Recommendations for Successful Digital Transformation in 2017

Lessons Learned from Digital Transformation Projects in 2016

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EXECUTIVE SUMMARY

Digital transformation rocketed to the top of mind for brands, enterprises and organizations in 2016. The fear of being disrupted by non-traditional competitors, margin pressure from competitors, and realization that digital was more than just technologies gave boardrooms and CxOs the political capital to invest in digital transformation projects.

As investment increased in digital transformation, leaders realized that these projects were more than just one-time initiatives. In fact, organizations learned that digital transformation projects were continuous efforts that required more than a tiger team and bi-modal approach for success. From Constellation's clients, advisory work, and research, this report shares insights from 2016 so that leaders can succeed in 2017.

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PROJECT TRENDS IN 2016 HIGHLIGHT 2017 CHALLENGES

Constellation defines digital transformation as more than just a technology shift. The digital disruption comes from both transforming business models and shifting how brands, enterprises, people, and machines will engage. Digital transformation rose to the top of priorities for most CEOs in 2016. As a result, 2016 trends in digital transformation projects showcase an emerging maturity among organizations and leaders (see Figure 1):

- Prioritization of digital transformation remains high in the boardroom. According to Constellation’s analysis, 61 percent of Global 2000 organizations embarked on or were in the midst of digital transformation efforts. Boardroom support was key for CxOs needing air cover to transform their businesses while keeping the lights on. Boardrooms realized a need to transform.

Point of View (POV): While most boards appointed a digital team or Chief Digital Officer to lead the efforts, Constellation believes that those efforts mark just the beginning. Why? Most boardrooms

Figure 1. Key Statistics from 2016 Digital Transformation Survey

- 61% of Global 2000 engaged in digital transformation
- 87% of digital transformation projects have a data component
- 73% of CXO’s expect to increase 2017 budgets
- 37% of projects led by Chief Digital Officer

Source: Constellation Research
underestimated the effort required for success. As with innovation teams, hiring a few people in a Regus office in Silicon Valley was not enough to sustain an effort. Full budgets, cultural shifts, and reinvestment are required. Boardrooms must be educated on the business model shifts and threats from non-traditional competitors in order to estimate the size of the threat and gauge the investment required for success.

• The majority of projects were led by the **Chief Digital Officer**. As organizations appointed leaders for digital transformation projects, the role of the Chief Digital Officer grew. Constellation estimates that 37 percent of digital transformation projects were led or influenced by the Chief Digital Officer.

**POV:** Constellation believes that there will be a handful of Chief Digital Officers by 2025. Digital transformation projects must move beyond a single, often underfunded individual to a team of digitally-enabled CxOs. Finance officers should understand how to evaluate, suggest, and adapt new business models. Marketing team members should understand how technologies affect products, services, and outcomes delivery. IT people should prepare the key platforms to support business model innovation. HR people should hire for digital DNA and infuse a culture of digital artisans.

• **Budgets are expected to increase.** Leading organizations are increasing their budgets for 2017. Constellation’s surveys show that 73 percent of CxOs expect to increase 2017 budgets for digital transformation. Qualitative interviews show a significant shift from proof of concepts to full-fledged programs.

**POV:** The shift from concept to commercialization remains a significant hurdle. Budget requests should address the larger issues of supporting an innovation team, funding a cross-governance team, and setting aside incentives for sustaining teams to put successful pilots into operation. Concept to commercialization is the number one challenge advanced digital transformation leaders face. Organizations
must budget for these initiatives as ongoing programs, not one-off projects.

- **Investment in data is fundamentally important.** Data is the foundation of digital transformation. Constellation sees that 87 percent of successful digital transformation projects incorporate an underlying data component. Conversations with digital leaders reveal that teams need higher data proficiency in order to succeed. From identifying correlation to testing for causation, leaders must democratize skill sets for data proficiency.

POV: From IoT sensors to interaction histories to structured and unstructured data, the goal is to achieve a level of automation and ultimately some level of machine learning and artificial intelligence. Organizations must build a data foundation that enables neural networks to self-learn and provide predictive and preventative capabilities that eventually will lead to automatic situational awareness (see Figure 2).

**Technology trends move beyond SMAC.** Constellation analysts identified the five

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**Figure 2. Seven Fundamental Outcomes for Artificial Intelligence**

![Figure 2](image.png)

Source: Constellation Research
forces that have driven consumer changes affecting the enterprise as early as 2009. Often referred to as SMAC, these forces around social, mobile, analytics, cloud, and unified communications have provided a key foundation in the last decade. Organizations must have these capabilities in their core operations and strategies in order to achieve a baseline standard.

POV: The future platforms of 2020 and beyond must incorporate and support IoT, the mixed reality of augmented reality and virtual reality, robotics, blockchain, three-dimensional printing, and artificial intelligence/cognitive capabilities (see Figure 3). These technology trends provide the underpinning for digital cores and the long-term ability to orchestrate micro-services across organizations, people, and machines.

MULTI-MODAL APPROACH IS KEY TO SUCCESSFUL DIGITAL TRANSFORMATION

The overhyped, bi-modal approach to IT and digital transformation is a flawed fallacy perpetuated by ivory tower, non-pragmatic legacy research firms. Lessons learned from successful digital transformation projects

Figure 3. Key Digital Technology Pillars for Future Move beyond SMAC

Source: Constellation Research
emphasize an organizational design comprised of six key virtual or physical teams (see Figure 4):

- **Incremental innovation teams improve existing business models.** These teams have a mandate for creating faster, better, and cheaper capabilities in existing business models. Key team traits include domain expertise, a passion for improvement, an understanding of existing constraints, and a spirit of innovation.

- **Transformational innovation teams innovate with new business models.** Often seen as the tiger team, these people explore additional business models for piloting inside organizations. Key team traits include a penchant for disruption, disregard for existing rules, passion for innovation, and ability to deal with abstract concepts.

- **Concept-to-commercialization team enables monetization.** This team must figure out how to take a proven concept from the transformational innovation team.

Figure 4. The Six Components of Successful Digital Transformation Governance

![Diagram of six components of successful digital transformation governance]

*Source: Constellation Research*
and incorporate the new business model in existing systems. This team often comprises a multi-disciplinary group of sustaining operations, incremental innovation, and transformational innovation members. Key traits include massive creativity, disruptive thinking, political savviness, and understanding of human behavior and rewards.

- **Culture team** infuses harmony among the teams. This team sets the cultural norms among all the teams. This team must not only highlight the differences among the teams, but also find bridges among the differences to inspire innovation. Constellation defines design thinking as unlocking solutions to questions that have not been asked previously. This requires a diversity of thought across multiple disciplines. In fact, an artist, architect, author, and accountant have different points of view that unlock innovation in problem solving and design.

- **Governance** ensures overall organizational alignment and success. This team must provide the ground rules and framework to ensure successful coordination among a variety of business objectives. In some cases, this team sets up the partnership ecosystems for co-innovation and co-creation. Key traits include policy making experience, program management, compensation design, and political savviness.

**Sustaining operations** keep the lights on. The bulk of an organization focuses on keeping the lights on. This team’s goal is to deliver operational efficiency, rock-solid reliability, and massive economies of scale. Key team traits include an attention to detail, strong work ethic, and adherence to standards and rules.

**RECOMMENDATIONS**

Constellation offers five distinct recommendations for the journey to successful digital transformation projects. Start here:

- **Answer why your brand, enterprise, or organization exists.** An organization must
start with its mission. What experiences and outcomes should the organization be expected to deliver?

- **Invest in digital artisans.** Balancing the right digital DNA inside an organization requires both a right-brain and left-brain approach. If an organization has many scientists, technologists, engineers, or mathematicians, add artists, ethnographers, anthropologists, design thinking experts, and story tellers. The goal is to inspire innovation from across multiple disciplines.

- **Form follows function.** The business model should be developed first. In fact, successful companies will deliver on more than one business model. Start from a core business model, then figure out the technologies, people, and processes to support the business model. Design multiple layers of business models that support the end-to-end value chain.

- **Move from gut-driven to data-driven decisions.** Data is the foundation of digital businesses. Every click, conversation, video, transaction, and interaction provides insight into future capabilities. Align the data to information flows and mine for insight. Take that insight and determine the next best action. From there, deliver a data-to-decisions capability for competitive advantage.

- **Focus on co-innovation and co-creation on platforms.** The future of an organization rests on the ability to put a partner ecosystem in place. This will come from the orchestration of content (i.e. products, services, experiences, insights, and outcomes), networks (i.e. distribution models, channels, and networks), and technology platforms. Most of these capabilities have not been developed. The goal is to find partners in the co-innovation and co-creation of these capabilities. In some cases, traditional competitors may be the best partners in creating a common core.
R "Ray" Wang
Founder and Principal Analyst

R "Ray" Wang is Founder, Chairman, and Principal Analyst of Constellation Research, Inc. and the author of the popular enterprise software blog, “A Software Insider’s Point of View.” He previously was a Founding Partner and Research Analyst for enterprise strategy at Altimeter Group.

A background in emerging business and technology trends, enterprise apps strategy, technology selection, and contract negotiations enables Wang to provide clients and readers with the bridge between business leadership and technology adoption. Wang has been recognized by the prestigious Institute of Industry Analyst Relations (IIAR) as the Analyst of the Year, and in 2009, he was recognized as one of the most important analysts for Enterprise, SMB, and Software. In 2010, Wang was recorded as part of the ARInsights Power 100 List of Industry Analysts and named one of the top Influential Leaders in the CRM Magazine 2010 Market Awards.

Wang graduated from the Johns Hopkins University with a B.A. in natural sciences and public health. His graduate training includes a master’s degree from the Johns Hopkins University in health policy and management and health finance and management.

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ABOUT CONSTELLATION RESEARCH

Constellation Research is an award-winning, Silicon Valley-based research and advisory firm that helps organizations navigate the challenges of digital disruption through business models transformation and the judicious application of disruptive technologies. Unlike the legacy analyst firms, Constellation Research is disrupting how research is accessed, what topics are covered and how clients can partner with a research firm to achieve success. Over 350 clients have joined from an ecosystem of buyers, partners, solution providers, C-suite, boards of directors and vendor clients. Our mission is to identify, validate and share insights with our clients.

Organizational Highlights

- Experienced research team with an average of 25 years of practitioner, management and industry experience.
- Organizers of the Constellation Connected Enterprise – an innovation summit and best practices knowledge-sharing retreat for business leaders.
- Founders of Constellation Executive Network, a membership organization for digital leaders seeking to learn from market leaders and fast followers.

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