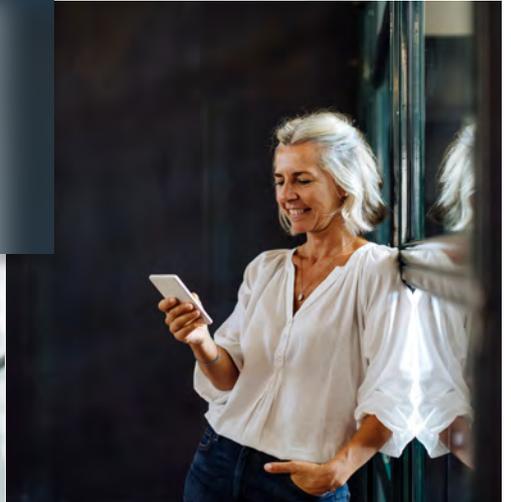




# Inside the telecommunications industry 2022

Trends, challenges, and solutions in the 5G era



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# INTRODUCTION

**The telecommunications industry has for more than a decade been a saturating connectivity market battling industry disruption and a confluence of innovation.**

However, if the era of Covid-19 has proven anything, it is the importance of connectivity and how it plays a critical role in enabling economic stability and social activity.

The telecommunications industry is a pivotal force in enabling this, and an increased focus on digitalisation presents a plethora of challenges and opportunities like never seen before.

**From reading this e-Book, you will learn about:**

- The current trends & challenges shaping the industry
- A digitalisation case study on Batelco
- Choosing the right partner for digitalising telco solutions



# PART I

## TRENDS AND CHALLENGES IN THE TELECOMMUNICATIONS INDUSTRY





## Fierce competition and industry transformation

There are two critical components in the telecommunications industry when determining competition. One is the number of brands operating in the industry. The other is the level of technology, where if an operator does not upgrade and innovate its network and infrastructure, it will lose market position.

Due to extraordinary industry transformations and emerging competitive threats, many telcos are turning to M&As to add new capabilities, expand product portfolios, provide access to new innovative technologies, and overall advance their business to push away competition.

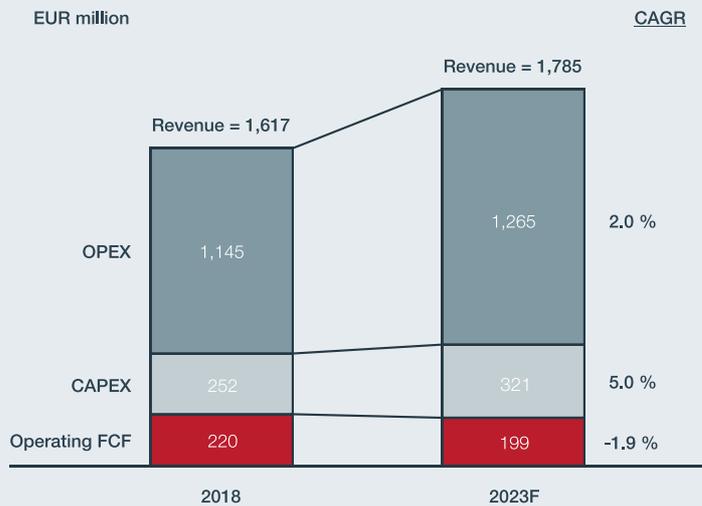
PWC announced that there has been a post-covid rebound in the number of global M&As having gone up from 754 in 2020 to 883 in 2021, and with deal values increasing by 48%.

Some of the more recent and noticeable M&As are those such as the \$44.4 billion agreement between Virgin Media and O2 in June 2021, Verizon's \$6.9 billion acquisition of Bluegrass Cellular in March 2021, Rogers Communications \$26 billion acquisition of Shaw Communications also in March 2021 and with current exclusive talks between Orange and MásMóvil that would result in a \$21.3 billion joint-venture.

# Low margins and financial returns

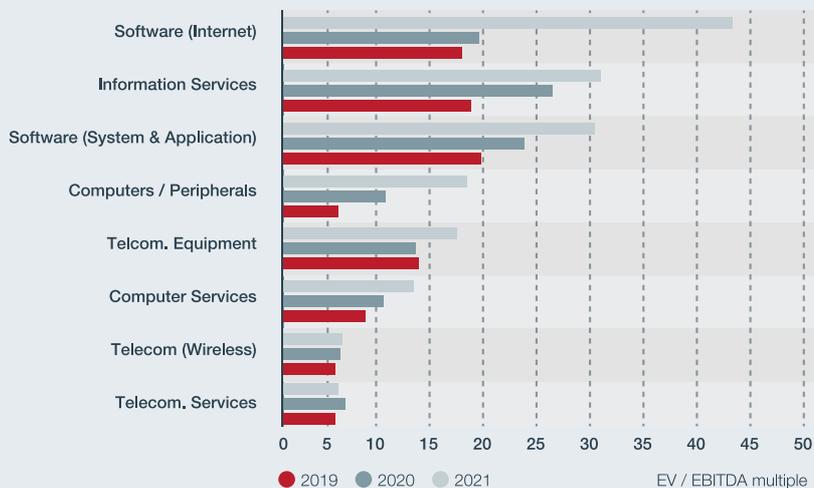
The global telecommunications industry continues to grow in terms of revenue, however, it is facing tough economic situations with low margins derived from multiple factors including alternative operators with lower prices, VoIP, regulatory pressure, etc.

Figure 5: Our base-case forecast for the global telco industry



The following graph indicates a forecasted reduction of 1.9% in Operating FCF (Free Cash Flow) from 2018 to 2023.

Source: Eikon - Thompson Reuters, Arthur D. Little



From an investment point of view, by measuring the EV/EBITDA to determine the market value of telco companies, we do see a lower value compared to companies from other industries.

Source: Statista 2022

According to McKinsey, the global telco industry has also significantly underperformed both on the global markets as well as other sectors. The telecommunications sector achieved a total shareholder return of just 28% growth over the last 7 years.

MSCI Total Shareholder Returns (TSR), %, USD-based



Source: Capital IQ

#### Comments

The telco sector as a whole has achieved **just 28% TSR growth** in the last 7 years

This **compares to 111%** the overall MSCI Index, including telcos

The difference is driven both actual **financial performance** and investor **growth expectations** long-term

Summing up the economic situation of the industry, it is safe to say that with reducing margins, disappointing value and low returns, telcos are facing urgent needs to transform their business model. According to McKinsey, 77% of CxO's from telcos around the world had embarked on more than five business-building initiatives over the past 10 years, however a quarter mentioned the initiatives were not yet profitable.



# Churn rates and the need to digitise

**The telco industry suffers from a very high churn rate, averaging between 10% to 67% annually.**

And with a reputation from consumers already being less than popular, it's very common to hear frustrations with some aspect of telco providers. This can either be convoluted billing, unwanted marketing emails, poor customer experience and communication, high plan prices, etc. As an example, from the U.K., the telecommunications industry was ranked the second worst vertical when it comes to customer satisfaction and did not meet the consumers' rising expectations of online services.

As McKinsey has concluded, digital first journeys results in greatest customer satisfaction. However, as the Boston Consulting Group reports, a mere 22% of telcos have successfully executed a digital transformation initiative. Partnerships are determined as playing a pivotal role in sparking innovation and boosting their market position, with the digital ecosystem and partnership area as the fourth highest transformation priority according to Boston Consulting Group.



The average telco operator in a mature market spends 15-20% of service revenues on acquisition and retention, and Canada's BCE revealed that it cost almost 50 times less for them to keep existing customers than to acquire a new one.

In order to reduce churn and become more attractive to existing and new potential customers, a lot of telcos are racing to exploit new opportunities and experimenting with bundling non-traditional telco products such as gaming, pharmacy, insurance, and other services together with their traditional products. Now, a lot of telcos see themselves moving past communications into the area of being a "digital life services" provider.

We also see a lot of telcos launching new business units with the sole purpose of chasing digital transformation and injecting agile cross-functional teams to speed up progress. Danish telco TDC did this in 2017 with the launch of a "digital tribe", whose purpose was to review customer journeys and keep everything digital. The results were an astonishing 5 stars to the onboarding journey by 80% of customers, and a reduction of 40% call volume, one of the largest cost drivers for telco.

Another example is UK's BT and their five-year agreement with Google to support its digital transformation efforts. The initiative is led by BT Digital, which was launched April 2021 to develop new digital products and undertake digital transformation initiatives.



## Cyber security & data protection

**With the telecommunications industry being one of the largest collectors of sensitive information in the world, telcos are relentlessly being targeted by cybercriminals.**

Cybersecurity firm EfficientIP stated that 43% of telecom operators suffered from DNS-based malware attacks in 2018, with 81% taking three or more days to apply a critical security patch after a detected data breach.

**“ 43% of telecom operators suffered from DNS-based malware attacks in 2018 ”**

Security company Cloudflare reported that the telecommunications industry was the most targeted by DDoS attacks in the first quarter of 2021, which was a significant jump from the previous year where telcos were the sixth most targeted.

As the world is becoming increasingly aware of data protection rights, e.g. with EU's GDPR, Brazil's LGPD and Japan's APPI, legal obligations and transparency towards how data is being handled by companies are a topic of great attention these days. Failure to comply with such laws can not only lead to financial penalties but also reputational damage, urging telcos to choose data security and GDPR compliant services and partners to ensure safety.

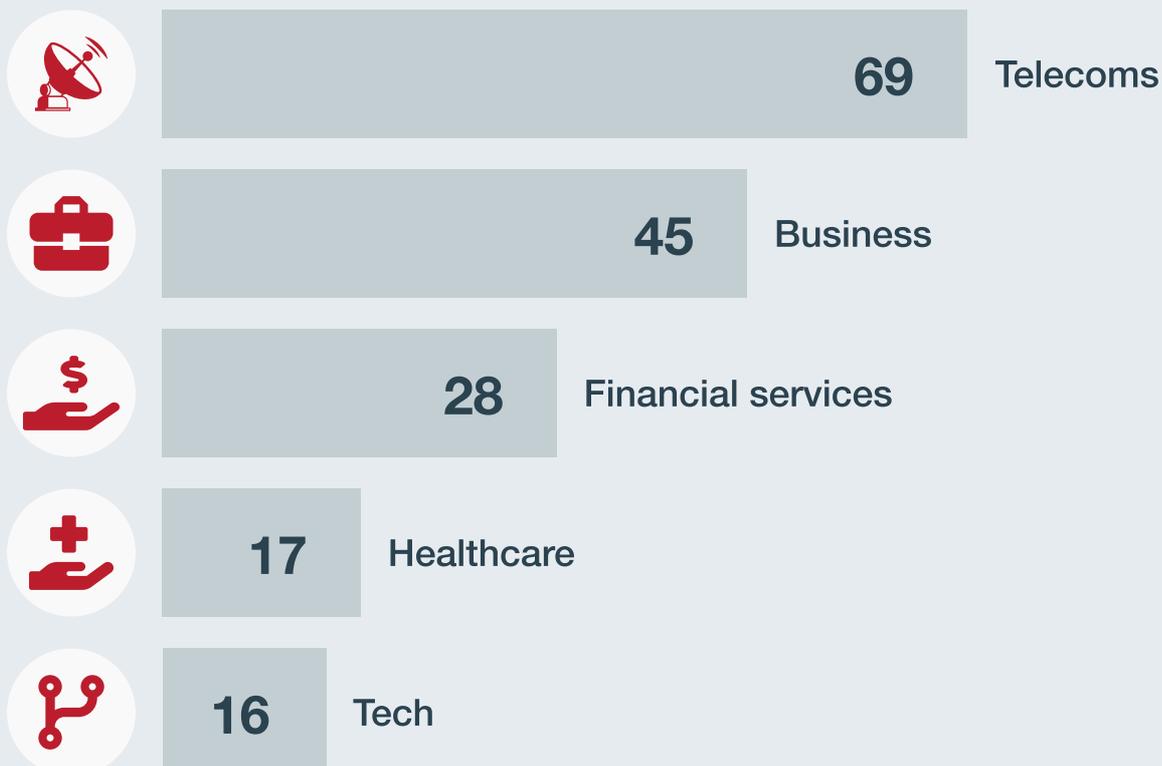
**“ The telecommunications industry was the most targeted by DDoS attacks in Q1 2021 ”**

The telecommunications industry received the most privacy-related fines in 2020 by industry. With a total of 69 sanctions, it was four times the number of sanctions against tech-firms. The value of these GDPR-related fines has been between €200,000 and €27.8 million.

The reason why telcos are subject to high levels of enforcement is due to the large volume of personal and financial data they sit on, making them an attractive target from cyberattacks. Another reason why telcos have been under fire from these sanctions, have been due to the misuse of customer information to push sales aggressively.



#### Privacy-related fines in 2020 by industry



Source: Federprivacy

# Sustainability

**Following a great digital acceleration triggered by the pandemic, telcos are facing two main challenges when it comes to sustainability.**

**First** - With the rollout of 5G, it is expected that we'll see a rapid rise in data usage, with research indicating that the 5G ecosystem will lead to 160% increase in power demands by 2030. Further, according to the ICT (International Telecommunications Union), the industry must reduce their greenhouse gas emissions by 45% between 2020 and 2030 if it's going to comply with the Paris Agreement.

**Second** - Telcos carry the weight of playing an important role to ensure that even the most isolated parts of society have connectivity. The gap in prosperity between metropolitan hubs and rural dwellers is growing, resulting in the poorest societies having less chance of being online. Investments by telecoms will be an important driver to closing that gap. The EU stated that the goal is for every European household to have access to high-speed internet coverage by 2025

**“ The 5G ecosystem will lead to 160% increase in power demands by 2030 ”**

Whilst it goes without saying that urgent action is required to reach the goals, responses from big players towards sustainability are being made. Orange issued its €500 million sustainability bond in September 2020, planning to allocate about 40% of funds to digital and social inclusion projects, and the other 60% to projects focused on energy efficiency and the circular economy.

The German firm Deutsche Glasfaser are investing €7 billion in its rollout of “fast-speed internet infrastructure” – an investment that will help support the German government's ambitions for gigabit internet networks to be available nationwide by 2025.

## Summary

The telecommunications industry is recognized as being fiercely competitive, having low margins, and high churn rates due to a general perception towards telcos being somewhat negative in terms of customer satisfaction. It's further been troubled with a high number of cyberattack cases, and due to the sheer volume of data that telcos are sitting on, their compliance towards privacy attracts a lot of attention.

In terms of sustainability, urgent actions are necessary to comply with the Paris Agreement, especially now that 5G is being rolled out and an increase of data usage is inevitable.

These challenges have led to numerous telcos investing heavily towards expanding their portfolio and developing into more of a digital life service provider, where a bundling of various services is offered to become as lucrative to end-users as possible.

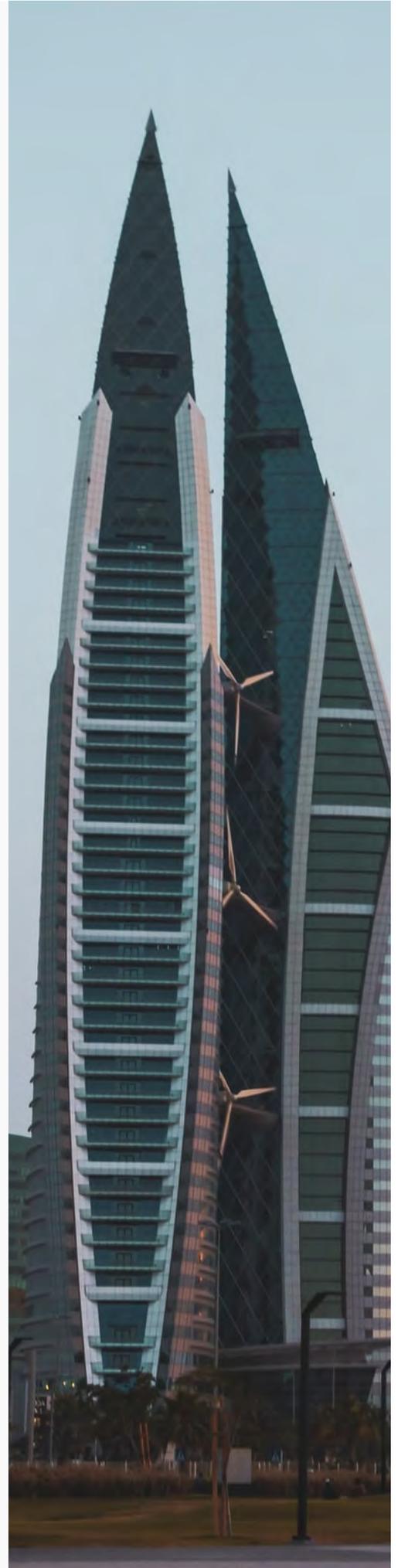
Further priorities have been internal transformations, aiming to achieve a safer digital infrastructure, a heightened focus towards sustainable solutions and an improved customer experience with a 'digital first' mindset.



In part II of this report, we take a deep dive into Batelco, the national telecommunications company in Bahrain, to understand what strategic approaches they take.

# PART II

## CASE STUDY: A TELCO DIGITALISING



## The search for digitalised growth

Batelco, the national telecommunications company in Bahrain, have similarly to telcos previously mentioned in this report, been seeking new digital solutions to add to their product portfolio, to further improve convenience to the digital life and enhance customer experience.

Contrary to many other telcos, they decided on a strategic partnership rather than moving into M&As. Considering the current global business climate with great attention towards sustainability, and the outstandingly high security breaches within the telecommunications industry, they had to be careful in the choice of partnership.

This set of requirements led Batelco to partner up with e-Boks, the leading Nordic provider of secure digital customer communication. Through a close strategic partnership, e-Boks facilitates Batelco with a digital communication infrastructure that brings the opportunity to establish several new revenue streams.



# Adopting the e-Boks business model

Through the e-Boks white label solution, Batelco is the owner of their own-branded version called OneBox developed in close strategic partnership with e-Boks.

It enables free and easy direct digital communication for residents with private sector businesses as well as public sector entities.

The communication entails the sending of data-sensitive documents, such as contracts, invoices, bank statements, doctor notes, etc, through the secured digital platform.

As Batelco onboards their private and public partners onto the same platform, they are establishing themselves as the national-level service provider of secure digital communication for document distribution in Bahrain and beyond.

The e-Boks business model implies revenue derived from the volume of documents sent through OneBox, thus creating new revenue streams for Batelco.

This provides them with great growth potential due to the number of strategic partnerships telcos tend to operate with, as they seek to become digital life providers and therefore bundles a variety of services from various distributors together.

**Batelco adopted the white-label solution from e-Boks**

**READ MORE ABOUT ONEBOX**



# Benefits for senders and receivers

Having integrated the e-Boks business model into their digital communications strategy, Batelco elevates the telecommunications services to a new level with substantial benefits for both the senders as well as the receiving end-users.

By breaking down the benefits, we can determine that many of the challenges mentioned in the industry analysis are being addressed, both from the sending entities but also the receiving end-users.

## Industry analysis

- 1-** Numerous cyberattacks and attention towards data-protection
- 2-** High churn rates and the need to digitise the business
- 3-** Low margins call for cost-efficiency
- 4-** Urgent actions are necessary to meet the Paris agreement

## Batelco and their partners

- 1-** Strengthened cyber security, and compliance with latest data-protection standards
- 2-** Effective contact to end-users that reduces critical support cases
- 3-** Reduced costs by eliminating manual processes when sending physical documents
- 4-** Sustainable platform that reduces the CO2 footprint

## Receiving end-users

- 1-** Encrypted login to one spam-free location of all important documents
- 2-** Improved customer experience through seamless digital communications
- 3-** Guaranteed and immediate receiving of important personal documents
- 4-** Safeguards the right to privacy and personal data



# Shaikh Mohamed Al Khalifa about e-Boks



“We have chosen e-Boks because of its value proposition in terms of the ability to offer an effective national level service with a secure and user-friendly digital communication platform ideal for official communications.”

## Shaikh Mohamed Al Khalifa

Chief Digital Growth

Officer at Batelco

“It’s part of our digital growth strategy to collaborate with partners that provide digital solutions which have proven to be successful in other parts of the world and can be adapted to our local and regional needs. Among the many benefits of utilizing digital postbox services are improved productivity and lower costs by eliminating manual processes of handling physical documents, and furthermore contributing to the reduction of the carbon footprint by switching from paper to digital, which additionally supports the UN Sustainable Goals.

“We believe that this is the future of communication between organizations and their clients. Consumers and businesses are increasingly looking for seamless transactions and services that can be provided remotely and effectively. With this partnership, we have the ability to provide a world-class digital solution to the region that have proven to be successful in a country that is considered to be one of the best in digital services.” says Shaikh Mohamed Al Khalifa.

# PART III

## E-BOKS - THE DIGITAL PARTNER FOR TELCOS



Telecommunications companies are facing volatile market trends and disruptive technologies, such as high churn rates, lowered margins, VoIP, pressing them to reinvent their business model.

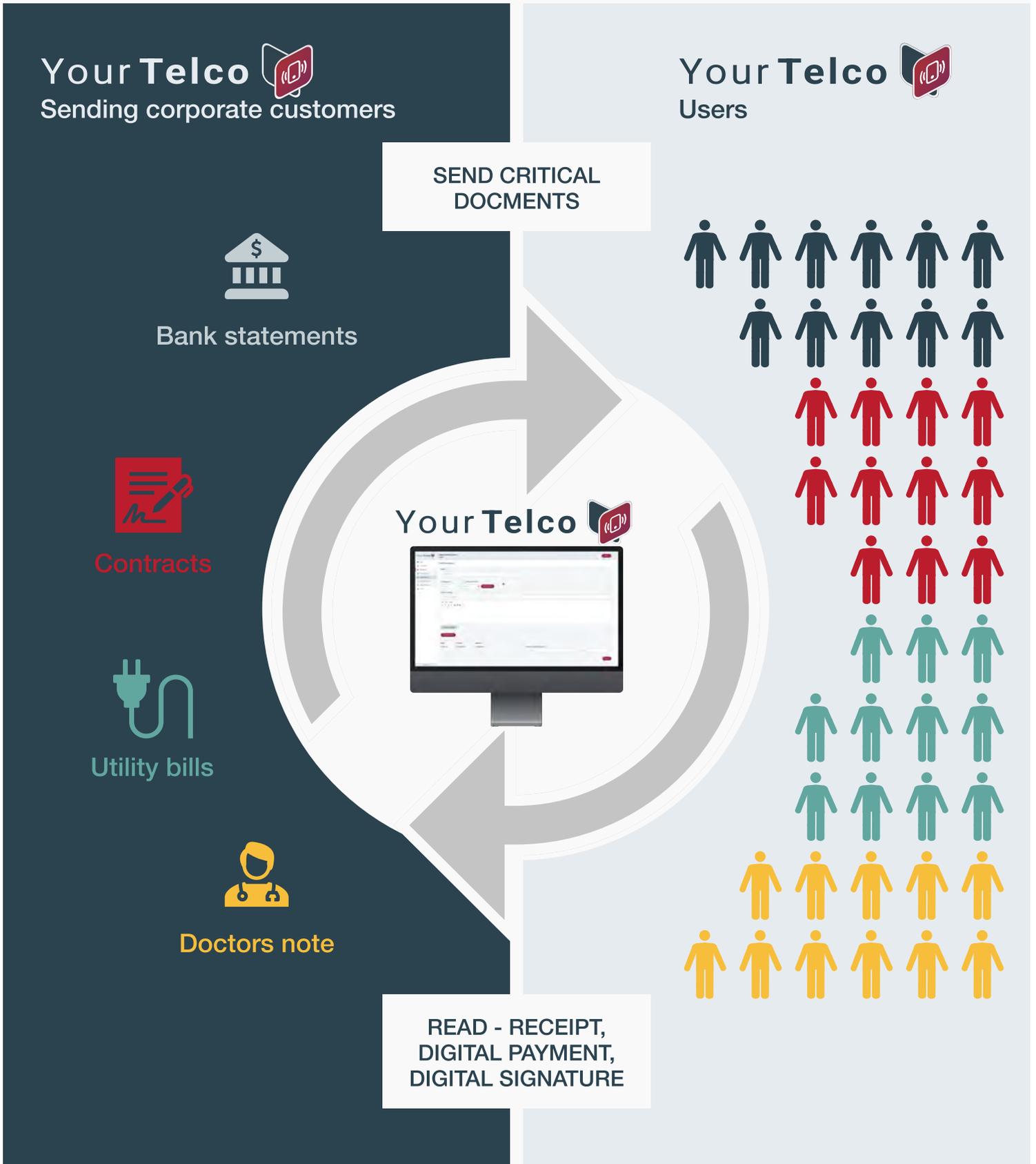
Successful modern telcos have therefore evolved into digital life service providers to reduce churn and are now offering a bundling of services such as internet and paid TV as a cost-saving measure for the end-users.

As the Boston Consultancy Group concluded, strategic partnerships proves to be a pivotal opportunity for telcos, in order to expand on an innovative and digital product portfolio to boost their market position.

e-Boks provides an addition to the telco product portfolio, establishing them as the lead distributor of important documents between public and private entities, and their end-users.

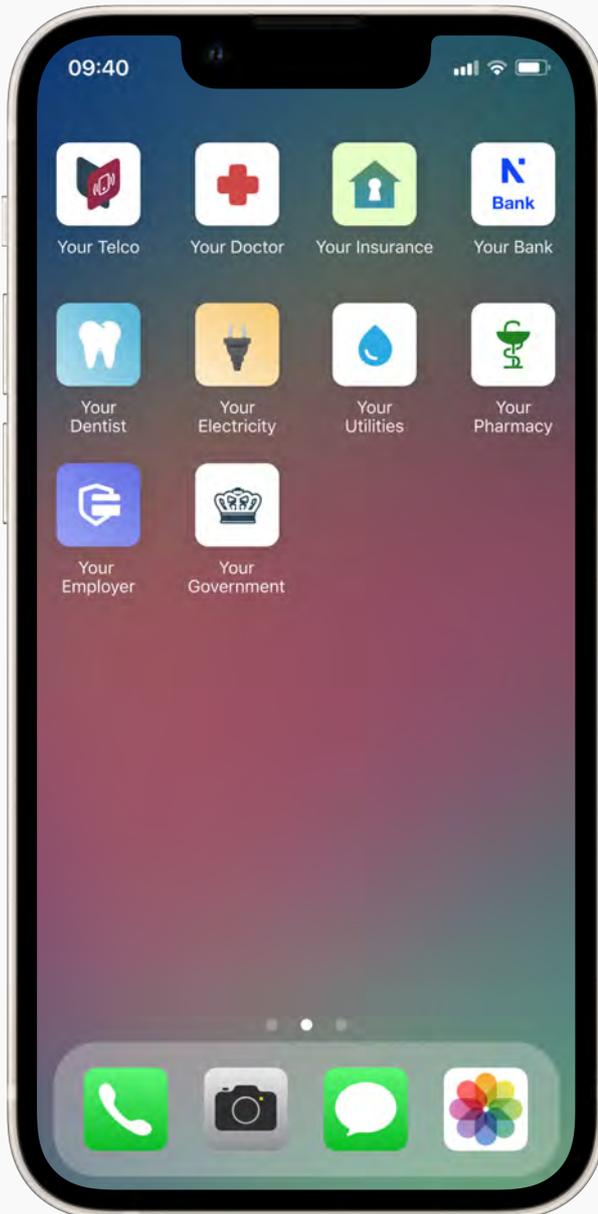


# The telco eco-system with e-Boks

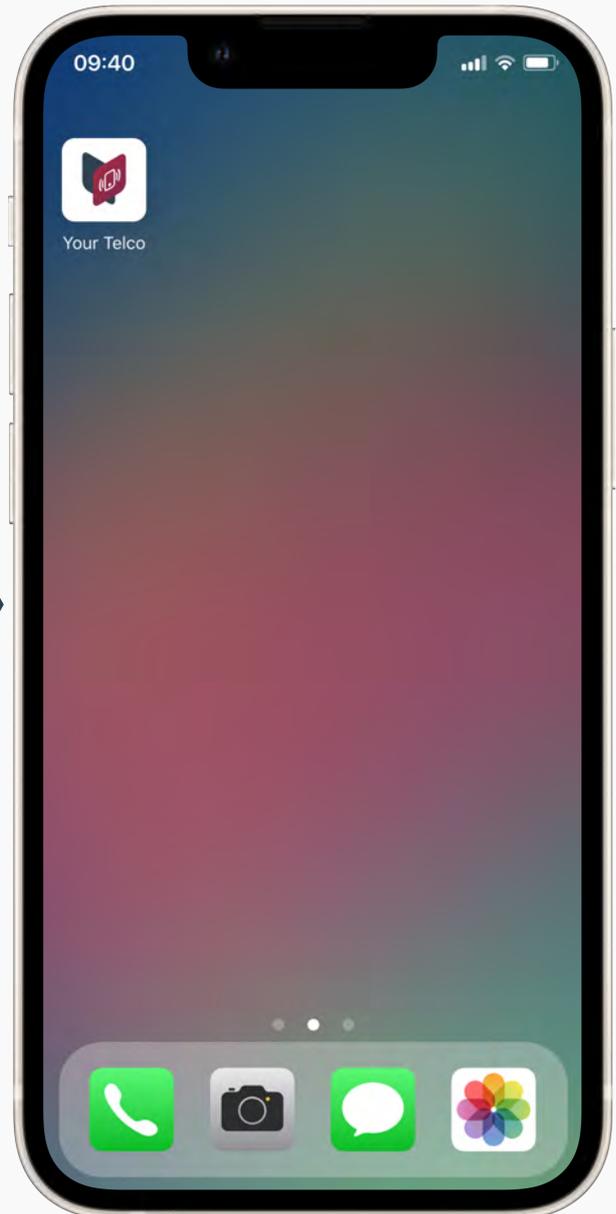


# Improved end-user experience

Traditional view



e-Boks white-label solution



- Several apps to manage
- Multiple logins to remember
- Complex user journey
- Lack of integration options

- One application
- One single eID encryption
- Spam and marketing free
- Free to use for end-users

# e-Boks - the digital partner for telcos

e-Boks, the Nordic trusted provider of secure digital customer communication, has with more than 20+ years of experience been the strategic partner of choice for large-scale companies, to provide them with the digital communication infrastructure and consultancy and establish success in an increasingly digitalised age.

## e-Boks supports telcos with...

### ...establishing new revenue streams

Scale your business by onboarding private businesses and public sector entities to the white-label platform, that allows for a complete re-branding of all UI to match your telco. Create revenue from the document volume your partners then send through this platform to reach their end-users.

### ...reducing churn rates through

### improved digital customer experience

Adopting a strong 'digital first' mindset with seamless communication to end-users will help telcos retain their customers and reduce the overall number of customer support cases.

### ...saving up to 80% distribution costs

By eliminating manual processes of sending physical documents and making the digital communication more effective with faster exchange, the e-Boks model allows for optimising and streamlining internal processes to free up resources.

### ...securing customer data and greatly reduce risks from malicious attacks

The e-Boks platform helps automate and streamline digital communication with the highest level of security and compliance. All latest technologies, principles and procedures are employed, and the platform supports two-factor authentication.

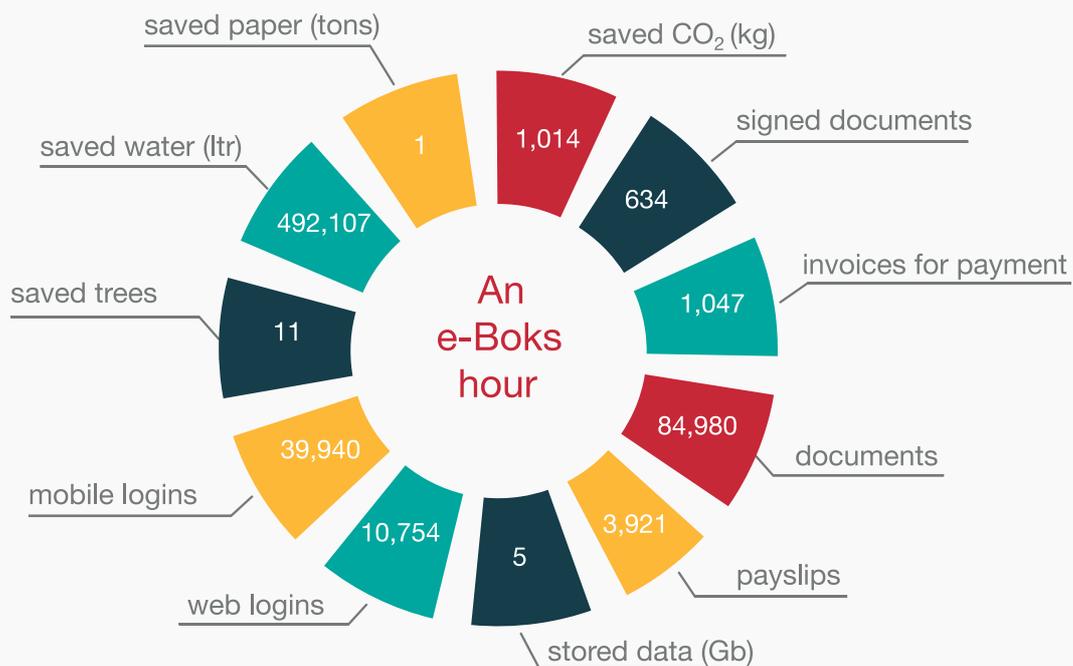


## Sustainability

### Benefit from working with a sustainable partner towards meeting the Paris Agreements

Through the e-Boks commitment to the UN Global Compact, the sustainability efforts positively impact our partners as well. e-Boks takes an environmental responsibility towards contributing to a greener world and safeguards human legal rights by enabling secure & transparent access to institutions and private companies.

Based on 744 million documents sent in 2021



[Read our UN Global Compact report](#)

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Want to know how e-Boks can help  
your Telco business establish new  
revenue streams by transforming  
digitally?

Please don't hesitate to contact us.  
[global.e-boks.com](http://global.e-boks.com)

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