does the architecture include cloud based service integration?
- Is IT aware of any shadow IT and hidden clouds?
Step 3: Strengthen the BRM role

Business relationship management becomes a core competency and is critical to the success of the new operating model. IT must transition into a true business relationship manager working to deliver best-in-class services and solutions regardless of the source. BRMs combine strong technology knowledge with deep business domain expertise to drive joint business/IT strategy, identify opportunities for technology-enabled innovation, and become true trusted advisors to the business. Some questions to ask:

- Are senior level people assigned to BRM roles?
- Is each business unit and function assigned a BRM?
- Do BRMs have a joint reporting relationship to IT and business leadership?
- Are BRMs influencing business strategy?
- Do BRMs manage their respective client portfolios?

Step 4: Invest in R&D

The business is looking for IT not just to support innovation but also to be a source of innovation. With the consumerization of IT, many IT organizations have found themselves behind their users in adopting new technologies. IT needs to invest in research and development capabilities to evaluate emerging technologies and support joint pilots and POCs with the business. IT needs to get ahead of its customers and lead, not follow when it comes to exploiting technology. Some questions to ask:

- Does IT have a dedicated R&D function?
- Is IT adequately funded with its own budget?
- Is there a program to expose the business to emerging technologies?
- Is there a process for IT and the business to collaborate on pilot projects or POCs?
- Has IT pro-actively brought opportunities to the business?

Step 5: Make talent management a priority

As IT shifts from developing and delivering services to integrating and managing externally sourced services, people’s roles and responsibilities will change. Some jobs may be eliminated but new jobs will be created and some IT positions will migrate into the business units. This will require strengthening some current roles as well as adding new skills and roles, including some that are not necessarily found in IT organizations today. Some are in high demand and far outstrip the available supply. Specific roles include relationship managers, account managers, service and product managers, and integration specialists. IT will need to develop core competencies around sourcing and vendor management, marketing, pricing, and customer service to name a few. This will require a coordinated approach to talent acquisition as well as an investment in training to develop internal candidates. Some questions to ask:

- Does IT have a formal talent management strategy developed with HR?
- Does IT have an effective employee development and training program?
- Does IT have an adequate training budget; is it being fully utilized?
- Do IT workers have the time to participate in training activities?
- Does a formal competency model exist for each position?

The above reflect some of the things that a CIO can do now to begin the transformation to a new operating model, but it is not an exhaustive list.