DESIGN FOR SOCIAL INNOVATION

QUIZ

Date: 29-Oct-2025 *Time: 45 min*

Max. Marks: 50

Section A: Very Short Answer Questions (3-5 lines each, 4 marks x 4 = 16 marks)

1. List any three NGOs whose guest lectures you have attended and describe briefly one NGO's domain and one key challenge it faces.
2. State your project's problem statement in 3-4 lines.
3. Mention the main stakeholders, specific expertise/experts and datasets needed for your project.
4. What does a strong Tech–Problem Fit mean? Give one short example from your project or class discussion.

Section B: Long Questions (One diagram + short note. 17 marks x 2 = 34 marks)

1. Refer to Section 3.3 — The Role of Technologies (Zhou et al., 2025) (attached in the next page).
   a) What are the three roles that technology plays in managing innovation for social good.
   b) These three roles influence designing solutions for Social Innovation. Discuss, specifically in the context of your own project, 3 observations of 3 lines each. Answer with specific references to your project.
2. Draw a simple functional or technical architecture diagram of your project. Label the key components (frontend, backend, database, APIs, ML/AI modules if any) and add a short 4–5 line description of the overall data flow.

3.3 The Role of Technologies

Based on the analysis of the retrieval studies, it appears that studies take different perspectives on whether technologies or, more precisely, technological advancement is a necessary condition for innovation for social good. In this vein, Fu et al. (2024) proposed that having a "leading-edge" technology is not a must for innovation for social good, and the emphasis could be on adopting current products and services to meet different societal needs; however, they do agree that companies with leading technologies, such as the digital platform, should play a more leading role in the innovation process. Similarly, Bos-Brouwers (2010) reported that most

sustainable innovation in their study can be categorized by innovation by design or function and that new technology mainly contributes to competitive advantages. On the contrary, studies following the responsible innovation discourse would argue that addressing grand challenges requires scientific breakthroughs and technological innovation (Liu et al. 2024). Hence, the need to steer science and technological breakthroughs has been the theoretical foundation for responsible innovation studies (Cha and Park 2024; Chen et al. 2024). As a result, it is necessary to further clarify the role of technologies in managing innovation for social good.

Specifically, three roles of technologies could be identified in the retrieval studies. First, technology could be treated as an enabler for innovation, meaning the solutions are only possible because of advancements in technologies (e.g., Kunapatarawong and Martínez-Ros 2016). For example, digital platforms have often been mentioned as vehicles for social benefits (Chen et al. 2024; Rauch and Ansari 2022; Wang et al. 2023). Viewing technology as an enabler of innovation then leads to studies discussing the need for new managerial capabilities to link new technologies with social problems. For example, Akter et al. (2024) reported on developing big data analytic capabilities and applying these to big poverty data to generate viable solutions. These new managerial capabilities are highlighting the need to find a fit between strategies, resource orchestration, and technological innovations (Cui et al. 2017). In this vein, Golgeci et al. (2022) conceptualized the capability as technology reflectiveness, showing the ability of managers to link technologies to societal needs. For managing innovation for social good, the more complex technologies are, the better support an organization needs to provide (Ambos and Tatarinov 2022).

Second, technology could also play a supporting role in innovation activities that are not technology-based. For example, Le Ber and Branzei (2010) discussed technologies as resources and leverages in collaborations between organizations and that the need for technological support would play a role in how strategic alliances are formulated for social innovation. Another case could be found in the scale-up process for social innovation. In this vein, Steinfield and Holt (2019) discussed how technologies, or technological knowledge, could support reproducing social innovation from an established market to an emerging market. Bhatt and Ahmad (2017) also reported on how technology could support forming social innovation as well as scaling it; the main challenge would be to adjust to the capabilities of the beneficiaries.

Third, technology brings uncertainty and unintended consequences that may lead to additional challenges (Dyck and Silvestre 2019). Studies adopting a responsible innovation lens have mainly reported on this aspect. In this regard, Pandza and Ellwood (2013) set the foundation for exploring and managing innovation responsibly based on the change of practices that new technologies may bring. Responsible innovation is, thus, about anticipating the consequences

of technological advancements (Lehoux et al. 2021). In addressing additional social needs, firms practicing responsible innovation are faced with the more disruptive nature of technologies (Liu et al. 2024). However, the potential negative impact of technology may not appear until it is implemented. For instance, the negative impact of technologies may be due to the lack of competencies of individuals using them, particularly when the innovation is targeted toward the more vulnerable groups in society. For example, Seifert et al. (2023) reported technology-based social innovation implementation in a refugee camp and showcased a few instances of additional challenges that were not anticipated.

Consequently, the main finding for the second review question is that despite some arguments on the necessity of technological breakthroughs in addressing societal challenges, innovation does not need to be technologically based to create social good. However, even in managing non-technological innovation for social good, a feel of how certain technology relates to society is needed. This would be particularly useful to counter the unintended consequences of technologies, especially considering the potential lack of competency of the user group in society.