

== General section ==

Type: E Title: Essay 1. DBS Bank noticed that customers of the digital bank are more profitable than those who use conventional branch banking. Please discuss the evidence for the observation and the managerial implications.

Type: E Title: Essay 2. Apply the concept of comparative advantage to explain how the scan-only self-pay checkout at Sheng Siong and Fair Price supermarkets would increase productivity.

Type: E Title: Essay 3. Apply the concept of competence destroying innovation to explain competition in either of the following contexts: (a) Between producers of electricity generated from fossil fuels vis-à-vis renewable sources such as solar and wind; (b) Between Nokia and Apple in the market for mobile handsets.

Type: E Title: Essay 4. How does Christensen's theory of disruptive innovation apply to the competition between Microsoft Office and Google Suite in the market for office productivity software?

Type: E Title: Essay 5. Consider the problem of keeping public areas clean. Suggest how to test whether extrinsic motivation crowds out intrinsic motivation.

Type: E Title: Essay 6. Opezzo and Schwartz (Journal of Experimental Psychology: Learning, Memory, and Cognition, 2014) showed that walking increases creativity. Discuss the implications for workplace design.

Type: E Title: Essay 7. Bloomberg and Thomson Reuters provide various benchmarking tools to rank companies' performance in corporate social responsibility and investment in sustainability. Discuss the effects of such benchmarking tools on managers and employees of the companies that are benchmarked.

Type: E Title: Essay 8. Analysts at financial advisor, Morningstar, research investment opportunities for investors. In 2018, Morningstar introduced a machine-learning model to learn from previous analysts' reports and help analysts to research funds they have not yet covered due to time constraints. Discuss whether Morningstar analysts have incentives to adopt this new technology. How should Morningstar promote the adoption by Morningstar analysts?

Type: E Title: Essay 9. In October 2020, Dropbox announced that all employees could work remotely permanently. Does this mean that proximity no longer affects knowledge transfer among individual workers? If not, how should Dropbox facilitate knowledge transfer among workers?

Type: E Title: Essay 10. Are IP rights a guarantee of commercial success and profits? Discuss the conditions under which this may be true.

== Econometrics section ==

Type: E Title: Essay 11. Please refer to the estimates of supermarket cashier productivity measured by dollars per minute. (a) What was the mean productivity across all cashiers? (b)

Use the regression estimate to compare the productivity of the least productive cashier with the most productive.

Type: E Title: Essay 12. Diwas Singh KC (“Heuristic Thinking in Patient Care”, Management Science, 2020) documented that, in Pennsylvania hospitals, cardiac patients admitted just before midnight were discharged earlier than those admitted just after midnight. KC wrote that he used a regression discontinuity design. In such analyses, it is standard to examine illustrate the discontinuity graphically. Illustrate what the figure should look like for KC’s analysis to be valid.

Type: E Title: Essay 13. Please refer to the estimates of hawker benchmarking (LumiNUS: Presentations and Discussions: BSN4811). How do you interpret the three-way interactions between treatment dummy (BMK), post-intervention visit dummy (post) and hawkers’ conscientiousness?

Type: E Title: Essay 14. In Atkins et al., (“Organizational Barriers to Technology”, Quarterly Journal of Economics, 2017), larger businesses were less likely to respond to the survey. Discuss whether and how this selection bias the findings, and propose a change to their experimental design to address such bias.

Type: E Title: Essay 15. Please refer to the estimates of Singapore patents. Compare the coefficients of R&D expenditure and missing R&D on patenting with and without controlling for company fixed effects, and interpret your findings. What would be the concerns if you regress patents on R&D with the sample limited to companies which reported R&D?