SUTHERLAND®

THE TELECOM DIGITAL TRANSFORMATION PLAYBOOK

Achieve Growth, Efficiency & Resilience for a New Era

Introduction: **Why This Playbook?**

Disruption in the telecoms industry is accelerating, and CSPs are feeling the pressure. Across every aspect of their business, they must navigate wave after wave of shifting market forces to succeed in this new era.

What is driving the shift?

According to the GSMA, between 2023 and 2030, more than three-quarters of CSPs' $1.5 trillion CAPEX is expected to be 5G-related.[1] It is therefore unsurprising that a survey of more than 300 CSP respondents cited 5G monetization as the mobile industry's biggest issue.[2]

Private 5G is an area that holds potential for CSPs, with expected spend on private 5G expected to reach $7 billion by 2027.[3] However, private 5G, while full of promise, presents delivery complexities that many CSPs are not equipped to handle on their own.

Artificial Intelligence (AI) and automation are, unsurprisingly, major drivers of change across CSP businesses, with promises of greater efficiency at lower costs set to overhaul customer experience for lower churn and enhanced ARPU. However, for CSPs to take advantage, they need systems that fully support seamless AI-driven customer experience.

As well as positive market forces, CSPs must also address the rise in **cyber threats** that come with expanded networks that offer a greater attack surface. Not only is this driven by a need to protect customers, but by mounting regulatory pressure in every region.

Cloud-native transformation of business and operational support systems (BSS/OSS) is no longer optional. However, with CSPs' spending on telecoms-related OSS/BSS software and services expected to reach $80 billion by 2028 there needs to be a focus on migration that delivers ROI.[4]

Finally, CSPs must take control of their own **data strategy** if they are to fully reap the benefits of Digital Transformation. The volume of data held by CSPs is vast and valuable. But, to take advantage of connected intelligence, they need to build the systems to handle their data and reach its potential.

The scale and scope of these challenges is seismic and no single strategy will solve them all. To succeed, CSPs need coordinated transformation across multiple fronts, guided by a clear vision. That's where this digital transformation playbook comes in.

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[1] The spend of an era: mobile capex to reach $1.5 trillion for 2023–2030
[2] Mobile world live: Industry Survey 2025
[3] Analysys Mason: Leveraging cloud-native technology: CSP strategies for success in the 5G private market
[4] CSPs' spending on telecoms-related OSS/BSS software and services will reach USD80 billion by 2028

Using the Playbook

Taking each area in turn, we provide a framework for transformation. It works as a strategy compass, breaking down transformation opportunities and mapping them against real challenges, showing proven solutions to overcome adoption anxiety, and providing an action plan for implementation.

It is structured to give clarity to complex transformation programs, helping to align stakeholders and develop clear strategies designed to deliver maximum, tangible impact.

This playbook is a practical guide for navigating these challenges across **six focus areas:**

Customer Experience Transformation

Network Operations & Automation

Cloud & IT Modernization

Cybersecurity & Fraud Prevention

Collections, Billing & Financial Optimization

Connected Intelligence

Customer Experience
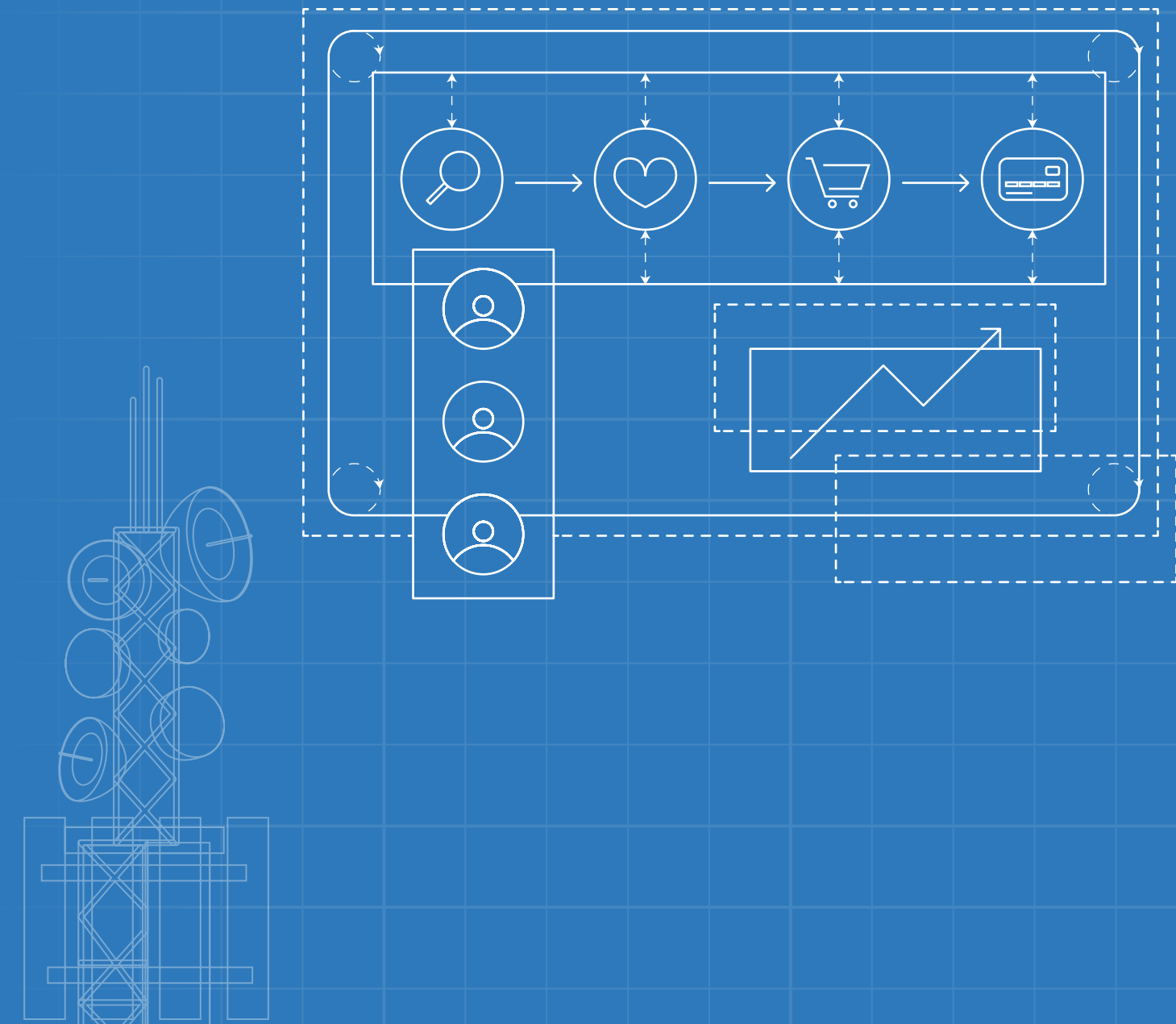## Transformation

Overview

Customer expectations have grown exponentially. Whether your customer is B2C, B2B, or B2B2X, the bar for service has been raised. Disconnected journeys, friction-filled processes, and slow complaint resolution are no longer acceptable. The direct consequence of poor customer experience is lower customer loyalty, limited ARPU, and churn.

Today's customers expect real-time resolution, seamless transitions between channels, and proactive engagement that anticipates their needs. Unfortunately, many CSPs are still relying on fragmented systems and outdated support models that create bottlenecks and inconsistent experiences. This has a tangible impact on the bottom line with poor customer service remaining one of the top drivers of churn, while personalized, frictionless journeys correlate with higher retention and lifetime value.

Opportunity

AI offers a powerful path forward. Deploying AI-powered CX enables CSPs to **remove friction from processes, streamline interactions, and personalize engagement at scale, while lowering cost-to-serve.** With the right tools, CSPs can move from reactive service models to proactive, intelligent experiences.

Transformation Checklist

Multiple AI-powered tools and solutions can accelerate customer experience transformation to meet modern customer experience needs:

- ☐ **Conversational AI & virtual assistants** to provide fast, 24/7 support

- ☐ **AI governance** to ensure ethical and transparent customer interactions

- ☐ **AI-augmented agent assist** to empower support teams with real-time guidance

- ☐ **Predictive analytics** and a 360° dashboard to anticipate customer needs and prevent churn

Action Plan Framework

LINES OF BUSINESS IMPACTED

	Customer Service	CX/Marketing	Revenue Ops
JOBS TO BE DONE	Deploy virtual assistants to improve First Contact Resolution (FCR)	Use data to personalize customer journeys and integrations	Overhaul and improve customer experience to reduce churn
	Use AI tools to empower agents and reduce Average Handling Time (AHT)	Improve customer perception by raising Net Promoter Scores (NPS)	Build personalized relationships with customers to increase retention and LTV

Here to Help

At Sutherland, we offer a full suite of services that support AI-powered customer experience transformation and tick every box on the transformation checklist. Sutherland Agent Success[5] enhances the productivity of contact center agents, CX360[6] Analytics supercharges data insights for better decision making, and Conversational AI[7] automates customer interactions for fast problem resolution.

Our ecosystem of partners in conjunction with Sutherland solutions ensure CX is optimized and enhanced from end-to-end. This includes Salesforce Agentforce increasing efficiency across account and contact management, LivePerson delivering real-time agent assist in customer conversations, and Ushur enabling responsive, self-service experiences.

Proven Impact

Sutherland worked with a Tier-1 global operator to transform its customer service offering using AI tools. **The CSP reduced support call handling time by 20%** through optimal use of the team.

Read More

[5] Supercharge Your Agent Experience
[6] Transform Customer Journeys with AI Analytics Software
[7] Contextualized Automation for Your Routine Chat and Voice Interactions
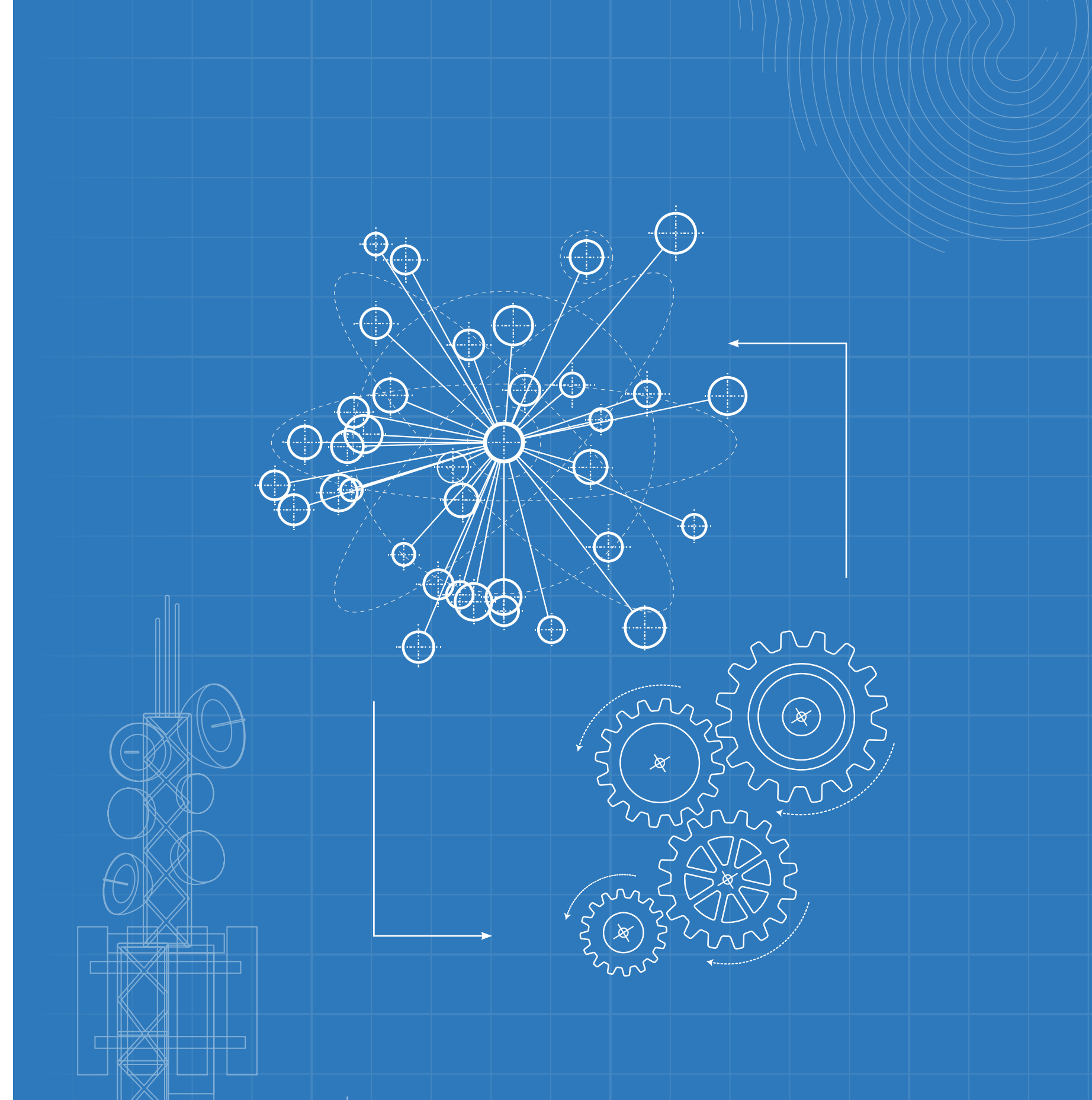
Network Operations &
Automation

Overview

Decades of rapid network evolution have forced CSPs to continuously layer new technologies on top of legacy infrastructure. As 5G rollouts, private network deployments, and satellite integrations accelerate, these already fragile systems face unprecedented strain. Traditional approaches to network operations (largely manual, reactive, and siloed) are no longer sustainable.

CSPs are expected to deliver **high-availability services with minimal downtime and lower operational costs.** Customers, both consumer and enterprise, expect seamless connectivity. Any disruption, lag, or service gap directly impacts brand loyalty. Add to this the growing burden of field service logistics, rising energy costs, and demand for service flexibility, and the imperative to rethink NetOps becomes clear.

Opportunity

AI and automation offer a fundamental shift from reactive firefighting to proactive, predictive operations. By embedding intelligence across the network lifecycle, CSPs can **gain operational agility, minimize outages, and shift engineering teams toward higher-value activities.** Instead of responding to alarms, operators can pre-empt issues, orchestrate responses across environments, and optimize performance based on real-time analytics.
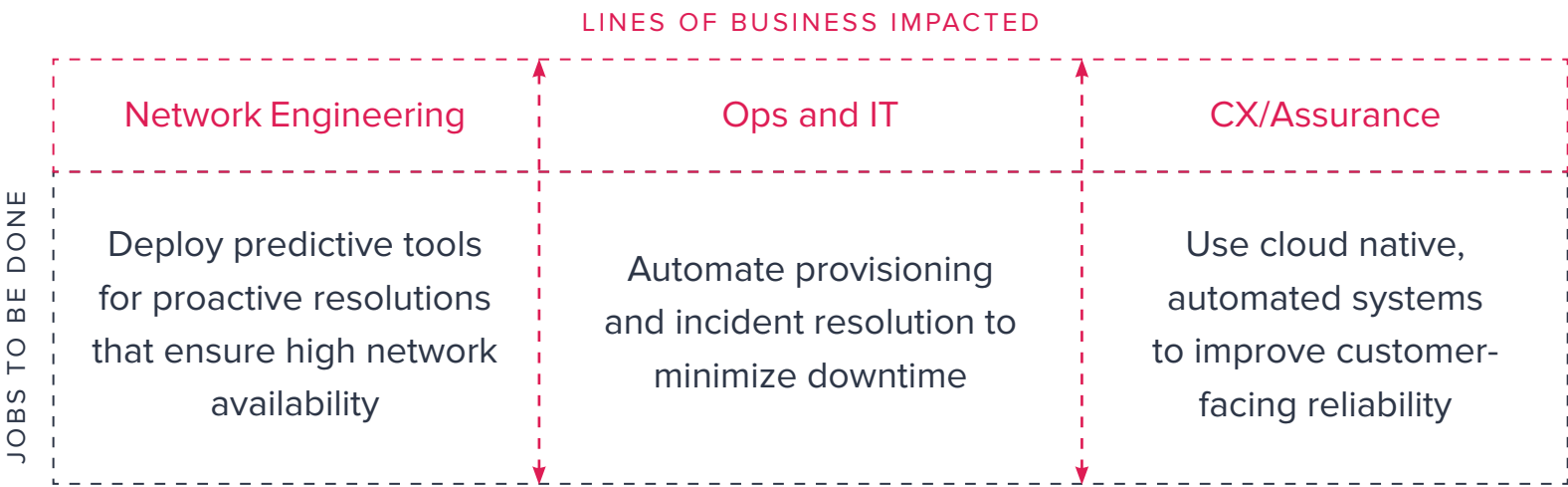
Transformation Checklist

In order to successfully transform network operations using AI and automation, CSPs need to look to deploy a suite of tools that support multiple aspects of network operations:

- [ ] **Predictive network analytics** for proactive maintenance
- [ ] **Zero-touch** automation for provisioning and scaling
- [ ] **Satellite and 5G integration** for future evolution and continuity
- [ ] **Cloud-native OSS/BSS** for agility and orchestration
- [ ] **Diagnostics as a Service** for regular network health checks and resolutions

Action Plan Framework

LINES OF BUSINESS IMPACTED

Network Engineering	Ops and IT	CX/Assurance
Deploy predictive tools for proactive resolutions that ensure high network availability	Automate provisioning and incident resolution to minimize downtime	Use cloud native, automated systems to improve customer-facing reliability

JOBS TO BE DONE

Here to Help

Sutherland's NetOps AI[8], AI-based orchestration tools, and cloud-native BSS/OSS[9] offerings support real-time, intelligent network operations. We help CSPs transition from patchwork systems to cohesive, future-proof NetOps environments, including remote monitoring, L1/L2 automation, guided fulfilment remediation, and anomaly detection workflows.

Our intelligent incident analysis prioritizes and routes customer complaints, and our LogAnalyzer.AI ensures Gen AI interactions are informed with key log data to identify issues.[10] By integrating with legacy and next-gen infrastructure alike, we ensure business continuity while driving efficiency.

Proven Impact

By working with Sutherland to deploy multiple AI and automation tools for improved NetOps, **a Tier-1 CSP reduced downtime by 30%**. Additionally, they were able to improve SLA adherence by using predictive automation to proactively address problems.

[8] Transform Telecommunications in the AI Era
[9] Move Beyond Connectivity to Unlock Added Value
[10] Log Analyzer AI

Cloud & IT
Modernization

Overview

Legacy IT and siloed architectures create significant barriers to transformation. In many CSPs, outdated infrastructure still forms the backbone of core operations. They slow down innovation, inflate costs, and make the agility to adapt to market demands impossible. These systems are often brittle, with patchwork integrations and mounting technical debt.

As CSPs explore new revenue streams, like edge computing, IoT offerings, or B2B managed services, their legacy environments hold them back. Launching new services takes too long. Scaling infrastructure across new geographies or customers strains resources. Operational overheads continue to rise.

Opportunity

Modernizing IT and embracing cloud-native principles creates an opportunity to radically improve agility, reduce operational burden, and future-proof infrastructure. Done well, cloud transformation provides a flexible, scalable foundation for innovation, without compromising on performance or security.
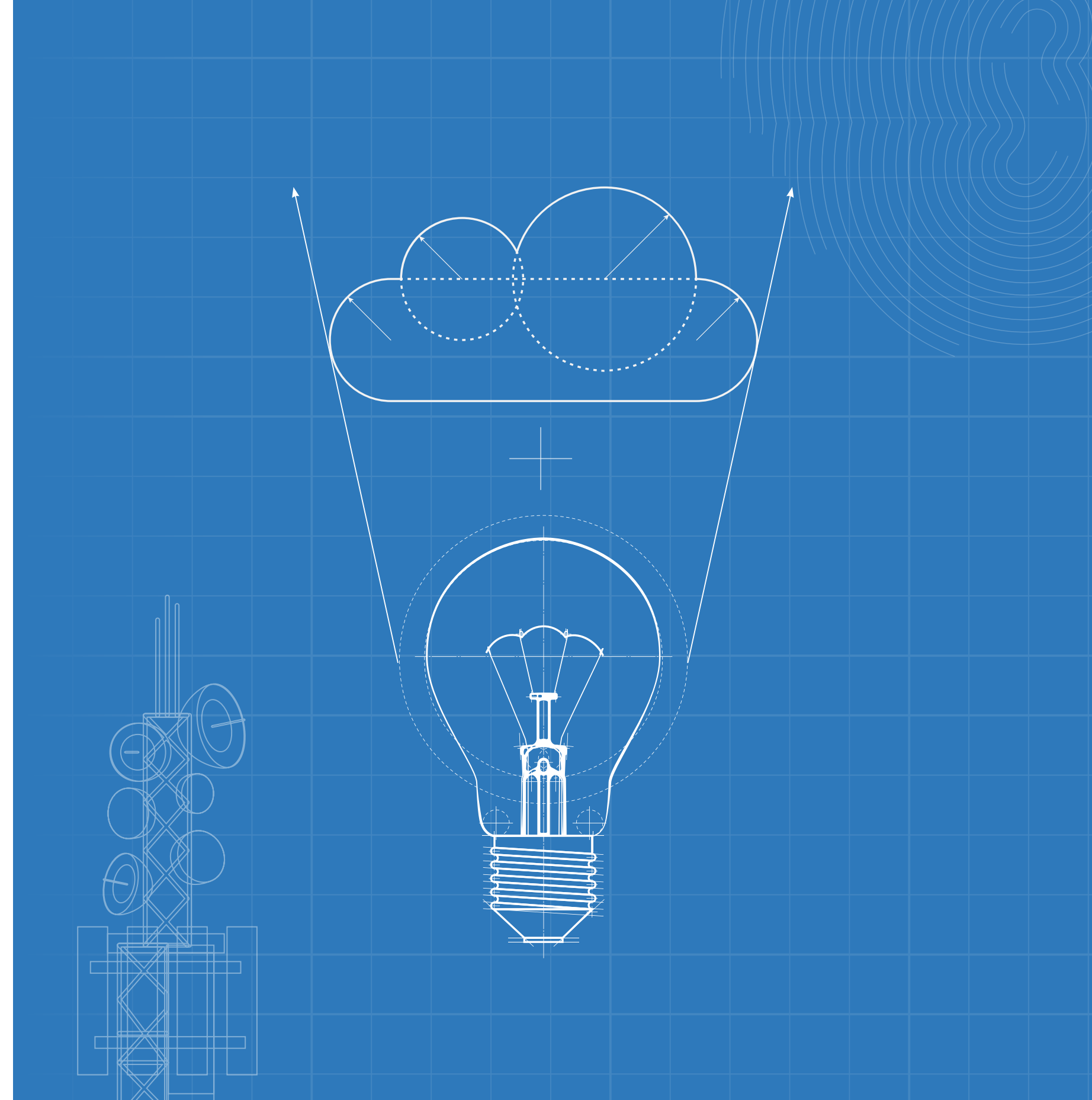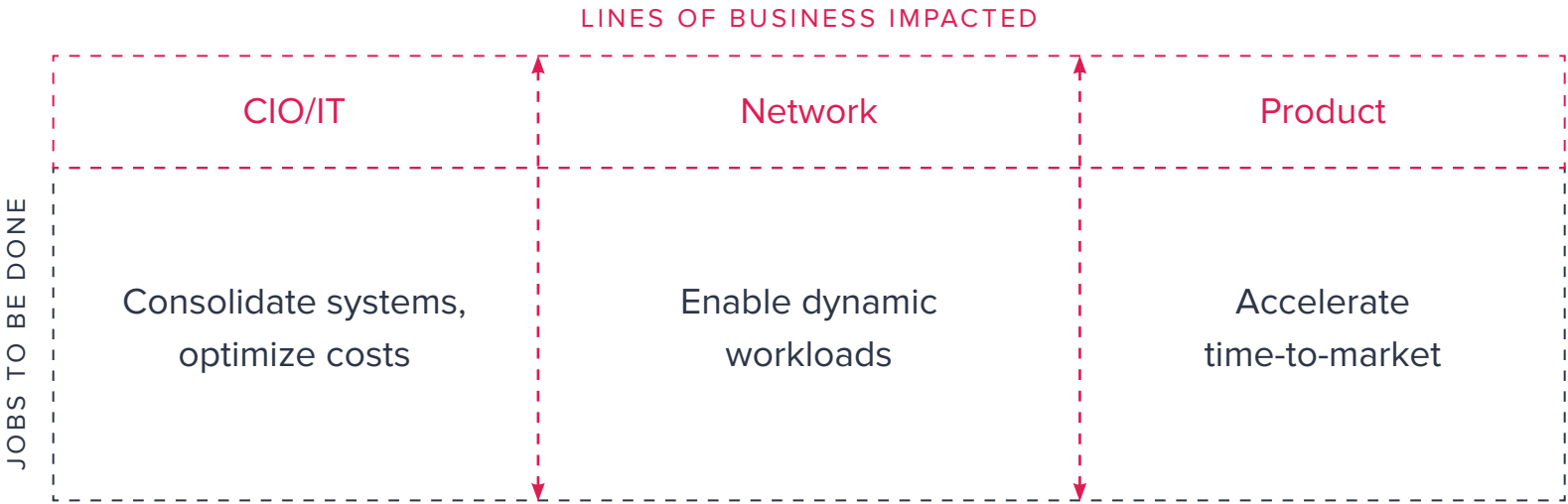
Transformation Checklist

This aspect of digital transformation requires a comprehensive approach that ensures all aspects of the business are migrated to the cloud, without impacting business as usual:

- **Cloud migration strategy** and workload modernization for a completely cloud-based modern infrastructure

- **MEC & private 5G** infrastructure enablement to enable the full range of business opportunities

- **AI-powered app lifecycle** and cloud cost management to ensure the cost benefits are realized.

- **DevOps and CI/CD** to support rapid service delivery and business agility

Action Plan Framework

LINES OF BUSINESS IMPACTED

CIO/IT	Network	Product
Consolidate systems, optimize costs	Enable dynamic workloads	Accelerate time-to-market

JOBS TO BE DONE

Here to Help

Sutherland works as a partner for cloud migration and transformation from strategy to execution. Our tools, such as S3H.AI for self-healing operations, and QaaS & Cloud Cost Governance tools, help CSPs build scalable digital foundations while maintaining business continuity.

Proven Impact

Sutherland worked with a Tier-1 telco on a cloud modernization and automation project. By utilizing Sutherlands tools and services **the CSP was able to achieve their modernization goals while realizing a 30–40% OPEX reduction.**

Cybersecurity & Fraud
Prevention

Overview

As networks expand and ecosystems grow, **CSPs face rising cybersecurity risks on multiple fronts.** From SIM swap fraud and data theft to regulatory scrutiny and brand damage. Every new device, channel, and integration point adds to the attack surface. Meanwhile, fraudsters are becoming more sophisticated, leveraging AI and social engineering to exploit vulnerabilities in real time.

At the same time, **global regulators are tightening requirements around data privacy and security.** Noncompliance isn't just a reputational issue; it carries steep financial penalties. For CSPs juggling aging infrastructure, customer data responsibilities, and expanding service portfolios, staying secure and compliant is a daunting task.

Opportunity

AI-led cybersecurity solutions allow telecom providers to minimize their cyber risk with powerful tools that keep pace with the threat landscape. These tools allow for **real-time protection and adaptive defense without slowing business operations.** As AI threats become more sophisticated, CSPs need equally intelligent systems to protect their customers, networks, and reputations.
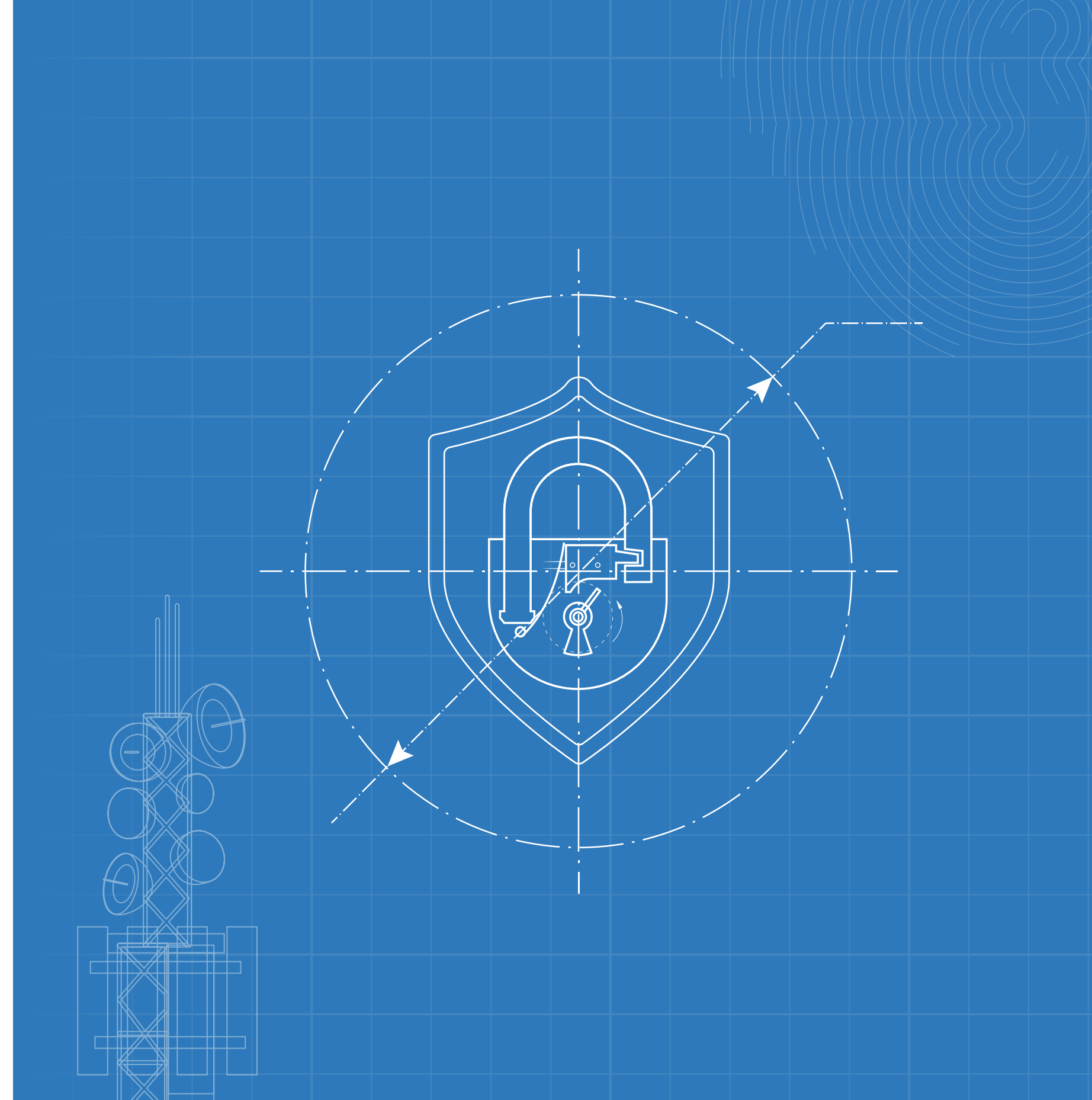
Transformation Checklist

For a successful transformation strategy around cyber threats and compliance, CSPs need to deploy tools that cover all aspects of security and regulation:

- **Continuous threat monitoring** and anomaly detection to proactively identify possible attacks

- **Automated compliance** and regulatory alignment tools for streamlined adherence

- **Real-time risk scoring** during interactions to identify risk

Action Plan Framework

LINES OF BUSINESS IMPACTED

	Security Ops	Risk & Compliance	Revenue Assurance
JOBS TO BE DONE	Use AI and automation for real-time response and remediation	Reduce audit complexity and ensure controls with automated compliance	Limit financial leakage from fraud with proactive fraud prevention tools

Here to Help

Sutherland has worked with hundreds of customers to integrate AI and automation into their security strategy for improved outcomes. By leveraging solutions like Sutherland Security Intelligence Platform, Fraud Prevention AI, and Agent-side fraud detection tools, businesses benefit from powerful and comprehensive cyber protection.

Proven Impact

One Tier-1 CSP cut fraud losses by 40% using real-time detection and automated mitigation tools.
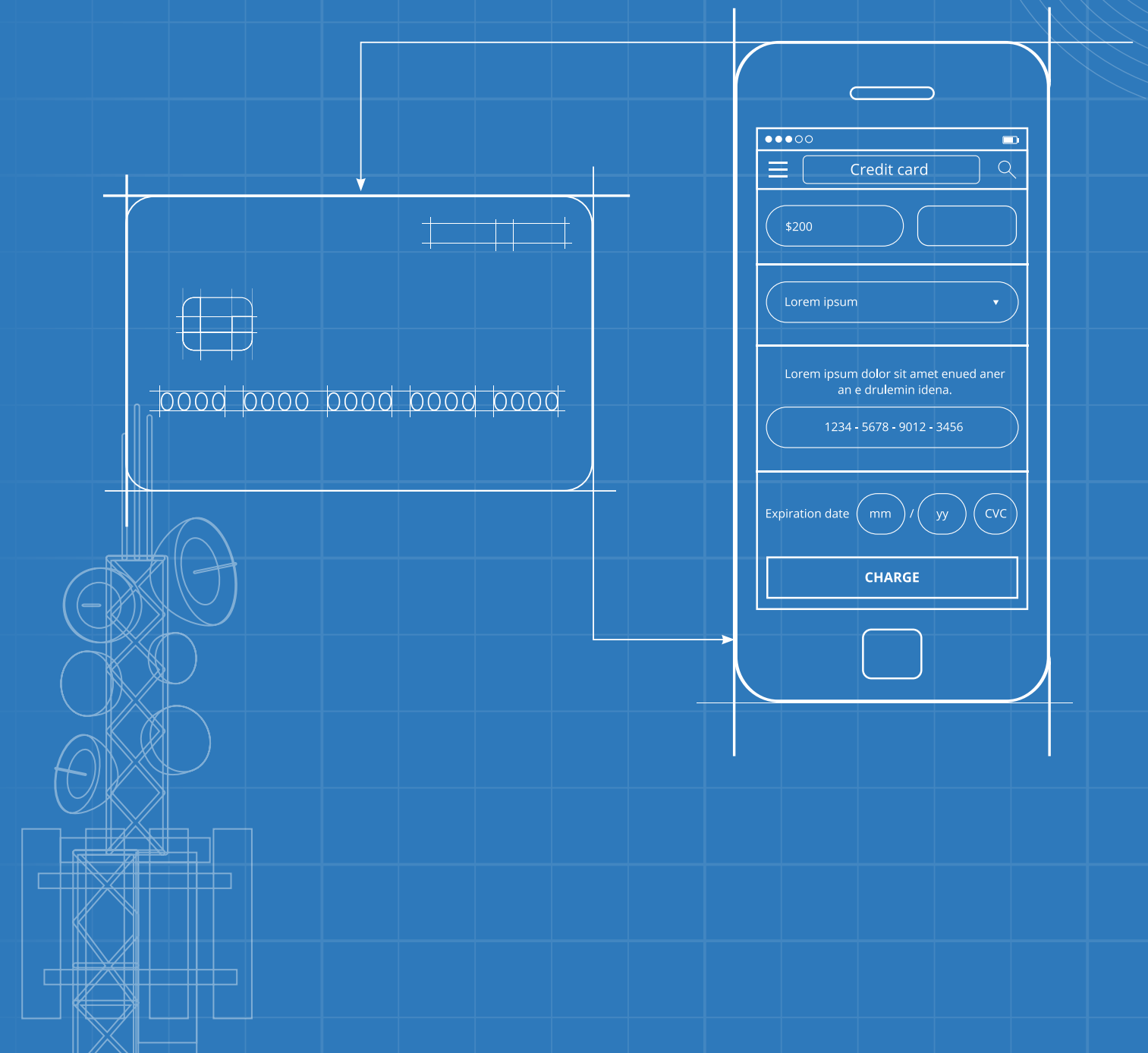
Collections, Billing & Financial
Optimization

Overview

Manual financial processes increase disputes, delay collections, and erode customer trust. As CSPs evolve their offerings through bundles, subscriptions, and tiered pricing models, **billing and revenue assurance systems are struggling to keep up.** Disconnected platforms, limited automation, and outdated reconciliation methods result in revenue leakage and poor customer experiences.

Opportunity

AI-driven automation can radically improve financial operations. From **streamlining collections and prioritizing at-risk accounts to proactively flagging anomalies and enhancing billing transparency,** CSPs can achieve real efficiencies and accelerate cash flow. By shifting to a digital-first, insight-led approach, they can strengthen financial health while also boosting customer satisfaction.
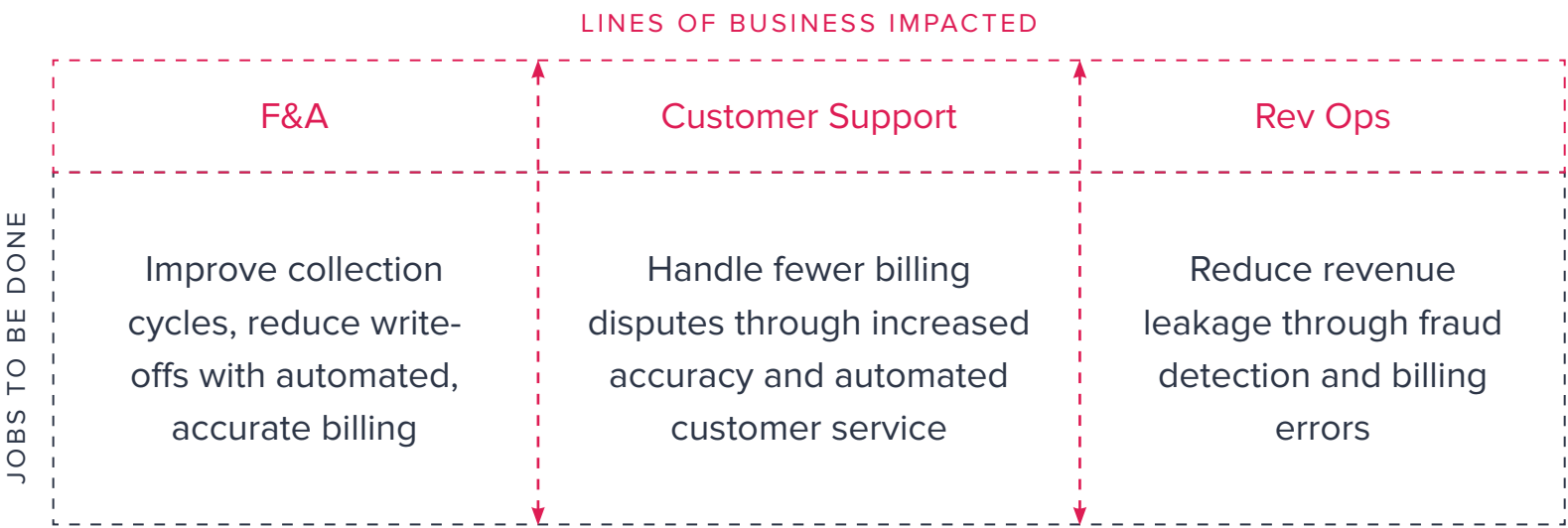
Transformation Checklist

AI-powered and automated billing, collection, and financial tools are transformative for CSPs looking to streamline and improve processes by removing friction and opportunity for error:

- **AI-powered billing and collections workflows** improve accuracy and speed up processes

- **Real-time credit risk scoring and fraud alerts** allow for proactivity to minimize losses

- **Digital self-service tools** for bill transparency build customer trust

Action Plan Framework

LINES OF BUSINESS IMPACTED

F&A	Customer Support	Rev Ops
Improve collection cycles, reduce write-offs with automated, accurate billing	Handle fewer billing disputes through increased accuracy and automated customer service	Reduce revenue leakage through fraud detection and billing errors

JOBS TO BE DONE

Here to Help

Sutherland's SmartBilling AI platform helps CSPs intelligently manage billing workflows and collections strategies. Our automated dispute resolution tools streamline case handling and reduce overhead, while fraud detection capabilities ensure integrity across financial processes. Digital customer portals close the loop, giving subscribers better visibility and reducing calls to contact centers.

Proven Impact

Sutherland worked with a global CSP experiencing challenges around revenue collection. **By deploying AI-driven billing, they were able to see a 20% reduction in overdue payments.**

Connected
Intelligence

Overview

CSPs are data rich but insights poor. They capture enormous volumes of information across customer touchpoints, network performance, billing systems, and digital channels. Yet without integration and governance, this data remains fragmented, underutilized, and ultimately of limited value.

Disconnected systems stall personalization, revenue growth, and hinder internal decision-making. It's not uncommon for different teams across marketing, customer care, finance, and engineering to operate with different views of the same customer. As data accumulates in silos, opportunities are missed: for upsell, for churn mitigation, for optimized pricing, or proactive service intervention.
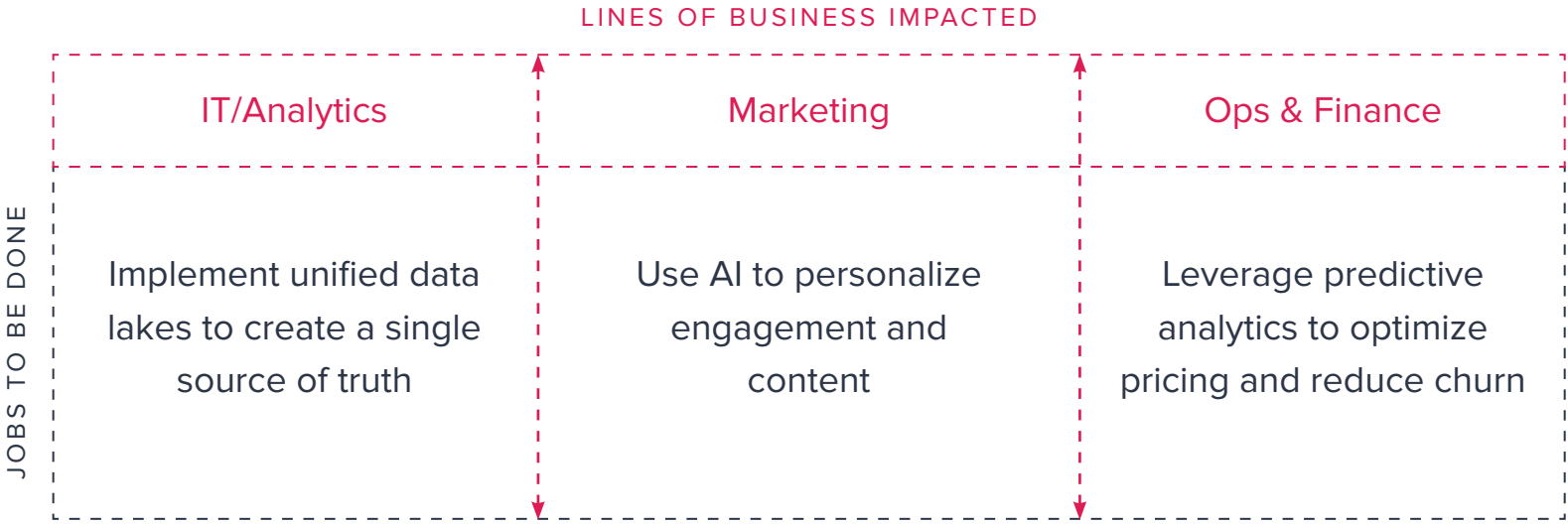
Opportunity

Connected Intelligence **transforms raw data into real-time, actionable insight. By integrating and governing data across the organization,** and applying AI to extract value, CSPs can make better decisions and uncover new efficiencies. Whether predicting churn, fine-tuning campaigns, or optimizing network usage, Connected Intelligence is the key to becoming truly data-driven.
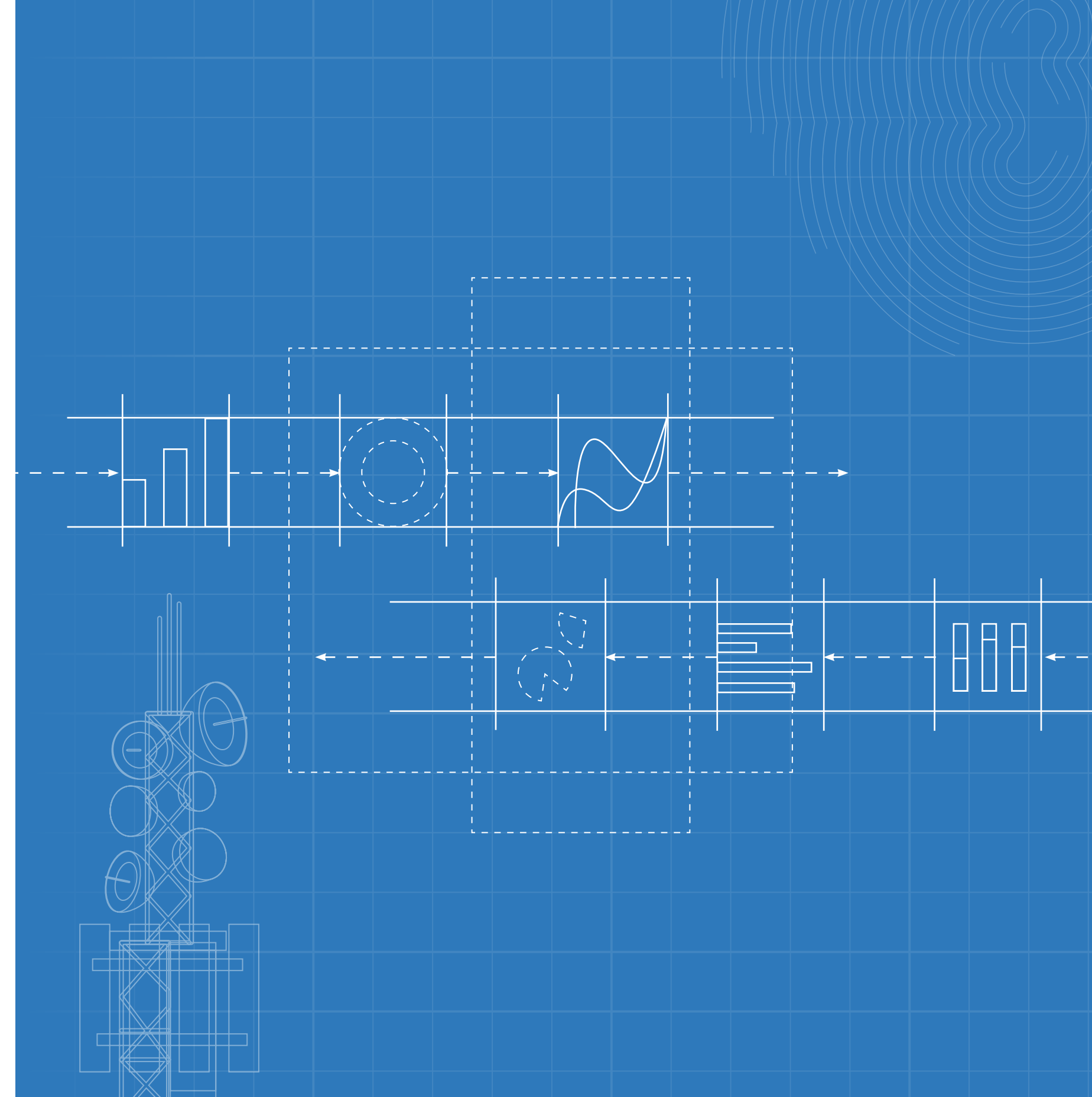
Transformation Checklist

- ☐ **Unified data lake** to integrate CX, ops, billing, and network data
- ☐ **AI-led personalization** and churn prediction
- ☐ **Predictive analytics** for revenue and cost optimization

Action Plan Framework

LINES OF BUSINESS IMPACTED

	IT/Analytics	Marketing	Ops & Finance
JOBS TO BE DONE	Implement unified data lakes to create a single source of truth	Use AI to personalize engagement and content	Leverage predictive analytics to optimize pricing and reduce churn

Here to Help

Sutherland helps CSPs break down silos and activate their data. Our Connected Intelligence Platform integrates cross-functional sources into a unified environment, while tools like CX360 and our AI governance framework provide the analytical power and oversight needed to make the data meaningful and usable across the business.

Proven Impact

A Tier-1 operator deployed Sutherland's Connected Intelligence Platform **to achieve a unified data strategy and power real-time decision-making across marketing and operations.**

Moving Forward

Transformation doesn't have to be overwhelming. But it does require a deliberate and structured approach. For CSPs, the path forward isn't about replacing everything at once. It's about identifying where change will drive the most impact and moving decisively in that direction.

Whether the goal is reducing operational costs, accelerating service delivery, preventing fraud, or personalizing customer experiences, the six areas outlined in this playbook offer a proven foundation. Together, they represent the cornerstones of a modern, future-ready telecom operation.
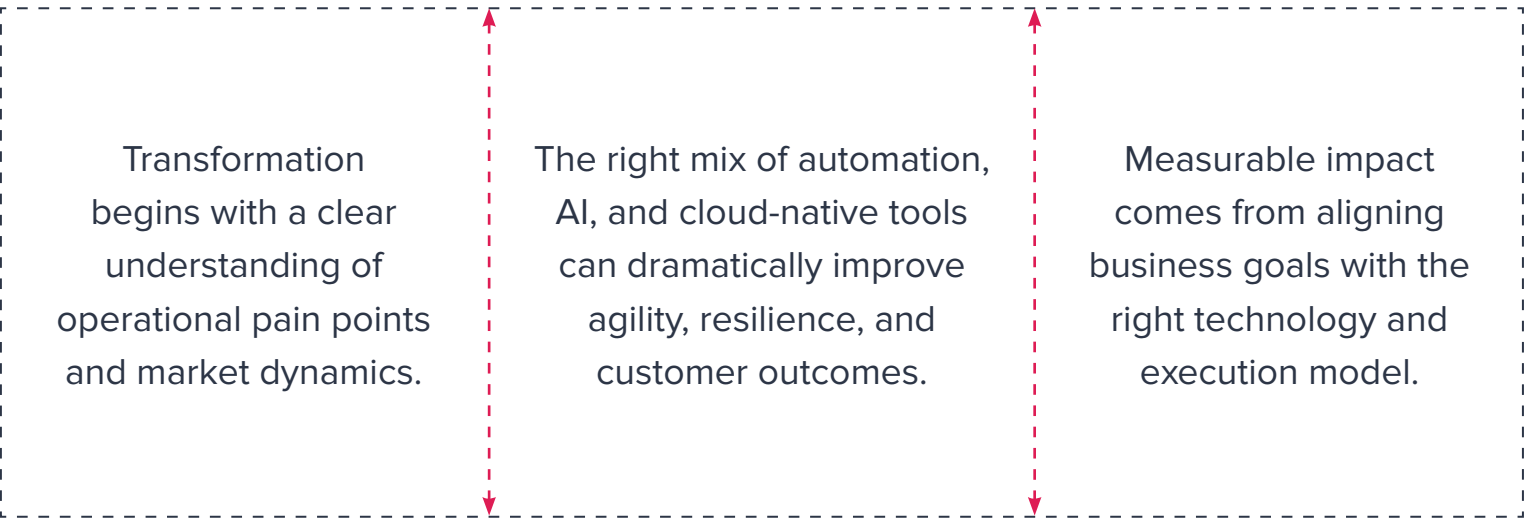
Sutherland's Role

From initial assessments to use case identification and implementation roadmaps, Sutherland partners with CSPs at every stage of their transformation journey. We bring deep telecom expertise, robust technology platforms, and a relentless focus on outcomes.

Key Takeaways

Transformation begins with a clear understanding of operational pain points and market dynamics.	The right mix of automation, AI, and cloud-native tools can dramatically improve agility, resilience, and customer outcomes.	Measurable impact comes from aligning business goals with the right technology and execution model.

What's Next

Use this playbook as a foundation to:

- Align stakeholders around a shared roadmap and measurable outcomes.

- Pilot, scale, and optimize, starting small but thinking big.

- Prioritize the most critical transformation levers based on business goals and market pressure.

Transformation is a journey.
Let's take the next step, together.

Artificial Intelligence. Automation. Cloud Engineering. Advanced Analytics. For Enterprises, these are key factors of success. For us, they're our core expertise.

We work with global iconic brands. We bring them a unique value proposition through market-leading technologies and business process excellence. At the heart of it all is Digital Engineering — the foundation that powers rapid innovation and scalable business transformation.

We've created over 200 unique inventions under several patents across AI and other emerging technologies. Leveraging our advanced products and platforms, we drive digital transformation at scale, optimize critical business operations, reinvent experiences and pioneer new solutions, all provided through a seamless "as-a-service" model.

For each company, we provide new keys for their businesses, the people they work with, and the customers they serve. With proven strategies and agile execution, we don't just enable change — we engineer digital outcomes.

SUTHERLAND®
digital outcomes.

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