



► *E-Guide*

# **CREATING DIGITAL TRANSFORMATION SUCCESS AND IMPLEMENTING CULTURAL CHANGE**

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**JOINING THE ERA** of digital transformation is more than just staying on the pulse of evolving technologies – it's about making changes across teams, roles, business processes, and the entire company culture as a whole. In this e-guide, we explore what it takes to get started with a successful digital transformation and take a closer look at the increasingly important roles of big data, Agile, DevOps, talent management, and more.

## WHY YOU NEED A DIGITAL TRANSFORMATION ROADMAP IN 2017

*Christopher Ward, New Product Founder and Advisor*

In 2016, we talked at length about the importance of digital transformation. Specifically, what areas need to change within different parts of an organization, what problems we aim to solve with these changes, and the breadth and depth of the change that needs to occur. A digital transformation roadmap is not just about changing technologies, but executing changes across teams, roles, systems business processes and, indeed, across the entire company culture.

Like most companies, your organization likely touts some level of digital strategy, but it still may not be a key objective for your department heads and C-level executives. As your company plans for 2017 and beyond, it's your job as a stakeholder in your company's future to help reinforce the importance of a new digital transformation roadmap. To help you make the argument, here are four research-supported reasons to prioritize digital transformation in 2017.

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## **DIGITAL TRANSFORMATION HAS BEEN PROVEN TO TURN A PROFIT**

Your top argument to C-suite executives should be the impact to their bottom line. Compared with those who do not, research from Capgemini Consulting suggests that companies that execute holistic digital transformation can see 26% higher profit margins and 12% higher total valuations. Product companies should specifically take note of the cost-saving benefits of lean delivery processes, such as Agile, DevOps and BizDevOps. Such lean approaches produce 200 times faster deployments and 30 times more frequent deployments, compared with more traditional methods, according to a presentation at the DevOps Enterprise Forum in 2015. Also, companies embracing more modern BizDevOps approaches are 200% more likely to push beyond their market share and profitability goals and see 50% improvement in long-term market cap growth.

## **YOUR COMPETITORS ARE ALREADY DOING IT (OR PLANNING TO)**

It's likely that a digital initiative of some sort is already a high priority for one or more of your competitors. Consider that two years ago, 67% of chief marketing officers (CMOs) already said tech disruptions caused them to drastically change strategy, according to a study done by IBM.

Also, in a 2016 study from Deloitte, “complete organizational redesign” was cited as a top objective by 92% of corporate leaders. To that end, 83% of large companies are planning or beginning to plan a digital transformation roadmap in 2016. While digital-centric business operations currently represent 18% of revenue, that number is predicted to grow to 43% in less than a decade, according to Gartner.

### **COMPANIES MUST CHANGE OR DIE**

It goes without saying that today’s digital-first startups will be tomorrow’s giants. Gartner predicts that 75% of the companies currently listed on the S&P 500 will be replaced by 2027. In fact, between 2000 and 2014, 52% of Fortune 500 companies went bankrupt, were acquired or otherwise folded, according to Forbes, and Gartner said one in four businesses will lose competitive ranking due to “digital incompetence.”

### **YOUR DIGITAL ADVANTAGE IS BIG DATA**

Knowledge is power in the digital age. Last year, Gartner reported the advanced analytics market grew 14% to \$1.5 billion. Still, far too few truly take advantage of the potential insights provided by big data. In 2014, a staggering 50% of

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CMOs did not use business intelligence or big data analytics to guide strategic decisions. Thus, it should be no surprise that 72% surveyed by the American Institute of CPAs last year said that not getting information and insights to the right people was the downfall of “at least one” major project.

While many have not yet implemented strong analytics solutions, most executives rate big data as critical for their organization, according to Accenture. This is because big data has been proven to dramatically reduce computing, storage and bandwidth costs year over year -- a cost savings of 25% to 50% alone from cloud computing solutions, according to a recent paper from the World Economic Forum. In 2017, the ability to harness big data for strategic planning, decision-making and cost savings remains a key advantage over your competitors.

## **CONCLUSION**

Increasing profitability, identifying marketplace competition and building competitive advantages are keys to the success of any organization. Research strongly suggests initiatives toward a digital transformation roadmap are more than just hype; they have the potential to pivot a company’s processes, technology and culture toward a more successful future.

## THE DIGITAL TRANSFORMATION OF INDUSTRIAL ORGANIZATIONS

*Jennifer Waldo, Senior Vice President, Chief Human Resource Officer,  
Board Member*

Today's cities, factories, power plants, oil rigs, hospitals and industries are changing. The rise of the industrial internet, big data and other trends are reshaping how industrial companies need to identify, hire, skill and manage talent.

Much is being discussed about digital transformation today given the rising importance of the internet of things. However, this is a broad category. The focus of our work and this paper is on the industrial internet of things — and IIoT is still a large, (\$225 billion), space with unique challenges and complex issues.

It's important to realize that this process of digital transformation looks very different at an industrial company versus a pure technology company. The idea of technological speed and agility are evolving concepts in the industrial world. The industrial sector is just beginning to embrace more digital elements in order to compete successfully in the current era. Shifting the culture of an

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industrial company to more quickly adopt and embrace digitization will be one of the biggest factors in a successful transformation.

### **WHERE TO BEGIN?**

Thinking about digitally transforming your organization can be overwhelming, so it's best to start simply. Ask yourself and your leaders a few key questions:

- ▶ Where do you see your current business model potentially getting disrupted by digital?
- ▶ Where do you have new opportunities for growth using data and analytics?
- ▶ Where do you have opportunities inside your company to better leverage digital in a way that directly benefits your customers?

Use these insights to formulate a vision and explore another set of questions often forgotten or understated:

- ▶ Do you have the talent in your organization today to fulfill this vision?
- ▶ What is your culture (the unwritten norms that exist) today and where does your culture need to be?

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- ▶ Do you have a talent/organizational ecosystem (e.g., organizational structure, compensation, benefits, rewards) that will attract and retain talent?
- ▶ Is your vision compelling enough to attract top IoT talent that wants to work on cutting-edge solutions and advanced technologies?

Many of the top industrial internet talent magnets are working on meaningful problems that are changing how the world works. Articulating this value proposition to potential candidates is crucial to success.

## THE RIGHT TALENT

People are the key differentiator in successful digital industrial transformations. It is critical to acquire talent that has grown up in tech and is comfortable with agile methods of process, as well as an agile culture. But it's also important to bring in the right talent at the right time. I like to think of this change involving a "first" and "second" generation of talent.

In the "first generation" of your digital transformation, look for talented disruptors, similar to those who might be part of a startup. This initial stage also requires a safe environment for experimentation, without pressure to deliver

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immediate results or implement across entities. You need to expect that some things may fail and that needs to be okay. This seeds a culture of taking chances and learning from what works and doesn't work. Pick a few big problems and begin experimenting. GE Digital initially formed as a Software Center of Excellence, away from other business units, in order to create the initial proof of concept (POC) of what became Predix. By taking this incubation approach, we were able to learn fast, apply the platform to internal business use cases and build a successful POC before going to market.

As your business matures in its digital industrial transformation to what I call "second generation," you need people who know what it means to disrupt, as well as what it means to scale. Talent at this phase should meet the organization where it's at, while also pushing progress forward. This talent profile has typically has worked in multiple startups and at large companies. Ideally, they bring experience of being acquired and spending time at the acquiring company. Bottom line: this talent knows how to juggle the demands of a startup in a larger company environment.

At every phase of your digital industrial transformation, it is critical to give your key talent permission to disrupt, push back and question how things are

done. By talking with each other, digital talent and industrial talent can learn from each other — and both get better.

### **DIGITAL NATIVES AND DIGITAL MIGRANTS**

So who are the right people to accelerate digital industrial transformation in your business? It should be a healthy mix of external and internal candidates, which can be referred to as “digital natives” and “digital migrants.”

A digital native has spent his or her entire career in technology and has experienced — and more likely participated in — tech disruption. Digital migrants are industrial by background but are now starting to learn the principles of agile development in a digital environment. Both are critical to the success of the modern, digitized industrial company. A recent Industry Week article by Jens-Thomas Pietralla and David Finke analyzed the psychometric profile of a productive disruptor versus a traditional industrial leader and supports the rationale for why both personas are needed to successfully transform traditional industrials to digital industrials.

Within the industrial organization, the goal is to nurture and develop a cadre of digital migrants as part of the existing workforce while attracting digital natives into a new kind of workplace. Digital natives coming to an industrial

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for the first time need to understand the end-customer and the larger, industrial ecosystem, while having an appreciation for a matrixed organization.

Digital migrants should have high learning agility, systems thinking, empathy and coaching skills. Typically, they serve in a translator role, understanding enough about both the digital natives and the current workforce to educate and coach both groups, becoming true advocates for transformation. Cross-functional leaders from finance, HR, manufacturing and engineering are great candidates for becoming digital migrants.

## **CULTURE SHIFT**

Change is difficult. It always is. But this is not an ordinary change — this is transformation. It requires a strong vision, leap of faith assumptions and a fierce protection of the new idea you are incubating, lest it be choked by the inertia of the existing culture.

Incoming leaders must assess what the cultural values are for the company today, and strike a balance between that existing culture and integrating new talent who can teach and bring the company and its culture further along.

My own personal example helps bring light to this concept. When I joined GE Digital four years ago (when it was a software center of excellence) to lead

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the HR function, I came from 11 years in one of GE's largest industrial businesses — GE Aviation. As one of only a handful of traditional industrial employees in the software business, I initially felt like an outsider. Over time, I became a “digital migrant” among many “digital natives.” Success required learning from digitally experienced and minded colleagues while incorporating their insights into the larger GE world — embracing change and innovation, while also protecting what is best about GE. This process is ongoing, but I believe that the digital and industrial worlds have a lot to learn from each other.

### **LOOKING AHEAD**

The growing trend of digitization is impacting no sector more profoundly than the industrial, a fact that I live every day. The digital transformation of industrial organizations requires sweeping changes to how the company identifies, hires, skills and manages its talent. Ultimately, the digital transformation of industrial organizations requires the full alignment and buy-in of corporate culture and its leadership to bring them into the digital era.

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