Trial Exam II
MOT113a Technology Dynamics

Trial Exam II is the second part of this year's trial exam. It covers chapters 5 to 7 and the guest lecture of the course. It takes 90 minutes.

For trial exam you can get up to 90 points. The number of points is equal to the minutes you have available to answer the questions, which gives you a rough indication of how much time you should be spending on each part of the examination.

No means of aid are allowed whatsoever.

Success!

Question 1 (45 points):

Please take any of the cases you analysed so far. Please use the scheme from Werker, 2020, Assessing Responsible Research and Innovation (RRI) systems in the digital age. In E. Yaghmaei & I. Van de Poel (Eds.), Assessment of Responsible Innovation: Methods and Practices. Abingdon (UK): Taylor & Francis. Werker, 2020, Figure 11.2.

Please

  I.   identify the structural components including all innovative agents and/or stakeholders and their values (12 points), (max 200 words)
  II. find crucial processes including those to identify shared values (6 points), (max 100 words)
  III. assess components and processes based on shared values (if you can detect them, else provide some insights how they could look like) (8 points) (max 100 words),
  IV. derive (value-related) drivers and bottlenecks of desirable processes (7 points) (max 100 words), and
  V.   propose solutions for problems based on shared values into I. and II. (7 points) (max 100 words).

Question 2 (45 points):

a) Please quick-read the paper on Blockchain-enabled Peer-to-Peer energy trading, 2021, by Wongthongtham and figure out what the major concepts used, the research questions and resolutions of the paper are (20 points) (max 250 words).

b) Please explain which effects blockchain-enabled peer-to-peer trading has on both prosumers and consumers (10 points) (max 150 words).

c) What do agents conducting inclusive research and innovation in STEM do? (5 points) (max 100 words)

d) Are energy-poor people[1] more likely to become prosumers or consumers? In the light of your answer how inclusive will blockchain-enabled peer-to-peer energy trading be? (10 points) (max 150 words)

---

[1] Human beings living in households who cannot meet their basic energy needs, e.g. for cooking