Taking the risk out of digital transformation
Expert guidance and advice from Nokia Cloud and Network Services Consulting
Changes in the telecom industry are happening at an ever accelerating pace. New market entrants, 5G core and cloud evolution, new business models and growing ecosystems are creating unprecedented disruption. The nimble and prepared have the opportunity to own this disruption and become market leaders. However, mistakes are costly and many service providers lack the in-house skills and confidence to transform themselves. An expert partner can help.

Disrupt or be disrupted.

Nokia Cloud and Network Services Consulting brings deep experience across all facets of transformation and can help you own disruption while managing risk.
At the crossroads of transformation

As consumers and businesses seek increasingly intuitive connected experiences, many communications service providers (CSPs) are moving beyond their traditional network-centric operations to become agile digital service providers (DSPs). With 5G ahead, disruptive webscale competition entering the telco market and the ongoing impacts of global crises such as the COVID-19 pandemic, the need to transform has never been more urgent.

Making the jump from CSP to DSP requires significant shifts on multiple fronts: technologically, operationally and at the people level of a CSP’s organization. Do too little or move too slowly and they risk being left behind. Take on too much or do everything on their own and the resulting mistakes could be costly.

That’s why growing numbers of CSPs are seeking the support of an expert partner to guide them through the change process — and to minimize the risk in the digital transformation journey.

The exponential pace of technological change is a major cause of the business disruption facing CSPs.

Time to 50 million users

<table>
<thead>
<tr>
<th>Technology</th>
<th>Time to 50M Users</th>
</tr>
</thead>
<tbody>
<tr>
<td>Telephone</td>
<td>22 years</td>
</tr>
<tr>
<td>TV</td>
<td>14 years</td>
</tr>
<tr>
<td>Computers</td>
<td>12 years</td>
</tr>
<tr>
<td>Mobiles</td>
<td>7 years</td>
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<tr>
<td>Internet</td>
<td>4 years</td>
</tr>
<tr>
<td>YouTube</td>
<td>3 years</td>
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<tr>
<td>Facebook</td>
<td>1 year</td>
</tr>
<tr>
<td>WeChat</td>
<td>19 days</td>
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<tr>
<td>Pokemon Go</td>
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The chart shows the time to reach 50 million users for various technologies, illustrating the rapid pace of technological change.
Becoming a DSP is about being highly innovative and data-driven, relentlessly focused on the customer experience and dedicated to using technology as a core business driver. But not all CSPs have the in-house skills or resources to transform in these ways. Even those that do may lack confidence that they’re following the latest industry standards, best practices and use cases.

Nokia Cloud and Network Services Consulting draws on deep network, software and business process expertise — as well as practical, real-world experience in helping CSPs digitally transform — to fill skill gaps and share best practices from the top industry performers. That allows us to take a vendor- and product-agnostic view of a CSP’s infrastructure and organization, looking at how everything fits together to determine the best way to overcome obstacles along the path to becoming a DSP.

With these insights, our consultants can provide tailored strategies and recommendations for CSPs to be secure yet open, stable yet scalable on demand. We help lay the foundation for operations that are reliable but constantly innovating and a service experience that is efficient but always improving — all backed by the highest levels of intelligence and agility.

When a major change program is implemented correctly, companies sustain twice the value from their prioritized opportunities two years after the change efforts have ended — and perform 30% higher on various financial performance measures.¹

Taking the risk out of digital transformation

Nokia Cloud and Network Services Consulting can help:

• **De-risk** change and transformation with expert guidance and advice

• **Simplify** the tools, technologies, organization and processes used by CSPs so they can become more streamlined, agile and efficient

• **Embed** industry best practices into CSP organizations, informed by real-world experience with CSPs of all sizes around the globe

Given that every CSP has different transformation needs, we offer six distinct consulting services:

- **Business Consulting**
  Digitally transform the business with results that can be measured.

- **Security Consulting**
  Tackle complex network security challenges with confidence.

- **Data Science and Analytics Consulting**
  Grow the business by turning data into insight and insight into strategy.

- **Technology Consulting**
  Get the best performance out of existing and future technologies.

- **Operations Consulting**
  Realign processes for greater agility — and conquer operational complexity.

- **Target Operating Mode Consulting**
  Become a truly digital organization with as-a-service platforms, infrastructure and networks.

Nokia’s consulting services are informed by best-in-class tools, frameworks and methodologies, including algorithms to predict subscriber churn and data-visualization capabilities to extract insights from massive volumes of telco data. These are distilled from our real-world experience working with CSPs, industry standards and best practices to support effective transformation and value creation.
CSPs have many reasons to adopt new business models: to meet shifting customer needs, improve the customer experience, monetize new use cases and more. Whatever is driving their decisions, they need to be sure any new business model is right for their market and that their transformation investments will yield real, measurable returns.

Nokia works with CSPs to define what success looks like for them — in both their traditional telco business and the future-facing 5G/Internet of Things (IoT) arena. We then collaborate on aligning their people, processes, technologies and data toward their transformation goals.

Business Consulting services include:

- **Customer experience consulting:** We develop and implement strategies to help CSPs enhance the overall customer experience so they can better retain high-value customers.
- **Customer care transformation consulting:** Our consultants help CSPs use network intelligence and automation to improve their contact center functions and touchpoints.
- **Digital engagement consulting:** Our team helps CSPs identify new revenue streams faster and transform the customer experience along the path to becoming a DSP.
- **5G innovation consulting:** We help CSPs take advantage of new business models and use cases to boost key performance indicators (KPIs) and define their 5G future.
- **IoT innovation consulting:** We present CSPs with insights and strategies for capitalizing on the emerging IoT opportunities of the enterprise/B2B2X market.
Data Science and Analytics Consulting

Data-driven insights to boost network performance and transform the customer experience

While most CSPs collect huge volumes of customer and network data, many struggle to turn that data into actionable insights for boosting revenues, personalizing customer engagements and fending off disruptive new competitors.

Based on a deep understanding of a CSP’s network services, capabilities, opportunities and customer experience, our consultants can provide the insights needed to make more informed, confident and strategic decisions that contribute to business results.

Data Science and Analytics Consulting services include:

• **Actionable network analytics:** We analyze the network-related drivers that can lead to a negative customer experience or degraded service performance, providing the insights CSPs need to prioritize remediation and prevent network issues from happening again.

• **Customer insights analytics:** We look at every touchpoint in the customer journey, identifying which customers are having a good experience (and which are not) to help CSPs better target upsell and retention efforts.

• **Data science and predictive analytics:** We use artificial intelligence (AI) and machine learning (ML) to provide CSPs access to the highest quality data, along with the flexibility to explore that data, enrich it for added value and discover all-new insights.

Download the brochure
Operations Consulting
Operational transformation for long-term digital success

Becoming a DSP is not just a technological shift but also a reinvention of how the organization operates. This often involves a fundamental rethinking of operations and tuning a CSP’s people and processes to an all-new way of working.

Nokia works closely with CSPs to chart the path to operational maturity and true DSP status, identifying which of their operational capabilities need modernization and which processes require streamlining — and the roles they’ll need within their teams to make those changes happen.

Operations Consulting services include:

- **Digital operations consulting**: Our team helps CSPs better understand their current level of operational maturity, analyze gaps and define their ideal future mode of operations.
- **Service operations center (SOC) consulting**: We support CSPs in evolving their SOC from reactive, network-centric legacy operations to a proactive, service-centric approach.

- **Process transformation consulting for operational and business support systems (OSS/BSS)**: We can develop a customized, multi-year roadmap with prioritized initiatives for OSS/BSS evolution designed to deliver maximum value.

Download the brochure
Target Operating Mode Consulting
A DelOps approach to agile software engineering

To design, test and deploy new services with greater agility, CSPs need a more collaborative working model for their engineering and operations teams. This requires a shift from rigid software engineering processes to a flexible, automated “DelOps” mindset (the telco version of webscale “DevOps”) where software delivery is seamlessly merged with operations.

We can help CSPs define their future target operating mode (TOM) — the systems, processes and organizational structures needed to take advantage of continuous integration and continuous delivery (CI/CD) — and align that TOM to Nokia’s target delivery mode (TDM) to ensure we can meet their service delivery demands as quickly as possible.

Target Operating Mode Consulting services include:

• **Target delivery mode advisory services**: Our team can prepare a recommended implementation strategy for CSPs that aligns their TOM with our TDM, ensuring they get the most out of our online service catalog for faster, more flexible service delivery.

• **Target operating mode advisory services**: We provide CSPs with a comprehensive assessment of their current mode of operations and prepare a step-by-step navigation strategy to help them quickly and successfully reach their TOM.

**Download the brochure**
Taking the risk out of digital transformation

Security Consulting
Digital transformation for future-ready security

As networks become more diversified and complex in the 5G era, so will the cyber threats they face. The challenge will be to create innovative new services and open ecosystems while keeping data private and infrastructure secure.

Nokia has helped hundreds of CSPs improve their approach to risk management and security operations. We apply that knowledge to deliver rock-solid security for sensitive data, critical infrastructure and all other aspects of the network.

Security Consulting services include:

• **Security operations:**
  Our consultants help CSPs improve their end-to-end security operations by implementing an advanced architecture for rapid, accurate security insights and responses across all endpoints, networks, cloud services and users.

• **Security assessment:**
  Our team delivers a complete risk assessment, security scan, architecture review and compliance audit process that is tailored to the threat profile of each CSP’s technology and market.

• **4G/5G security evolution:**
  We provide recommendations to bridge the gaps between the current and desired future state.

Download the brochure
CSPs are spending more than ever on technology—5G, automation, AI/ML—as they look to become DSPs. Investing in new technologies comes with a long list of questions about the operational and delivery models needed to implement them, how to optimize deployed solutions to get the highest possible return, and more.

Nokia consultants help CSPs make sure they’re investing in the right solutions for their needs, developing a clear plan for transitioning to an open, modern, software-based architecture with technologies that enable new operating and business models.

Technology Consulting services include:

- **Technology blueprint creation**: We provide a clear path for standards-based evolution, helping CSPs arrive at a future-proof architecture framework for their OSS/BSS.
- **Cloud consulting**: We can define a comprehensive cloud strategy aligned with each client’s business goals, including a complete roadmap for workload migration.
- **Solution optimization**: Our team can help CSPs get peak performance out of their deployed Nokia software solutions over the long term.

Download the brochure
Real-world experience, real-world results

With expert guidance and advice, Nokia Cloud and Network Services Consulting is helping CSPs around the world de-risk the digital transformation process, delivering benefits that touch every part of their organizations:

**Management**
Improve Net Promoter Score and predict and prevent churn among subscribers with low customer experience index scores.

**Marketing and sales**
Boost revenues by identifying customers who cannot access services and migrating others to higher-value technologies.

**Operations and engineering**
Reduce capital expenditures by setting priorities for technology rollouts, addressing coverage gaps, and proactively monitoring and resolving errors in a cost-efficient way.

**Customer care**
Reduce operating costs by diagnosing individual customer complaints, automating troubleshooting steps and conducting preventive complaint analyses.

**Recent engagements**
- **North America**
  - Revenue recapture of $20 million annually for a Tier 1 CSP through network- and customer-centric insights derived from AI/ML advanced analytics.
- **Latin America**
  - Implementation of a multi-year transformation roadmap with 100+ initiatives across a Tier 1 CSP’s processes, people and platforms.
- **Africa**
  - +12% campaign adoption, +40% churn prediction and +15% efficiency in customer operations through cross-functional business transformation for a Tier 1 CSP.
- **Asia**
  - 20+ network performance improvement use cases implemented on a Tier 1 CSP’s analytics platform.
- **Europe**
  - Prioritization of the customer experience by using analytics-driven insights to automate operations, reducing costs for a Tier 1 CSP.
A trusted partner for digital transformation

Nokia is unique in the consulting services arena, bringing a broad perspective on how CSPs are tackling the digital transformation challenge.

Our global team of consultants has deep expertise in the most complex, multi-vendor CSP environments. We have extensive software and network knowledge, backed by access to the latest research and innovation from Nokia Bell Labs. And with a track record of successful 5G, IoT and cloud solution deployments, we have the real-world experience to guide the creation and implementation of end-to-end transformation blueprints.

Visit our website to learn more — or contact us to start a Nokia Cloud and Network Services Consulting engagement today.
About Nokia

We create the technology to connect the world. Only Nokia offers a comprehensive portfolio of network equipment, software, services and licensing opportunities across the globe. With our commitment to innovation, driven by the award-winning Nokia Bell Labs, we are a leader in the development and deployment of 5G networks.

Our communications service provider customers support more than 6.4 billion subscriptions with our radio networks, and our enterprise customers have deployed over 1,300 industrial networks worldwide. Adhering to the highest ethical standards, we transform how people live, work and communicate. For our latest updates, please visit us online www.nokia.com and follow us on Twitter @nokia.

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