Microsoft

Five Ideas
For
Five Years

Five Ideas For Five Years

Digital transformation drives Europe's economy, and over the past decades the European Union (EU) has **fostered innovation** and **set global standards** for the **responsible use of technologies** such as the General Data Protection Regulation. At the heart of the 4th Industrial revolution, the EU's **human-centric** approach to technology, based on timeless values, will be one of Europe's core strengths.

From start-ups to the most successful enterprises, artificial intelligence (AI) and cloud computing are already transforming European industries more rapidly than ever before. AI can put Europe at the **cutting edge of the digital revolution**. Channeled the right ways, these digital technologies can also be catalysts for developing new solutions to today's most pressing challenges, such as **reducing climate change, curing diseases and advancing public safety.** The digital revolution, however, also comes with risks of disruption to our society. A strong digital Europe requires that **no one be left behind**, and that respect of **human rights** and **ethics** shape a trustworthy transformation.

A flourishing European economy through digital technologies can help ensure society's broad **prosperity, equality and security,** creating benefits for all. As a longtime partner of the national ecosystems across Europe, Microsoft is willing to contribute to this ambition.

The 5 Ideas For The Next 5 Years outline some of the concrete steps the EU can take over the next legislative term to create a positive framework for human centric digital technologies. We hope these ideas will elicit the discussion about a successful and sustainable digital Europe.

Digital Inclusion
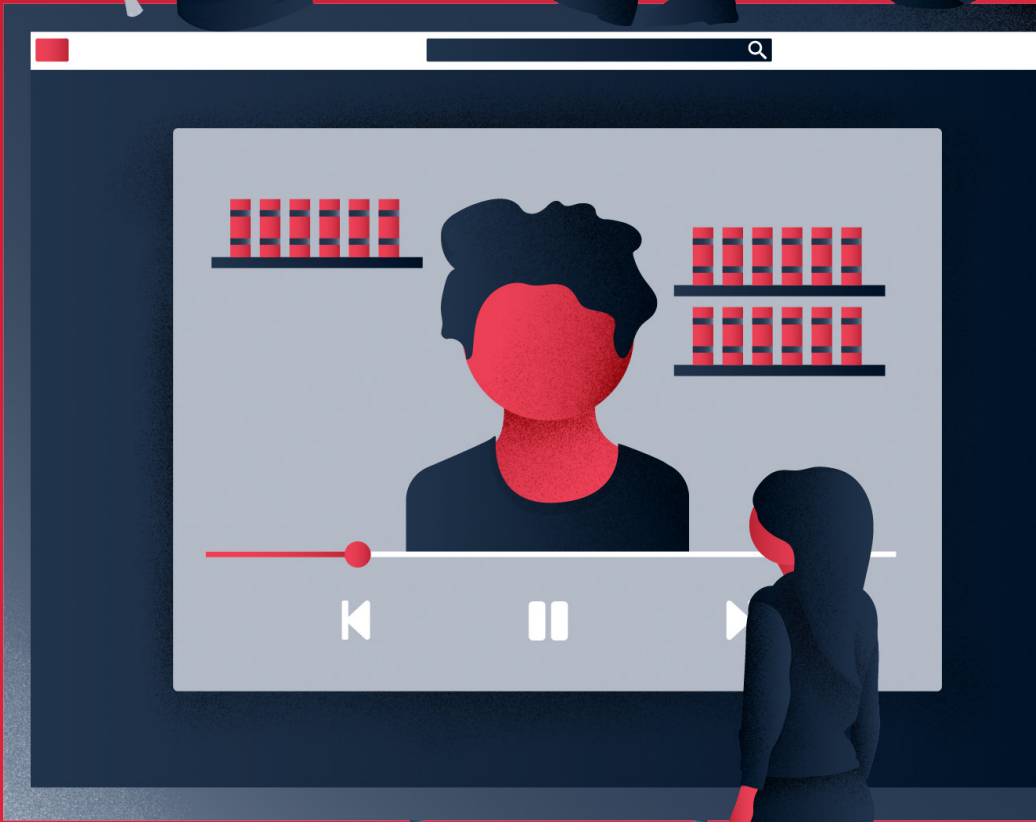
Our jobs and ways of working will change profoundly in the next decade. Experts forecast that 85 percent of the jobs that will exist in 2030 do not exist today.

As digital transformation brings socio-economic changes in the labor market, there is no doubt that education and lifelong learning will be critical to build workers' resilience.

Ensuring that everyone can benefit from the economic opportunities in the new digital economy is a key priority. We know that skill building is essential to success in a changing world. Young people entering the labor force are digital natives, but we need new ways to reduce youth unemployment. Schools and programs should encourage the development of both **technical and soft skills** and empower people to benefit from the opportunities today's digital world has to offer. We should consider expanding Erasmus opportunities to include work-based training - perhaps an « **e-erasmus** » - that could foster not only intercultural study exchanges but also **skill transfers**.

Both apprentices and experienced workers need to travel on a path to lifelong learning. The **AI school** that Microsoft opened in France is a model for what could be done. Similarly, LinkedIn Learning provides a means for people to bridge the gap between the skills they have and those they need in order to create **new job opportunities** for themselves.

But what does « digital revolution » mean for those who are not part of this transformation? In Europe, many rural areas still lack broadband access, thereby **limiting their ability to thrive in a digital economy**. Through our Microsoft Airband Initiative, combining new TV White Spaces technology with existing wireless solutions, we have demonstrated that lower cost solutions exist to deliver broadband quickly and efficiently to underserved areas. This solution can provide critical connectivity and productivity across Europe.
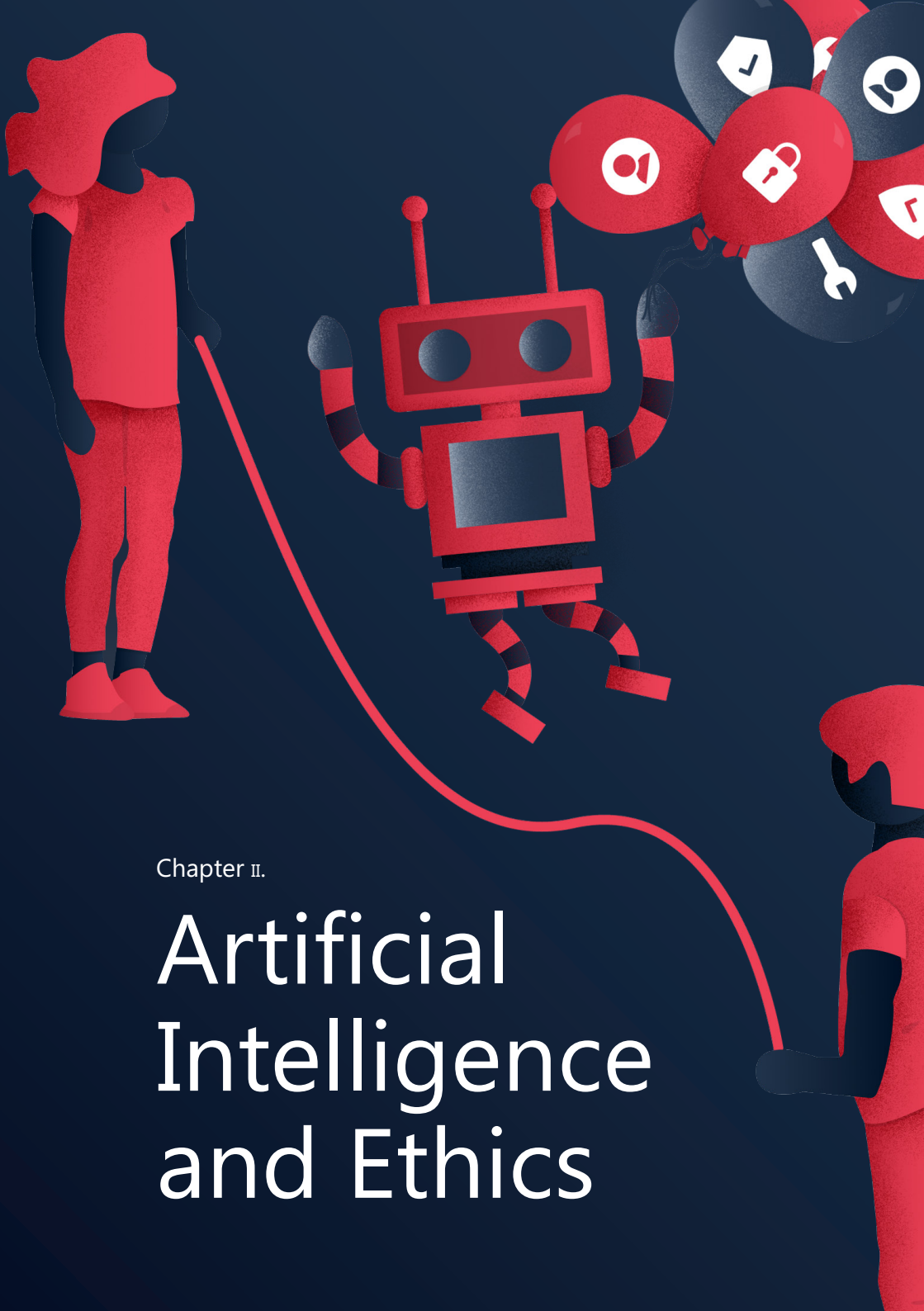
Chapter II.

Artificial Intelligence and Ethics

Artificial intelligence technologies will bring about both advances and changes to our economy and daily lives. Member States and European institutions have aligned to boost the EU's technology and industrial capacity. We must therefore provide European industries with clear direction toward a quick integration of AI to bolster their competitiveness.

At the same time, it is our duty to look at this future with critical eyes and focus on a common objective to strengthen our social fabric.

Deployments of AI must respect timeless values based on the European Charter of Fundamental Rights and democratic principles shared by all Member States.

Ethical AI should be based on common principles such **as fairness, reliability, safety, privacy, security, and inclusiveness,** and underscored through **transparency and accountability.**

One pressing question is how the use of biometric technologies such as **facial recognition** will impact our society. This technology brings important and even exciting societal benefits, but also the potential for abuse. The facial recognition genie, so to speak, is barely emerging from the bottle. Unless we act, we risk waking up five years from now to find that facial recognition services have spread in ways that exacerbate societal issues such as discrimination. By that time, these challenges may become more difficult to bottle back up. **It is time to work on new regulations for these technologies.** As Mark Twain once noted, « *The secret of getting ahead is getting started.* » The time to start is now.

Chapter Ⅲ.

Digital
Peace

In recent years, we witnessed an inflection point for cyber conflict, triggered by the **state-sponsored cyberattacks** of WannaCry and NotPetya. These attacks represent a larger trend in which citizens, technology users, public entities, civil society, and corporations have **all become targets of destructive digital weapons**.

Bold measures are needed for a safe digital transformation in industry while also **protecting civilians from indiscriminate cyberattacks**. Therefore, Microsoft proposed the idea of a *Digital Geneva Convention* and helped establish the *Cybersecurity Tech Accord* with over 60 global tech companies. In parallel, converging initiatives such as the European company-led *Charter of Trust* were launched.

Last November, a multi-stakeholder dialogue took place during the Paris Peace Forum that led to the *Paris Call for Trust and Security in Cyberspace* based on **9 pillars**, supported by more than 500 signatories including all **28 EU Member States** among 60 Governments and more than 450 NGOs and Private Sector entities.

It is unquestionable that cybersecurity will continue to be a top priority over the next 5 years.

Especially considering 2019 is a critical year for elections in Europe, it is urgent that we take measures to **protect democratic processes** from cyber-enabled threats.

In the years ahead, all Member States and the EU are in a unique position to move forward and develop **a collective European multi-stakeholder action** to effectively prevent cyber conflicts, in cooperation with civil society and Industry both on the provider and customer side, **to reach the goals of the *Paris Call***.

Fight Crime and Protect the People's Rights

Protecting people against terrorism and crime is a crucial function for Member States and the European Union.

To fulfil this obligation in today's complex digital world, old laws must be updated and harmonized across Europe to take into account not only the increasing volume of digital evidence, but the means by which law enforcement can access it lawfully. Modernizing the law requires striking the right **balance between a set of fundamental rights such as privacy and freedom of speech, and public security and safety.**

The Commission has introduced a promising proposal to address this challenge, known as the e-Evidence package. It is a positive step in the right direction. The legislative process must ensure that the legislation provides strong safeguards and does not erode protections for Europeans. The work is ongoing and there is no doubt that citizens, industry, civil society as well as governments and the European Parliament **will seek a more robust protection of fundamental rights.**

Achieving the right approach to access digital evidence in Europe will pave the way for an even broader solution by establishing a new international legal framework between the EU and the US. To ensure that such an international data access framework meets government and citizen expectations, including full respect of fundamental rights, Microsoft has articulated six principles to help shape both European regulation and multilateral agreement between the EU and the US.

Tech and Climate Change
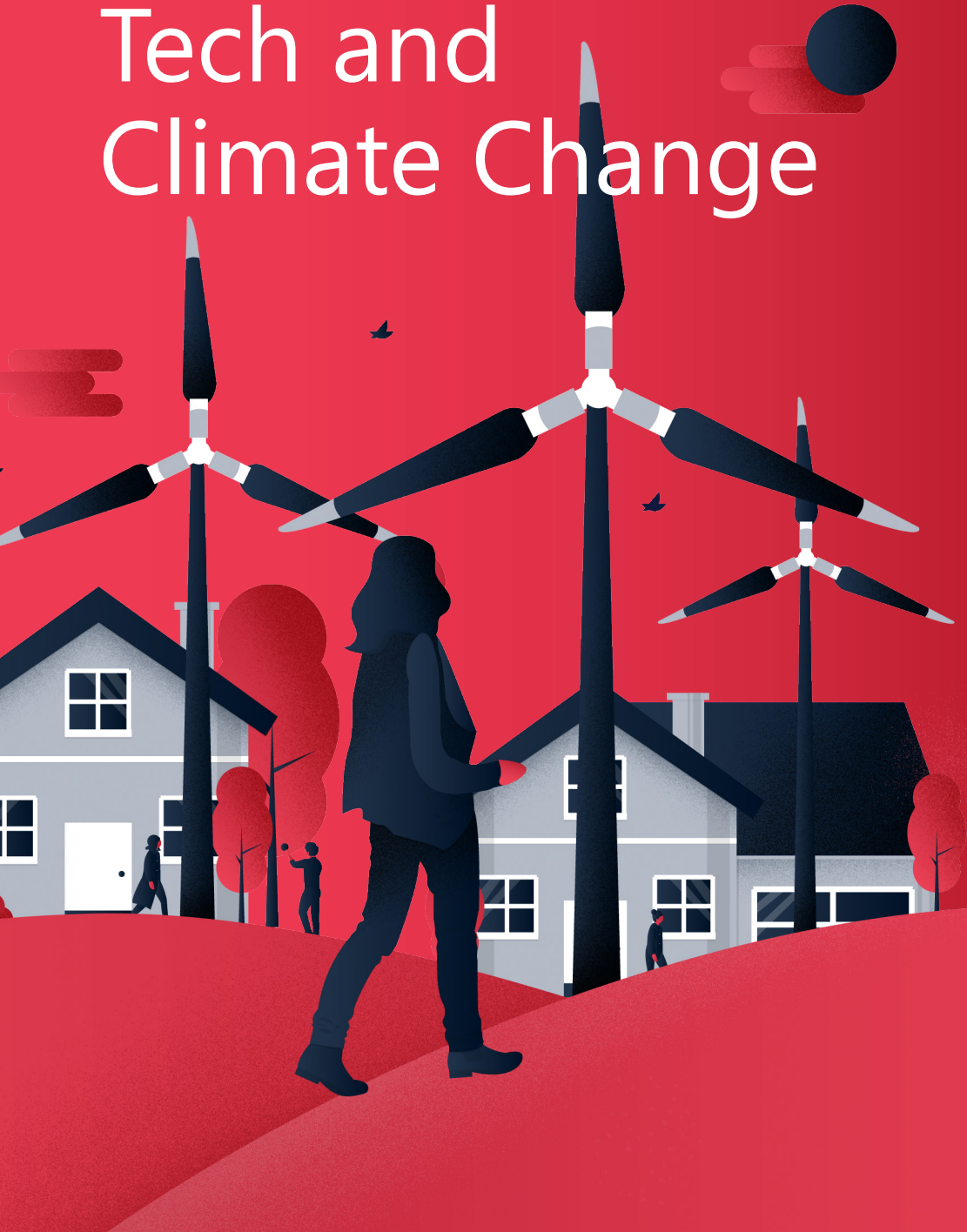
Human ingenuity combined with technology has solved many great challenges in the past. Climate change remains perhaps the greatest challenge still unsolved, but new efforts enabled by data-driven technologies like AI can become the game-changer in this space, although we must all do more, and faster.

Scaling private investments in climate innovations to meet the targets of the Paris Agreement, the EU needs €180 billion in extra investment every year until 2030. And to carry out the European long-term vision of a climate-neutral economy by 2050, investments of €520 billion are needed every year.

To fill this gap, greater corporate involvement in the production, distribution and consumption of **renewable energy is needed**. Microsoft has already been funding renewable energy projects in Ireland and the Netherlands, but further legislative action would encourage even more investments. We also need to enable a **full transformation of the energy sector**, including new solutions for **energy storage and smart grids** distributing renewable energy where and when it is needed.

Data for tackling climate challenges : for more actionable climate intelligence, scientists need **access to more and new environmental data sets for analysis.** Our « **AI for Earth** » program is moving AI out of the lab and into the field, where it can be used by everyone and everywhere to **accelerate research, innovation and solutions** to our most urgent environmental challenges.

Our collective work can only be the beginning. The policy and investment decisions taken today will determine where the world will stand a decade from now.
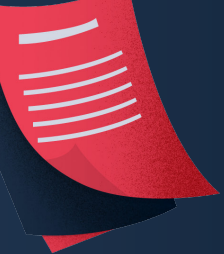
Microsoft
in Europe operates in all
EU member states

25 000
Local employees

50 000
SME's supported

7
European data centers

19
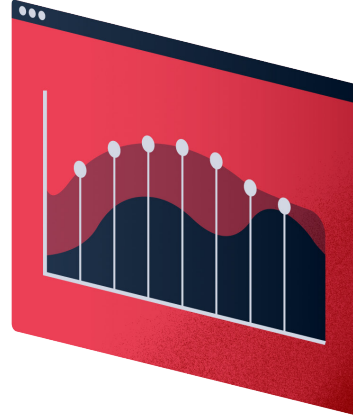Microsoft Innovation Centers in Europe

8
Of our R&D centers are in Europe

41 000
European Start-Ups supported by our Microsoft for Startups

Microsoft in Ireland

13
Data centers by end of 2019

74
Nationalities working in Microsoft in Ireland
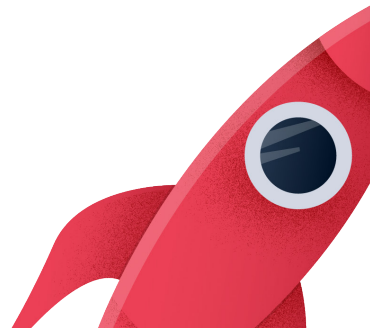
34
Languages spoken in our HQ in Dublin

600
Partners

600
Startups over the last four years have been supported through Microsoft for Startups

2
Research centers

2066
Employees

Microsoft

Visit our website for more information blogs.microsoft.com/eupolicy/