

DIGITAL ECONOMY, AI AND SOCIETY 37010

Prof. Petri Mäntysaari

ABOUT THE COURSE

Welcome!

Our society has been transformed by the deployment of digital technologies and might be transformed by the deployment of AI in the future. On this course, we will study our digital economy through the lens of commercial law.

We will first set the scene and study the nature of digital economy as well as some of its characteristic business models.

After that, we will focus on big and concrete topics such as: e-commerce, the regulation of big tech, the Internet of Things, robots, artificial intelligence, fintech services, blockchain and cryptoassets, and also how to defend serious media and our democracy. We will cover a lot of ground.

You can find the rough syllabus on the next page. I tend to revise this course twice a year due to the the fast development of technology, regulation and business.

ROUGH SYLLABUS

Lecture 1 The nature of digital economy. 1 The big picture. 2 Information, digital information, noise, attention, search, curation. 3 Platforms, network effects. 4 Disruptive innovation. 5 Limits to growth, growth areas. 6 The impact of digital technology on productivity growth. 7 The impact of AI on productivity growth. 8 Battle for hegemony. 9 Internet governance. 10 Questions. **Lecture 2 Some basic business models.** 1 The big picture. 2 Pipeline model for retailers. 3 Freemium or subscription. 4 Standard-based ecosystems. 5 Platforms. 5.1 General remarks. 5.2 Technical platforms. 5.3 Online platforms. 6 Cloud computing. 7 Enterprise IT and AI. 8 The firm. 9 Crime. 10 Where are we going? Social commerce, the metaverse, AI, commoditisation, short-term profitability. 11 Questions. **Lecture 3 e-Commerce: Online retail sales.** 1 The big picture. 2 There is a governing law, only certain courts have international jurisdiction. 3 Geo-blocking is restricted, online sales must not be prohibited. 4 Electronic contracts are binding. 5 General contract terms must be incorporated. 6 Website for online sales: two exercises. 7 Spamming is prohibited. 8 Unfair marketing is prohibited. 9 Consumers have contractual rights. 10 Questions. **Lecture 4 e-Commerce continued: Contract rules for online sale of goods and the supply of digital content.** 1 The big picture. 2 Mandatory nature. 3 Introduction to contents. 4 Price or data? 5 Passing of risk, burden of proof. 6 Specifications. 7 Remedies. 8 Product security and product liability. 9 Terms of use, regulation of general contract terms. 10 Questions. **Lecture 5 Regulating Big Tech.** 1 The big picture. 2 Competition law. 3 Sector-specific regulation (traditional sectors). 4 Labour law. 5 Sector-specific regulation of platforms. 6 User data, privacy. 7 Data-driven advertising. 8 Content liability (intermediary liability). 9 Copyright. 10 Consumer protection, regulation of general contract terms. 11 Taxation. 12 Tech geopolitics, data sovereignty. 13 Questions. **Lecture 6 The Internet of Things.** 1 The big picture. 2 Characteristic problem areas. 3 Cybersecurity. 4 General product safety and product liability. 5 Connectivity, broadband, the rights and duties of telecoms. 6 Privacy, processing of personal data, GDPR. 7 Access to and reuse of data, ownership of data, data mining. 8 Some contract law issues. 9 Questions. **Lecture 7 Robots and AI: Ethics.** 1 Introduction. 2 What is a robot? What is AI? 3 AI Policy. 4 Philosophical and ethical issues. 5 International law, the UNESCO Recommendation. 6 Ethics guidelines and regulation in the EU. 7 Safety issues. 8 Readings and questions. **Lecture 8 Robots and AI: Regulation.** 1 Introduction. 2 Robots: allocation of risk, the Machinery Regulation. 3 AI: social capital, biased decision-making, transparency. 4 AI: EU, US, China. 5 Big data, data mining, GDPR, copyright. 6 Intellectual property of robots, AI or persons. 7 Readings and questions. **Lecture 9 Fintech (1): services, platforms, central-bank digital currencies.** 1 Introduction. 2 Payment services. 3 Lending and funding platforms. 4 Regtech and supotech. 5 Case: Libra. 6 Central-bank digital currencies. 7 Readings and questions. **Lecture 10 Fintech (2): distributed ledger technology, blockchain, cryptoassets, smart contracts.** 1 Introduction. 1.1 General remarks. 1.2 Examples of not-cryptoassets. 1.3 Cryptohype v reality. 1.4 General remarks on regulation. 1.5 What will happen to accountants and auditors? 2 General remarks on cryptocurrencies, ICOs and stablecoins. 2.1 Definitions. 2.2 Hype. 2.3 Crime in general. 2.4 Anti-money laundering and anti-crime. 2.5 Scams and thefts. 2.6 Are cryptocurrencies legal? 2.7 Stablecoins. 3 The regulation of DLT and cryptoassets. 3.1 General remarks. 3.2 The regulation of DLT, blockchain and “tokens” at EU level. 3.3 The regulation of DLT and blockchain in certain countries. 3.4 The United States. 3.5 The regulation of stablecoins. 4 Example: NFTs. 5 Smart contracts. 5.1 Definition. 5.2 Contract law. 5.3 Data Act. 5.4 GDPR. 5.5 Company law. 5.6 Literature and other sources. 6 Blockchain and the GDPR. 7 Readings and questions. **Lecture 11 Democracy, the media, and disinformation.** 1 The big picture: democracy. 2 The role of the media in a democracy. 3 Attacking a democracy. 4 Transparency v corruption. 5 Freedom of speech, access to information. 6 The future of serious media. 7 How to fight disinformation and conspiracy theories? 8 The Facebook scandal, political advertising and EU law. 9 Questions.

HOW DOES IT WORK?

All materials will be in Moodle.

I will upload two or three written lectures per week after the start of the course. My goal is to have roughly 11 big written lectures about the biggest things.

Due to the fast development of the area, the main text will be the lectures. I will not use a textbook, because a textbook in this area would be outdated before it is published. The updated lectures will thus replace the textbook.

It would be impossible to understand this highly complex area in any meaningful way without reading quite a lot. The complexity of the substance explains why there have been no traditional spoken lectures in the classroom on this course. Lectures would simply be too general to provide useful information. The absence of spoken lectures has also given me time to update the lectures.

In each written lecture, you will find links to legal and other scholarship and materials. Please feel free to have a look at the ones you find interesting. Some of the links are to scholarly or normative materials that you will need for the term paper. Some of the links might not work, because links tend to have a short life expectancy.

In each lecture, you will also find some simple questions. The simple questions are just a test for yourself to improve your learning. Feel free to discuss them with yourself or your fellow students.

TERM PAPER

You learn by reading the lectures, by having a look at the linked scholarship and materials you find interesting, by trying to answer the simple questions on the basis of the materials, and by writing a term paper.

When all lectures are in place, you will write a term paper. I will assign the topics randomly based on a digit in your student number.

It is my intention to ensure that you will have a period of two weeks to write the term paper. Since there will be enough time and you will have a chance to write the term paper in any location, you will not need to worry about whether you will be in Vaasa, Helsinki or somewhere else.

The term paper will be the one and only method of assessment. Please write a good one. The instructions will matter very much.

I will tell you more about the term paper in Moodle when all lectures are in place. Remember to read the instructions carefully!