

ALE

Where  
Everything  
Connects



The CIO's role in an era of digital transformation

# Swimming with the Digital Sharks

eBook  
Swimming with the Digital Sharks

Alcatel-Lucent   
Enterprise

# Table of contents

- | Transform or die
- | What is digital transformation?
- | The benefits of digital transformation
- | Are you digitally mature?
- | A digital transformation action plan
  1. Connect everything
  2. Deploy analytics
  3. Roll out new business models
  4. Build a foundation for innovation
- | Digital transformation in motion: Three case studies
- | Top 10 traits of transformation titans
- | Leading the charge
- | Conclusion: The key to longevity is to add business value
- | Resources



# Transform or die

Digital transformation has reached warp speed. Businesses that fail to transform and continue clinging to traditional models will drown in complexity and become increasingly vulnerable.

What does this mean for chief information officers (CIOs)? You might say their future is bright. You might say it's bleak. Either way, you'd have to say their positions are precarious. In this transformative age, CIOs who limit their scope to the maintenance of IT operations and costs are soon gone.

**“CIOs and technology directors that focus on speeds and feeds and hardware are being disrupted by the folks that have broader ideas about what the capability of technology can be. The new model calls for thinking outside of the wheelhouse of infrastructure only.”**

ARTHUR BRANT, ABILENE CHRISTIAN UNIVERSITY

The CIO needs to be an enterprise leader – an agent of digital transformation. A shark.

Sharks rule the seas. They are streamlined, powerful, fast, and restless. Some shark species must swim constantly to survive.

Today's CIO can no longer mind IT as usual. CIOs need to shift the focus of technology from hard assets and business processes to extracting information from those assets and streamlining business processes. They must redefine their role and navigate a successful transition to digital to gain a competitive advantage. CIOs who fail to lead digital transformations are likely to see the value of their companies erode and instead of being the shark, get devoured by other sharks.

# What is digital transformation?

This eBook is about digital transformation and the CIO's role in making it happen. According to various publications and experts, digital transformation is...

**The REINVENTION of an organization through the use of digital technology to improve the way it performs and serves its constituents.**

SOURCE: TECHTARGET/SEARCHCIO

**The ROUTE companies take toward leveraging the abundance of data and connectivity to change the way they compete and create value.**

SOURCE: SAPINSIDER

**A JOURNEY with multiple connected intermediary goals, in the end, striving towards continuous optimization across processes, divisions and the business ecosystem.**

SOURCE: I-SCOOP

In essence, the term “digital transformation” describes what must happen if a company is to fully leverage opportunities presented by the rapid growth of digital technologies. Digital transformation has caused a profound and swift transformation of business activities, processes, capabilities and models.

Digital transformation is about organizations using technology to improve the experience of their connected customers, increasing employee efficiency, encouraging innovation, and accelerating decision making.

Fundamentally, digital transformation is about changing the way people work by modernizing their processes and ways to communicate and provides organizations with an opportunity to change and improve their industry.

For most companies, the goals of a digital transformation is infusion of simplicity, mobility, collaboration, agility, innovation and efficiency into their operations. In addition to technology improvements, digital transformation is also about transforming organizational structures and business models thus improving business results while increasing profitability.

When you digitally transform your business you'll experience simpler, more agile operations and innovation, everywhere. And at the same time, you'll improve the bottom line through more cost-effective purchase models and increased profitability.



“By placing the customer at the center of the company you will improve on the company’s offerings that focus on positive outcomes, processes, and the organization. The user experience and the customer journey are truly enhanced by using digital capabilities.”

JACQUES GOUDET, CIO OF ALE

# The benefits of digital transformation

Changes in the digital landscape occur continuously so the goal is to have the ability to transform along with them. Organizations need to be able to focus on what their customers need and how that need can be quickly and better addressed through digital capabilities.

Research by *The Economist* (Digital Evolution) shows that business leaders have identified what they wish to gain from a digital transformation, with the primary benefit they seek being real-time transaction. By addressing their needs with the latest technology, they are able to improve the efficiency of their operations which can lead to attracting and retaining new customers.

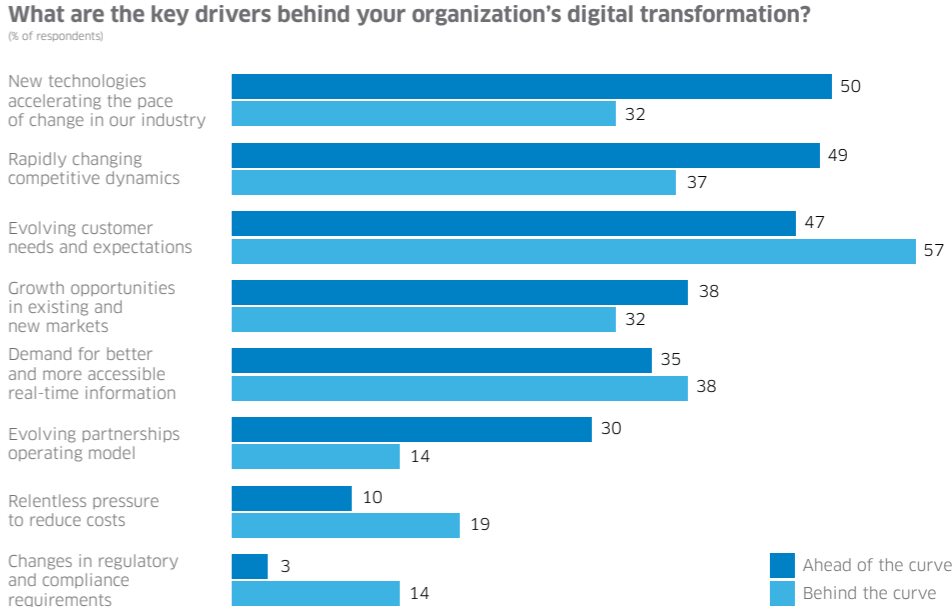
Leaders are seeking the following benefits (by priority):

1. Enabling real-time transactions
2. Improving the efficiency of operations
3. Acquiring new customers
4. Providing employees access to real-time information from any device
5. Creating new sales channels
6. Improving compliance and mitigation of risks
7. Providing management with real-time decision-making information
8. Delivering new outcomes for customers
9. Gaining new insights into customer behavior
10. Personalizing the customer experience
11. Interacting with customers
12. Improving collaboration with partners
13. Accelerating product development
14. Involving customers in product development

## Revenue generation

**66 percent of companies engaged in a digital transformation expect to generate more revenue from their operations.**

SOURCE: GARTNER, 2016



*The Economist* Intelligence Unit survey included a question on what the key drivers are that are behind the surveyed organization’s digital transformation. The leading responses are not a surprise: 1. New technologies are accelerating the rate of change in their industry, 2. Competitive dynamics are rapidly changing, and 3. Evolving customer needs and expectations. Of special note is that more than a third felt they were behind the curve in addressing these drivers.

# Are you digitally mature?

**“Digital maturity matters. It matters in every industry,” say the authors of *The Digital Advantage: How digital leaders outperform their peers in every industry*.**

CAPGEMINI CONSULTING/MITSLOAN MANAGEMENT

Digital maturity is the combination of two related but separate characteristics. One is digital intensity, which refers to how many technology-enabled initiatives the company deployed to change how they operate in terms of customer engagement, internal operations and business models.

The other characteristic is transformation management intensity, which creates the required leadership to create digital transformation in the organization.

The research claims most large firms use technologies like social media, mobile applications, and analytics to improve their transformation. However, few have positioned themselves to capture the real benefits.

## **Greater profitability**

**The elite – those that are digitally mature – enjoy significantly higher financial performance. On average, they are 26% more profitable than industry competitors.**

SOURCE: CAPGEMINI CONSULTING/MITSLOAN MANAGEMENT

## **Digital maturity by industry**

Some companies fit the description for “digirati”. These are companies that have the digital maturity to build innovations and to drive enterprise-wide transformation. Data indicates that the digirati have significantly higher financial performance than the less digitally-mature competitors.

Research by Capgemini Consulting/ MITSloan Management reveals the following rankings for digital maturity by industry.

1. High technology
2. Banking
3. Insurance
4. Travel and hospitality
5. Telecom
6. Retail
7. Consumer packaged goods
8. Utilities
9. Manufacturing
10. Pharmaceuticals

# A digital transformation action plan

## Where do you start? What do you focus on?

Although it's impossible to write a universal plan, ALE believes successfully executing digital transformation relies on a four-part strategy:

1. Connect everything
2. Deploy analytics
3. Roll out new business models
4. Build a foundation for innovation

Let's take a closer look.

### 1. Connect everything

One of the primary objectives of a digital transformation is to connect people, processes, and things—inside and outside the borders of the enterprise. The deployment of high-performance, secure and reliable smart networks connect:

- People to each other
- Machines to each other
- People to machines

Enterprises increase employee efficiency with powerful, connected communication platforms that deliver borderless tools that are available at all times.

### 2. Deploy analytics

In the digital age, one of your key strategic goals is to improve the customer experience. Doing so requires access to, and the application of, analytics that provide better insights into understanding your customers, employees, stakeholders and business partners.

Insights gathered from analytics drive strategic initiatives, which enable enterprises to guarantee quality of service, improve retention rates and provide customers with lifetime value. Real-time analytic capabilities allow enterprises to react quickly to changing conditions and interact with customers faster.

With the right information, businesses can offer sales incentives and upgrades to the right customer at the right time. You can track the use of products and gain insights into which customers are most (and least) active. The information can be used to upsell premium services and deliver additional content to drive sales.

### 3. Roll out new business models

Digital transformation often results in the introduction of new business models, such as:

- The freemium business model—A basic product or service is free, while premium versions require purchases or subscriptions.
- Communications platform as a service (CPaaS)—Companies lease entire elements of their communications infrastructure, such as a private branch exchange (PBX) or data center, from service providers. This is known as a consumption model.
- Unified communications as a service (UCaaS)—This model offers unified communications services in the cloud. Services may include instant messaging, presence information, voice, single number reachability, web and video conferencing, and desktop and data sharing.
- Network on demand (NoD)—Network on demand is a unique consumption-based model offering complete network infrastructure solutions. Customer fees can be based on network consumption or fixed-rates.

### 4. Build a foundation for innovation

Collaboration is critically important in building a strong foundation that encourages innovation and accelerates decision making. This foundation must be able to integrate all platforms to provide highly functional communication and collaboration services. Context-aware applications equipped with geo-location services and supported by big data analytics solutions, can accelerate decision-making.



## Digital transformation in motion: Three case studies

Stories of companies making digital transformations are in the news every day. Here, we will examine how some ALE customers are thriving with digital advancements – both in how the customer delivers services and increases operational efficiency.

### Hospitality

A large hotel chain operating 100,000 rooms across a number of properties uses a mobile app that enables consumers to book hotel rooms directly with the hotel. The app features an easy-to-use communications tool, which allows hotel personnel to report when a room needs to be cleaned, monitor housekeeping services, and notify the front desk when the room is prepared for a guest.

Their mobile app has been downloaded more than 20 million times. They now use the application to send promotional offers and create upsell opportunities. Future plans include expanding the app to enable guests to make dining reservations, book spa treatments, and order room service and taxis.

### Finance

Treni, an Indonesian company established to make technology payments easier, created a payment app that allows transactions via cell phone within the Treni community. The app – PayTren – leverages the open APIs in Alcatel-Lucent Rainbow™ to maximize business results by enabling group chat, multimedia conversations with audio and video on any device, and analytics on transactions. Rainbow plays a key role in Treni's digital transformation.

### Healthcare

A hospital has implemented a converged campus solution to provide a seamless wired and wireless network. New network capabilities, such as electronic billing, reduce the complexity of their infrastructure, reduce operational costs, and increase patient safety. Patient information and EMRs are available from anywhere in the hospital, at any time.





# Top 10 traits of transformation titans

- 1. Executive buy-in**  
The CEO is a champion for digital.
- 2. Strategy**  
Executives responsible for digital are involved in setting high-level business strategy.
- 3. Consensus**  
Business aligned digital strategy is agreed upon and shared at the C-level.
- 4. Communications**  
Business and digital strategies are clearly communicated enterprise-wide.
- 5. Consulting**  
The company actively engages with external sources to gather new ideas.
- 6. Investment**  
Digital enterprise investments are made to gain a competitive edge.
- 7. Data driven**  
The company effectively captures and uses data to drive business value.
- 8. Security**  
The company proactively evaluates and plans for security and privacy risks.
- 9. Commitment**  
A single, multi-year roadmap is in place, which includes business capabilities, processes, and digital and IT components.
- 10. Measurement**  
The company consistently measures outcomes from digital tech investments.

Based on: 2015 Global Digital IQ Survey, Lessons from digital leaders—10 attributes driving stronger performance, PWC

# Leading the charge

Despite all the benefits, digital transformation is a struggle for many organizations.

There's no universal blueprint for success, however, MIT and Capgemini research (cited previously) concludes digital transformation success stories don't evolve from the bottom up. They are driven from the top.

**“To become a digital enterprise, which is the ultimate objective of any digital transformation, CIOs need to move beyond their traditional role as manager of the IT cost center to become an enterprise leader who understands the potential of new technologies and has the ability to create new business models.”**

SOURCE TECHTARGET/SEARCHCIO

## Is it all on the CIO?

Undertaking a major transformation requires knowledge about what needs to be done and how it can be accomplished. Who is best suited to lead digital transformation?

- The CIO has the best understanding of technology and the most experience with it.
- Should the CEO step in to give the transformation the highest possible mandate?
- It may be time for a new addition to the C-suite, the chief digital officer (CDO). Many companies believe so.

The Economist's Digital Evolution study reveals that leading digital transformation is rarely a one-person job. They explored the subject by asking, “Which executives have primary leadership of digital transformation?”

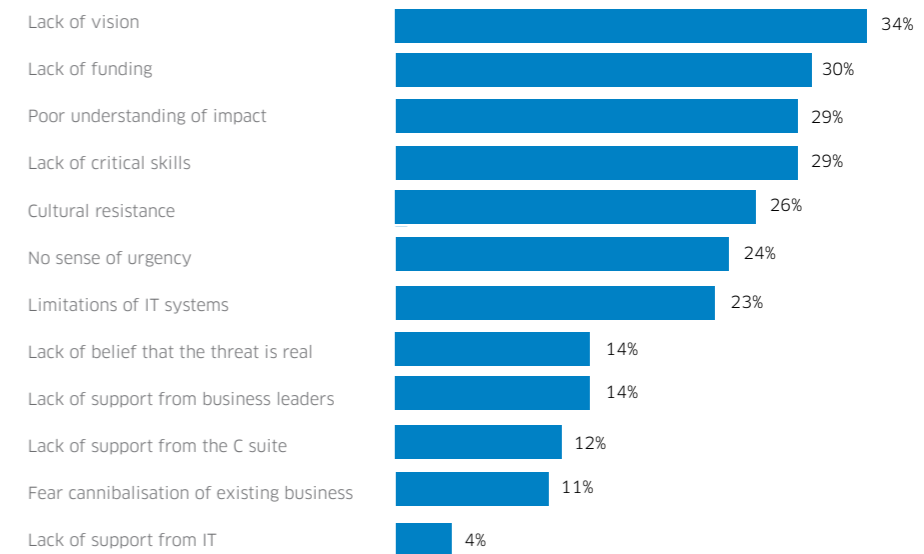
- The CIO is still the top individual. 52% of respondents identified the CIO (or CTO) as having primary leadership of digital transformation.
- 59% identified at least two C-suite positions. This approach has proven especially common with companies that are ahead of the curve.
- Others?
  - 37% said CEO
  - 28% said COO
  - 21% said CDO\*

\*The research also reported CDO leadership is significantly more common among ahead-of-the-curve companies.

**“The CIO needs to stay very close to the business and provide the support needed to make transformations and stay ahead of the curve. They need to co-create with the various business groups, whether it is on the marketing front, the product front, support functions, and even finance.”**

JACQUES GOUDET, CIO OF ALE

## What are the biggest challenges you face in responding to digital disruption?



A Harvey Nash/KMPG CIO Survey from 2015 shows the top five challenges of responding to digital disruption are: Lack of vision, lack of funding, poor understanding of impact, lack of critical skills, cultural resistance, and no sense of urgency.



## Conclusion: The key to longevity is to add business value

**“The CIOs that don’t add business value makes me ask a question, which is, ‘Why is IT not outsourced?’ A CIO who is essentially looking at the role of business technology in the organization as infrastructure management—that’s a shrinking job. That is not in any way, shape or form a growth industry.”**

**JONATHAN FELDMAN, CIO FOR THE CITY OF ASHVILLE**

The digitally empowered customer is redefining how businesses achieve lasting success. Companies have little choice but to leverage digital technologies across their enterprise.

Longevity, for the company and the CIO, depends on adopting a new approach to respond to customer demands. Digital technology—and transformation—plays an immensely crucial role.

As a result, the CIO’s role in the business has been elevated. CIOs must now move beyond the traditional IT focus on technology assets and adopt an expanded view that centers on a more satisfying customer experience.

**“You need to bring technology and the business closer together. That is the holy grail. Technology really is the business. Technology is not waiting to be told what to do. Technology is an actual partner at the table helping to bring the proper techniques to actually transform the business model to become more digital—and that’s really what’s going to survive going forward.”**

**LUCILLE MAYER, HEAD OF CLIENT EXPERIENCE DELIVERY AND GLOBAL INNOVATION AT BNY MELLON**

## Resources

### PUBLICATIONS

*Digital Transformation: Leveraging Technology to Reveal New Opportunities*, (ALE), April 2017

Digital Transformation: Online Guide to Digital Business Transformation, (i-Scoop), Accessed April 2017

*The Digital Advantage: How Digital Leaders Outperform Their Peers in Every Industry*, (Capgemini Consulting/ MIT Sloan Management)

*Digital Evolution, Learning from the Leaders in Digital Transformation*, (The Economist Intelligence Unit), Accessed April 2017

CIO Survey, (Harvey Nash/ MPMG)  
<https://www.hnkpmgciosurvey.com/>

SearchCIO  
<http://searchcio.techtarget.com/>

### ARTICLES

Linda Tucci, "MIT CIO Symposium 2017 Elucidates the Digital Playbook," SearchCIO/TechTarget, May 2017  
<http://searchcio.techtarget.com/news/450419720/MIT-CIO-Symposium-2017-elucidates-the-digital-playbook>

Kim S. Nash, "Q&A: Recruiter Martha Heller Says CIOs Must 'Erase The Wall' That Can Stymie Progress," August 2016  
<https://blogs.wsj.com/cio/2016/08/31/qa-recruiter-martha-heller-says-cios-must-erase-the-wall-that-can-stymie-progress/>

### INTERVIEWS

Excerpts republished with permission from:

Jacques Goudet, CIO of ALE

Arthur Brant, Abilene Christian University

Jonathan Feldman, CIO for the City of Ashville

We are ALE. We make everything connect by delivering technology that works, for you. With our global reach, and local focus, we deliver networking and communications. On Premises. Hybrid. Cloud.

ALE | Where  
Everything  
Connects