MCB CONSULTING
POSITIVELY DISRUPTIVE

HOW DIGITALLY SOBER ARE WE?

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We live in a fast-paced and ever-changing community governed by technology. Our day-to-day lives have literally been transformed. From endless remote meetings to a multitude of apps and streaming services to choose from to ease our lives, we're consumed with being online and connected. As a result, the use of electrical devices and the volume of data we generate is booming.

It is a fact that technology has positively disrupted lives, business operations, education, trade, communication and so many other aspects of the industrialised world. The sudden outbreak of a global pandemic opened worlds of possibilities for technological advances and their use, at an accelerated rate, none ever experienced before. From weather predictions fuelled by renewable energy to online shopping, learning, working, technology has kept us all connected during the pandemic and is unmistakably the driving force behind sustainable change.

Over the years, we as individuals have started to feel more responsible about our impact on the planet and even organisations are leaning in. Businesses across the industrial spectrum are putting in significant efforts through their activities to align to sustainability targets and commitments to net-zero climate emissions.
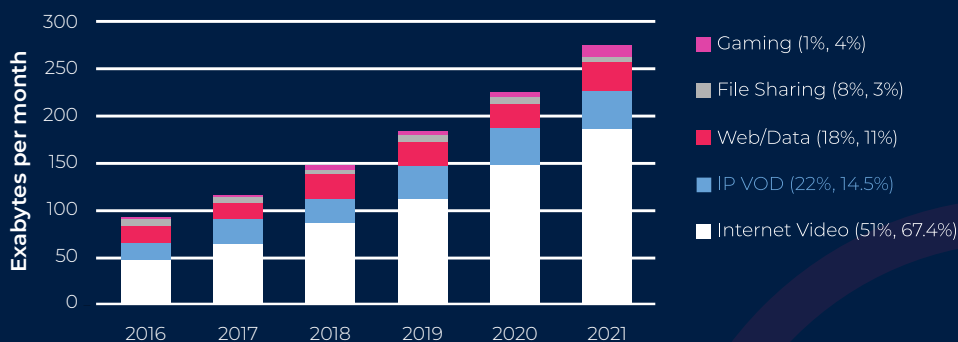
Around the world, 80% of major companies now report on sustainability, and thousands of organizations have aligned to reach climate targets through initiatives such as the United Nations' Race To Zero campaign.

However, behind the scenes, another story is unfolding, invisible for the many, yet with heavy consequences attached. We can no more be adamant to the impact of IT equipment, use of software, data centres or other types of technology whether on-premise or in the cloud. Technology sits at the heart of our professional and personal lives. The number of connected devices is on the rise, expected to reach 55.7 billion by 2025.

For instance, the growth in the number of users equipped with at least one connected terminal has resulted in an explosion of traffic on networks, a growth that is occurring at a rate that surpasses energy efficiency gains in equipment, networks and data centers.

24% CAGR 2016-2021

Evolution of shares of traffic 2016-2021
[Source: (Cisco, 2017a)]

Legend:
- Gaming (1%, 4%)
- File Sharing (8%, 3%)
- Web/Data (18%, 11%)
- IP VOD (22%, 14.5%)
- Internet Video (51%, 67.4%)

Y-axis: Exabytes per month (0–300)
X-axis: 2016, 2017, 2018, 2019, 2020, 2021

Most of the growth in these data flows is attributable to the consumption of the services provided by the GAFAM (Google, Apple, Facebook, Amazon, Microsoft), to which we are adding more and more their Chinese counterparts Baidu, Alibaba, Tencent, Xiaomi (BATX), to such an extent that it can represent 80% of the traffic carried on the networks of certain operators. Another striking example which is part of our everyday corporate life is the use of email.

Hear it out: Global email usage generates as much CO2 as having 7 million extra cars on the road. The image below speaks for itself.

The concept of digital sobriety

Whether we like it or not, digital technologies have a footprint. And even though a lot of companies are making the effort, the positive impact of same is still relatively low. Let us ponder on same for a moment.

What could be the consequences of this massive dependence and overload of technology? Big enough to jeopardise the survival of the next generations. There is therefore an urgency to reduce the energy and environmental footprint of digital technology and this requires questioning the social and economic usefulness of our behaviors linked to purchasing and consuming digital objects and services, and to adapting them accordingly in order to avoid immoderation. This calls in digital sobriety!

We cannot talk about digital sobriety without mentionning the report LEAN ICT: Towards digital sobriety, though, released in 2019 and published by the French carbon transition think-tank **The Shift Project**, which aims to reduce the environmental impact of our technologies.

The report states that: 'The share of digital technologies in global greenhouse gas emissions has increased by half since 2013, from 2.5% to 3.7% of global emissions. The demand for raw materials such as rare and critical metals, essential for both digital and low-carbon energy technologies, is also growing.'

If the increase in equipment rates and the multiple types of peripherals make full use of available reserves of these metals, it appears that many of them are difficult to recycle: for example, the recycling rate of indium, gallium, tantalum and germanium is lower than 1%. In order words, digital usage is fast growing, and it is power and resource hungry.

Being digitally sober looks easier said than done however. In fact, the president of the Shift project gave a fine definition of sobriety as 'buying the least powerful equipment possible, changing them as least often possible, and reducing unnecessary energy-intensive uses. So it is a question of mindset!

Global email usage generates as much CO2 as having **7 MILLION** extra cars on the road

1 LESS EMAIL sent per day by each email user in the UK would reduce emissions by **16,433** tonnes of CO2

which is equivalent to **81,152** flights from London to Madrid

The impact of email usage. Data from Science Focus and OVO Energy

Responsible actions stem from better understanding

Our responsibility lies both in our individual actions as the actions we carry out for the collective and greater good. One of those responsibilities is to get the right information and understand how to act accordingly.

The term 'Digital' is so widely spread nowadays that it can still be confusing. Do we all know the difference between digitize and digitalise? The global pandemic is an example of how fast organisations and industries activated digital responses to ensure business continuity and survival. If shopping and grocery shopping has been a reality for years in many countries, it was enforced overnight in many others, including Mauritius due to mobility restrictions, lockdowns and other and it helped thousands to achieve their targets. It's simply the ability to dematerialize what's physical into virtual and hence online.

On the other end, digitalise refers to a complete transformation. More than just making existing data digital, digitalization embraces the ability of digital technology to collect data, establish trends and make better and informed business decisions.

Just like we, MCB Consulting, along with our long-established partner accompanied the digital transformation of an international telecommunication company in just seven months while in lockdown, to launch the first digital bank entirely remotely. Today, this business is thriving with thousands and thousands of clients onboarded in one year. Yet, digitalisation with all its implications sure leaves its mark on the planet, i.e a footprint. How do we address this?

Think – Discuss – Act or Think before you act

As much as this adage Think – Discuss- Act resonates with the DNA of MCB Consulting since its inception in 2014, it is a motto that has over these past years been taken over in the jargon when talking about digital sobriety, though coined as 'Think before you act' which in fact simply pushes stakeholders in the technology industry to question the usage of their digital technologies.

How relevant is it to invest in technology, and if so, what piece or type? Is it really necessary or the right timing? Pausing to reflect on the importance of developing technology is crucial today more than ever in view of the damage and consequences.

It is undeniable that evolution requires an enhanced use of technology. It is a *sine qua non position*, meaning we have to invest but we can choose to invest more responsibly and develop only what is meaningful while being impactful.

For this to be effective, we need to effectively establish our digital strategic objectives and proceed to identify the corresponding business needs, some of these digital strategies being to:

- Create competitive advantage Enhance revenue

- Formalise, implement and improve risk management

- Improve Total Experience (TX)

- Increase operational efficiency

- Reinforce people centricity

- Transform data into information

Once this is done, one decisive step would be to

1) assess the infrastructure and IT solutions currently in place to better evaluate what should be retained and what should be scrapped to achieve all these goals.

2) This further step will help define the functional requirements of the type of technology required, which in line will be the stepping stone for

3) assessing the risks involved, whether in terms of human capital, regulatory concerns as to whether the technology should be stored on the cloud or on-premise or linked to environmental issues.

4) In the world of fast-paced and ever-changing technology, we need to be mindful of time when we devise digital strategies. We cannot

exceedingly plan if we very well know some technologies will be superseded by more-evolved ones, which can only translate our nimbleness in the approach, just as this mindset will define the types of methodologies we apply, whether we want to adopt an agile or waterfall system for instance.

Addressing the value chain

The whole value chain needs to be tackled properly at the pre-use phase, and then only the 'rebound effect' of technology consumption can be contained.

Some very conscious companies like Dell publish a carbon footprint of every single device manufactured. Many others are following lead but the success lies in how these very organisations address the whole value chain, incorporating all segments, from its primary activities to its support system, to provide a Total Experience (TX).

Total experience is a strategy that creates superior shared experiences by weaving together the following 4 disciplines:

CX

Customer Experience

Needs less friction and more delight through a better user interface, more options to communicate, and more empowered employees.

EX

Employee Experience

Needs faster, better access with empowerment across multiple channels/platforms to delight customers.

MX

Multiexperience

Deliver better experiences with a simpler interface across multiple touchpoints and modalities: voice, gestures, no-touch, etc.

UX

User Experience

Provide an effortless, more intuitive navigation in less time and across multiple devices.

When it comes to digital sobriety altogether, it really boils down to relevancy and how impactful the use of technology can be for all these audiences. Understandably, to gain competitive edge, companies choose the digital transformation path, which is the right thing to do, yet, when necessary. This is indeed the whole idea of sobriety. Being impactful virtuously. Everyone is responsible and accountable. Today, the big tech companies have a huge responsibility about producing eco-responsible IT equipment, as well as the businesses that choose to implement these technologies.

The type of industry will definitely matter in the equation, and some will be more willing than others to take risks, which is where the whole idea of partnerships make sense.

Putting sustainability at the heart of businesses

It is only by collaborating with others on the same destination that the industrial ecosystem can tackle a fundamentally complex challenge.

Just like the African proverb goes, 'If you want to go fast, go alone, if you want to go far, go together". By combining their efforts through solid partnerships, organisations can, for the benefits of customers and employees, unlock sustainability benefits across the value chain by saving costs, reducing greenhouse gas emissions, making more sustainable choices, and unlocking innovative strategies.

It is indeed true that consumers and regulators increasingly want brands to put sustainability at the heart of their operations. Getting all the minds together bears unparalleled opportunity to achieve greater social impact.

"*Partnerships help build a powerful ecosystem that achieve true sustainability to respond effectively and responsibly to the 3Ps: People, Planet and Profit, the triple bottom line that all organisations should aim to achieve, in line with the global goals set by the United Nations.*"