



Predictions: People & Process Trends - 2016

RFG Perspective: The global economic headwinds in 2016 will once again constrain IT budgets; nonetheless, more business executives recognize the need for cloud computing and collaboration and strategic planning with IT executives. To address both issues business and IT executives must examine the people and process issues for the digital economy and productivity improvements. Externally, IT executives will have to work with non-IT teams to improve and restructure processes to meet the digital world's analytics and mass personalization requirements that demand more collaborative, interactive and predictive real-time information. Simultaneously, IT executives will have to address the data and service level concerns that impact business outcomes, productivity and revenues so that there is more confidence in IT. Internally, IT executives will need to increase their focus on automation, operations simplicity, orchestration, and security so that IT can deliver more (again) at a lower cost while better protecting the organization from cybercrimes.

As mentioned in the RFG research report "Plan Conservatively for 2016" the global economic environment will remain weak within the U.S. and weaker outside, thereby keeping IT budgets contained or shrinking. Additionally, the further collapse of oil prices to below breakeven for most suppliers (along with the plunge of the Russian rouble and other oil-driven currencies) will ripple through multiple industry sectors causing revisions to strategies, revenue projections, budgets, and IT initiatives and staffing. Therefore, IT executives must invest in process improvements to help contain costs, enhance compliance, minimize risks, and improve resource utilization. Below are the top dozen areas RFG believes will be the focus of people and process improvement initiatives in 2016.

Automation/simplicity – Productivity in IT operations is a requirement for data center transformation. To achieve this IT executives will be pushing vendors to deliver more automation tools and easier to use products and services as well as taking advantage of selected cloud solutions. Over the past decade some IT departments have been able to improve productivity by 10 times but most have not fared as well. In support of this, operations staff must switch from a vertical and highly technical model to a horizontal one in which they will manage services layers and relationships. As DevOps matures within an organization, IT executives and staff should expect development to take over operations and thereby dramatically slice operational costs. New learning management techniques, sensors and systems will be needed to deliver content that can be grasped intuitively. Furthermore, the demand for increased IT services without commensurate budget increases will force IT executives to pursue selected cloud and productivity solutions to satisfy the business side of the house. Thus, analytics software for IT, automation software, virtualization techniques, and integrated solutions that orchestrate and simplify operations and/or prevent potential problems from occurring will be attractive initiatives for many IT executives throughout the year.

Chargebacks – The movement to clouds and the digital economy is enabling the implementation of chargebacks and cost accountability. IT executives will need to embrace this and gain buy-in from the executive management team to roll this out across the board so that there is accountability and IT cost containment becomes a performance



measurement for line of business executives. IT executives that are able to implement financially-meaningful chargebacks will be better at linking IT expenditures to business initiatives and thereby improve funding sources and enable better allocation of IT resources. However, while chargebacks are gaining momentum across all industries, there is still a long way to go, especially for in-house and hybrid clouds, systems and solutions.

Cloud Management – The inclusion of clouds into the IT management mix has complicated the management of operations. Regardless of whether IT is the cloud service provider itself or outsources it or both, IT has assumed user and vendor relationship management roles. This will require trained staff to address requirements gathering, analysis, and priorities plus brokering of services and management of the procurement and delivery cycles. IT should have been performing these functions anyway but most have not; thus, the shift to cloud computing will have a major impact on organizational structures and job descriptions, roles and responsibilities. IT will also have to find ways to breach cloud opacity so that it can manage and secure applications, data, and operations, as corporate accountability remains with company executives.

Compliance – Once again thousands of new regulations take effect on January 1, making compliance even tougher. Keeping up with the constant change is not only a major challenge but also can be a major risk exposure. The 15-year old EU – U.S. Safe Harbor agreement was nullified in October 2015 and the Obama administration plans on initiating more executive orders in the New Year. Thus, 2016 has a high probability of being a growth year for regulatory changes that have major impacts upon IT. With the global economic uncertainties hitting most countries, it is highly likely that new protectionist legislation will crop up around the world, putting more compliance pressures on organizations. Thus, IT executives will be hard pressed to keep up with compliance requirements globally and to improve users' support for compliance. IT executives will need to work with auditors and regulators to find ways to be more collaborative and proactive to reduce the cost of compliance and the risk exposure.

DevOps – DevOps will dramatically change the way expectations of IT and IT operations. The ability to deliver code changes in less than a day, a day or a week will impact business and IT processes. The full implementation of DevOps will represent a true cultural change to an organization. Development will subsume operations and make IT responsive to the business like it has never been. However, this "nirvana" will take time (years) to flow through an organization and executives should be prepared for the active, and passive, resistance to the change. 2016 may prove to be the year that the DevOps movement becomes mainstream – or it could be the year it falls into the trough of disillusionment.

Operations efficiency – This will once again be an overriding theme for many IT operations units. As has been the case over the years the factors driving improvement will be automation, cloud computing, orchestration, standardization, and consolidation along with virtualization. However, initiative effectiveness requires IT executives to be able to



measure and monitor the key data center (and cloud) metrics, which for many will remain a challenge despite all the tools on the market. IT executives could reduce operational costs by 50 percent if they had the right tools and applied the resources to address the problem points. However, RFG expects minor advances in efficiency overall – including shifting resources to the cloud – due to resource and funding constraints. But for those IT executives addressing operations efficiency, there will be major double-digit operational gains. RFG notes there is an interesting dichotomy as relates to the development life cycle: movement of development to external cloud service providers (CSPs) may or may not reduce operational costs but most will see a significant shrinkage in speed of delivery, which will get rave reviews from the business side of the house.

Organization and job descriptions – The paradigm shift from administrators or operators handling vertical stacks – from databases, networks, and infrastructure to applications – to horizontal instance and stack management will transform IT operations. Nonetheless, this restructuring will occur, mostly driven by the movement to cloud. A restructuring from the inefficient siloed approach to horizontal cross-domain layered operations is a massive restructuring of operations and changes the job descriptions and responsibilities of the operations teams. It will turn out that this process causes self-elimination of excess staff, as those concerned about their new responsibilities tend to voluntarily depart. One of the big challenges in this type of reorganization is finding the skills required for the new positions. Whereas in the old world in-depth IT knowledge is key but in the new horizontally layered world business knowledge, oral and written communications, and negotiation skills are paramount. The majority of existing IT staff at most companies do not possess the required skills, which will have to be backfilled. However, there is one caution IT executives must keep in mind: this shift is not the target structure but a step in the process of reorganizing into a full DevOps organization.

Procurement – With the requirement for agility and the move towards cloud computing, more attention will be paid to the procurement process and supplier relationship management in 2016. RFG expects a majority of cloud procurement efforts to lead to disappointment later on as shortcomings in vendor-biased contract terms and conditions come to the fore during the implementation phase. Business and IT executives need to establish procurement strategies and vendor performance metrics that can be effectively measured and monitored so that year-over-year improvements can be made. The major areas most likely to be focused upon are spend management and supplier selection and management. While much of spend management will concentrate upon external expenditures, key internal metrics should be tracked as well.

Security – The use of analytics and more external and internal collaboration will help improve real-time analysis but security issues will still be top of mind in 2016. The U.S. government's Office of Personnel Management (OPM), IRS, and Ashley Madison breaches in 2015 will further fuel the fears of identity theft and personal information exposures but do little to impair eCommerce growth. Users, it seems, have become impervious to the eCommerce and the Internet of Things. Moreover, it is evident from examining the breaches that organizations have less of a technology problem than a



people and process failure. Unfortunately, for Americans, the federal government will do little to fix the problems or hold individuals accountable – something enterprises do not have the luxury to emulate. The use of cloud computing will add layers of complexity to the already complex compliance efforts. Furthermore, the lack of CSP transparency will remain an issue and an exposure, although the top cloud providers have stronger security histories than many of the companies that use them. While there are some players coming together to find automated, proactive ways to enforce and validate compliance, RFG expects little improvement for most IT organizations and instead, the cost of compliance will increase once again.

Staffing – IT executives will do limited hiring again this year and will rely more on cloud services, consulting, and outsourcing services. There will be some shifts on suppliers and resource country-pool usage as advanced cloud offerings, geopolitical changes and economic factors drive IT executives to select alternative solutions. Instead, most organizations will look to retraining (on the job training or e-learning) of key staff to address the new organizational demands for the new IT roles and responsibilities.

Standardization – More and more IT executives recognize the need for modernization and standardization but advancement will require a continued executive push and involvement. The shift to clouds is exposing the fact that standardization is a complex topic with multiple options (similar to the standard keyboard – of which there are 86 varieties) and can result in undesired proprietary choices. The lack of a common taxonomy does not simplify the process. 2016 will be another year where large enterprises attempt to sort through the options and find standards that can be used corporate-wide. One shift in the process is the move towards APIs and away from service oriented architecture (SOA). SOA enables reuse of existing code whereas APIs enhances agility and flexibility, and hastens the switch to the digital economy. IT executives should recognize standardization projects are multi-year initiatives that can be baked into other projects and act accordingly.

SLAs – Most IT executives and cloud providers have yet to provide the service levels businesses are demanding. More and better SLAs, especially for cloud platforms, are required. IT executives should push providers (and themselves) for SLAs covering availability, accountability, compliance, performance, resiliency, and security. IT executives should not relax their SLA requirements if they hope to meet or exceed the business needs; nor should business executives lower the bar. Companies that address these issues correctly will be the winners in 2016; others will fall behind.



RFG POV: 2016 will likely be a challenging year for IT executives. People and process issues will have to be addressed if IT executives hope to achieve their goals for the year. IT needs to integrate itself with the business and work collaboratively to enhance operations (whether onsite or in the cloud) and innovate new, simpler approaches to doing business. Additionally, IT executives will need to invest in DevOps and other process improvements to help contain costs, enhance compliance, increase flexibility and responsiveness, minimize risks, and improve resource utilization. IT executives should collaborate with business and financial executives so that IT budgets, plans and strategies dovetail with the business and remain tightly integrated with the business throughout the year.

Additional relevant research is available at www.rfgonline.com. Interested readers should contact RFG Client Services to arrange further discussion or interview with Mr. Cal Braunstein.