



www.pipelinepub.com

Volume 20, Issue 5

Data-Driven DX Decisions in Telecom's Digital Transformation

By: [Anna Tyschenko](#)

Telcos able to transform numbers into valuable insights are halfway down the road to success. According to IDC's projection, worldwide data is expected to reach [one trillion gigabytes by 2025](#). Organizations must implement data-driven philosophies on a strategic level to win. It's easier said than done, however, and calls for significant changes. Let's see what it takes and how it can affect digital transformation. Keep reading.



Why are Data-driven Decisions Essential for Telcos in 2024?

The year 2024 might cause a fundamental shift in the technological world, making data a pushing element. Foremost, data-driven decisions can help distill vast amounts of information into correct choices. Having powerful analytic tools and methodologies opens the gates to comprehensive client understanding and allows enterprises to respond to obstacles and leverage operations effectively.

Being armed with data-driven insights helps to detect network failures, diminish their negative impact, and reduce downtime. Also, should there be any equipment issues, it helps to identify them before they become expensive problems. From a customer service perspective, data driven insights and analytics enable the tailoring of offers to individual needs for an enhanced customer experience.

Data Analytics and Predictive Analytics as Catalysts for Data-driven Decisions

Making data-driven decisions inevitably means applying both data and predictive analytics. By looking at user past behaviors, historical data allows businesses to identify trends, patterns, and insights to guide them in their strategic planning.

Predictive analytics, however, takes it a step forward, employing additional statistical models and system analyses to prognosticate future outcomes. Making use of data from this angle enables firms to predict shifts in consumer and industry trends. It reveals potential risks, enabling bold yet informed decisions.

Top Benefits of Data-driven Decisions for Telcos

Personalized approach: Decisions based on advanced data analytics facilitate the offering of custom proposals to clients. Instead of simply looking at standard points, e.g., age, gender, and demographics, telcos have additional data resources available, such as browser history and call records. According to the numbers, firms that invest in personalization might get over [40 percent](#) return in revenue.

Faster rollout of relevant services: Big Data helps with faster and more efficient analysis of incoming data, which allows for detecting individual patterns for customer behavior and preference analysis. Owning this information helps a company prepare new releases swiftly and with better confidence and quality. There's also no need to spend extra time and resources on advance testing or trials of the service or product. It allows faster rollout while helping to improve existing services and products.

Optimized workflow: According to Dell's Big Data stats, [85 percent](#) of telcos point to network optimization as a top priority for the industry. The analysis of information that comes from user devices or network equipment helps detect where data flow is interrupted. Clearing the way for efficient load balancing commits to even distribution. As a result, using these insights significantly improves the dependability and effectiveness of telecom services.

Swift adoption of innovation: Receiving information from diverse sources can help companies create innovative products and services. To advance in these innovation efforts, [60 percent](#) of organizations apply data analytics. Using those insights to guide service or product development also helps businesses improve their performance and provide the right solutions for their customers.

Competitive Edge: Staying ahead of competitors plays a crucial role for telcos and data analysis plays a major role in their doing so. By drawing out requisite numbers and implementing data-driven decisions, an organization can gain a significant competitive advantage.

How Telcos Should Process Data to Make it a Driver of their DX

Data is money in the digital world. The digital transformation won't succeed if the right infrastructure is not there to facilitate its transmission and storage. To keep up with growing demand and needs, telcos should guarantee omnichannel internet connectivity by constructing gigabit roads and high-speed infrastructure. Transition toward a data-powered digital transformation allows telcos to make accurate, data-driven choices in areas like customer service, sales, and marketing. But to do it right a few things should be considered.

Investments in data management infrastructure: The telecommunications landscape is dynamic. Organizations doing business there should be ready for rapid changes and continuous development of their core structure to handle the non-stop growing number of connected devices. [More than a hundred](#) new gadgets connect to the internet every second! With so many devices plugged in and the diversity of data they generate, modern infrastructure is a must. However, it's not only about costs;

telcos that enable vast data flows through their systems have an opportunity to develop them as an income source. *IoT and AI applications for data model creation:* AI opens up new opportunities in the fields of robotic process automation (RPA), speech detection, machine learning, and intelligent systems. Firms are creating additional data collecting points because of the need for large amounts of data to train the algorithms in AI tools and apps.

As for the IoT, it is one of the main motives for CSPs' focus on AI. IoT devices are becoming increasingly integrated into costly telecom infrastructures, such as data centers and towers. Through their managing and maintaining of machinery these devices save downtime and allow for enhanced customer support.

By intelligently controlling network coverage and capacity distribution, AI optimizes network traffic and improves user interactions. IoT data and AI analytics working together are fostering transformation in the telecom industry and producing better, customer-focused goods and services.

Increase employee awareness: According to PwC's report, just [56 percent of firms](#) provide training on new tools and procedures for their teams. The link between adoption and the use of new technology is all too easily broken. By modifying the corporate culture and raising awareness during the transition to innovative solutions, this problem may be resolved.

Staff members empowered with transformative technology can significantly increase the efficiency of company operations. Businesses will likely benefit from empowering their teams with workflow management, project management, and process automation tools and platforms. But they can only be useful if they are implemented throughout the entire organization. Team members need to become advocates for digital transformation.

Core Challenges CSPs Face in a Data-driven Approach

Processing huge data volumes: Having access to an enormous volume of information is not in itself beneficial. The difficulty of the transformation process increases with the amount and variety of data churned. Those terabytes present a challenging issue. Telecom businesses must learn to prioritize, navigate toward, and exploit only suitable information focused on their customers' past behaviors.

Cybersecurity risks: At the same time, data must be safeguarded and its collection and use must comply with relevant privacy laws and regulations. [37 percent of users, up from 34 percent](#) only two years ago, have broken up with businesses because of data concerns. And of course we all know that a company that deals with sensitive data will attract hackers. As a safeguard, smart businesses frequently employ cybersecurity experts who implement best practices and tactics to protect their systems against attacks.

Compliance pitfalls: Compliance responsibilities are increasingly concerning for telco CEOs. Indeed, [61 percent](#) report that regulation risks will affect their businesses in the upcoming years. Certain markets have had controversial merger assessments recently, and the attitude of regulators regarding consolidation remains uncertain. In 2024, the base erosion and profit shifting (BEPS) 2.0 regulations will come into effect. This can be a major headache for businesses in different countries. Another source of dispute is the regulation of AI in its developing stages. Differences are already beginning to surface at the national level over how best to balance between guidelines and proposed laws.

The Bottom Line

Digital transformation in telecom is always data driven. Data volume is skyrocketing. To navigate effectively, organizations must learn how to extract only the information that is relevant to their missions. The proper understanding of customer behavior and diving into the end-to-end journey opens up the way to specially crafted solutions that target the right individuals and, as a result, raise profits.

This should be technically supported, as a strong back-end allows coordinating with other data centers to get salient information about customer patterns without asking unnecessary questions. If the proper investments are put in place at the right time, digital transformation will prove to be a gift that keeps on returning.

Not for distribution or reproduction