Artificial Intelligence:

Opportunities and Challenges for the Internal Market and Consumer Protection

Developing appropriate policies and regulations for AI is a priority for the European Union. AI has become a powerful **driver of social transformation**, reshaping individual lives and interactions as well as economical and political organisations. AI brings huge **opportunities for development, sustainability, health and knowledge**, as well as significant **risks of unemployment, discrimination, exclusion**, etc.

Multiple areas are affected by AI, such as **data protection** (lawful and proportionate processing of personal data, subject to oversight), **fair algorithmic treatment** (not being subject to unjustified prejudice resulting from automated processing), **transparency and explicability** (knowing how and why a certain algorithmic response has been given or a decision made), **protection from undue influence** (not being misled, manipulated, or deceived).

In order of relevance, this collection of studies presents research resulting from ongoing interest of the **Committee on the Internal Market and Consumer Protection** in improving functioning of the Digital Single Market and developing European digital policies based on scientific evidence and expertise.

Artificial Intelligence (AI): New Developments and Innovations applied to E-Commerce – Challenges to the Functioning of the Internal Market (May 2020)

Artificial Intelligence has a **significant potential to contribute to the Digital Single Market** and to enhance the development of online platforms and marketplaces. However, many aspects of AI such as reasoning, adaptation to human environment and human-machine interaction are still lagging behind and can create risks for businesses and consumers. These range from **discrimination and manipulation** to **polarisation** of users' tastes (e.g.: through targeted ads and job offers).

In order to limit these drawbacks, the study emphasises the importance of developing **trustworthy, explainable** and **societal-aware AI**.

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New Aspects and Challenges in Consumer Protection – Digital Services and Artificial Intelligence (April 2020)

Online consumers often find themselves in an **unbalanced relation to service providers** and traders. A range of powerful intermediaries delivering key services such as online search, content sharing, cloud computing, and online payments has emerged. Machine learning has enabled traders to grasp correlations between consumer data (purchases, websites visited, likes on social networks) and possible responses to ads. The **ability to predict consumers' reactions** could morph into **manipulation** as consumers' responses could be based on irrational aspects of their psychology or a lack of information.

Even though the risks that AI poses to consumers are significant, no less important are the opportunities opened up by AI. AI can support citizens and their organisations so that they may not only make better use of the opportunities available in the market, but may also resist and respond to unfair and unlawful behaviour by AI-powered companies. Consumer-empowering AI technologies can support consumers in protecting themselves from unwanted ads and spam; they can enable consumers to identify cases where unnecessary or excessive data is being collected or where fake and untrustworthy information is provided. Automated AI based services, such as Claudette, can support consumers and their organisations in detecting unlawfull contractual clauses and monitor data protection compliance. AI based systems can detect violations of the law, assess compliance, and in the future obtain redress in an automated way.

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New Developments in Digital Services – Short- (2021), Medium - (2025) and Long - Term (2030) Perspectives and the Implications for the Digital Services Act (May 2020)

The next two decades will be the most dynamic in human history due to the further digitisation of all sectors of the economy. By 2030, **fully digitised and customisable services** and solutions will allow consumers to create products that perfectly fit their needs. Technologies will enter the next generation with new scientific findings to increase their efficiency and sustainability. Everything that we know now will be more customised to **fit each individual's needs**. Current issues, such as the climate crisis, will be dealt with to create a liveable future for the next generations.

By providing a visionary outlook into the next ten years, the report aims to inspire MEPs to reach thoughtful, ground-breaking, and sophisticated decisions in the legislative process for the Digital Services Act.

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State of the Art and Future of Artificial Intelligence (January 2019)

Artificial intelligence is a booming field of scientific discovery and practical deployments. Twenty-first century AI enables a spectrum of mainstream technologies that are having a substantial impact on everyday lives. AI accompanies the users in everyday errands and professional lives. In the future it will not only **reshape business, public administration, health care, finances or education**, but may also contribute to **solving grand civilisational challenges such as climate change, hunger or inequality**.

Current state of technological development does not clarify what sort of use will we make of those technologies that are either replacing people or opening up a new, radically deeper level of machine-human interaction. Humans are no longer sure if they are indeed following the path of humanising technology, or rather moving towards adapting humans to technologies. Recent scandals with major data leaks at Facebook, Grindr, threats of autonomous weapons and other problems complicate understanding of this process.

For harmonious development AI requires a firm set of **ethical guidelines**, covering issues such as **fairness, safety, transparency, the future of work, democracy, privacy and personal data protection, and non-discrimination**, consolidated through standards and legal provisions. Close collaboration with the **academic centers of excellence** and further **funding** are necessary.

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Strategy for Artificial Intelligence in Europe (October 2018)

The roundtable on the Strategy for AI in Europe with academics from the **European University Institute** involved MEP Róża THUN (Chair of the Digital Single Market Working Group of the Committee for the Internal Market and Consumer Protection), MEP Mady DELVAUX, Mr Riccardo RIBERA D'ALCALA (Director-General of DG IPOL), Ms Catelijne MULLER (Member of the European Economic and Social Committee), and Dr Cecile HUET (the Deputy Head of Robotics and Artificial Intelligence Unit in DG CNECT).

The proceedings summarise **challenges and opportunities** of the AI advancements as well as policy priorities, including a need for **increased citizen involvement**, continued **investments in research**, focus on **evidence-based policymaking** and **emphasis on foreseeing** and addressing AI implications in advance.

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Contribution to Growth: The European Digital Single Market - Delivering economic benefits for citizens and businesses (January 2019)

This study evaluates the **benefits of European Digital Single Market at € 177 billion in annual economic gains** from full implementation of the legislative measures enacted by the European Parliament. Artificial Intelligence and data will generate an important part of these benefits, estimated at **€ 51,5 billion annually**.

The study proposes more public investment in transformative technologies, in particular in AI and robotics, in order to maintain EU competitiveness.

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Workshop on Type-approval Requirements for Motor Vehicles as regards their General Safety and Protection of Vehicle Occupants and Vulnerable Road Users (October 2019)

In 2017, road traffic accidents **in Europe caused 25 300 deaths**, while over **a million died in road traffic accidents worldwide**. MEP Róża THUN - the Chair of the Digital Single Market Working Group of the IMCO committee and the Rapporteur for the regulation on the type-approval requirements for motor vehicles as regards their general safety and the protection of vehicle occupants and vulnerable road users - chaired this expert workshop with involvement of numerous stakeholders, NGOs, car manufactures, governmental representatives and Members of the European Parliament, in order to explore how **Artificial Intelligence, can save lives and reduce the number of victims** of road accidents.

Members discussed during the workshop such technologies as the Event Data Recorders (EDR) and advanced drowsiness monitoring, the Intelligent Speed Assistance (ISA), Lane Keeping Assist Systems (LKAS) and Autonomous Emergency Braking (AEB) and "Direct Vision". A special focus was made on the heavy goods vehicles with examples of good practices deployed by the City of London.

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Online Platforms: How to Adapt Regulatory Framework to the Digital Age? (September 2017)

Online platforms facilitate the interaction between consumers and suppliers, frequently utilising artificial intelligence to enhance user experience. The authors of the briefing highlight that current directives do not consider "the **specific nature of the platform economy**" and put forward suggestions to **clarify the platforms' status**, to **clarify the users' status**, and to **regulate reputational systems**.

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Social Cost of Fake News in Digital Single Market (December 2018)

The "fake news" phenomenon has come to the centre of public and political attention since 2016, with the suspicion that several electoral events (elections in the U.S. and in France as well as referenda in the UK and Catalonia) have been tampered with. In all cases, the role of social media platforms as major vectors of such disruptive phenomena has been questioned, especially with scandals such as Cambridge Analytica's use of data from Facebook, and court cases such as Internet Research Agency vs. United States of America.

This study explores the mechanisms of "fake news" and their societal costs in the Digital Single Market. It describes the **risks to the integrity of information** and to the **integrity of elections**. It highlights the **roles of the various actors** involved in the production and amplification of such information disorders. Finally, it outlines responses that are being tested in different parts of Europe to deal with the issue.

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Technology as an Enabler of Fake News and a Potential Tool to Combat it (May 2018)

The internet has dramatically changed how information and ideas are circulated. In general, these changes are for the better – more content is created, consumers have more choice and there is easier access – to information, education and other people.

The change also caused problems. On the internet, traditional gateways that quality-controlled and fact-checked the content before publishing are gone. This results not only in a freer exchange of ideas but also in the circulation of ideas that may be wrong and even harmful – the so-called fake news or disinformation. The most influential technology to disseminate ideas and information is social media technology, with services such as Facebook, YouTube and Twitter. They disseminate not only "good" but also "bad" ideas and have so far made little effort to make a distinction. Technology can also be used to improve the information that is circulating. A combination of artificial intelligence and human effort can re-create the effects of editing and quality control known in the traditional media."

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Workshop on "Free Flow of Data - a Cornerstone of the Digital Single Market" (September 2018)

The free flow of data is a complex issue with strong influence over the EU economy. Data can be used by different agents with different goals, from public bodies looking to gather more information, to businesses trying to achieve better business models and making better decisions. This workshop discusses the main challenges related to the topic and the draft regulation by the European Commission. A key challenge of the EU is to **increase access to non-personal data** within the EU, with important consequences for the Digital Single Market and for the development of **Artificial Intelligence and competitiveness of Europe**. Harmonisation at the European level in this area is necessary since a multitude of different rules in the different Member States could become a major obstacle in the future for the integrity of the single market, especially of its digital side.

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Building Blocks of the Ubiquitous Digital Single Market (November 2015)

This workshop concerned the development and growth of digital technologies in the Digital Single Market. Digital technologies enable new disruptive business models and fundamentally improve **e-government** solutions. They transform the **Digital Single Market into the main engine of growth and job creation**. The workshop gives an overview of the most advanced market and technological trends built on **mobile connectivity** and **ubiquitous computing**. It points at Estonia and South Korea as leading jurisdictions that made the most of digital technologies both in private and public sectors.

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Cloud Computing (May 2012)

Cloud computing is a new computing model brings substantial benefits to consumers, businesses and administrations, while also creating new risks and challenges. This study demonstrates that cloud computing can induce savings and **facilitate innovative digital services**. However, it finds that in order to seize the benefits of cloud computing, priority actions for EU policymakers are addressing **legislation-related gaps**, improving **terms and conditions for users**, tackling stakeholder **security concerns**, encouraging the **public sector cloud**, and promoting further **research and development in cloud computing**.

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