Office Hour – Exams Trial

Innovation Management Course A.y. 2021/2022

Prof. Paolo Neirotti Francesco Luigi Milone



Multiple Choice Questions

Prof. Paolo Neirotti, Francesco Luigi Milone

Q1 (June 2021 - Neirotti)

What principles do you have to avoid when you (as company) are driving a digital transformation?

- 1. Agile Product Focus
- 2 None of the other
- 3. Hiring technical personnel only
- 4. Having a single integrated strategy

Q1 (June 2021 - Neirotti)

What principles do you have to avoid when you (as company) are driving a digital transformation?

- 1. Agile Product Focus
- 2 None of the other
- 3. Hiring technical personnel only
- 4. Having a single integrated strategy

Q2 (June 2021 – Milone)

MC - 6. In the videogame market, why do platforms (e.g., PlayStation, Xbox) compete to host marquee games developers (e.g., EA Sport) on the supply side?

- 1. Because they generate very strong externalities for consumers.
- 2. Because they only want to increase the number of producers on one side of the platform.
- 3. Because they aim at specializing in one game typology.
- 4. None of the others.

Q2 (June 2021 – Milone)

MC - 6. In the videogame market, why do platforms (e.g., PlayStation, Xbox) compete to host marquee games developers (e.g., EA Sport) on the supply side?

- 1. Because they generate very strong externalities for consumers.
- 2. Because they only want to increase the number of producers on one side of the platform.
- 3. Because they aim at specializing in one game typology.
- 4. None of the others.

Q3 (January 2021 – Neirotti)

Automation bias means (Only one answer is correct)

- 1. A form of sample bias in the data on which machine learning algorithms are trained
- 2. When the analysis run by a software gives us a false sense of security, human disengage from the part of work software is doing.
- 3. None of the previous statements
- 4. Giving undue weight to the information coming through the monitor...ending up believing information even when it is wrong or misleading.

Q3 (January 2021 – Neirotti)

Automation bias means (Only one answer is correct)

- 1. A form of sample bias in the data on which machine learning algorithms are trained
- 2. When the analysis run by a software gives us a false sense of security, human disengage from the part of work software is doing.
- 3. None of the previous statements
- 4. Giving undue weight to the information coming through the monitor...ending up believing information even when it is wrong or misleading.

Q4 (January 2021 - Milone)

Complete the following sentence: ... are associated to traditional companies, while ... are associated to digital platforms.

- 1. Supply scale economics Demand scale economics
- 2. Demand scale economics Supply scale economics
- 3. Supply scale economics Supply scale economics
- 4. Demand scale economics Demand scale economics

Q4 (January 2021 - Milone)

Complete the following sentence: ... are associated to traditional companies, while ... are associated to digital platforms.

- 1. Supply scale economics Demand scale economics
- 2. Demand scale economics Supply scale economics
- 3. Supply scale economics Supply scale economics
- 4. Demand scale economics Demand scale economics

Q5 (January 2021 - Neirotti)

For vendors machineries, making them "smart and connected" give opportunities for business models based on ... (Only one answer is correct)

- 1. Outsourcing of the machine
- 2. Helping the client optimize the use of the machinery in the production system through data-driven prescriptions
- 3. Selling less spare parts
- 4. A "Break and fix" revenue model

Q5 (January 2021 - Neirotti)

For vendors machineries, making them "smart and connected" give opportunities for business models based on ... (Only one answer is correct)

- 1. Outsourcing of the machine
- 2. Helping the client optimize the use of the machinery in the production system through data-driven prescriptions
- 3. Selling less spare parts
- 4. A "Break and fix" revenue model

Q6 (January 2021 - Milone)

Which of the following conditions allow your company to rely on strong barriers to entry?

- 1. Data become obsolete quickly
- 2. The marginal value of data decreases slowly
- 3. None of the other
- 4. Your data are derived from public sources

Q6 (January 2021 - Milone)

Which of the following conditions allow your company to rely on strong barriers to entry?

- 1. Data become obsolete quickly
- 2. The marginal value of data decreases slowly
- 3. None of the other
- 4. Your data are derived from public sources

Q7 (January 2021 - Neirotti)

Which is the greatest challenge for Industrial IoT platforms like GE Predix? Select TRUE statements only. (Only 2 answers are correct)

- 1. Lack of accurate machine learning algorithms
- 2. Diseconomies of scale
- 3. Interoperability in data generated by the sensors in the single machineries
- 4. Capability of codifying the industrial phenomena affecting machineries and complex industrial processes

Q7 (January 2021 – Neirotti)

Which is the greatest challenge for Industrial IoT platforms like GE Predix? Select TRUE statements only. (Only 2 answers are correct)

- 1. Lack of accurate machine learning algorithms
- 2. Diseconomies of scale
- 3. Interoperability in data generated by the sensors in the single machineries
- 4. Capability of codifying the industrial phenomena affecting machineries and complex industrial processes

Q8 (January 2021 - Milone)

Segmenting customers according to their age in order to offer personalized discounts is an example of ...

- 1. 1st degree price discrimination
- 2. 2nd degree price discrimination
- 3. 3rd degree price discrimination
- 4. None of the others

Q8 (January 2021 - Milone)

Segmenting customers according to their age in order to offer personalized discounts is an example of ...

- 1. 1st degree price discrimination
- 2. 2nd degree price discrimination
- 3. 3rd degree price discrimination
- 4. None of the others

Q9 (February 2021 – Neirotti)

Which of the following is NOT an organizational consequence of automation of decision-making given to algorithms?

- 1. Line involvement in Interpretability and validation of algorithmic outcomes
- 2. Elimination of some middle management activities related to control
- 3. Replacement of repetitive and routinary tasks
- 4. Outsourcing and offshoring

Q9 (February 2021 – Neirotti)

Which of the following is NOT an organizational consequence of automation of decision-making given to algorithms?

- 1. Line involvement in Interpretability and validation of algorithmic outcomes
- 2. Elimination of some middle management activities related to control
- 3. Replacement of repetitive and routinary tasks
- 4. Outsourcing and offshoring

Q10 (February 2021 – Milone)

What is the most common shape of Digital Platform markets' value chain?

- 1. Linear Value Chain
- 2. Circular Value Chain
- 3. None of the other
- 4. Vertical Value Chain

Q10 (February 2021 – Milone)

What is the most common shape of Digital Platform markets' value chain?

- 1. Linear Value Chain
- 2. Circular Value Chain
- 3. None of the other
- 4. Vertical Value Chain

Q11 (February 2021 – Neirotti)

Which of the following is a competitive implication of automation of decision-making given to algorithms?

- 1. Scalability
- 2. Less industry concentration (large companies becoming smaller)
- 3. reduced entry barriers and more companies in the market
- 4. none of the following options

Q11 (February 2021 – Neirotti)

Which of the following is a competitive implication of automation of decision-making given to algorithms?

- 1. Scalability
- 2. Less industry concentration (large companies becoming smaller)
- 3. reduced entry barriers and more companies in the market
- 4. none of the following options

Q12 (February 2021 – Milone)

Starting from Harvard University, Facebook has overcome the chicken-egg problem. What kind of strategy is this?

- 1. Micro-market strategy
- 2. Big-Bang adoption strategy
- 3. Single side strategy
- 4. Marquee strategy

Q12 (February 2021 – Milone)

Starting from Harvard University, Facebook has overcome the chicken-egg problem. What kind of strategy is this?

- 1. Micro-market strategy
- 2. Big-Bang adoption strategy
- 3. Single side strategy
- 4. Marquee strategy

Q13 (February 2021 – Neirotti)

Taxi drivers in London have a unique and immense knowledge of London's stress, addresses and point of interests. Such knowledge comes from their preparation for a test, called the Knowledge, that requires three years of study and regulates the access to the industry. Rise of GPS and digital maps have made taxi drivers' unique and in-depth knowledge of London streets

- 1. A commodity that can be easily accessed by new entrants
- 2. A substitute product
- 3. A competitive disadvantage
- 4. An exit barrier

Q13 (February 2021 – Neirotti)

Taxi drivers in London have a unique and immense knowledge of London's stress, addresses and point of interests. Such knowledge comes from their preparation for a test, called the Knowledge, that requires three years of study and regulates the access to the industry. Rise of GPS and digital maps have made taxi drivers' unique and in-depth knowledge of London streets

- 1. A commodity that can be easily accessed by new entrants
- 2. A substitute product
- 3. A competitive disadvantage
- 4. An exit barrier

Q14 (June 2021 - Milone)

What is the main characteristic of a *subsidy-side* in a platform business?

- 1. It drives the growth of the platforms generating higher externalities for the other side
- 2. Customers on that side pay higher prices (commissions) as they generate strong externalities
- 3. None of the others
- 4. This side hosts consumers only.

Q14 (June 2021 - Milone)

What is the main characteristic of a *subsidy-side* in a platform business?

- 1. It drives the growth of the platforms generating higher externalities for the other side
- 2. Customers on that side pay higher prices (commissions) as they generate strong externalities
- 3. None of the others
- 4. This side hosts consumers only.

Open Answer Questions

Prof. Paolo Neirotti, Francesco Luigi Milone

OA Questions

January 2021 (Neirotti). With reference to the GAP case study, how do you evaluate the option of Gap to sell garments on Amazon in reference to its objectives to use big data analytics to predict customer preferences and decide what to design and produce accordingly?

February 2021 (Milone). Discuss what are the industrial sectors in which we have seen or in which it could be possible to observe the emergence of a Digital Platform. What is the common characteristics between these industrial sectors? Then, discuss the advantages of digital platforms when compared to traditional business.

June 2021 (Milone). Discuss the network externalities that arise on the Uber multi sided platform. Remember: there are many kinds of network externalities: build a comprehensive answer including a discussion on all types of externalities.

Exam Sample (Neirotti). Illustrate the main organizational characteristics of AI Factories (i.e., companies that use AI in their operating model like Netflix, Amazon, Facebook) in reference to work practices, approaches for market analysis and exploration, way data architectures are management. Explain how such characteristics are linked to their scalability (Define also scalability)

Innovation Management

A.y. 2021/22

for questions and doubts, write to:

<u>paolo.neirotti@polito.it</u> francesco.milone@polito.it

