5G
THE SOCIETAL IMPACT

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FOREWORD

By Menno Van Den Berg, President Samsung Electronics Benelux

Over time, technological innovation has brought us prosperity and joy. It has and will continue to open possibilities that seemed unthinkable a few years ago, such as being able to share every moment instantly thanks to smartphones and mobile internet. Now society is preparing for ground-breaking technologies like artificial intelligence (AI), virtual reality (VR) and the Internet of Things (IoT).

Samsung's future 5G technologies will mean way more than a fast-mobile internet connection; they will propel the 4th industrial revolution and elevate other digital innovations to a whole new level; self-driving cars for instance.

5G technologies will mean way more than a fast-mobile internet connection.

Samsung already invests heavily in 5G, which is already one of the strongest growth-driving business areas and – more importantly – will massively improve citizens' lives.

Samsung has compiled a trend report on 5G and its impact on Belgian society. Belgium is a well-connected society with the 6th fastest 4G network in the world. As Europe's capital, Brussels and by extension Belgium should - with the help of government

incentives - lead the charge when it comes to a smooth roll-out of 5G.

The efficient introduction and implementation of a supersonic 5G network will un-tap incredible possibilities in four sectors in particular: healthcare, transport, entertainment and smarter industry. Thanks to 5G, the smart society is near.

In this trend report, Samsung shows you how and why.

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5G: boosting smart society's four pillars

- Society's lingering healthcare issues

- Talkative transport

- Next level in entertainment

- Smart(er) industry

What is 5G?

What is **5G?**

5G stands for the 5th Generation in mobile telecommunications.

It's a ground-breaking 2020's technology with a bandwidth speed up to 200 times faster than its predecessor 4G.

As a supersonic network, 5G will propel 8K and VR livestreaming viewer experiences and catalyze IoT and Smart City solutions. 5G will also allow an uninterrupted transfer of mobile data thanks to its very low latency. Its connection density makes it possible for a gigantic group of devices to enjoy high-speed connections at events such as large music festivals. 5G will facilitate high-speed mobility handovers as well: trains and cars will eventually communicate autonomously.

The history of wireless cellular technology kicked off in the 1980's, when 1G networks became the analog telecommunication standard for radio signals. Its successor 2G connected the 2G-radio network to the existing telephone network. Whereas the voice during a call was just modulated to a higher frequency in 1G, 2G enabled the birth of SMS and MMS.

3G in the 2000's was able to process and transfer more information than 2G. This fueled the rise of smartphones and opened the door for mobile internet access, video calling and emailing.

The data-focused 4G network came next, providing a mobile broadband internet access that significantly sped up internet connections. Among other things it made streaming platforms, gaming services, high-definition mobile TV, video conferencing and cloud computing possible.

5G is right around the corner and will generate even more opportunities, especially in the fields of healthcare, transport, entertainment and the economy.

Death of Wi-Fi?!

Wi-Fi became popular at the end of the 90's because it gave people the ability to connect devices such as computers and later smartphones to the internet within a particular area, without messy wires.

5G will possibly make Wi-Fi as we know it redundant. That's because connected devices will either have an e-sim through which they directly connect to the internet, or a central router will pick up a 5G signal and spread it around the house making fiber-based connections redundant.

Once fiber-based connections top the speed of 5G, then we probably will use a combination of both, but until then 5G will prevail.

80's
1G
2.4 Kbps

90's
2G
64 Kbps

00's
3G
2,000 Kbps

10's
4G
100,000 Kbps

20's
5G
20,000,000 Kbps

5G:
boosting *smart society*

5G:
boosting *smart society's*
FOUR PILLARS

The rise of digital technologies has been transforming nearly every aspect of modern life. Most people are online 24/7, have access to a seemingly endless amount of data and have multiple devices – smartphone, home security systems and a refrigerator for instance – interconnected. This smart society allows us to focus our resources and capital on the activities and relationships that matter the most. The smarter our society becomes, the more people will benefit. Enter 5G: the indispensable catalyst that brings society to the smartest possible level by elevating four pillars; healthcare, transport, entertainment and industry.

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5G has the potential to impact global society as much as the inventions of the telephone, the television and even the internet.

This revolutionary technology will enable an Internet of Medical Things (IoMT) that will among other things help elderly to live autonomously, introduce remote surgeries and leverage the breakthrough of wearable devices that will allow personal care and long-distance monitoring. Considering transport, 5G will facilitate vehicle-to-vehicle communication and driverless cars – leading to less traffic jams and safer roads in general – and improve the functioning and popularity of public transport.

5G will transform the entertainment sector. It will make tv experiences more personalized and interactive than ever before, let gamers feel the physical blows their virtual characters suffer and bring personal assistants to life using holograms. Finally, 5G's speed and low latency allows a drastic shift on an economic level, too. Both production and logistics will face considerably less bottleneck issues and enjoy smooth and safe electronic payments. E-commerce experiences can continue their steep rise and an all-round virtual retail will enter the scene.

Labelling 5G as simply the successor of 4G in a series of mobile telecommunication generations would not do this invention justice. 5G has the potential to impact global society as much as the inventions of the telephone, the television and even the internet.
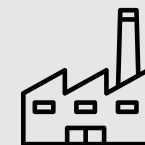
HEALTHCARE

TRANSPORT

ENTERTAINMENT

INDUSTRY

1
HEALTH-CARE

SOCIETY'S LINGERING HEALTHCARE ISSUES

Healthcare technologies have made massive leaps forward over the last decades, resulting in an overall health improvement. Gapminder statistics show that Belgians born in 2018 are expected to live on average 8 years longer (81,2) than the generation that was born in 1980 (73,2).

Lung cancer has become 25% less deadly for Belgian males in a timespan from 2002 to 2016: dropping from 80,5 deaths per 100,000 men to 60,8 two years ago. There's a similar positive trend for breast cancer. Its mortality rate decreased 20%, from 30 deaths per 100,000 women in 2002 to 24,1 fatalities in 2016.

The introduction and implementation of 5G in healthcare can provide effective and groundbreaking solutions from which all healthcare stakeholders – hospitals, doctors and most importantly patients – would benefit. 5G can tackle the three hottest topics in healthcare through the development of the Internet of Medical Things (IoMT): the ageing population, long-distance robotic surgery, and an improved personal healthcare via monitoring.

Ageing society poses **a new challenge to Belgium**

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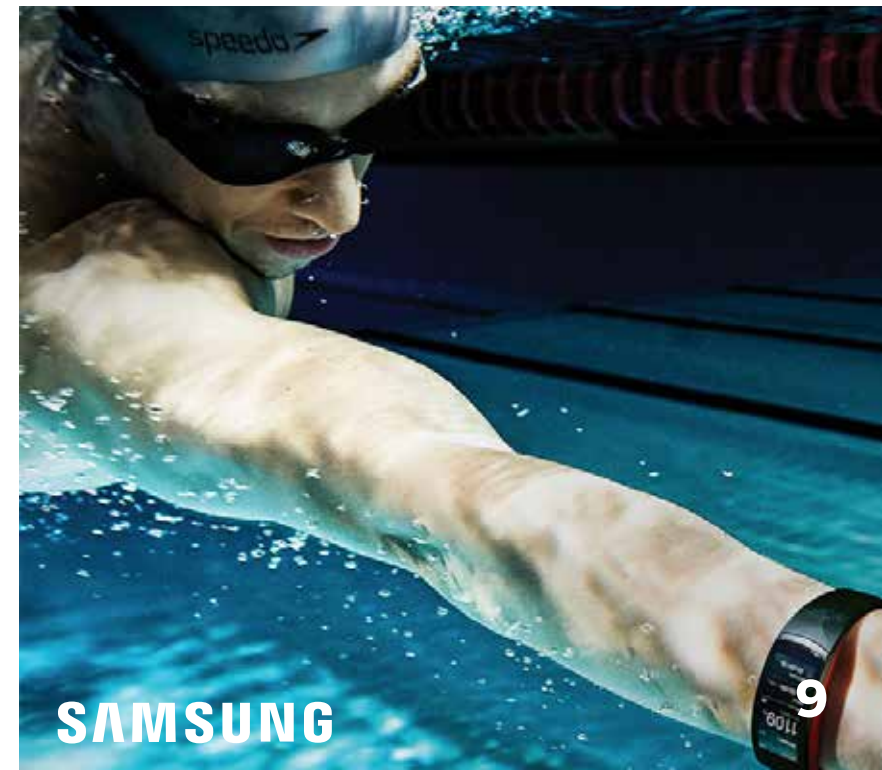
1 IOMT* HELPS THE GROWING NUMBER OF ELDERLY PEOPLE LIVE AUTO-NOMOUSLY

Belgium's steadily ageing population puts the healthcare system under pressure. The numbers speak for themselves. In 2016, the ratio of people suited for the labor market – aged 18 to 66 – versus elderly, aged 67 or older, was already just four to one. By 2060, that ratio will be two and a half to one as 39% of all Belgians will be 67 or older, according to the official Belgian government statistics bureau Statbel. This shift in demographics places added demands on healthcare support, as more and more people will need all-round medical assistance and percentage-wise the working population will drop.

The arrival of 5G allows for the creation of an IoMT. Seamlessly connected medical devices can meet those new needs by helping seniors live more independently. Think of visible ones as watches

79%	1991	21%
75%	2016	25%
61%	2060	39%

Ratio working people vs. retired people
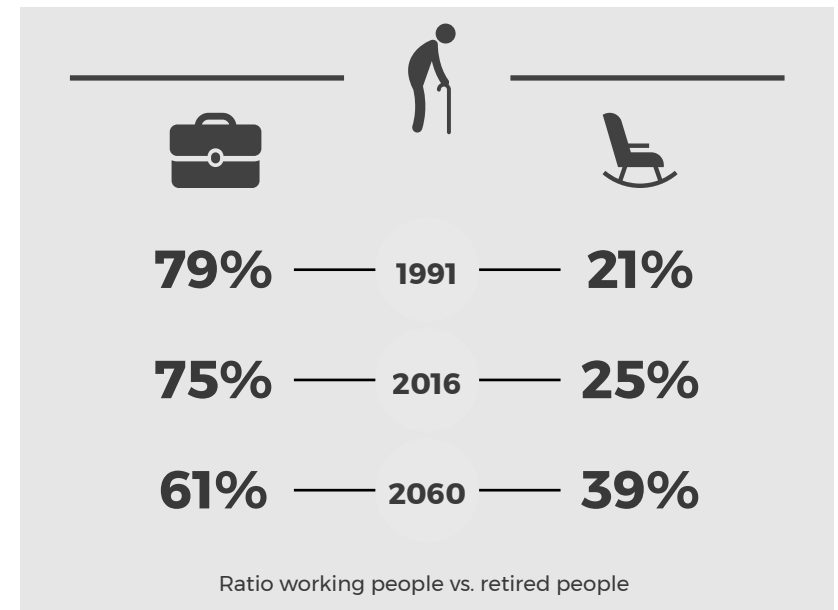
Source: statbel.fgov.be

Connected medical devices and an IoMT will assist seniors live **more autonomously**

that measure your heart rate, and implants like the next generation pacemaker.

Connecting medical devices to homes will form one broad IoMT, autonomously monitoring the physical state of elderly patients. Monitoring elderly people's health from afar by high-tech medical devices would also lower the number of hospital checkups they would need, and reduce the number of medical visits by healthcare workers. AI technology can help during emergency phone calls too, by processing data from wearable devices instantly.

*IoMT: The 'Internet of Medical Things', can be compared to the Internet of Things, but with focus on connected medical tools. This could lead to the next level in medical services. Ex: A smartwatch connected to the emergency services.

Thanks to 5G, surgeons will be able to perform remote surgery - which means they won't even need to be in the same operating theatre

2

5G SIMPLIFIES ACCESS TO SPECIALISTS WORLDWIDE WITH REMOTE SURGERY

Still too often, an unfortunate family makes headlines when one of its children suffers from a rare, life-altering disease. As these illnesses can't be cured by any easily available surgery, a super expensive treatment abroad is often the only solution. Besides the money and the specialists' availability, the physical distance between the specialist's operating room and the Belgian patient is often a major issue.

Thanks to 5G's extremely fast connection and almost non-existent latency, a surgeon in, for example the United States will be able to perform robotic surgery using a high-definition livestream in Belgium without any lag or delay. While this potentially life-saving technology is still at an early stage, Belgium already wants to take on a key role in overcoming physical barriers to cutting edge healthcare worldwide. It underlined that ambition by opening Orsi, the world's largest robot surgery training center in Melle in September 2018.

3 WEARABLES ENABLE PERSONAL CARE AND LONG-DISTANCE MONITORING

It's better to be safe than sorry, especially considering Belgian patients' health. That's why continual prognosis, rather than diagnosis, should be the goal. Severe gradually developing conditions or sudden life-threatening physical breakdowns call for constant proactive monitoring, not just for the needs of patients but also for healthcare budgeting.

5G will enable healthcare to **focus on prognoses** rather than diagnoses

Wearables connected through 5G are the way to do this. A study by Stanford University School of Medicine concluded that wearables can predict when we will become ill. Monitoring on a large scale could, with the help of big data - predict and thus limit the spread of epidemics. Data from the wearables would be transferred and processed at 5G speed. Patients support the move to wearable health monitors. A PwC study revealed that 80% believe that wearables can make healthcare more convenient. Hospitals could benefit as well and save 16% of their budget, as CDW Healthcare, an IT resource that monitors over 15.000 healthcare organizations, calculated. This thanks to a bunch of cloud-based services together with high-tech medical devices and improved administrative tools.

The Belgian start-up FibriCheck is a prime example of how wearables can enable personal care and enhance long distance monitoring. It's the first medical certified solution – in the form of an app – that detects cardiac arrythmia early. The app measures your heart rhythm when you press your finger on your smartphone camera for 60 seconds. Doctors are already suggesting the app and can easily monitor patients from a distance and intervene depending on the outcome of the test. It's a ground-breaking preemptive approach. FibriCheck says irregular heartbeats are responsible for 20% of all strokes and 75% of strokes can be prevented by quick intervention and active follow-ups. Besides cardiac patients, diabetics can benefit from 5G wearables as well. The US based company Dexcom G6 manufactured a Continuous Glucose Monitoring system (GCM) that outshines the traditional finger-stick tests. Those tests measure one point in time and give no indication whether glucose levels are rising or falling. The GCS device allows patients to track trends over time, helping them to improve their insulin regime. Diabetics can share their personal glucose information with up to five people through the app.

Hospitals could benefit as well and **save 16%** on their budget

This offers peace of mind for a parent with a diabetic child and provides doctors 24/7 blood sugar level information on their patients. 5G will dramatically improve healthcare. IoMT will help the growing number of elderly people to live autonomously. 5G's speed and low latency will simplify access to specialists worldwide by erasing physical borders.

Wearables will enable personal care and long-distance monitoring – fueling the shift from reactive healthcare to preventive personal care. Samsung supports this technology-driven advance in healthcare. Thanks to the intuitive Samsung Health app for instance; through which people stay well-informed about their activity, nutrition and heart rate. Soon, we will able to consult a doctor via the Samsung Health app.
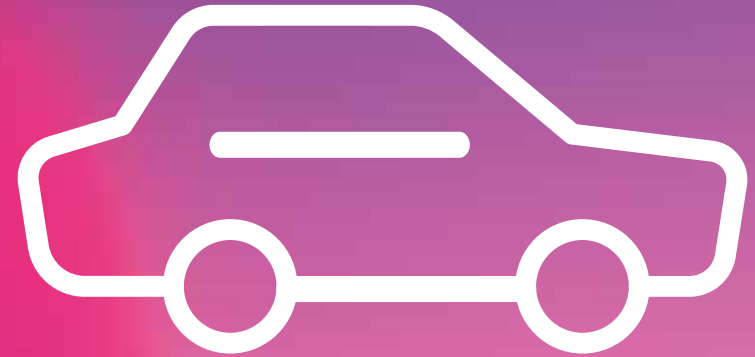
2
TALKATIVE TRANSPORT

TALKATIVE TRANSPORT

Despite the rise in ride sharing systems and excellent access to an extensive public transport network, Belgians still like to stay in their own driver's seat.

Numbers by the Belgian Federal Government Department of Mobility illustrate the steep rise of 'vehicle kilometers' or the total amount of kilometers all vehicles combined drove on Belgian roads: 29 billion in 1970, 70 billion in 1990, 90 billion in 2000 and 100 billion in 2016.

Our roads and infrastructure systems often get clogged up with traffic. In 2014, nowhere in the world did drivers lose so much time in traffic jams as in Belgium – a whopping 51 hours a year according to INRIX Global Traffic Scorecard. In the first 6 months of 2018, the number of hours where the combined traffic congestions exceeded 100 kilometers, rose by 22% compared to 2017; from 696,4 hours to 848,3 hours. The number of hours where Belgian traffic jams reached over 300 kilometers nearly doubled in that same period as well, going from 24,2 to 46,6 hours.
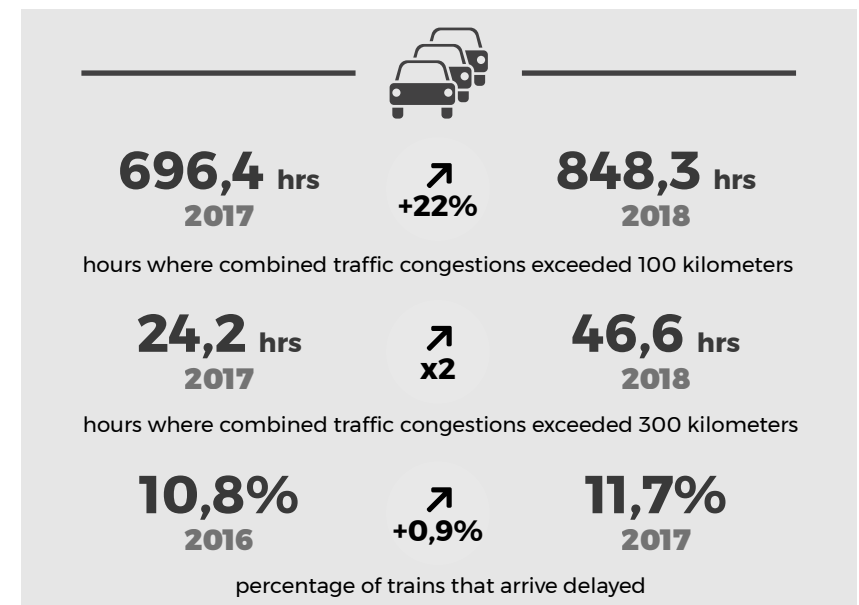
An even bigger issue the mobility sector faces is the numbers of car accidents and lives lost on the roads. The Belgian statistics bureau Statbel reported that in 2017 no less than 38.020 car accidents occurred on Belgian roads. Leading to 49.066 victims and 615 lives lost. 5G, vehicle-to-vehicle communication and driverless cars can lower the number of traffic jams and reduce the number of car crashes and road fatalities, too.

Besides road fatalities and traffic jams, public transport isn't operating nearly as smoothly as it should. The NMBS or National Belgian Railway Society is a prime example, as punctuality reports by Infrabel show. In 2017 11,7% of all trains were delayed, compared to 10,8% in 2016 and 9,1% in 2015.

A 5G connection can vastly improve the interconnectivity of all trains and boost the number of trains that will arrive on time. If the popularity of public transport would rise, the number of cars on the road and car crashes will most likely go down. It would be a threefold win.

696,4 hrs
2017

↗ **+22%**

848,3 hrs
2018

hours where combined traffic congestions exceeded 100 kilometers

24,2 hrs
2017

↗ **x2**

46,6 hrs
2018

hours where combined traffic congestions exceeded 300 kilometers

10,8%
2016

↗ **+0,9%**

11,7%
2017

percentage of trains that arrive delayed

1.

LESS TRAFFIC JAMS THANKS TO VEHICLE-TO-VEHICLE COMMUNICATION

Nonetheless, more traffic does not have to imply more traffic jams. Vehicle-to-vehicle comunication - a technology that enables real time communication between cars - will soon be possible thanks to 5G.

Constant interacting vehicles would in the longer run provide big data as well, which can be analyzed to predict congestion and automatically suggest alternative, less time-consuming routes on the go, dividing traffic on different routes and thereby solving all congestion issues. An IoT-technology by Bosch already helps drivers save time and reduce traffic jams by showing them nearby parking spots when they need one. Passing cars equipped with parking sensors measure open spots and shape a real-time map for other drivers; displaying where their car might fit.

Technology is making transport safer as we speak, too. The Swiss company WayRay for example will soon use AR (augmented reality) technology to project all necessary road and car information onto your windscreen – keeping your eyes on the road at all times. Vehicle-to-vehicle communication will take this state of awareness to a whole new level. Cars will be able to interact and help drivers anticipate vehicles entering their lane or pedestrians crossing the street.

Communicating vehicles offer drivers an extra set of eyes and will reduce traffic jams

Driverless cars communicate in a *more elaborate and efficient* way than people do

2.

DRIVERLESS VEHICLES LEAD TO SAFER ROADS

In the end however, a driver still must process and act upon the data he or she receives from vehicle-to-vehicle communication. Tricky, as the Institute of Electrical and Electronics Engineers calculated that 95% of all car accidents are caused by human error.

Ideally, human interaction between drivers would become obsolete by letting cars and other vehicles steer themselves. 5G would enable this – placing all traffic in sync with mind-boggling accuracy. This would dramatically lower the number of road traffic accidents and it would help Belgium achieve its goal of a maximum 420 road casualties per year. The Vias Institute – Belgium's knowledge hub for road safety and mobility – claimed this goal would be very hard to reach with existing technologies.

3.

5G: BOOSTING PUBLIC TRANSPORT'S EFFICIENCY AND POPULARITY

5G would increase the efficiency and on-board enjoyment of public transport enormously. Linking every train, subway or bus to a central controlling grid, the number of accidents and delays would nearly vanish. 5G would finally widely introduce internet connections on public transport, too.

In October 2018 Flemish public transport provider De Lijn broke off a four-year cooperation deal with LijnCom to install Wi-Fi on buses and trams. De Lijn said that passengers do not need Wi-Fi as their mobile data package is sufficient to meet passengers' on-board connectivity needs. Meanwhile, the CEO of the NMBS announced in October 2017 that Wi-Fi would be a no-go on Belgian trains because 'it is too expensive'.

5G would be able to provide internet on public transport thanks to its fast and reliable connection. This is also a required condition to transform train units for commuters to a prototype of the productive co-working space of the future. Samsung embraces this idea and is currently testing a train concept with KDDI, aiming for a launch in 2020. Next level public transport would lead to less private cars and road fatalities, too.

Thanks to 5G communicating cars, driverless vehicles and seamlessly punctual public transport can thoroughly tackle all the mobility problems Belgium is facing today: relentless traffic congestion, way too many road fatalities and the problematic

functioning and brand image of public transport.

> ❝
> **Thanks to 5G; communicating cars, driverless vehicles and seamlessly punctual public transport can thoroughly tackle all the mobility problems Belgium is facing today**
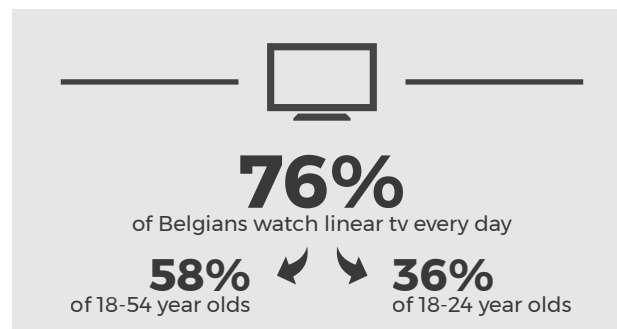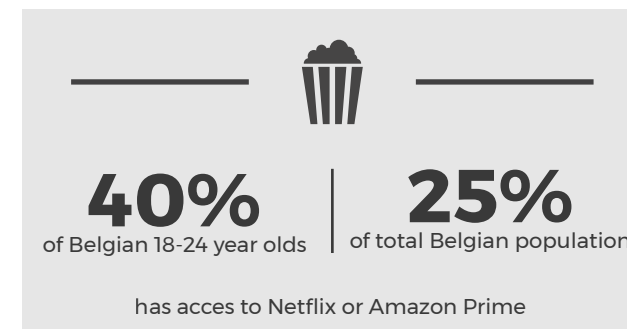

5G Railway:
Enjoy Immersive Multimedia Experience on Board

Game Multimedia Biz Center

NEXT LEVEL ENTERTAINMENT

3

The **NEXT LEVEL** in entertainment

Customer is king more than ever, specifically in the entertainment sector. Home too late for the 7 pm news? Just digitally turn back the clock and watch it as if it was in real time. Can't get enough of that new show your friend recommended? Just binge watch an entire season. Want to choose what the characters do and alter the outcome of the series? Just watch the soon to be released interactive episode of the widely popular science-fiction show Black Mirror and interfere all you want. Needless to say: the skyrocketing individualization and interactive possibilities of the entertainment sector seem limitless.

76%
of Belgians watch linear tv every day

58%
of 18-54 year olds

36%
of 18-24 year olds

40%
of Belgian 18-24 year olds

25%
of total Belgian population

has acces to Netflix or Amazon Prime

Source: www.vrt.be

1. Immersive TV-experiences

5G will propel this shift in the entertainment sector even further: it's the sole network connection able to provide that amount of data at a very high speed. Both are necessary to stream whatever content in the highest possible resolution and regardless of the location – the future standard expectation. Higher resolution requires more data. We are talking about 4k screens right now, but Samsung already launched an 8k screen and is truly pioneering in this field. If we want to stream content in this type of resolution we need 5G to be able to transfer the data.

US telecommunications multinational Verizon might be ahead of the pack. It will launch a 5G network service for families in multiple major American cities by the end of 2018 and bundle a TV service with it. Content would be delivered wirelessly to a 5G receiving modem in the subscriber's home, so drilling holes for cable left and right will become redundant.

The entire world will experience the shift towards hyper individualized entertainment during the 2020 Olympics held in Japan, a true benchmark event for 5G.

THE 2020 TOKYO OLYMPICS WILL BE AS **D-DAY** FOR ATHLETES AS FOR 5G

During this televised global event, viewers will be able to follow athletes' quest for eternal glory through their own eyes thanks to devices on the athletes' body and real-time virtual reality.

This POV type of virtual and augmented reality amusement on your smartphone, TV or VR headset will most likely transform the way we experience concerts and movies as well.

19

2. Gaming 2.0:
becoming both the eyes & body of our character

Ditto high expectations for the gaming industry. Console developers such as Microsoft are working on a device where all console power will come from central databases and games will be streamed in real-time with no lag – replacing replacing the big gaming consoles of today.

5G connections will make haptic gaming feedback possible as well. When gamers will put on a specific suit, they will for example experience physical contact when their character gets virtually hit. Just like the actors in Steven Spielberg's 2018 futuristic movie 'Ready Player One' do.

PHYSICALLY FEELING A HIT THE MOMENT YOUR GAMING CHARACTER GETS SHOT WILL BE THE NEW NORMAL

3. Hologram as a life-like personal assistant

Personal assistants will soon evolve too, surpassing the capabilities of current ones. In the Netlix series Black Mirror, one episode features the possibilities of a scarily digital human like personal assistant in a hologram – a three-dimensional image, created with photographic projection.

Thanks to SK Telecom's 5G technology, a holographic figure traveling alongside us will however become reality. Its personal assistant Wendy will be a companion that is able to listen, display emotions, think and react using facial expressions. This AI assistant of the future can only be powered by the data and bandwidth 5G offers and will eventually travel with you on your smartphone.

When it comes to interactive and individualized entertainment, the best has yet to come. Tailor-made experiences in gaming, television shows, live sport events and digital personal assistants will, thanks to 5G, alter for good the way we amuse ourselves in our spare time.

4

SMART(ER) INDUSTRY

SMART(ER) industry

In today's smart economy, companies can reduce production time and the number of bottlenecks in logistics, resulting in a higher productivity, thanks to autonomously communicating machines.

Consumers can experience an advanced level of user-friendliness as interconnecting devices aid and take care of daily monotonous tasks. The Smart(er) Industry however goes one step further. Analyzing all the obtained data instantly over a 5G connection.

The fading borders between on- and offline, the steep rise of e-commerce and the exploding population growth – 8,6 billion people by 2030 compared to 7,6 billion in 2017 according to The Economist – challenge logistics and production processes in business worldwide to become smarter and faster. 5G can facilitate these crucial transitions.

1. Decimating bottleneck issues in production & logistics

Production and planned transport are heavily intertwined and can both benefit from a 5G connection. Take maintenance, for instance. At the moment production processes temporarily shut down due to an unexpected failure or unplanned necessary update. A continuous stream of real-time data made possible by a 5G connection would enable companies to analyze productivity and proactively predict and plan maintenance. Less downtime would improve safety in the workspace. It can also boost a company's efficiency, as the World Economic Forum and Accenture found that reducing unplanned downtime by 70% can cut maintenance costs by nearly 30%.

When productivity rises, a smooth and speedy logistics system should follow. Blockchain, a decentralized technology used to manage data, will keep track of a meticulous history of every transported good; simplifying predictions and overall control in logistics. These massive data files need to be transferred instantly, preferably with a 5G connection.

> **Thanks to 5G, the number of unexpected maintenance interruptions would be cut sharply**

IBM estimates that the implementation of blockchain could save the logistics industry 33.1 billion euros per year on 70 million containers. IBM and Maersk, the world's largest shipping company, recently tested shipping a batch of avocados from Mombasa (Kenia) to Rotterdam. The calculated costs of the shipping container were over 1.740 euros, of which 260 euros for associated paperwork. Shared and synchronized digital data can erase all those administrative costs. The Port of Antwerp has already implemented blockchain in its daily activities.

2. Fueling the shift towards safe & seamless electronic payments

No smart industry without payment methods, for example Samsung Pay. The fact that almost all merchants refuse to accept 500-euro bills and that there's a shortage of eurocents – yet the European Union forbids Belgium to make any extra – are both writings on the wall that we are most likely evolving towards a cashless society. A shift that makes sense, as electronic and contactless payments are quicker, safer and more convenient for both buyer and seller. Figures of the European Central Bank show that the number of electronic payment transactions has gone up with a whopping 46% between 2013 and 2017. The popularity of these transactions require a fast and reliable connection especially during busy moments such as Black Friday and 5G will do the trick.

Paying electronically for smaller amounts of money is booming as well. According to Worldline, no less than 27% of all electronic payments in Belgium in 2018 are for sums below 10 euros, 11% even for bills under 5 euros.

Nearly 4% of all Belgian payments in April 2018 were contactless or Near Field Communication (NFC) ones, according to Statista. A small percentage, but double the fraction compared to the year before. 5G's speed and interconnectivity assets will surely further boost the number of electronic and NFC payments, ensuring an end-to-end secure system including all actors embedded in the mobile payment ecosystem: customers, merchants, electronic payment processors, security service providers and software developers to name a few.

Cash payments
2014 - 2017

-12,7%

Card payments
2014 - 2017

+23,3%

Contacless smartphone payments
2017 - 2018

+363%

Source: rtbf.be & sdw.ecb.europa.eu

Nearly **4% of all Belgian payments** in April 2018 were contactless or Near Field Communication (NFC) ones

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Virtual shopping
assistants will soon
elevate your
e-commerce experience

3. Boosting e-commerce & all-round virtual retail

The rise of e-commerce has recently altered the retail sector forever. Services like Colruyt's Collect&Go and web shops such as Bol.com, Samsung.com and Zalando have reduced the number of people visiting super-markets and shoe, clothing and furniture retailers in real life. 5G will make shopping from home even easier by transferring you digitally to the store thanks to a set of VR goggles. This supersonic connection will erase the main threshold left for e-commerce: the lack of help and information pro-vided by a shopping assistant; as a digital version will accompany you during your VR store visit.

The introduction and implemen-tation of 5G can improve and elaborate every aspect of today's industry: production, logistics, interaction between merchant and customer, and the eventual payments.

POLICY ADVICE

Based on the societal impact of 5G, we conclude with four pieces of policy advice.

1. Secure a fast and broad rollout before 2020

Belgium has a head start with the 6th fastest 4G connection in the world. It should be ambitious and remain an EU front-runner when it comes to 5G rollout by both the local and federal government, considering it's a vital catalyst for society and business. When allocating the frequency bands for 5G in 2019, longterm accessibility should be guaranteed, propelling providers to make the necessary investments.

A 5G connection should be accessible across the nation, even in rural areas. Like this, the smallest towns will be able to surf on the wave of economic growth and investment that comes with 5G.

2. Make the rollout of 5G in Brussels possible

Mid-October 2018, the regional Brussels government was on the edge of raising the extremely low maximal application radiation levels it first imposed. Until now, no more than 6 volts per meter per antenna is allowed – a norm 50 times stricter than the one the World Health Organization (WHO) suggests.
This pending decision on radiation levels makes a rollout for a 5G network possible and is a major step in the right direction. Hence, a decision should be made in this regard as soon as possible in order to have a 5G-connection in the capital city of Europe.

3. Secure future-proof solutions for road safety

Both vehicle-to-vehicle communication and vehicle-to-infrastructure communication are vital conditions for safer roads. 5G will be a neutral and trustworthy technology. When the European Commission decides which network technology should be the standard towards a single digital market, they should make the most future-proof choice - 5G.

4. Facilitate a coalition of experts

The Federal and local governments should work closely together and facilitate a coalition of experts. This coalition will contribute to the widespread support on the relevance and importance of 5G, putting it on the map and stimulating innovation. This group needs to consist of a broad range of actors, as 5G has an impact on different aspects of society. The coalition should bring together industry stakeholders such as providers and producers, policymakers from different fields in society and thought leaders.

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