# Principles of management and tech law

## Prof. Gianandrea Giochetta; Prof. Michele Faioli

I Module - *Principles of management* (Prof. Gianandrea Giochetta)

***COURSE AIMS AND INTENDED LEARNING OUTCOMES***

Digitalization is drastically enhancing the ability to capture and analyse information and automatize processes. This in turn is driving innovation. New technologies such as big data, artificial intelligence, blockchain, cloud computing and Internet of Things are changing the competitive landscape of most industries. To thrive, incumbents and new entrants alike must adapt both decision and operating processes. From a general management perspective, the course builds skills and competences required to understand digitalization and lead its adoption in an organization. Students who complete this class will be able to (i) **know** and understand business value drivers and the opportunities related to the digital transformation and (ii) **apply** complex reasoning and formulate successful business strategies, with problem solving method. The students will be also able to (iii) clearly **communicate** the contents of their research themes, and, on the basis of the acquired knowledge in tech, interlock with experts and not experts.

***COURSE CONTENT***

1. Course induction and introduction to the digital economy;
2. Technological Building Blocks – From Data to IT Architecture;
3. New & Emerging Technologies – Big Data, Artificial Intelligence, Blockchain, Cloud Computing and Internet of Things;
4. Strategy & Data Driven Innovation;
5. Using Decision Support Systems and Social Media for Marketing & CRM;
6. How Industry 4.0 Impacts Operations & Supply Chain Management;
7. Leveraging on Organization & Project Management to Drive Change.

***READING LIST***

Lecturer’s notes and a list of voluntary reading material to be made available on the Blackboard platform.

Digital Business and E-Commerce Management by Dave Chaffey, 6th (2014) edition.

***TEACHING METHOD***

The course consists of both theoretical lectures and classroom team assignments (case study based). Active participation is highly encouraged at all times. Selected guest speakers will be invited to share their professional experiences.

***ASSESSMENT METHOD AND CRITERIA***

Written exam. The grade of the module will be based on the answer to a query related to a business case). During the exam the student has to demonstrate knowledge and full comprehension of model, methodologies, techniques and tools illustrated during the course. The answer’s pertinence, structure and a correct use of specific terminology will contribute to the final grade. Through the business case final presentation, the ability to properly apply models, methods and techniques will be assessed, together with the capacity to effectively communicate and convey consistent messages, findings, connections and logical path leading to the solution.

**The grade will be based on the answer to the query related to Principles of Management Module (1/2) and on the answer to the query related to the Tech Law Module (1/2).**

***NOTES AND PREREQUISITES***

No pre-requisites or preparatory courses required.

Attendance is strongly recommended.

Detailed syllabus, timetable and coursework material to be made available on the Blackboard platform.

II Module - *Tech Law* (Prof. Michele Faioli)

***COURSE AIMS AND INTENDED LEARNING OUTCOMES***

This is a class in tech law. It is designed to teach students what they need to know to work effectively with technologists, and vice versa, in firms with advanced approaches to artificial intelligence, robot and smart organisations (Industry 4.0). Topics covered may vary based on recent events, but will include advanced technologies at firm level, smart work, jurisdiction, regulations, blockchain and social application, cybersecurity, digital property. The class is meant as an introduction to these issues and, while some questions might be answered and some legal solutions might be found, the aim will be to help students develop a framework for answering these questions now and in the years to come. Students who complete this class will be able to (i) **know and understand** through the likely legal implications of artificial intelligence and robot, with new ideas and critical thinking and (ii) **apply** complex reasoning and formulate successful legal strategies, with problem solving method, in relation to artificial intelligence, workplace process transformation, big data, encryption, blockchain, in tech/firms 4.0. The students will be also able to (iii) **clearly communicate** the contents of their research themes, and, on the basis of the acquired knowledge in tech, interlock with experts and not experts.

***COURSE CONTENT***

The areas we will explore are below indicated:

1. *The Law of Robots & Advanced Technologies* – Should the law ensure that human-robot interactions occur in ways that are safe? What happens when a self-driving car or a robot causes an accident? What happens when robots interact with humans, at firm level, patrolling and organizing the work to perform? When an intelligent machine breaches a contract, upon whom do we serve process to initiate legal action? How will the law respond to such change?

2. *Blockchain, Smart Contracts and Social Application* - Blockchains, decentralized databases that are maintained by a distributed network of computers, present challenges and opportunities. Blockchains offer potential to change financial and corporate systems, to promote new social application for workers and citizens, to support participation and democratized access to resources, to change the way we contract with one another. We will consider the current EU/USA regulation on this topic and the extent to which regulation and government intervention should balance the maintenance of social norms against the need to let a nascent technology innovate.

3. *Tech Jurisdiction* - Is tech itself a jurisdiction, a place that could have laws of its own, a cyberspace with its own regulation? Tech is a global network, so jurisdictional questions are inevitable. This area is all about conflicts: there is the conflict between (radical) markets and consumers, tech users and the governments who disapprove of what they are doing, conflicts between different governments with different policies. A tech network brings together people in different places. Its aim is to bridge geographic divisions. When those divisions are transnational, the network raises jurisdictional issues just by being a network. We will explore different facets of jurisdiction. We will also explore the problem of overlapping national laws on a global network and how EU/USA laws deals with the question of jurisdiction over online activity.

***READING LIST***

Most readings will be taken from these casebooks and from materials I developed during my recent researches (visit regularly our University’s blackboard page):

E. Palmerini, al., *Regulatory challenges of robotics: some guidelines for addressing legal and ethical issues*, in Law, Innovation and Technology, 2017, 9, 1, 1 ss.

J. Grimmelmann, *Internet Law: Cases and Problems*, Semaphore Press, last edition – in <https://internetcasebook.com>

***TEACHING METHOD***

Students are requested to: (i) do the assigned readings (see the materials published by blackboard and the related timetable), (ii) participate in class discussions on one or two principal problem that will be listed by means of blackboard; (ii) keep materials in digital folders. Our class discussion will be directed and focused to solve cases and to come up with a collective answer to the problem. Most of the readings consist of excerpts from casebooks, doctrines, judicial opinions, case law, statutes, law, CBAs.

***ASSESSMENT METHOD AND CRITERIA***

Written exam. The grade will be based on the answer to the query related to a legal case. (i.e. the student will receive a set of facts that have legal implications, and will be required to provide someone - a client, a judge, a legislator, etc. - with good advice on what to do in light of those facts). The student should identify the legal questions those facts raise and do the best to answer those questions based on the law they learned in the course (pursuant to the IRAC Template [- link).](https://web.law.columbia.edu/sites/default/files/microsites/writing-center/files/organizing_a_legal_discussion.pdf) The student’s capacity will be assessed on the basis of the attitudes to (i) synthetize the case, (ii) identify and apply relevant principles, (iii) conduct legal research, (iv) communicate effectively the legal concepts.

**The grade will be based on the answer to the query related to Principles of Management Module (1/2) and on the answer to the query related to the Tech Law Module.**