Improving Service Provider Business Performance Through DX - Digital Transformation

IDC DX research sponsored by Cisco
Digital Transformation (DX) agenda

- SP challenges and opportunities
- DX, what is it and why is it important?
- Research key findings
- The DX journey
- DX Quick assessment tool demo
- DX benefits summary
- How to proceed
Turn Service Provider Challenges Into Opportunities

**Challenges**
- Flat or declining revenues, margin instability
- Competitive pressures
- Increasing customer requirements
- Technology migrations

**Opportunities**
- Improve cost efficiency
- Accelerate innovation
- Introduce mass service customization
- Enable agile business architecture

**How? Through DX—Digital Transformation**

It's the approach by which service providers (SPs) drive changes in business models and ecosystems—leveraging digital technologies and competencies. DX creates opportunities to optimize cost structure, improve customer experience, and launch new and innovative services faster.

**It’s BIG. All industries are pursuing it**

IDC forecasts that by 2021, at least 50% of global GDP will be digitized, with growth in every industry driven by digitally-enhanced offerings, operations and relationships.*

* new business relationships, technology innovations, applications, devices, services, threats, disruptions, regulations, environmental factors.
A DX Model Built for SPs

SPs understand the need to transform to a more digitized environment, but struggle with planning the starting point and course of the evolution.

Cisco and IDC partnered to conduct research with SPs about current and future DX adoption and maturity in their organizations.

The outcome is a DX model:
- Shows where you are on your DX journey.
- Provides guidance on what steps to take to advance to the next digital level.
- Measures business improvements resulting from digital readiness.

What can you expect to get from Digital Transformation?

**Business Performance Improvements**

- **Operations Cost**
  - 49%

- **Revenue**
  - +14%

- **Customer Retention**
  - +30%

- **Profit**
  - +22%
In-Depth Research Study Provides SPs with Information About How to Successfully Advance in Their DX Journeys

The Methodology We Used

Broke the Problem Down:
- 7 domains and 33 sub-categories

Surveyed 400 SPs worldwide, plus
- 20 in-depth SP interviews

Measured the progress per domain, from “Ad-Hoc” to “Pioneer”

- Gauge the relative performance across key business metrics, pain points, and adoption of digital capabilities across 7 domains.

- Explore how digital transformation progress in each domain and sub-category turns challenges into opportunities.
SP DX Stages Broken Down Into 7 Domains and 33 Sub-Categories

With 33 sub-categories, SPs can manage and measure the DX journey in bite-sized transformation action steps. Challenges can be turned into opportunities via a step-by-step process without requiring massive, unrealistic overhauls.

<table>
<thead>
<tr>
<th>Network Infrastructure</th>
<th>Automation &amp; Orchestration</th>
<th>Customer-Facing &amp; Internal Services</th>
<th>Security</th>
<th>Business Processes</th>
<th>Organization &amp; People</th>
<th>Analytics</th>
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<tbody>
<tr>
<td>5. Visibility of Service Delivery Infrastructure</td>
<td></td>
<td>5. Technology Resilience</td>
<td>5. IT &amp; Engineering</td>
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Where Are SPs on the DX Journey?

The most successful SPs are defined as “pioneers.” But they represent only a small percentage of all SPs. Most SPs run their business using “ad-hoc” approaches or simple “manual” methods.

<table>
<thead>
<tr>
<th>Category</th>
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<tbody>
<tr>
<td>Pioneer</td>
<td>8%</td>
<td>8%</td>
<td>6%</td>
<td>18%</td>
<td>3%</td>
<td>1%</td>
<td>6%</td>
</tr>
<tr>
<td></td>
<td>Cloud, automated, on-demand, fabric simplified</td>
<td>Automated, multi-layer configuration and control</td>
<td>Real-time, elastic service delivery</td>
<td>Automated, predictive testing</td>
<td>Automated, zero-touch sensing platforms</td>
<td>Entrenched disruptive digital strategy</td>
<td>Model-driven Telemetry</td>
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<td>Deployer</td>
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<td>Adopter</td>
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<td>Manual</td>
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</tbody>
</table>
Key Findings: 70% of SPs Describe Themselves as Only “Manual” or “Ad-Hoc”

These organizations cite 3 key challenges blocking them from moving up in the digitization index:
- Culture is too risk-averse
- Siloed organizations
- Skills and people resources

Yet these organizations believe they are not behind—73% believe they are on par with peer SPs.

42% report a consistent group-wide DX strategy, and 41% claim significant progress in transformation.
Key Findings: The Most Advanced “Pioneer” SPs Enjoy Significant Business Performance Gains

- They have improved key business metrics:
  - Revenue: 14%
  - Profit: 22%
  - Customer Retention: 30%
  - Customer Satisfaction: 40%

- They have reduced costs and cycle times:
  - Operational costs: -49%
  - Time to market: -88%
The Benefits of Initiatives Include Cost Reduction and Revenue Enhancements

**Revenue Increase**
- Personalization or targeted marketing: 10%
- Higher customer satisfaction or higher quality products/services: 41%
- Improved ability to deliver new products/services or quicker to market: 49%

**Cost Reduction**
- Reduced costs of infrastructure: 34%
- Network virtualization: 23%
- Customer portals/self services: 29%
- Automation: 10%
- Reducing downtime: 4%
Key Findings: What DX Can Do for Your Business

SP’s report significant opportunities achieved as a result of digital transformation.

- "By adopting elastic compute and network resources, we saved nearly 50 million euros."
- "Through automation, we reduced delivery times from 10-20 days to 5-10 minutes."
- "Programmable network infrastructure has reduced SLA breaches from 5% two years ago to 1% today."
- "Service delivery time is critical for customer experience. We have brought days down to minutes, and minutes down to instants."
- "With self-service portals, cost to install has reduced from 500-600 euros to 100 euros."
- "By automating ethernet edge configurations, we have saved several days in the process, and sets us up well for doing more things down the road."
- "IT and business are a singular, collaborative group. That is the biggest single change we have made and it is digitally transforming."
- "Getting cash quicker and more accurately. Turnaround time to first billing was 100 days before DX, now it is 20 days."
Progressing in DX is a Priority for Service Providers

Today, 16% of SPs describe themselves as deployer or pioneer (levels 4 or 5), but in 2 years, 28% plan to be at these levels. Manual and ad hoc approaches are clearly not working.
What Should Be Done to Move Up in DX?

Create cross-organizational DEVOPS scrum teams that are responsible for the product and all processes around it.

Get the CEO to champion change. When you get the CEO to champion the process, it is one of the single biggest factors.

Launch a center of excellence to centralize technology, testing and engineering activities.

Develop a business case for DX investment that covers both Cost Reduction and Revenue Improvements. Identify the low hanging fruit per area of gain and embark on an executable plan.

DX should be geared toward revenue protection, customer growth, revenue growth but DX must be anchored in customer experience.
# How Should DX Implementation Success Be Measured?

<table>
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<tr>
<th>Look at metrics beyond business gain; emphasize higher customer satisfaction, and general good will within the business.</th>
<th>Percentage of the network under unified control (currently, everything is coordinated with workflows, but without unified control).</th>
<th>Monitor adoption of new capabilities both internally and externally to track progression through digital.</th>
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<td>Reduced calling rates, truck rolls, repeat calls. Bringing NPS up a few percentage points and customer touch points down a few points is a huge improvement.</td>
<td>ROI will be a multi-year process. It will be a few years before DX platforms become all-pervasive and get heavily used.</td>
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Are you ready to digitalize for profitability?

- DX technology is dramatically improving the economics and performance of businesses across the globe.
- Digital native web players adopted it from day one and got the power to grow their business.
- Service providers started their journey for digital transformation, but are struggling with planning the course and evolution of it.
- Take this quick assessment now to benchmark your digital readiness against your industry peers and to get clear and tangible essential guidance for your DX evolution.
What are the top 3 high-level business priorities for your organization?

- Revenue protection
- Improve customer experience
- Generate revenue from new markets & ventures
- Improve employee productivity
- Improve operational efficiency
- Maximize ROI on capital investment
- Improve competitiveness
- Other, please specify
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Did You Know?
69% of SPs rank Revenue protection, Improve customer experience and Generate revenue from new markets & ventures as their top business priorities.
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Did You Know?
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Which departments in your company are responsible for driving digital transformation (DX) initiatives? (Select all that apply)

- Centralized digital innovation group
- CTO Group/Network Architect
- Customer Care
- IT
- Marketing
- Network Operations
- Sales
- Senior Business Leadership
- Other, please specify

Did You Know?
75% of Pioneer SPs include marketing and sales as driving DX initiative
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Digital Transformation (DX) Readiness for SPs

Progress

What are the primary drivers behind your organization’s consideration to implement digital transformation (DX) initiatives? (Select all that apply)

- Service agility – faster response via automation and orchestration
- Reduce operational costs in lines of business – opex reduction
- Operational efficiency – eliminate manual provision through automation
- Deliver better customer experience
- Organizational efficiency – process, tools, systems aligned to drive continuous efficiency
- Revenue enhancement – Support new products and revenue streams
- Cross-operational alignment – Align process dependencies, procedures, and policies to drive efficiency and improve profitability
- Other, please specify

Did You Know?
"Deliver better customer experience" was most frequently selected as the #1 primary driver?
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20%

Did You Know?
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Progress

Which one of the following best describes your organization’s approach to modularity of hardware and software for service delivery?

- Proprietary hardware and network operating software (NOS)
- Limited VNFs - only control functions being virtualized
- Virtualized data plane functions - PE, BNG functions but mostly centralized
- VNFs can be spun up anywhere in the network (main DC, edge DC, MEC, etc.) on demand, and distributed as needed
- Distributed full NOS modularity and disaggregation - any network application or module (BGP, OSPF, etc.) can be operated on any standardized hardware anywhere

Your score
Top 25% of SPs
Average SPs

Previous   Next
Which one of the following best describes how your organization manages the resources used to deliver services to customers?

- Static/manual resource management
- Limited accurate views of resource pools
- Compute and network resources are elastic but accurate views of network resources are not yet available
- Accurate view of resources, but end to end enablement of missing resources is highly manual
- Real-time, accurate, on-demand and elastic delivery of applications and services using an innovative and transformative engine
Which statement best describes your organization’s service lifecycle/runtime environment?

- Manual, inconsistent service configuration process
- Script-based service configuration and change management
- Template-based workflow for service activation with some automation in change management & TTU (Test & Turn-up)
- Some processes automated – onboarding is zero-touch
- Zero-touch service onboarding, activation, TTU, change and decommissioning
Digital Transformation (DX) Readiness for SPs

Which statement best describes how your organization manages its response to a security incident?

- No pre-defined plan
- Developing a process
- Drafting a breach readiness plan
- Retainer contract with 3rd party security expert with fast agreed-upon response based on documentation and staff involved
- Standard retainer with fast agreed-upon response and with documentation, staff and law enforcement identified, including access to supplier ecosystem; all tested in routine practice runs

Progress: 60%
Which statement best describes the process used in your organization for product development?

- Each step and each team operate independently
- Islands of ongoing cooperation
- Cooperative approach, but still requires complex manual lifecycle management
- Limited use of sensing platforms (AI, ML) to define/develop products. Sensing platforms (AI, ML, analytics) suggest product options
- Agile product development with Fast Fail/Success. Data-driven product creation based on a holistic view of customers and business
Which statement best describes how your organization is structured to enable successful digital operations?

- No structure - Business units are not collaborative or coordinated
- Ad hoc - Business unit coordination is project-based
- Informal - Common digital organization structure emerges centrally (best practice)
- Formal - Program office created to manage digital initiatives across business units
- Corporate leadership - Digital operation group manages/coordinates all digital operations
Please select the country your organization is headquartered.

--Select Country--

Please select your service provider type.

--Select--

Please select size of your customer subscriber base.

--Select--
Please select the country your organization is headquartered.

Austria

Please select your service provider type.

Multi network operator

Please select size of your customer subscriber base.

Less than 5 million
Congratulations for completing your assessment, based on your answers, your score puts you in **Manual Stage**.

See below example to what it means for you to progress in the digital transformation index.

Get a personalized digital transformation readiness report with benchmarks against your peers and begin the development of a detailed digital transformation roadmap specifically tuned to the needs of your organization.

**Sign in below to get your personalized Digital Transformation Readiness Report**

Peer value comparisons, Essential guidance on how to improve your digital transformation readiness and expected performance impacts that fit you and your industry.

- **First name** *
- **Last name** *
- **Email** *
- **Organization name** *
- **Phone** *

By requesting an email copy of your report, you agree to receive subsequent communications by one of our Cisco experts to discuss the report and provide ways to detail your digital transformation roadmap.

I would like to receive email communications about products and offerings from Cisco and its Affiliates. I understand I can unsubscribe at any time.

Email my personalized report

For more information on how Cisco uses and protects your data, please see our Privacy Statement.
The DX program benefits

Service Provider

**Identify the DX readiness**
Ranking per each of the SP business pillars, infrastructure, Security, Process, Organization …

**Peer comparison**
Per industry, region or size, or any other permutation

**Personalized DX roadmap**
Detailed and customized solution to advance DX readiness

**Quantify business gains**
Revenue, profit, costs, productivity and customer satisfaction from advanced to the next DX level
How To Proceed?

Quick Assessment

• Complete DX quick assessment and receive instantly your report.
• Evaluate findings and discuss with peers and management as needed.
• Identify the areas of immediate Digitalization and decide on the need for a deep dive.
• Reach out to your Cisco account team or send your enquiry to SP_DX@cisco.com

Deep Assessment

• With support of Cisco teams and DX experts perform the DX deep dive for the identified sub-domains (min 3). This is supported by an online tool.
• Receive detailed report with clear guidance on why and how to digitalize the selected subdomains.
• Discuss outcome of the report with Cisco teams & DX experts and agree on possible next steps.

Possible next steps

• Deliver executive readout
• Identify the areas where Cisco can assist in your DX activities and/or journey.
• Execute on a DX plan
• After phase 1 of the DX plan execution redo the DX quick assessment to measure progress.
Thank you