

# BUILDING DIGITAL ORGANIZATIONS

## INTERVIEW RESULTS

February 2017

Digital transformation has become a watchword for many businesses. In a new era defined by cloud computing and mobile strategies, companies are pursuing new IT tools, and the best use of tools requires a disruption to operational procedures.

CompTIA's new research explores the different aspects of this corporate evolution. As companies seek success with new products and new customers, there are many areas that must be addressed in order to become a digital organization.

To augment the quantitative research performed by CompTIA, Cascade Insights recruited and spoke with 10 individuals, split between business and technology roles. The goal of these interviews was to determine how the business and technology groups are working together towards digital organization initiatives.

### KEY POINTS

#### Technological Blindside

Organizations recognize that technology trends can allow upstarts to enter a market and upend an entire industry. Therefore, staying up on technological innovations is imperative.

#### Business Friendly Technology

Technology is less about RAM, CPU, and Gbp/s, and more about IoT, cloud computing, and machine learning. These technologies are easier for business personnel to understand conceptually and more relevant. As a result, business personnel are more comfortable having a technical conversation.

#### Reigning in the Rogues

Rogue IT has matured into a more systematic framework that lets the business self-service technology needs in a safe sandbox and lets business and technology personnel closely collaborate through innovation labs and matrixed organizational structures.

#### Top Line

Digital transformation isn't about digitizing the existing business, it's about putting the business on a footing to rapidly innovate, seize opportunities, and grow the topline. Business personnel and technologists are working hand-in-hand to make this happen.

## DIGITAL TRANSFORMATION IS IMPERATIVE FOR GROWTH AND SURVIVAL

Business and technology leaders operate in an environment where the deft application of technology can rapidly overturn an entire industry. As an example, interviewees cite high-profile cases such as Uber, where a company with few assets and employees was able to overturn the very established taxi industry by building a technology platform. Business leaders have seen this happen enough times that they are working to ensure that their organization isn't next.

*"You are required to know things that you would have never needed to know before. For example, Uber claims they're a technology company, but they're clearly a taxi company, a logistics company. They're into moving bodies and moving freight and moving food. I mean, a taxi company would never be a shipping company traditionally, or a taxi company would never be doing food delivery, and so you see these kinds of overlaps."*

Rapid technological changes are altering the fundamentals of how customers interact with companies and how companies interact with each other. Interactions that customers were happy to do in person they now want to do remotely, and often through a hand-held device. The technologies that underpin how markets work and transactions are recorded are evolving. Even the simple notion of "responsibility" is being rethought in emerging age of autonomous systems.

*"Block chain, IOT, autonomous vehicles. If you're in our industry you have to know these developments well. Five years from now, you wouldn't want to be an insurance provider that hasn't thought about what insurance means for autonomous vehicles."*

Businesses also recognize that customers exist in both a physical and virtual world, and businesses need to be savvy about being in the right place at the right time for customer interaction.

*"In some cases the consumers don't even know that they're being digitized. They feel like they're in the physical world, but we are really able to combine the data and track consumers from being interested in your product, interacting on a mobile device, interacting on the web page, walking by a sensor in Walmart, where the sensors are built into light fixtures. All that information building out a consumer journey that ultimately leads to purchase."*

As organizations undergo digital transformation, they are driving towards an outcome where the business is smarter, more efficient, more nimble, and more responsive.

*"My role is to help digitalize my firm, with really two objectives. One is to improve productivity and second is to enable growth. Growth enablement would come from things like improved market penetration, better customer or client satisfaction. We expect to drive that through improvement in our productivity, but more importantly to have the right knowledge available to the right person at the right time to enable them to do their job."*

## TECHNOLOGY IS MORE BUSINESS FRIENDLY

But why now? Why are business leaders and technology leaders increasingly delving into each other's worlds? In short, the transformational aspect of virtualization, the cloud, and SaaS cannot be overstated in enabling a digital transformation of business. Technology projects are less about CPUs, RAM, and Gbp/s, and more about higher-level capabilities that are relevant to business leaders. And the time required to stand up a prototype is a fraction of what it was in the hardware-centric past.

*"I think what matters is that you get service fast. You don't have to invest in high up-front investment in infrastructure, but you can deploy things fast and you can work fast together with business teams from an IT department perspective, and do quick proof of concepts and win fast, fail fast. It doesn't matter what you call it. You call it platform as service, or software as service, or infrastructure as a service. These technologies enable business teams to test out and seeing if something is a fit or not."*

*"You're not expecting to have a 1.5 year long project. I definitely see with cloud deployment that the deployment time is going down drastically and that there's also a shift of responsibility."*

Modern IT departments are also quick to say that they exist to support the business, rather than the other way around.

*"The business decides what the business needs to do, and IT handles the nitty-gritty technical details of how to do it."*

*"I don't think business really cares about cyber security or infrastructure or things like that. That's something they shouldn't really care about, because it's something that is IT's day-to-day activities."*

*"There's strategy, then there's execution, then there's management. The business lead drives through all three, owns it top to bottom. Everybody in the matrix or in different departments that's assigned to the project is ultimately responsible and accountable to the business owner."*

The place where IT is in the leadership position is in *how* a solution is implemented. The technologists are the experts on cyber security, scalability, and technical compliance requirements. The business looks to IT to make sure the system can, for example, handle the holiday load, not get hacked, and not be out of compliance with PCI or some other regulation.

Even for cloud deployments, there are still significant technical details to work out. What size of server instances are needed? How should virtual networking and security groups be configured? Should this be a micro-service architecture? Should it follow a DevOps development model? Does the company already own software that can enable the new initiatives, or does new software need to be acquired? None of these are in the wheelhouse of the business groups.

## ROGUE IT HAS MATURED

"Rogue IT" had begun emerging as a trend of unilateral technology decision making by business groups. Finding that the bar to understand and utilize technology had come down, and being under pressure to move faster, business groups were cutting IT out of decisions altogether. At first, this seemed brilliant. Applications were implemented, and stuff got done.

But over the long term, the business groups realized that there was ongoing care and feeding for these applications. Different business groups acquired different products to do the same thing. High profile hacking of large corporations put CEOs and boards on notice about the business risk of technology. Business groups found themselves embedding admins within their ranks and birthing their own mini-IT departments, or going back to IT asking if they could take over some of the responsibilities. At the same time, IT has become a lot more responsive to the business.

*"A couple of years ago just about every organization had rogue IT but now these days you are seeing more about organizations spinning off or launching innovation labs. Rogue IT outside the context of governance, standards and policy is a big no-no."*

*"First, IT leaders frankly said, 'I can't fight this rogue IT battle anymore. Let me figure out what I need to do to wall this off. Here's your playpen, go play in it. Here's the things you can do, here's the things you're not allowed to do.' The second thing that happened is data security and privacy concerns have really risen to the top. Your client's information is now number one on CEO's agendas. rogue IT can destroy the business."*

*"I think people got a little bit burned with rogue IT. They went in a direction and they realized after 2, 3 years that they didn't really want to be supporting the system that they went rogue and bought. Then the other aspect is that, with these technologies, also IT is a lot more nimble now."*

While rogue IT is on the wane, it isn't back to business as usual either. Part of the maturity has been for IT and the business to come together and figure out where the business can self-service technology needs. One such area has turned out to be analytics. As long as security and governance are in place, it makes sense for the business analysts to be analyzing their own data or data that has a direct impact on their decisions.

*"We are also seeing a lot of what I call 'recreational data scientists'. These are not your traditional developers or science engineers but they are very savvy business analysts who are now leveraging some of the very user-friendly data science visualization tools so they can now become more hands-on in engaging the data science solutioning process."*

*"Be careful about trying to get in front of that train because they're going to see a lot of value in being able to self-service a lot of their own analytics and not have it be a six-month BI project. It's an afternoon in a conference room to test some hypotheses and things like that. You don't want to stand in the way of that"*

## COMPANIES ARE SHIFTING TO NOVEL ORGANIZATIONAL STRUCTURES

Organizations are turning to innovation labs as an effective way to make cross-discipline creativity happen. These are especially useful where substantial industry or technology trends require fundamental rethinking of parts of the business. They are also a way to make great, grass-roots ideas more bountiful.

*"We have also launched several what we call 'innovation challenges'. In fact, one of the rules is you can't have just all IT on your team or all business, it has to be a blended team and they'll work together. It's not just teamwork, we want to foster collaboration, which is having their perspectives and ideas actually collide in a very safe environment, innovation lab environment, then germinate into new thinking of having that pride as incentive helps a lot."*

*"Actually the idea is to say 'What if we were to put together insurance for autonomous vehicles? What would the underwriting process look like? Would you have to go through the artificial intelligence and machine learning algorithms to figure out how you want to underwrite this?'"*

Interviewees also report that when their company embarks on a new business initiative, it will likely be implemented through a matrixed structure. For the initiative, a team is formed that contains people who organizationally sit in a business group, the IT department, project management, and possibly other organizational units such as data science. However, for the duration of the project, team members may find that they are physically located together and seeing more of each other than the people they're closest to on the org chart.

*"Personally, I noticed that there's a shift where we have a lot more of a matrix organization, where I was pulling in experts from business teams and training them up on the tools and making them part of my team and aligning with my peers to get some of their time, because it was mutually beneficial for the teams to understand the technology and how they can best do this."*

*"We have a whole data sciences team that's independent as its own department that facilitates cross company analytics. They work on everything. They'll work on everything from yield optimization to retention optimization to pricing optimization. They are a Swiss army knife of different data nerds, and I say that with absolute affection. They don't roll up to any specific department. They serve the whole company."*

*"We've taken it to the ultimate next level where we're co-locating business and IT together in pods, actuaries, financial analysts, IT people to work on projects together. There is no project that's not an IT project."*

Part of the reason why IT often reports to the CFO is that for more than a decade, IT has been seen as a way to reduce cost and increase efficiency. The focus has been on the bottom line, and as a result, IT has operated in a very cost constrained environment. But as business initiatives are increasingly containing a mix of business people and technologists, IT is increasingly helping to grow the topline of the company.



## BUSINESS PEOPLE ARE MORE TECHNICAL

As a result of digital transformation, business leaders have had to become more technologically savvy. Some of the technology learning is informal, but some businesses have set up innovative programs to cross-pollinate business people with more technology understanding and technologists with more business depth.

*"As a global, large organization, we are experimenting with a couple of methodologies or techniques. One of them is actually a rotational program. We will actually rotate business SMEs into the technology or innovation organizations and vice versa. This is kind of like a long-term ethnographic field observation."*

*"More interestingly, we're starting to see business folks asking really deep-pointed questions about how to use technology to enable business results."*

*"We're trying to do more of these hands-on interactive demo type of sessions so the business can actually discern the difference between what they saw in the vendor presentation versus the real prototype or product."*

The technical acumen among business leaders isn't uniform. Some are extremely technology literate, some are not. But the trend will be for business people to understand more about cloud computing, machine learning, Internet of Things, data science and analytics, and other technologies that form the foundations of many business initiatives.

## FINAL THOUGHTS

The organizations we interviewed are forging ahead with digital transformation, and they see it as much more than simply digitizing the existing business. They see it as a key way to identify new opportunities and capitalize on them quickly.

*"I am part of the global innovation organization so my job is to help the enterprise to identify new and emerging technologies, business models that we think have fundamentally transformed the way we deliver products and services."*

While nothing is perfect, rogue IT has given way to a more mature model for rapid innovation. IT and business personnel are collaborating through matrixed organizational structures and innovation labs to bring business initiatives online.

*"I think those traditional structures still remain intact, and the same with my firm. We co-locate, we form virtual teams, but the traditional reporting structures are still intact."*

At the end of the day, organizations are seeking to deliver value to businesses and consumers that have one foot in the physical world and the other in the digital universe.

*"Customers have 2 worlds they live in. They've got the physical world and the digital world. As customers spend more time in the digital world, the business has to understand that and follow them there."*

## RESEARCH METHODOLOGY

This qualitative study consisted of a series of in-depth interviews with 10 technology and business professionals, conducted by market research firm Cascade Insights. Interviewees were selected to represent a range of organizational responsibility. Interviews were conducted on a one-on-one basis over approximately a six-week period in September and October, 2016, with an average length of approximately 30 minutes.

CompTIA is responsible for all content and analysis. Any questions regarding the study should be directed to CompTIA Research and Market Intelligence staff at [research@comptia.org](mailto:research@comptia.org).

CompTIA is a member of the market research industry's Insights Association and adheres to its internationally respected Code of Standards.

## ABOUT COMPTIA

The Computing Technology Industry Association (CompTIA) is a non-profit trade association serving as the voice of the information technology industry.

With approximately 2,000 member companies, 3,000 academic and training partners, 100,000 registered users and more than two million IT certifications issued, CompTIA is dedicated to advancing industry growth through educational programs, market research, networking events, professional certifications and public policy advocacy.



## USEFUL RESOURCES

### RESEARCH

CompTIA publishes 20+ studies per year, adding to an archive of more than 100 research reports, briefs, case studies, ecosystems, and more. Much of this content includes segmentations or analysis by company size, providing insights on the small business market.

[CompTIA Research Library](#)



### EDUCATION & CHANNEL TRAINING

CompTIA has an extensive catalog of Quick Start Sessions, Executive Certificate Programs, Playbook Workshops, and Vender & Distributor Education. Many aspects of the training focus on sales and solutions for the SMB market.

[CompTIA Training Catalog](#)



### COMMUNITIES

CompTIA member communities are forums for sharing best practices, collaborative problem solving, and mentoring. Discussions frequently revolve around the SMB market.

[CompTIA Communities](#)

