



Digital Transformation by Cisco

There's Never Been a Better Time
to Reimagine Your Business

Executive Summary

Digital transformation is disrupting businesses in every industry by breaking down barriers between people, businesses and things. By breaking these barriers, they are able to create new products, services and find more efficient ways of doing business.

These innovations are happening across organizations of all types, in every industry. But they share a common theme: create new customer experiences, transform business models and empower workforce innovation. To do this, companies need a foundation that is outcome driven and enabled by technology.

Cisco provides the foundation for digital transformation that consists of a comprehensive product and services portfolio, digital solutions and a Developer Environment supported by a broad global ecosystem of partners. Cisco's portfolio brings together connectivity, security, automation and analytics.

This paper delves into:

- Drivers of Digital Transformation
- Lessons, capabilities and differentiated initiatives from Digital leaders
- How can Cisco help you to transform into a Digital Business

Key Facts and Figures

78%

of businesses surveyed said that achieving digital transformation will become critical to their organizations within the next two years¹

-Capgemini Consulting and MIT Sloan Management Review

67%

of CEOs will have digital transformation at the center of their corporate strategy by the end of 2017²

-IDC survey of 2000 global enterprises CEOs



Contents

- 02 Executive Summary
- 04 What Is Digital Transformation?
 - 05 Transform Business Models
 - 06 Create New Customer Experience
 - 07 Empower Workforce Innovation
- 08 Why Is Digital Transformation Important?
- 09 How Can You Drive Digital Transformation?
- 10 Cisco, Your Foundation for Transformation
 - 10 Cisco Portfolio
 - 10 Digital Solutions
 - 10 Developer Environment
 - 10 Partner Ecosystem
- 11 Cisco Portfolio
 - 12 Connectivity
 - 12 Security
 - 13 Automation
 - 13 Analytics
 - 14 Collaboration
- 14 Start Your Digital Journey with Cisco



What Is Digital Transformation?

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Talk to analysts, IT or business leaders these days, and you'll find a hundred ways to define Digital Transformation. But the real question is what it means in today's context. At its core, Digital Transformation is the application of technology to build new business models, processes, software and systems that results in more profitable revenue, greater competitive

advantage, and higher efficiency. Businesses achieve this by transforming business models, creating new customer experiences and securing everything.

So how does it start? It begins with convergence of people, business, and things.

When **people and business** connect, it results in better customer experience, security and efficiency.

When **people and things** connect, it results in new opportunities, solutions and market research.

When **business and things** connect, organizations uncover new opportunities to transform processes and gain visibility into business outcomes.

Digital Transformation

Dimension Data

Improved healthcare service and performance using our video surveillance manager and virtual patient observation solution.

Digital Transformation

Ikusi

Now delivers comprehensive, specialized Internet of Things solutions for transportation, public sector and utilities customers

Digital Transformation

Dundee Precious Metals

Connected equipment across its mining operations to collect real-time and historical data

Results

Dimension Data

- 57 fewer patient falls
- 1313 additional patients monitored
- Reduced cost per monitored hour by \$9.43
- US \$194,436 savings in staffing costs

Results

Ikusi

- Offering complete, integrated IoT solutions helps to build revenue
- Scalable solutions promote cross-selling and upselling
- Partner ecosystem helps extend reach and meet customer needs

Results

Dundee Precious Metals

- Quadrupled annual production to 2 million tons
- Saved \$2.5 million over two years

Organizations need three critical capabilities to embrace Digital Transformation. They are:



Figure 1.

Let's look at these in detail.

Transform Business Models

As more and more devices get connected, companies have the potential to connect to and collect data from every extremity of their value chains. This creates the potential for new ways of doing business and the ability to disruptively transform existing business models, which leads to faster time-to-market, leaner operations, and greater agility to respond to market changes.

For example, when businesses move to an automated digital supply chain, they can improve productivity, efficiency, and visibility with accurate demand planning, real-time inventory management and reliable fulfillment. Similar business process improvements exist in all major business areas - marketing, finance, HR, product development, manufacturing, legal, sales, and customer engagement.

75% of manufacturing value chains will use digitally connected processes, assets, products, and services by 2019 to improve responsiveness and productivity
-IDC²

22 Billion IoT devices will be installed by 2018
-IDC²

1 Million New devices will go online every hour by 2020
-IDC²

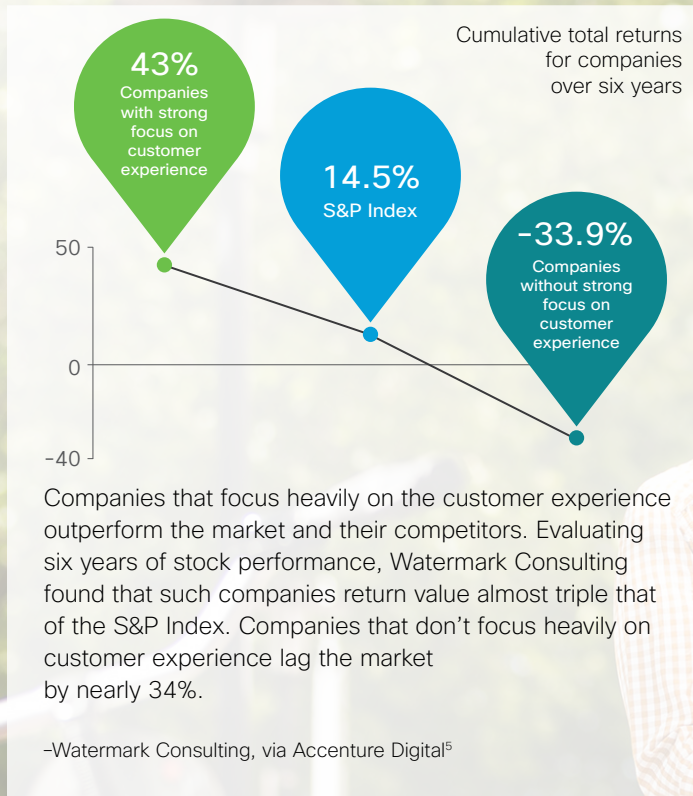
200,000 New IoT apps and services will be available by 2018
-IDC²

Create New Customer Experience

In a world of always-on digital services at your fingertips, customers have much higher expectations of the organizations with which they do business. Although product and cost leadership strategies have been used to great effect in the past to outsmart competition, the quicker pace of innovation and outsourcing has made them easy to duplicate. Winning the customer's unwavering loyalty by delivering delightful customer experiences has become the primary factor in winning and retaining business and maintaining credible sustained differentiation.

By providing a seamless Omni channel experience to each customer—across every channel of interaction—digital businesses are winning increased customer loyalty. At the same time, they're gaining deep insight to improve products and services, and predict future purchases. As a result, customers have access to consistent information and receive delightful experiences along each step of the customer lifecycle.

Customer Experience's Impact on Stock



2 out of 3

Customers switching providers cited poor customer experience as the reason.

—Accenture Digital Survey of 13,000 Consumers⁵

9 out of 10

Companies now competing primarily on customer experience

—Gartner⁶

“We see our customers as invited guests to a party, and we are the hosts. It’s our job every day to make every important aspect of the customer experience a little bit better.”


—Jeff Bezos, CEO, Amazon⁷

Empower Workforce Innovation


Today's workforce is multigenerational, with each group having unique motivations, values, and work styles. Workers want to be more engaged, empowered, and inspired at work. They tend to be more emotionally invested and focused on creating value every day. And they're looking for companies that provide the tools and culture to allow them to be more productive and responsive. Digital technologies can play a central role in engaging a multigenerational workforce and meeting the unique requirements and motivations of each generation.

Digital businesses are giving employees the tools to be more connected, engaged, and mobile. The blueprint for the digital workforce requires an always-connected workforce, deeper engagements through richer collaboration, and security everywhere. With these capabilities in place, organizations can increase productivity and improve their ability to attract and retain the best people.

60%
Employees strongly agree that digital technologies have the potential to fundamentally transform the way people in their organization work.³



50%
Jump in earnings per share when companies reduce employee dissatisfaction to 10 percent.⁴



—MIT Sloan Management Review and Deloitte University Press



The yearly cost of disengaged workforce is:

- \$450 billion to \$550 billion in USA
- €112 billion to €138 billion in Germany
- £52 billion and £70 billion in UK

Gallup Global Survey of Employees in 142 Countries

“On average, nearly 80% of respondents say they want to work for a digitally enabled company or digital leader.”³

—MIT Sloan Management Review and Deloitte University Press, Findings from 2015 Digital Business Global Executive Study

Why Is Digital Transformation Important?

Digital Transformation is having huge effects in every industry. Boards of every company are concerned about the impact of digitization on their ability to ensure the company's business relevance and continuity. Forward-looking leaders understand the seismic shift that's happening as their industries and competitors embrace Digital Transformation. They're worried about its potential impact to:


- Disrupt their company's business model, making it unviable or irrelevant.
- Force them into a mode of "thrive, survive, or go extinct".
- Give their competition the ability to continuously innovate and respond to market changes more quickly than their own company.
- Enable competitors to grab market share and sustained competitive differentiation.

These leaders are right to be concerned, because, Digital Transformations translate to real-world business results.

Digital Companies Achieve:




-Capgemini Consulting and the MIT Center for Digital Research⁸

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"Digital disruption will displace nearly 4 out of the top 10 incumbents by industry over the next five years."⁹

-IMD and Cisco

Share 

Digital Transformation Examples

UPS¹⁰

Digital Transformation

Deployed location services and mobile app to tell customers when packages will arrive within 1-2 hours, and enable real-time alerts, rescheduling, and more

Results

Dramatically improved customer loyalty

Saved 8 million gallons in fuel through route optimization

Boeing¹¹

Digital Transformation

Deployed asset tracking technology to track millions of parts across a 100 acre, 472 million cubic feet building used to assemble 737,747,767,777

Results

Increased assembly line uptime

Saved millions in financial losses from misplaced parts, toolkits, machinery, and work-in-process inventory

How Can You Drive Digital Transformation?

Driving Digital Transformation in a company is not easy. Line of Business leaders are looking to transform their business processes and achieve tangible business outcomes. However, to do this, they need help from IT leaders who can provide them with technology solutions to achieve these outcomes. So, Line of Business and IT leaders have to work in collaboration to create the environment and resources for digital business.

Gone are the days where Business leaders and IT leaders had relatively non-overlapping focus areas. The leaders from both areas are jointly responsible for customer success. To succeed, they need to jointly focus on the following areas:

People, Process and Culture

Empower people with the right digital skills, updated processes and an adaptive culture towards transforming their business.

Reimagined Value

Tie digital investments to value realized.

Data and Analytics

Expand cross-organization and customer visibility, both historical and in real-time.

Security

Securely connect every transaction, communication, and endpoint across the value chain.

Orchestration

Grow/shrink processes and operations on-demand

Technology and Data Architecture

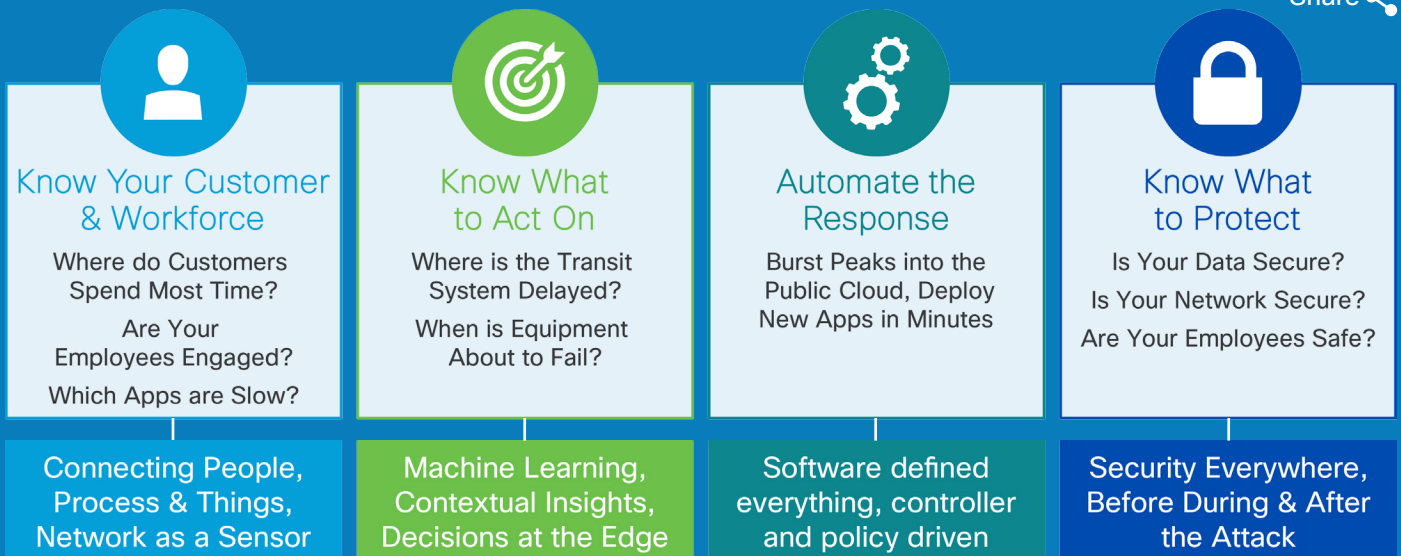
Use an integrated technology platform covering all technology needs.

“Every industry – from manufacturing to high technology – has firms that have already begun to gain the benefits of digital transformation. This should be a call to action for executives in every firm.”⁴

–Capgemini Consulting and the MIT Center for Digital Business

Digital transformation has a lot of moving parts. Integrated technology capabilities by Cisco brings everything together and help you to:

Share 



Cisco. Your Foundation for Digital Transformation

Cisco provides products, solutions and services needed to transform your business. Our product portfolio brings together critical capabilities needed to connect people business and things while our solutions and services help accelerate your strategy toward Digital Transformation.



Figure 3.



Cisco Portfolio

At the core of the digital business capabilities is the Cisco Portfolio. It brings together key capabilities for digital transformation:

Connectivity

Ability to connect millions to endpoints across the value chain and collect data

Security

Ability to secure everything and provide continuous policy-based threat protection

Automation

Ability to automate process from network edge to data center to cloud

Analytics

Ability to gather data around devices, networks, users, applications, and threats that can be converted into actionable insights

Collaboration

Ability to work better together across distances without compromise

Digital Solutions

Cisco Digital Solutions are specially created packages of hardware, software, and services that deliver business outcomes like increasing revenue, improving customer experiences, engaging employees, lowering costs, and mitigating risks. Defined by the outcomes they deliver, digital solutions are bucketed into Customer Experience, Workforce Experience, Business Operations, and City Operations solutions.

Customer Experience

Transform your customers' experience to improve satisfaction and loyalty, which drives increased revenue by measuring and optimizing every interaction across the customer journey.

Workforce Experience

Increase employee engagement and productivity, and enhance innovation by transforming the workplace into a flexible, collaborative environment that helps to empower a digital workforce.

Business & City Operations

Ability for businesses to streamline their operations, scale effectively from hundreds to millions of endpoints, and manage everything from a single pane of glass.

Developer Environment

Cisco provides an open environment where developers can create their own solutions. This is essential, as it gives organizations the freedom to go beyond one-size-fits-all solutions to meet the unique needs or outcomes of their business.

Partner Ecosystem

Cisco's global partner ecosystem helps customers deploy, manage, support, and upgrade solutions, so that each and every customer realizes optimal value from their investments.

Cisco Portfolio

Cisco Portfolio helps you to reimagine work and realize value with the help of technology capabilities. The technology capabilities required for Digital Transformation are:

Connectivity

Only Cisco's broad portfolio of ruggedized and non-ruggedized devices can help you connect every extremity of your value chain.

Security

Only Cisco has an end-to-end, policy-driven approach securing every aspect of your value chain.

Automation

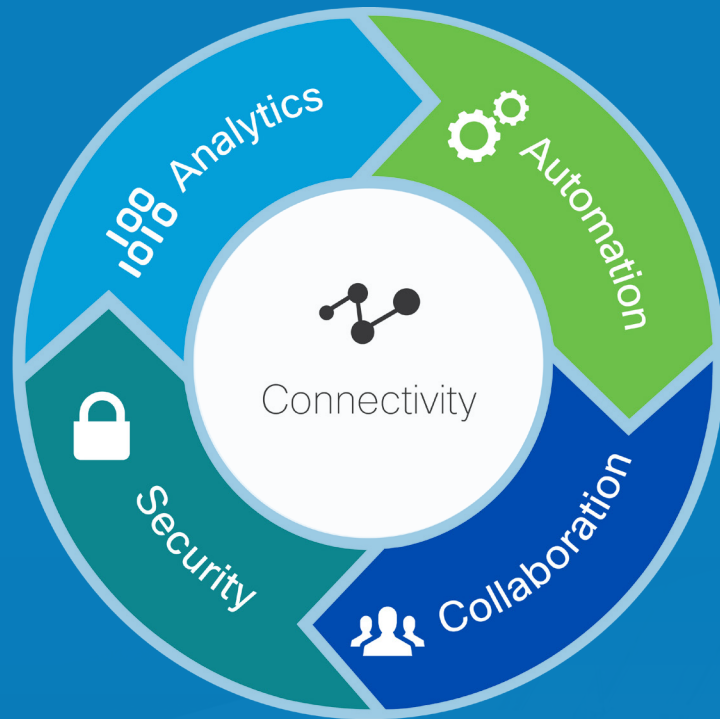
Only Cisco can automate your entire infrastructure and processes, from the endpoint to the datacenter to the cloud to the app, under a single pane of glass.

Analytics

Only Cisco's deep analytics capability helps you analyze and make near real-time decisions at the endpoint, in the aggregation network, or back in the datacenter.

Collaboration

Only Cisco's collaboration portfolio helps you to work better together, build stronger relationships and transform your workplace across every room, every desk and every pocket without compromise.



Work Reimagined
Value Reimagined
Defined by Technology

Figure 4.

Share

“The strength of digital technologies—social, mobile, analytics, cloud—doesn’t lie in the technologies individually. Instead, it stems from how companies integrate them to transform their businesses and how they work.”³

—MIT Sloan Management Review and Deloitte University Press

Connectivity

Connectivity is fundamental. If you can't connect and collect data, you can't transform.

Connects Every Part of Your Business

Connect workers, customers, suppliers, business applications, sensors, assembly lines, and much more to collect data. Make it scale, so you can accommodate millions of new connections with your existing organization and operations.

Provides Hyper Distributed Intelligence

Embed data-driven intelligence across your network and organization to enable smarter, faster decision making and better business outcomes.

Secures Everything

Secure every part of the network so that it can act as a sensor and an enforcer.

Converges IT and OT

Bring IT and OT together for integrated process and information flow that can break down silos that keep disparate organizations, processes, and digital investments from delivering the value you expect.

£30 billion per year



Estimated economic growth that the United Kingdom is missing due to a connectivity deficit in its biggest businesses and public sector organizations¹²

– Centre for Economics and Business Research (Cebr)

Security

High-profile security breaches seem to happen almost daily, and they're growing in every industry. Attacks have become more sophisticated, and with proliferation in devices and the IoT, the number of potential targets continues to grow. Digital Transformation can unlock amazing business advantages and insights, but also increases your exposure to threats. Successful digital businesses think about security at the most basic level of any transformation strategy.

Secures Everything

Get embedded security across devices at the edge of your network, across your infrastructure, and through the data center and the cloud.

Provides Support Before During and After the Attack

Provide continuous advanced threat protection across the attack continuum.

Has Pervasive Threat Visibility

Provide threat visibility across many vectors.

Is Policy Driven

Provide consistent policy across devices, networks, and clouds, so you can identify advanced threats, keep them contained, and mitigate them quickly.

\$3.79 million



average global cost of a data breach in 2015

– Ponemon Institute¹³

\$154 Average global cost



per record compromised in data breaches in 2015

Automation

Once you've securely connected everything, you can start capitalizing on new insights and faster responsiveness and decision making. That is, if you can find a way to manage all of those new connections without overwhelming your IT operations. The answer is automation. By automating manual and repetitive processes across your organization, you can drive efficiency, agility, innovation, and new business models.

Provides Complete Infrastructure Automation

Automate everywhere across the network, including Cloud, Data Center, Mobility, Branch, Campus, collaboration and Security.

Is Controller and Policy Based

Has software-defined programmable infrastructure and prebuilt apps.

Is Open

Operates with a wide range of third-party and open-source devices, systems, and tools.

Is a Self-service Model

Makes it possible to deliver services and capabilities to customers and workers in an automated, self-service fashion.

90%
Reduction



in application
deployment times

87%
Less
staff time



spent on network
administration

- Forrester¹⁴

Analytics

At its core, digital transformation enables deeper and broader insights into your organization and your business. It's those insights that allow digital leaders to spot new trends, identify emerging customer needs, and develop new products and services more quickly than their competitors. The value you realize from Digital Transformation is directly tied to your ability to collect more data from more places and analyze it consistently.

More Exposed Datasets

Help to gather analytics at every device in the network and make network as sensor.

Simpler Access to Data

Empowers you to act more quickly by aggregating and normalizing data from every source.

Contextual Insights

Provide contextual insights by correlating data across devices, network, users, applications, flows, and threats.

Better Real-time Decisions

Enable near-real-time decision making by distributing intelligence out to the edge of the network.

96% of
companies



believe that analytics will
become more important to
their organizations in the
next three years³

- MIT Sloan Management
Review and Deloitte
University Press

55% of
companies



indicate that it is either very
or extremely challenging to
manage data

- Accenture technology
vision 2015¹⁵

Collaboration

The pace of change is accelerating. Agile organizations promote open flow of information, encourage experimentation and function as a network. Collaboration is foundational for being an agile organization. Our collaboration needs are highly varied and we need to focus on excellent user experience that provides pervasive, seamless and secure collaboration.

Experience Centric

Provide delightful, purpose-built products for every room, desk and pocket.

Cloud Connected

Deliver collaboration capabilities on-premises, from the cloud or in a hybrid combination.

Value Extended

Extensible through open APIs that are interoperable with third-party systems and business applications.

Integrated

Deliver a single collaboration experience that spans across all modes of communication.

96% of executives



cited lack of collaboration as the primary reason for workplace failures

- Salesforce

90% of organizations



will offer mobility to workers by 2020

- Frost & Sullivan

Start Your Digital Journey with Cisco

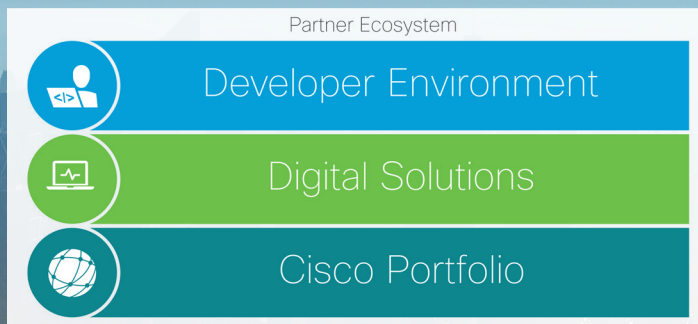
Cisco is the only partner that has an integrated portfolio across the entire technology realm: network, datacenter, cloud, security, collaboration, IoT, analytics, and service provider. We combine this with industry partners to bring a truly robust set of capabilities that can reach every extremity of your value chain, from anywhere a service or application resides to wherever it may be consumed.

The world is changing fast. The choices you make now will decide whether you're setting the pace in your industry or playing catch-up. There's never been a better time to transform your business. No matter where you are in your digital transformation, Cisco can help you build a smarter, faster, and more competitive business. Cisco is your foundation for Digital Transformation with a comprehensive

set of products, solutions, and services for providing connectivity, security, automation, and analytics across your entire value-chain. Let Cisco help you reimagine your business and accelerate your journey towards Digital Transformation in your organization.

Take the next step in your digital journey today. Visit: <http://www.cisco.com/go/digital>

Cisco. Your Foundation for Digital Transformation



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