We live not in an era of change, but in a change of era. The pace of change is remarkable. No aspect of our lives will remain untouched. Across the world, economies and societies are being fundamentally transformed by digitalisation. It is redefining all aspects of life, from new models of business and work, to learning, leisure and democratic participation. It could even challenge the very idea of what it means to be a human being.

The promise of data and digital technologies to improve lives is compelling. However, decision-makers in government and business also need to tackle the risks that this epochal change will inevitably bring. We face the important task of seizing new digital opportunities for societies and economies, whilst mitigating the risks.

Since Telefónica published its first Digital Manifesto in 2014 there has been a substantial shift in the political climate. The benefits of globalisation are being increasingly questioned by populist and extreme political forces.

A New Digital Deal: Towards a human-centric digitalisation

“The social order is a sacred right which is the basis of all other rights. Nevertheless, this right does not come from nature, and must therefore be founded on conventions”.

Jean Jacques Rousseau, The Social Contract (1762)
Emerging technologies will also disrupt the way we exchange value. Blockchain’s distributed ledgers enable trusted transactions. New, decentralised organisational forms, such as Distributed Autonomous Organisations (DAO), may allow effective interaction between people who do not need to know or trust each other.

The positive impact of this epochal change on per capita Gross Domestic Product (GDP) could be four times greater than during the last Industrial Revolution.

**A new data economy is developing as the combined effect of a number of different developments, each in itself transformational:**

- The generation and storage of huge amounts of data, enabled by the falling cost of data storage and processing together with super-fast and ultrabroadband connectivity and the proliferation of sensors, built into everything from consumer goods to industrial processes.
- The ability of Artificial and Cognitive Intelligence and Machine Learning to make sense of this vast amount of data, turning it into valuable insights; this will be the key to solving many of the world’s most pressing issues, from climate change to migration and epidemics.
- The Automation of production which enables “re-shoring” and “mass customisation” of products. Routine jobs and repetitive tasks will be taken care of by machines and at the same time productivity will increase, though it is as yet unclear if this will be accompanied by job creation, perhaps bringing a new set of challenges.
- High-speed connectivity based on fibre and 5G networks.
- Decentralisation of processes using Blockchain and distributed ledgers, providing a way to establish trusted peer-to-peer transactions. Together, these developments are taking us into a new era. However, they are also creating concerns and challenges which, when combined, could jeopardise innovation, economic development and growth. The key question is how to govern today to create a better tomorrow.

**A new mindset is necessary in both the public and private sectors, taking into account the following factors:**

- **Scale and speed of change:** unprecedented in its scale and effects, digitalisation challenges the nature of national borders and increases the complexity of local decision-making. The speed of these changes is overwhelming policymaking processes and challenges international policy cooperation.
- **New digital divide:** connectivity is an important foundation of digitalisation and is the key to social inclusion. However, half of the world’s population, mostly in developing countries, is still not connected, meaning they are excluded from the benefits of digitalisation.
- **Privacy and security:** revelations about mass surveillance, security breaches and especially the ever more sophisticated analysis of massive amounts of data challenge the fundamental right to privacy.
- **Automation:** developments in AI, the Internet of Things (IoT) and the emergence of the Industrial Internet raise concerns about the future of work. If machines replace people, hard-won social and human rights will be in danger. This development might also create new forms of inequality and a need to help certain parts of society to adapt.
- **Dominance and gatekeepers:** the concentration of power in the hands of a few global digital platforms makes them de facto gatekeepers of the digital experience, potentially creating bottlenecks that threaten the sustainability of digitalisation and the Internet. Some platforms have a huge influence on public opinion and people’s everyday lives, which can challenge the fair and proper functioning of democracies and markets.
- **Fair contributions to societies:** there is a growing perception that global digital platforms do not contribute sufficiently to the welfare and development of local communities. This risks generating further resistance to digitalisation.
- **Sovereignty of States under threat due to the global nature of digital services:** the powers of governments usually end at national borders. Governments find it increasingly difficult to enforce national laws, for example in the collection of taxes and the protection of citizens’ privacy. This creates public debates on the question if global digital services comply with national laws and contribute sufficiently and fairly to society.
- **New challenges for democracies:** democracies are facing new challenges to form public opinion through social media because fake news and misinformation are making it difficult to ensure fair democratic processes.

**A New Digital Deal: towards a human-centric digitalisation**

Many existing rules, frameworks and processes are no longer fit to resolve these challenges. Their complexity means that broad collaboration to find solutions is now necessary. The goal should be to define how new technologies could be used in fair and democratic ways. Technology needs to be human-centric and we cannot afford to leave anyone behind.

It is time for society to fundamentally agree on ethical principles and common values for a digital world: it is time for a New Digital Deal. It needs to define a new social contract which ensures better, more open collaboration between governments, business, and civil society and under which technology finally serves to improve everyday life for every member of our societies. We need collaboration and debate to find creative ideas to...
renegotiate, redefine and reassert common values for our digital future.

This New Digital Deal should establish:
- A Digital Bill of Rights that protects our values and fundamental rights in a digital world.
- A modernisation of our policies and regulatory frameworks to guarantee fair competition.
- A renewed focus on business responsibility based on better transparency and increased accountability for their services and platforms.
- A commitment to innovation, entrepreneurship and investment.
- A collective understanding of how digitalisation can be made sustainable by improving inclusiveness, transparency, accountability, responsibility and fairness.

Achieving such a human-centric digitalisation will require collaboration on the following priority issues.

Connecting digital lives: leaving no one behind

It is important to ensure that the benefits of digitalisation flow to all citizens to create a more inclusive society leaving no one behind. The first step for inclusiveness is to have infrastructure available to connect.

Driven by massive private investments, the growth of connectivity in recent years has been remarkable. However, almost half of the population is still not connected.

The reasons for this unsatisfactory situation are manifold and the public administrations should cooperate with the private sector to bring connectivity to all.

The private sector should find new ways of providing connectivity allowing it to deploy infrastructure in unserved, rural areas. Additionally, new methods of commercialisation should be established that make broadband affordable even for low-income consumers. Public administrations have also a vital role to play: regulatory reform can stimulate investment and removal of sector-specific taxation can make connectivity more affordable. Demand for services is stimulated by improving skills, promoting relevant local content and through the digitalisation of public administrations.

Overall, there are opportunities to establish new models for investment, as well as a need for new policies that encourage technological and business innovation. A new cooperation and collaboration effort between businesses and policymakers is necessary to deliver innovative ways to provide connectivity infrastructure.

Reforming social and tax policies: innovating in education, employment and taxation

One of the main public concerns regarding digitalisation is the loss of jobs.

However, history suggests that new kinds of jobs are created in place of those that are replaced by new technologies. This means that we will see a transitional period during which workers will need to be reskilled and social policy will need to mitigate the most negative impacts.

Research suggests that:
- Nearly half of all the work we do today will be automated by the year 2055.
- 90% of jobs will require some level of digital skill.
- 65% of today’s children will perform jobs that do not exist yet.

Chart 1. Disruption in the jobs market

Source: European Commission, DG Research and Innovation

Automation is improving business performance by increasing productivity. It is important that the disruption produced by the rapid pace of technological development is better understood. Society must be prepared for digitalisation and people must be equipped with the necessary skills to cope with it.
Innovation of social policies should focus on mitigating new inequalities born out of digitalisation. Some proposals brought forward include Universal Basic Income, negative taxation, four-day weeks and increasing taxes further on the wealthy. Solutions will require the engagement of all stakeholders, including workers themselves.

Massive adoption of robots and digital services provided from abroad can have disruptive effects on employment and contributions to public finances. Digitalisation will require policymakers to adopt new approaches to fiscal policy in coming years. But sector-specific taxation, such as a tax on robots, might have unintended consequences: holistic analysis and testing are needed.

Tax policies should avoid tax base erosion by ensuring that online and offline businesses contribute fairly to those societies where their transactions take place. Businesses will also need to embrace responsible tax practices and aim so as to fairly contribute to finance the public services of those countries where they provide their services.

Delivering trust in data

Data can be a force for good and its use can enrich the lives of individuals, benefit businesses and advance society as a whole.

We believe a new data ethical framework is needed because people should be at the centre of digital transformation. Human-centric technologies can transform civil services such as health, education and transport to create a better future. It can also enable sustainable development and help to address some of the world’s biggest problems, like climate change, natural disasters and pandemics.

Surveys show that people want to have control of their data, to decide how and when it is used and for what purposes. People also want meaningful choice in relation to their data usage.

Chart 2. Would you like to have your own tools to manage your privacy options on the internet?

No 6.3%
Yes 83.1%
N/A 10.6%

Building trust in relation to personal data requires attention to four basic concepts:

- **Transparency**: allowing users to access the information they generate.
- **Data security**: confidentiality and integrity of data are the pillars of privacy.
- **Putting people in control**: users should have access to tools that enable them to obtain the full value of their personal data in simple and convenient ways.
- **Choice**: people should have meaningful choices about how and for what purpose their data is used.

Supporting fairer platforms and accountable algorithms

Global digital platforms create value for their users, drive innovation and deploy new business models that often are more efficient or convenient than established ones.

Despite such obvious benefits, the dominance and market power gathered by today’s biggest platforms gives them the potential to control users’ digital experience and exert a huge influence on their lives. Some even have the ability to shape public opinion.

The combination of new technologies based on Artificial Intelligence, automated decision-making processes and massive access to data risks further reinforcing the dominance of the leading Internet platforms. This could create enduring bottlenecks in the digital economy.
To preserve the global and open nature of the Internet, local laws and values must be respected. To ensure fair contributions to societies, taxes and other provisions to national welfare and employment must be linked to the places where transactions take place and services are used. Policymakers should actively respond to these challenges and digital platforms should match their great power with increased responsibility towards their impact on the societies in which they operate.

Modernising rights and policies

Rights must apply equally online as they do offline.

In the digital ecosystem, business interests must coexist with people’s rights and the interests of States. There is a plurality of interests that should be taken into account in this debate.

Not only businesses but also governments within a democratic framework should contribute to an open and transparent Internet by protecting people’s rights and fostering transnational agreements in various relevant areas. Governments should seek a certain harmonisation of policies and rules in order to enable the fulfillment of individual’s rights.

Citizen and consumer rights are embedded in national and international arrangements, but their definition is usually shaped by their historical role in the offline world. These rights must become equally applicable in the online world, so the establishment of a “Digital Bill of Rights” must become the subject of a public debate and agreement.

When it comes to the rights of citizens, the oft-heard argument that “online is different” does not hold. Business must step up to its responsibilities and take an active role in society and the promotion of people’s rights.

Market supervision

A new policy and regulatory paradigm is needed, and they should be based on accountability and transparency, combining business self-regulation, policy guidance and regulatory supervision.

A variety of existing institutions shape digital policies, but the distribution of responsibilities has developed organically.

As the Internet matures and the next wave of digitalisation gathers pace, a strategic solution is required, creating appropriate institutional frameworks that tackle today’s challenges:

- Competition dynamics in digital markets have led to the concentration of market power in the hands of a small number of global players. Whilst innovation still takes place in the digital ecosystem, there is a great risk that it increasingly only takes place with the permission of these powerful firms, through the proprietary rules they enforce and the bottlenecks they control.

- Technological evolution and new business models are outpacing traditional policy and regulatory frameworks. In a fast-paced, disruptive, global, digital environment, regulation must become more responsive to behaviours and activities and less focused on specific industries and sectors. Not only businesses but also policymakers and regulators must embrace change and adapt to the new political and technological context.

- Supervision must be modernised in order to make it smarter and faster, seeking a new approach based on:
  - A focus on “what” rather than “who” is regulated.
  - A less prescriptive regulatory approach, leaving markets the freedom to experiment but with close supervision of market developments; retaining the capability to intervene decisively when market dominance and abuse take place.
  - The inclusion of data in competition analysis as the way to pay for services on a platform and a key production factor in the data economy.
  - More expertise about digital markets within authorities, making them fit for a digitalised economy and society.

Some dominant digital platforms have a far-reaching impact on people, competition and economies that often goes beyond those of traditional business. Such companies should place the values of transparency, accountability and non-discrimination at the heart of their approach and activities; they must assume greater responsibility for their impact on economies and societies.

- Business leadership based on a values-driven approach. Business, driven by values, must anticipate the impact of digitalisation, acting responsibly to achieve a sustainable digital ecosystem.

- This should include a cross-sector approach and a focus on citizenship, human and consumer rights, rather than a purely market-centred approach.

Global solutions

As digitalisation enhances globalisation, policymakers and businesses should strive to find global or regional solutions to problems that are rooted in the cross-border nature of the Internet. The role of governments should be to enhance international cooperation in order to solve new, global issues stemming from global digital services and data flows. In this regard, the rise of cyberthreats has become one of the most pressing dangers to the future of the Internet and there is a need for better alignment and cooperation between governments and the private sector.

Today’s regulatory frameworks and institutions were not built for this digital age. It is time to redesign them in order to preserve the values and achievements of previous generations. This must be done on the basis of a better understanding of how new technologies, business models and markets evolve and work. New frameworks will need to find the right balance between the experimentation and innovation inherent in well-functioning markets, whilst protecting people’s rights and ensuring sufficient competition.