Eight Dimensions to Consider for IoT Strategies

By: Jan Abrahamsson

Today, data has become one of the most valuable assets on the planet. With developments in artificial intelligence (AI) and machine learning (ML), it's now possible to spin mountains of data into gold in the form of actionable business intelligence.

Need proof? Google and Facebook generated more than $130 billion from data-driven advertising alone in 2017. Furthermore, in 2018, seven out of the top 10 companies by market cap were webscale players that leveraged data in their business models.

Fueled by the rise of Industry 4.0—and the increasing capability of organizations to connect products and services to the Internet—a global push toward digital transformation is driving the exponential growth of data and new applications for networks and emerging technologies such as AI and ML. As a result, new, industry-shaping advancements arrive daily.

Communications service providers (CSPs) are now well-positioned to provide new data services that give them entrance into markets where previously they had a limited presence. Organizations of all types already trust CSPs with critical information. Furthermore, the rise of both 5G and the Internet of Things (IoT) will not only drive data growth but will also increase its value.

In fact, CSPs are already starting to leverage their unique position to generate lucrative new revenue streams based on their ability to collect, analyze and move data. Still, despite this apparent competitive edge, success isn't guaranteed.

The digitization gold rush is creating new friends and foes. Customers' core businesses are increasingly about providing enhanced digital experiences, which require high-performance networks and improved operational efficiency. Then, there's the new growth enabled by 5G and IoT, which will continue to usher in developments we can only guess at now. Today's marketplace is a volatile, brand-new place, and customers have different expectations from those to which CSPs are accustomed. For these reasons, CSPs need to take a strategic approach that plays to their strengths in order to pursue opportunities they are likely to win.

In early 2018, Ericsson published a report, Exploring IoT Strategies, that examined how CSPs were taking advantage of their position in the IoT value chain. The dialogue has since continued, and through additional engagements with CXOs at major CSPs, further research shines some light on how these global entities are monetizing data.

That insight led us to produce an eight-dimensional strategic framework, supported by case studies, which CSPs may find useful for turning their 5G and IoT visions into profitable realities.

Holistic and Strategic

The eight dimensions can be divided into two groups. There's the "where to play" segment, which encompasses strategic intent, consumer focus, enterprise focus and value chain position. Then there's the "how to win" segment, which addresses go-to-market and ecosystem strategy, commercial models, portfolios, and network strategy and operating models.

CSPs can use this framework to decide where their 5G and IoT focus should be,

starting with the identification of overall positioning and key differentiators. Once target segments and the value chain position are defined, the most suitable go-to-market, business and operating models can be determined.

CSPs need to look holistically across all eight dimensions to determine what their priorities should be. Unfortunately, most are only addressing a few of these critical areas.

Why? CSPs can be too tech-focused, lacking long-term strategic intent, and sometimes overestimate their actual ability to execute. They often place too much emphasis on targeting enterprises, too, which means they miss out on valuable opportunities with smaller but still-sizeable organizations. And when it comes to value chain position, many CSP leaders assume they should be higher up the IoT stack, which leads to miscalculating the foundational capabilities required to deliver related services. They also often overestimate their own strengths in comparison to more well-equipped IT firms.

When it comes to "how to win," CSPs are encountering difficulties with go-to-market and ecosystem strategies. They're finding it difficult to develop adequate in-house capabilities and establish solid partnerships. Further, CSPs' various operating units work as silos, which complicates the operating model. For example, if a CSP has separate enterprise and network departments—and most do—these departments may find it difficult to work in close concert to deliver value, resulting in disjointed strategy and inefficient operations.

But don't worry; these challenges pale in comparison to the potential now available to CSPs.

The Right Data Plays

To provide actionable insights, an organization needs access to data, whether it collect this data on its own or gets it from another source. The data broker has risen in importance and will continue upwards as the IoT market matures and more of it is shared across industries. Given their solid track records for handling sensitive data— and the huge volume of quality, exclusive data that they steward—CSPs are in prime position to compete for a great segment of this market. There are four primary data monetization plays that they should consider.

CSPs can leverage IoT use case data, and to do so should first identify what's most valuable to organizations. Primary cases, such as predictive maintenance based on sensor data generated from asset performance, are a good start.

Additionally, CSPs can aggregate primary use case data into a data lake, which they can also complement with external sources. This information can be stored, validated, integrated and anonymized, making it desirable and ready for sharing.

The remaining two plays include brokering in a data marketplace, or even establishing their own means of connecting data providers with users. This further step can create a "single stop" for buyers to find the diverse data sets they need. Finally, CSPs can build applications using data from both the lake and third parties to create additional revenue streams.

There are multiple viable strategies and choosing the right one requires executives to be candid about how aggressive they want to be in data-driven markets. Yet, with the growing IoT data sets they possess, make no mistake: CSPs can disrupt the market as high-value data players.

Making Moves in Transport and Logistics

The final area of focus deals with transport and logistics. This industry will greatly benefit from 5G and IoT—and CSPs are built to take these organizations exactly where they want to go.

The transport and logistics sector includes five key customer processes: traffic management; vehicle, driver and fleet management; hub management; and supply chain management. Each has distinct pain points, with security and data-sharing topping the lists.

CSPs can tackle many of these issues, including lack of communication between systems, high fleet maintenance costs, poor inventory visibility and the reality of valuable data stuck in silos. CSPs are also nearly perfectly positioned because transport and logistics depends on wide-area coverage, mobility, and vehicle and traffic data. Plus, such companies have a need for high-speed, ubiquitous connectivity.

CSP offerings in this area in the past have been varied and often have covered the entire IoT value stack. Some take a connectivity approach, such as embedded. Others employ an end-to-end solution for functions like fleet management. Then there's a platform approach, including V2X, which facilitates connected-vehicle-to-everything communication.

Now, CSP focus areas are shifting to take advantage of such opportunities. Because they can already collect massive amounts of location and movement information, CSPs are placing a notable emphasis on location data brokering and on becoming data exchange providers. Furthermore, there are future opportunities brewing in global embedded and infrastructure connectivity, as well as V2X services.

Some savvy operators are also looking at location-based marketing, using data from mobile devices to alert a consumer about an offering at a nearby business. With people and vehicle location data, CSPs can help local governments improve city planning and infrastructure. This data can also be used for road authorities and transport organizations on smart traffic initiatives, street lighting and parking.

For the field, people-location data sets can track and optimize service for utilities, manufacturers and public-facing agencies. Additionally, the potential exists for tremendous public safety improvements through CSP-provided data. Consider vehicle location, speed, driver behavior, environment data and video monitoring, for instance. All of this information can be used to improve search and rescue, emergency medical, fire and police efforts.

New Dimensions, New Successes

Whatever paths a CSP chooses to pursue—whether leveraging 5G to move up the value chain, monetizing data or creating vertical solutions—there will be hurdles. Expect gaps in technology, business models and industry expertise.

Gaining the right capabilities might require acquisitions. CSPs will also need to build trust and forge partnerships with key players in industries they want to pursue, especially if it's not in an area in which they already have a strong presence.

Further, with global digitalization impacting nearly every business, new competitors will emerge. Even non-CSPs will get into the game. The trick is not to be "pushed off the ball" and relegated to handling connectivity alone, which, while critical, is not nearly as lucrative as higher-margin data services.

Such relegation would be a shame because CSPs possess unique strengths. Their position gives them advantages like no other entity in providing value in the fast-growing 5G and IoT space. They have plenty of secure, highly reliable networks, device and data management expertise, and tremendous access to all types of data.

There will always be obstacles, but these can be overcome. Seizing opportunity comes down to a CSP developing a clear and holistic strategic vision. If and when it does, new dimensions emerge that offer seemingly unlimited success.