

Telia's Division X accelerates IoT innovation with new business models and partners

Who?



BearingPoint//Beyond

What?

Created Division X, a separate business unit focused on experimenting, integrating and growing revenue from emerging businesses and technologies such as IoT, AI and 5G with extreme focus on customer needs and speed of execution

How?

Built a digital ecosystem enablement platform, using BearingPoint//Beyond's Infonova Digital Business Platform utilizing TM Forum's Open Digital Framework and Open APIs. Infonova Digital Business Platform enables Division X to monetize and orchestrate their offerings. It also gives Division X the agility and speed to react to dynamic business needs, experiment with new business models and charging models, and develop, fulfil and monetize joint offerings with partners

Results

Division X is driving 20% year-over-year growth

Sweden's Telia Company, which serves about 24 million fixed and mobile subscribers in 9 northern and eastern European countries, like all communications service providers (CSPs), Sweden's Telia Company AB needs to increase agility, accelerate innovation and lower operating costs to offset pressure on revenue from traditional connectivity services. **A recent study by Ernst & Young**, for example, finds that while globally telco revenue increased by a compound annual growth rate of 3.7% between 2015 and 2018, EBIDTA (earnings before interest, depreciation, tax and amortization) rose only 0.6%.

"While this signals improvement, telecoms investment cycles challenge the long-term prognosis," the study explains. "During the last major upgrade cycle to 4G, top- and bottom-line performance both suffered."

That doesn't bode well for CSPs when 5G deployment **is expected** to be more expensive than 4G. It's clear they must find new ways to offset costs, increase revenue and combat mounting competition from hyperscale platform providers such as Amazon and Google.

To address these challenges and spearhead innovation in emerging business markets, Telia formed an entirely separate unit in 2017 called Division X to focus on integrating new technologies like IoT, AI and 5G, and experiment with new services and business models. The idea was to build on strong collaboration with Telia's local operating companies and a growing partner ecosystem to target new markets, such as industrial IoT, digital health and smart cities.

"Division X was created because we needed a way to funnel innovation in the company, to experiment with emerging businesses and to scale them fast where we uncovered real potential for the business to grow," says Mats Nilsson, Head of Shared Technology, Division X. "It was created with the philosophy of: 'Startup attitude with corporate power,' and it is an incubator for innovation, meaning that we have the freedom to explore."

Tailored services

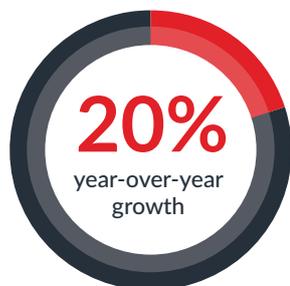
Division X, in partnership with BearingPoint//Beyond, is using the Infonova Digital Business Platform to underpin the orchestration and monetization of its offerings and business processes. A single platform across local operating companies gives Division X the advantage of developing and managing offers centrally, while allowing tailored solutions for specific markets – using local partners, languages, currencies and tax codes, for example.

Today, Division X serves more than 600 enterprises in four countries, and the unit's revenue is growing steadily at 20% year over year. In 2019, Division X onboarded 70 IoT solutions spanning many lines of business such as healthcare, industrial IoT, smart cities, smart buildings, smart energy and waste management.

Telia's Division X accelerates IoT revenue growth using Infonova Digital Business Platform

A New Avenue for Revenue Growth

In 2019 Division X was driving



Becoming the Hub for Enterprise Customers

More than 600 enterprise customers



Leveraging Economies of Scales

With the platform, Division X **develops** offerings **centrally** & sells them **locally**



Reducing Time to Market & Accelerating Innovation



Experimenting, Monetizing and Growth with New Business Models

+70

Leveraging business flexibility and advanced charging to introduce new business models

launched on the platform in 2019



IoT Solutions



Using TM Forum assets to enable these achievements

BearingPoint//Beyond

TM Forum Information Framework principles are adopted by the Infonova Digital Business Platform and support Division X's B2B2X digital services innovation activities. By using TM Forum **Open APIs**, the platform allows Telia to move to a more efficient single platform configuration and enables simple and fast onboarding of new IoT services.

In Helsinki, for instance, Telia's Crowd Insights service monitors millions of trips taken between Helsinki and Espoo. Analysis of transportation data has led the City of Helsinki to invest in a new subway line, which in turn has improved road conditions and reduced traffic by 8%.

In Sweden, the electric utility company E.ON is working with Division X to connect 1 million smart utility meters, enabling the utility and its end customers to monitor production and consumption of electricity in real time. E.ON is replacing existing metering devices with a device that supports

narrowband IoT (NB-IoT), which is a low-power wide-area network radio technology that excels in indoor coverage, long battery life and high-density connectivity. Division X bundles connectivity and the physical SIM cards as part of the service.

Today E.ON is using the service only to monitor usage, but Division X aims to bundle data analytics with connectivity. This could support new capabilities such as giving end users the ability to control electricity usage, automating operation of a dishwasher or washing machine so that it runs during non-peak hours, for example.

New business models for 5G

One of the most important features of the Infonova platform is the flexibility, speed and short iteration cycles it offers for experimenting with new business and charging models. The platform leverages the **TM Forum Information Framework** and **Open APIs** to automate onboarding of new IoT services. During the onboarding process, Division X product teams are able to design and test multiple charging models in order to validate demand, optimize revenue and minimize risk. BearingPoint//Beyond has developed the Infonova platform through extensive participation in TM Forum's **Open Digital Ecosystem Collaboration Project** and **Catalyst Program**.

For more about the importance of Open APIs, watch the video featuring BearingPoint//Beyond's Andreas Polz, Senior Vice President of Technology, Innovation and Standards.



You can also learn much more about how the company uses the Open Digital Framework including the Open APIs by listening to [this Global Architecture Forum webinar](#) on demand.

This kind of flexibility will become increasingly important as Telia and other CSPs deploy 5G. Operators envision using network slicing to deliver services with widely varying requirements for latency, availability and reliability. While this presents a technical challenge in terms of how to orchestrate slices in the network, it also highlights a significant business challenge when it comes to charging and billing for the services, a process that is even more complex when partners are involved.

For example, customers may want usage-based pricing for some services, while for others a subscription model may work better. A CSP could even offer **zero-rating** for a service delivered with a partner and then implement a revenue-sharing arrangement on the back end.

"5G is not only a connectivity service; it also brings a lot of additional features that we could package in different ways," Nilsson says. "We will be able to create new offerings and new bundling of services together with 5G. That is definitely what the platform will bring to the table – it's core for monetizing this."

Division X is already addressing some of these challenges, according to Diana Molero, Strategical Program Manager in Shared Technology. "Product teams are trying to understand the features that are available and how they can give different value for customers," she says.

Figuring out how to package connectivity, internet and other services such as analytics is a challenge for product teams.

“This is why it’s so important for the platform to be flexible when it comes to product and pricing models,”

Molero explains.

“There will be experimentation... and a lot of iterative work before telecom operators figure out how to package and sell 5G.”

Fail fast

The real trick is translating the potential of 5G services and packages into a context that makes sense for customers, explaining to them what the benefits are – and just as importantly recognizing when an offer is not what a customer wants. “This could be part of an iterative process where you try things out, and you realize, okay, this is actually not at all what the user wants – even though technically it’s a really cool feature,” Nilsson explains.

Sven Fuerst, *Senior Enterprise Architect*, **BearingPoint//Beyond**, agrees, noting that the possibilities are exciting:

“We are seeing this with IoT services, not so much the connectivity but the services on top: New ideas are coming in from the business and sometimes we are thinking, ‘That’s a crazy idea!’ But some of them are really successful – and some aren’t.”

That ability to experiment with ideas, test them with users and improve them in a very short time with fast iterations is one of the most important lessons Telia is learning through Division X.

“We need to provide a structure, a platform to our business that enables rapid time to market, because if we are stuck in long and complicated processes with too much development needed each time we need to try something out, then naturally we will never be fast enough,” Nilsson says. “We will never be able to compete.”