Capgemini invent

INDUSTRY PORTFOLIO 2022





QUO VADIS, TELECOMMUNICATIONS?

How communication service providers (CSPs) can play at the forefront of bringing inventive services, innovation, and technology together.

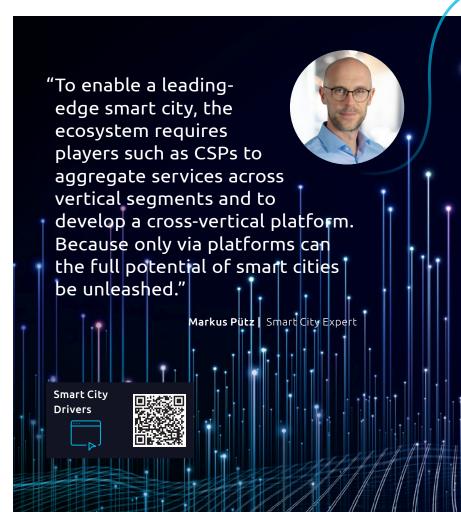
The telecommunications market has undergone a significant transformation over the recent years – from a monolithic connectivity and device provider towards the enabler of new ecosystems through partnerships. We believe that there is an imperative for change within the telecommunication provider economy to foster new and innovative business models while reducing cost and creating outstanding customer intimacy within their consumer and business ecosystem.

We see data as a key success factor for entering the "Collaborative Ecosystem play" which positions communication service providers (CSPs) in an enabling role for any relevant industrial or public service ecosystem like smart cities, industrial manufacturing, and smart commerce.

Due to the emergence of these new opportunities, we recommend that CSPs re-invent their business- and operating model – become open, lean and agile, thus aiming for more efficient operations. This transformation will be substantially driven by new technologies like 5G and Open RAN that CSPs need to understand, embrace, and drive into their markets. Another important imperative is the necessity to step up the journey to net zero operations. This also represents the chance to leverage own capabilities to advance ecosystem partners on the path to sustainable business environments, and positive societal and climate evolution.

I am happy to share an excerpt of our current views and services in this booklet. Let's start a discussion on how to "re-INVENT" the telecommunication Industry!





CHALLENGE:

It's more important than ever for CSPs to find their position across "play areas" in the value chain of ecosystems such as smart cities and to capture more of the value chain than the traditional connectivity. Since many players don't position themselves as an E2E provider, it's crucial to find valuable partnerships to develop a holistic, collaborative and sustainable approach across vertical segments.

SOLUTION:

We have a significant track record in Europe, the US, and the Middle East – working for leading CSPs. This experience enables us to support telecommunication providers in every stage of their smart city engagement. We can help CSPs find the right monetization model, choose the right initiatives, build the right in-house capabilities, and ultimately develop the ecosystem that a smart city needs.

15%

is the impact on GDP growth to be reached by platform based smart cities

16.6%

is the projected CAGR in the global smart city market revenues

18%

of citizens want to live in smart cities as they believe them to be more sustainable

COLLA

CHALLENGE:

Data ecosystems are becoming the "new normal". Tech companies like Apple and Google have built formidable data ecosystem businesses by effectively harnessing the data they collect. However, most CSPs still struggle with the complexity to engage in an "ecosystem approach" from a businessand partnership model perspective.

SOLUTION:

First, we help understand the new roles a CSP can play in collaborative data ecosystems. Second, we help recognize the value of CSP data as an enabler in external data ecosystems for innovative products and services. Third, we help build partnerships with other sectors like government, insurance, retail, and manufacturing to create powerful future data businesses.

€550B

value data economies of EU27 countries by 2025

value data of overall EU GDP by 2025

of CSPs plan to launch data ecosystem initiatives



Philipp Wagner | Vice President Data & Al



Collaborative Data Ecosystems: The "New Normal" for Telcos



TELCO **NVENTIVE**

CHALLENGE:

CSPs are operating in a fast-evolving digital environment where the portfolio is changing drastically. The real challenge for operators is to keep up with the pace of change and deliver new, innovative, digital experiences to enable customers' aspirations. In order to solve these challenges efficiently, we divide them into the areas of B2C, B2B and vertical industry players.

SOLUTION:

Our B2B approach provides a framework to launch digital experiences to gain new revenue. We help vertical industry players in capturing efficiency opportunities associated with the connected world and set up their own capabilities to implement the telecommunication services they require. Our B2C approach rewires omnichannel customer experience and optimizes business operations while enabling a smooth extension of an offer portfolio.

31_{P.}

an average net promoter score (NPS) is the lowest across industries

20%

organizations understand how customer experience supports strategy

70%

CSPs believe, digital business models will be strategic priority



INVENTIVE IT ENABLING BUSINESS-LED AND IT-DRIVEN END-TO-END TRANSFORMATION



"As business models for CSPs are changing dramatically towards ecosystem plays, an innovative and flexible IT must be the enabler of change and driver of innovation. It's time to accelerate your digital (r)evolution to generate business value across each stage of your digital journey."

Bernd Nagel | Director Telecommunications Strategy, Innovations & Transformation

of senior business of organizations of digital today say they have executives and CIOs have transformation the digital capabilities a shared understanding programs do not required for success on the role of IT in their meet their targets digital transformation

CHALLENGE:

Transformational programs have significant strategic value, but are often IT-focused on execution and can easily become managed as a cost issue with limited business impact. In constantly changing environments, a future-proof target operating model needs to drive continuous end-to-end transformation and shift focus from onetime efficiency gains to delivering full business value

SOLUTION:

We empower IT to be the driver of sustainable and ambitious change. Our clients generate transparent business value on their digital journey by simultaneously transforming the IT landscape and the operating models that connect business and IT realities. We achieve this through a purpose-driven strategy, a smart use of the organization's ecosystem, and new ways of working.

NEXT INFRASTRUCTURE

"In a world powered by data and digital, connectivity is becoming key to unlock efficiency and innovation.

5G is one of the hottest topics in the telecom industry: a sea of change in terms of investments, transformation, and business opportunities."

Stefan Muderack | Director 5G



CHALLENGE:

Knowing the potential of 5G to address the unique connectivity needs of numerous industries, CSPs can move from being a service provider to a core transformation partner for their enterprise customers. Maximizing 5G potential is not without challenges, which span identifying the right use cases, accessing vertical-specific solutions, managing cybersecurity, orchestrating multi-vendor environments, and containing the environmental impact of 5G implementation.

SOLUTION:

We help CSPs, tower companies and industrial enterprises to accelerate their data-driven and R&D transformation, and harness the full potential of high-performance networks, applications and equipment. Capgemini works with ecosystem partners, and invests in the right mix of intellectual property across strategic topics such as Edge Computing platforms, software frameworks for network elements, RAN intelligent controls, and 5G Labs across the globe. This helps our clients stay ahead of the competition by building the next infrastructure.

70%

industrial organizations that intend to adopt 5G are at the planning and ideation stages

WITHIN 2 YEARS

40% of industrial organizations plan to implement 5G at scale at a single site

67%

of organizations say their choice of a 5G operator will be impacted by their sustainability credentials

TELCO **SUSTAINABLE**

CHALLENGE:

The telecommunication industry plays an important role in supporting national and regional ambitions on climate change. More and more CSPs are making climate commitments worldwide. It's more important than ever to find new ways to generate sustainable business value, operational efficiency, and creative innovation.

SOLUTION:

We can assist CSPs to reach their sustainability goals using a holistic approach. We can help by defining a new sustainable strategy/business model, designing sustainable products/services and a sustainable IT architecture, developing sustainable operations, leveraging the full potential of 5G with innovative use cases and harnessing data, AI and analytics at scale.

40%

of telecommunication providers are lagging behind their sustainability targets

70%

of consumers are interested in repairing products to prolong product life

>85%

of a mobile operator's energy use is accounted by networks





REASONS WHY CAPGEMINI INVENT

VISION

At Capgemini Invent we help our clients to embrace innovation and transformation to get the future they want.

PROMISE

We innovate and transform our client's business with solutions by design, driven by data and with sustainability at the forefront.

FOUR DIFFERENTIATING DRIVERS ARE THE HALLMARKS OF OUR BUSINESS AND SET US APART.

World-class
thought leadership combined
with deep sector
expertise provide
insights and results
on the biggest
transformation
challenges of the
world's leading
companies.

A unique competence blend of industries and capabilities that provide leaders with exceptional solutions by design.

capabilities
addresses leaders'
needs to create
the optimum
solution and the
technology to
support and run it
at scale.

A new set of

An end-to-end delivery that is global and draws on the strength of Capgemini Invent and its unrivaled ecosystem.

4

We anticipate the evolution of each industry and combine award-winning research studies with deep industry expertise.



The Sustainable Telco



THE FOUNDATIONS
FOR DATA-OBVIEN
TRANSFORMATIONS

Foundations for data-driven transformations





The cloud imperative for telcos' data analytics





One-to-one customer engagement





Data sharing masters



Accelerating the 5G industrial revolution



ASIA

Arpad Kiraly +82 1085 0568 17 arpad.kiraly@capgemini.com

FRANCE

Alexeï Kharlamov +33 674 875 104 alexei.kharlamov@capgemini.com

BELGIUM/LUXEMBOURG

Frédéric Vander Sande +32 4965 744 08 frederic.vandersande@capgemini.com

GERMANY

Ansgar Schlautmann +49 2213 7992 749 ansgar.schlautmann@capgemini.com

NORWAY

Johannes Aasheim +47 9265 2815 johannes.aasheim@capgemini.com

NORDICS

Habib Melhem +46 7272 14171 habib.melhem@capgemini.com

INDIA

Amit Joshi +91 9820 5075 96 amit.joshi@capgemini.com

ITALY

Alessandro Puglia +39 3496 8076 86 alessandro.puglia@capgemini.com

UNITED KINGDOM

Amanda Gosling +44 7787 1549 94 amanda.gosling@capgemini.com

UNITED STATES

Christof Mees +1 5035 7777 88 christof.mees@capgemini.com

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ABOUT CAPGEMINI INVENT

As the digital innovation, design and transformation brand of the Capgemini Group, Capgemini Invent enables CxOs to envision and shape the future of their businesses. Located in nearly 40 studios and more than 60 offices around the world, it comprises a 10,000+ strong team of strategists, data scientists, product and experience designers, brand experts and technologists who develop new digital services, products, experiences and business models for sustainable growth.

Capgemini Invent is an integral part of Capgemini, a global leader in partnering with companies to transform and manage their business by harnessing the power of technology. The Group is guided everyday by its purpose

of unleashing human energy through technology for an inclusive and sustainable future. It is a responsible and diverse organization of over 350,000 team members in more than 50 countries. With its strong 55-year heritage and deep industry expertise, Capgemini is trusted by its clients to address the entire breadth of their business needs, from strategy and design to operations, fueled by the fast evolving and innovative world of cloud, data, AI, connectivity, software, digital engineering, and platforms. The Group reported in 2021 global revenues of £18 hillion

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