

**Entrepreneurship in Analytics and AI
XM_0090**

2023-2024

Sample Questions from Previous Years' Exams

Question 1 (5 points)

The paper by Amit et al. (1998) discusses why venture capital firms actually exist and in which industries they are most likely to be active.

In explaining why venture capital firms exist, Amit et al. (1998) refer to the concepts of “adverse selection” and “moral hazard”. Discuss the meaning of these two concepts and how they each help to explain the existence of venture capital firms.

Article: Amit, R., Brander, J., & Zott, C. (1998). Why do venture capital firms exist? Theory and Canadian evidence. *Journal of Business Venturing*, 13(6), 441-466.

Question 2 (5 points)

Audia and Rider (2005) discuss two views of where entrepreneurs come from: (1) the legend of the “garage entrepreneur” and (2) entrepreneurs as “organizational products”.

Discuss the key difference between the two views in terms of how they explain who is likely to become an entrepreneur.

Article: Audia, P. G., & Rider, C. I. (2005). A garage and an idea: What more does an entrepreneur need?. *California Management Review*, 48(1), 6-28.

Question 3 (5 points)

The paper by Camuffo et al. (2020) discusses the “scientific approach” to entrepreneurial decision-making and presents evidence that it can help aspiring entrepreneurs to make faster progress and identify more promising opportunities.

As you know, one of the components for this course is the Student Design Sprint (SDS). Imagine that you are the new course coordinator for our EAAI course and that you have decided that students should apply the scientific method throughout the SDS assignment. Discuss how you would set up the SDS tutorials given this new focus on applying the scientific method to entrepreneurial decision-making.

Article: Camuffo, A., Cordova, A., Gambardella, A., & Spina, C. (2020). A scientific approach to entrepreneurial decision making: Evidence from a randomized control trial. *Management Science*, 66(2), 564-586.

Question 4 (5 points)

The paper by Davidsson and Honig (2003) discusses the importance of human capital and social capital for people who are in the process of launching a new business venture. Based on the arguments and findings of Davidsson and Honig (2003), evaluate your own human capital and social capital in terms of whether they can be expected to support you in launching a new AI-driven venture after your studies. Explain your logic.

Article: Davidsson, P., & Honig, B. (2003). The role of social and human capital among nascent entrepreneurs. *Journal of Business Venturing*, 18(3), 301-331.

Question 5 (5 points)

Huang et al. (2017) examined why only some digital ventures are able to rapidly scale their user base and discovered three distinguishing mechanisms through which this scaling is achieved. Discuss two out of these three mechanisms and explain how each of them can help an AI-driven venture to grow its user base.

Article: Huang, J., Henfridsson, O., Liu, M. J., & Newell, S. (2017). Growing on steroids. *MIS Quarterly*, 41(1), 301-314.

Question 6 (5 points)

In the lectures we discussed how entrepreneurs can formulate key hypotheses underlying their ventures' business models and create a Minimum Viable Product (MVP) to test these hypotheses. However, we also highlighted that entrepreneurs should be very careful in conducting these hypothesis tests by emphasizing several best practices and pitfalls. Discuss one key consideration that entrepreneurs should consider when (1) formulating hypotheses for testing underlying business model assumptions; and one key consideration that entrepreneurs should consider when (2) testing these hypotheses using an MVP.

Question 7 (5 points)

Imagine that you're telling a good friend of yours about how much you have enjoyed taking this EAAI course. Your friend tells you that she believes that entrepreneurship is all about the act of starting your own business. You disagree because you just read the paper by Shane and Venkatraman (2000), which offers a somewhat different view of what is entrepreneurship. Explain the core idea underlying this view and how it differs from viewing entrepreneurship as the creation of a new business.

Article: Shane, S., & Venkataraman, S. (2000). The promise of entrepreneurship as a field of research. *Academy of Management Review*, 25(1), 217-226.

Question 8 (5 points)

In the lectures we discussed why new venture founders, at some point in time, are often pushed out of their own firms and are asked to step down as CEO. In this discussion, we highlighted the role of "the paradox of entrepreneurial success". Explain the meaning of this paradox and how it can explain the need for founders to relinquish control over their ventures.

Question 9 (5 points)

According to Wasserman (2017), entrepreneurs face a “control dilemma” as they seek to develop and grow their business ventures.

Imagine that you would really like to launch your own AI-driven venture, but only when you can keep control over the venture. You’re currently searching for new business ideas and you’ve identified several promising opportunities. Explain how your ambitions in terms of keeping control will influence your assessments of the identified opportunities and decision which of the identified opportunities you should ultimately pursue.

Article: Wasserman, N. (2017). The throne vs. the kingdom: Founder control and value creation in startups. *Strategic Management Journal*, 38(2), 255-277.

Question 10 (5 points)

Imagine that after this course your team decides to move forward with the SDS group project and wants to actually start a business together to commercialize the business concept. One tricky issue, however, is that you and your co-founders are not sure how to divide the equity (ownership shares) of the company. Based on the study by Breugst et al. (2015), explain what is most crucial to consider in this choice and why that is important.

Article: Breugst, N., Patzelt, H., & Rathgeber, P. (2015). How should we divide the pie? Equity distribution and its impact on entrepreneurial teams. *Journal of Business Venturing*, 30(1), 66-94.