



Course outline “eBusiness” (M.Sc.)

Summer term 2026

I. Background

The course “eBusiness” focuses on the question of how digitization has shaped and continues to shape marketplaces. As such, it tries to understand whether digitization changes economic principles or whether their applicability is challenged or changed due to the digitization of economic transactions.

II. Course goals

Against this background, the goal of this course is for students to develop a strong understanding of digitization, e-commerce, and online economic activities. They will analyze how digital markets work, how market mechanisms have evolved due to digitization, and critically engage with insights from recent academic research.

III. Course format

Instead of traditional lectures, students will write an individual short thesis on a specific topic. Each thesis must be based on the latest academic research from leading journals and include references to real-world examples. Students will be assigned to groups of 3, and the students within one group will work on their own subtopic under one common umbrella topic. Students can and should cooperate within the groups. Each student will submit an individual thesis. After submission, students will present and defend their thesis in front of the entire course. The presentation will be delivered as a group; grading of the presentation will be based on individual performance. During the presentation sessions, all students in the audience will actively participate in the discussion. This will count toward the final grade.

The final grade will be determined as follows: 45% thesis, 45% presentation, and 10% participation in discussions.

IV. Enrollment

To enroll in this course, students must sign up in Alma and must be present in the first session of the term on April 14. **Students who do not attend on April 14 will not be allowed to enroll. Only M.Sc. students can enroll.**

V. Thesis format

Each student must submit a 5-page thesis, including all tables and figures. The title page, table of contents, and reference list do not count toward the page limit. The 5-page count begins with the introduction. The thesis must follow these formatting guidelines:

- Font: Times New Roman, 12-point
- Line spacing: 1.5
- Margins: 2.5 cm on all sides

VI. Schedule

Date	Time	Content
14-Apr-26	08:15-09:45	Kick-off session. Topic assignment. Participation mandatory. Workshop on academic writing part 1
21-April-26	08:15-09:45	Academic writing part 2
28-Apr-26	08:15-09:45	Students have studied the literature for their topic. Students ask questions about their thesis plans and receive feedback (1)
05-May-26	08:15-09:45	Presentation skills
12-May-26	08:15-09:45	Students ask questions about their thesis plans and receive feedback (2)
09-Jun-26	08:15-09:45	Students receive feedback on the current state of their thesis (3)
21-Jun-26	11:59 p.m.	Students submit their thesis
30-Jun-26	08:15-09:45	Students present their presentation plans
07-Jul-26	08:15-09:45	Students receive feedback on their thesis (individual meetings) and the current state of their presentation plans
17-Jul-26	09:00-04:00 p.m.	Student presentations. Participation mandatory.

VII. Topics

The topics below include a brief introduction along with potential research questions and problems for exploration. These questions are suggestive rather than exhaustive, and students are encouraged to develop their own research questions related to the topic. The following logic should guide the students' thinking: for each topic, the student should be able to name a dependent variable Y (outcome variable) and a focal independent variable X (input / regressor) that the topic is covering. Student should only embark on a specific research question if some academic research is available that covers both the chosen X and Y, and the relationship between these.

For each topic, the literature list provides an introduction but is not comprehensive. Students must conduct additional literature searches to identify relevant academic papers. Per default, articles should come from journals listed in the Financial Times FT50 list or the UT Dallas journal list. Non-FT50/UTD references below are explicitly marked as exceptions (for example, foundational or very recent evidence not yet represented in FT50/UTD outlets).

Journal lists

- Financial Times FT50 Journal List: <https://www.ft.com/content/3405a512-5cbb-11e1-8f1f-00144feabdc0>
- UT Dallas list of journals: <https://jsom.utdallas.edu/the-utd-top-100-business-school-research-rankings/list-of-journals>

Additionally, all students are required to read the following article, which serves as a foundational reference across all topics. Each thesis must explicitly discuss whether and how this article relates to the chosen research question.

- Goldfarb, A., & Tucker, C. (2019). Digital economics. *Journal of Economic Literature*, 57(1), 3–43

1. Digital Platforms

Digital platforms have reshaped competition, pricing, and market structure. Research in this area covers network effects, multihoming, platform governance, platform-owned advertising and ranking systems, and competition between platforms and traditional firms. Students should examine how platform rules (for example, commissions, ad placement, ranking algorithms, and access rules) affect sellers and consumers, and under which conditions platforms become more concentrated or remain contestable.

Literature (examples):

- Long, F., Jerath, K., & Sarvary, M. (2022). Designing an online retail marketplace: Leveraging information from sponsored advertising. *Marketing Science*, 41(1), 115–138
- Zhang, L., & Chung, D. J. (2020). Price bargaining and competition in online platforms: An empirical analysis of the daily deal market. *Marketing Science*, 39(4), 687–706
- Zervas, G., Proserpio, D., & Byers, J. W. (2017). The rise of the sharing economy: Estimating the impact of airbnb on the hotel industry. *Journal of Marketing Research*, 54(5), 687–705
- Barron, K., Kung, E., & Proserpio, D. (2021). The effect of home-sharing on house prices and rents: Evidence from airbnb. *Marketing Science*, 40(1), 23–47
- Dinerstein, M., Einav, L., Levin, J., & Sundaresan, N. (2018). Consumer price search and platform design in internet commerce. *American Economic Review*, 108(7), 1820–1859
- Cramer, J., & Krueger, A. B. (2016). Disruptive change in the taxi business: The case of uber. *American Economic Review*, 106(5), 177–182

2. Monetization

The shift from free to paid models remains a central challenge for digital businesses because users are often accustomed to free content. Research on freemium models, subscriptions, paywalls, and

ad-blockers highlights trade-offs between revenue maximization and user experience. Goldfarb and Tucker (2019) also emphasize how lower replication and tracking costs enable personalization and price discrimination, but can trigger consumer resistance and increase reliance on advertising. A new monetization challenge is the rise of GenAI assistants and chatbots that may substitute for web search and reduce referral traffic to content websites, potentially weakening incentives to invest in content creation.

Literature (examples):

- Amaldoss, W., Du, J., & Shin, W. (2024). Pricing strategy of competing media platforms. *Marketing Science*, 43(3), 488–505
- Todri, V. (2022). The impact of ad-blockers on online consumer behavior. *Marketing Science*, 41(1), 7–18
- Pauwels, K., & Weiss, A. (2008). Moving from free to fee: How online firms market to change their business model successfully. *Journal of Marketing*, 72(3), 14–31
- Chae, I., Ha, J., & Schweidel, D. A. (2023). Paywall suspensions and digital news subscriptions. *Marketing Science*, 42(4), 729–745
- Halbheer, D., Stahl, F., Koenigsberg, O., & Lehmann, D. R. (2014). Choosing a digital content strategy: How much should be free? *International Journal of Research in Marketing*, 31(2), 192–206 [Exception to FT50/UTD]
- Chiou, L., & Tucker, C. (2013). Paywalls and the demand for news. *Information Economics and Policy*, 25(2), 61–69 [Exception to FT50/UTD]
- Kaiser, M., & Schulze, C. (2025). Chatgpt referrals to e-commerce websites: How do llms compare against traditional channels? [Working paper (SSRN 5585812)] [Exception to FT50/UTD]

3. Product Reviews

Online reviews reduce search costs and can increase demand, but they also create risks such as fake reviews, strategic manipulation, and extremity bias. Platforms must balance credibility, moderation intensity, and participation. Students should study both demand-side effects (how reviews change choices and conversion) and integrity-side effects (how verification, moderation, and platform response policies affect trust and welfare).

Literature (examples):

- Chevalier, J. A., & Mayzlin, D. (2006). The effect of word of mouth on sales: Online book reviews. *Journal of Marketing Research*, 43(3), 345–354
- Chen, Y., & Xie, J. (2008). Online consumer review: Word-of-mouth as a new element of marketing communication mix. *Management Science*, 54(3), 477–491
- Vana, P., & Lambrecht, A. (2021). The effect of individual online reviews on purchase likelihood. *Marketing Science*, 40(4), 708–730
- Beck, B. B., Wuyts, S., & Jap, S. (2024). Guardians of trust: How review platforms can fight fakery and build consumer trust. *Journal of Marketing Research*, 61(4), 682–699

- Brandes, L., Godes, D., & Mayzlin, D. (2022). Extremity bias in online reviews: The role of attrition. *Journal of Marketing Research*, 59(4), 675–695
- Proserpio, D., & Zervas, G. (2017). Online reputation management: Estimating the impact of management responses on consumer reviews. *Marketing Science*, 36(5), 645–665

4. Online Advertising and Real-Time Bidding

Digital advertising operates through auction-based mechanisms, algorithmic targeting, and increasingly constrained measurement pipelines. Key questions include auction design, attribution, targeting under privacy constraints, and the business value of display advertising. Students should analyze trade-offs between personalization and privacy, how firms adapt to weaker tracking, and what real-time bidding mechanisms imply for advertisers, publishers, and platforms.

Literature (examples):

- Despotakis, S., Ravi, R., & Sayedi, A. (2021). First-price auctions in online display advertising. *Journal of Marketing Research*, 58(5), 888–907
- Lambrecht, A., & Tucker, C. (2013). When does retargeting work? information specificity in online advertising. *Journal of Marketing Research*, 50(5), 561–576
- Schwartz, E. M., Bradlow, E. T., & Fader, P. S. (2017). Customer acquisition via display advertising using multi-armed bandit experiments. *Marketing Science*, 36(4), 500–522
- Tian, M., Hoban, P. R., & Arora, N. (2024). What cookie-based advertising effectiveness fails to measure. *Marketing Science*, 43(2), 407–418
- Dai, W., Kim, H., & Luca, M. (2023). Which firms gain from digital advertising? evidence from a field experiment. *Marketing Science*, 42(3), 429–439
- Berman, R. (2018). Beyond the last touch: Attribution in online advertising. *Marketing Science*, 37(5), 771–792
- Danaher, P. J., & van Heerde, H. J. (2018). Delusion in attribution: Caveats in using attribution for multimedia budget allocation. *Journal of Marketing Research*, 55(5), 667–685

5. Influencer Marketing

Influencer marketing changes the economics of persuasion by combining social ties, content production, and paid promotion. It blurs the line between organic and sponsored content and raises questions about disclosure, trust, and platform governance. Students should compare influencer marketing to traditional advertising, evaluate effectiveness and platform-side incentives, and examine how disclosure requirements shape consumer response and creator monetization.

Literature (examples):

- Liu, J., & Liu, Y. (2025). Asymmetric impact of matching technology on influencer marketing: Implications for platform revenue. *Marketing Science*, 44(1), 65–83
- Beichert, M., Bayerl, A., Goldenberg, J., & Lanz, A. (2024). Revenue generation through influencer marketing. *Journal of Marketing*, 88(4), 40–63

- Trusov, M., Bodapati, A. V., & Bucklin, R. E. (2010). Determining influential users in internet social networks. *Journal of Marketing Research*, 47(4), 643–658
- Berger, J., & Milkman, K. L. (2012). What makes online content viral? *Journal of Marketing Research*, 49(2), 192–205
- de Vries, L., Gensler, S., & Leeflang, P. S. H. (2012). Popularity of brand posts on brand fan pages: An investigation of the effects of social media marketing. *Journal of Interactive Marketing*, 26(2), 83–91 [Exception to FT50/UTD]

6. Social Networks

Social media platforms shape information diffusion, social interaction, consumer engagement, and firm communication with users. They also generate concerns about polarization, mental health, and platform design choices that favor engagement. Students should examine platform incentives, algorithmic curation, welfare trade-offs, and the consequences of social-media design for users, firms, and regulators.

Literature (examples):

- Aridor, G., Jimenez-Duran, R., Levy, R., & Song, L. (2024). The economics of social media. *Journal of Economic Literature*, 62(4), 1422–1474 [Exception to FT50/UTD]
- Allcott, H., Braghieri, L., Eichmeyer, S., & Gentzkow, M. (2020). The welfare effects of social media. *American Economic Review*, 110(3), 629–676 [Exception to FT50/UTD]
- Braghieri, L., Levy, R., & Makarin, A. (2022). Social media and mental health. *American Economic Review*, 112(11), 3660–3693 [Exception to FT50/UTD]
- Hinz, O., Skiera, B., Barrot, C., & Becker, J. U. (2011). Seeding strategies for viral marketing: An empirical comparison. *Journal of Marketing*, 75(6), 55–71
- Berger, J., & Milkman, K. L. (2012). What makes online content viral? *Journal of Marketing Research*, 49(2), 192–205
- Gauthier, G., Hodler, R., Widmer, P., & Zhuravskaya, E. (2026). The political effects of x's feed algorithm. *Nature* [Exception to FT50/UTD]

7. Privacy

Privacy concerns are in tension with data-driven business models because lower tracking costs increase the value of targeting and personalization but also intensify concerns about consent, security, and market power. Students should examine whether privacy rules benefit consumers, how firms adapt, and which firms bear the largest costs under stricter tracking restrictions.

Literature (examples):

- Goldfarb, A., & Tucker, C. (2011). Privacy regulation and online advertising. *Management Science*, 57(1), 57–71
- Johnson, G. A., Shriver, S. K., & Du, S. (2020). Consumer privacy choice in online advertising: Who opts out and at what cost to industry? *Marketing Science*, 39(1), 33–51

- Wernerfelt, N., Tuchman, A., Shapiro, B. T., & Moakler, R. (2025). Estimating the Value of Offsite Tracking Data to Advertisers: Evidence from Meta. *Marketing Science*, 44(2), 268–286
- Aridor, G., Che, Y.-K., Hollenbeck, B., Kaiser, M., & McCarthy, D. (2025). Evaluating the impact of privacy regulation on e-commerce firms: Evidence from apple's app tracking transparency [Articles in Advance / forthcoming at time of revision]. *Management Science* Articles in Advance / forthcoming.
- Turjeman, D., & Feinberg, F. M. (2024). When the data are out: Measuring behavioral changes following a data breach. *Marketing Science*, 43(2), 440–461
- Martin, K. D., & Murphy, P. E. (2017). The role of data privacy in marketing. *Journal of the Academy of Marketing Science*, 45(2), 135–155 [Exception to FT50/UTD]

8. Online Misinformation and Fake News (including GenAI)

Misinformation spreads in digital environments because low production and distribution costs interact with attention-driven ranking and social amplification. GenAI adds new supply-side risks by lowering content generation costs, increasing scale, and complicating authenticity judgments. Students should study content moderation, fact-checking, algorithmic interventions, consumer susceptibility, and the limits of platform self-governance.

Literature (examples):

- Lazer, D. M. J., et al. (2018). The science of fake news. *Science*, 359(6380), 1094–1096
- Allcott, H., & Gentzkow, M. (2017). Social media and fake news in the 2016 election. *Journal of Economic Perspectives*, 31(2), 211–236
- Nyhan, B. (2020). Facts and myths about misperceptions. *Journal of Economic Perspectives*, 34(3), 220–236 [Exception to FT50/UTD]
- Pennycook, G., Bear, A., Collins, E. T., & Rand, D. G. (2020). The implied truth effect: Attaching warnings to a subset of fake news headlines increases perceived accuracy of headlines without warnings. *Management Science*, 66(11), 4944–4957
- Rao, A. (2022). Deceptive claims using fake news advertising: The impact on consumers. *Journal of Marketing Research*, 59(3), 534–554
- Vosoughi, S., Roy, D., & Aral, S. (2018). The spread of true and false news online. *Science*, 359(6380), 1146–1151
- Gauthier, G., Hodler, R., Widmer, P., & Zhuravskaya, E. (2026). The political effects of x's feed algorithm. *Nature*

9. Generative AI, Chatbots, and AI Search in eBusiness

Generative AI changes how consumers search, compare, and evaluate products. AI assistants can become a new referral channel, a shopping assistant inside platforms, or a substitute for traditional search and website browsing. This topic focuses on channel economics, consumer response to AI assistants, and design choices in conversational commerce. Students should examine when AI

assistance improves conversion, when it reduces trust or perceived control, and how AI-mediated discovery changes traffic allocation and monetization for websites and platforms.

Literature (examples):

- Kaiser, M., & Schulze, C. (2025). Chatgpt referrals to e-commerce websites: How do llms compare against traditional channels? [Working paper (SSRN 5585812)] [Exception to FT50/UTD]
- Luo, X., Tong, S., Fang, Z., & Qu, Z. (2019). Frontiers: Machines vs. humans: The impact of artificial intelligence chatbot disclosure on customer purchases. *Marketing Science*, 38(6), 937–947
- Wang, L., Huang, N. N., He, Y., Liu, D., Guo, X., Sun, Y., & Chen, G. (2025). Artificial intelligence (ai) assistant in online shopping: A randomized field experiment on a livestream selling platform. *Information Systems Research*, 36, 2358–2374
- Sun, C., Shi, Z., Liu, X., & Ghose, A. (2025). The effect of voice ai on digital commerce. *Information Systems Research*, 36(2), 1147–1166
- Liu, Y., Wang, L., Yang, S., & Wang, Y. (2025). Artificial intelligence-powered digital streamers in online retail: Empirical insights and design strategies from experiments [forthcoming]. *Information Systems Research*
- Puntoni, S., Reczek, R. W., Giesler, M., & Botti, S. (2021). Consumers and artificial intelligence: An experiential perspective. *Journal of Marketing*, 85(1), 131–151
- Huang, M.-H., & Rust, R. T. (2025). The genai future of consumer research. *Journal of Consumer Research*, 52(1), 4–17

10. AI and eBusiness: Fairness, Transparency, and Labor-Market Implications

AI-driven decision systems affect pricing, targeting, recommendation, hiring, credit, and customer service. Two major concerns are fairness/transparency and labor-market implications. Students should investigate sources of algorithmic bias and methods for auditing and mitigation. Alternatively, they can study, e.g., the labor market implication by looking at the trade-offs between automation gains and distributional outcomes in employment and wages.

Literature (examples):

- Lambrecht, A., & Tucker, C. (2019). Algorithmic bias? an empirical study of apparent gender-based discrimination in the display of stem career ads. *Management Science*, 65(7), 2966–2981
- Shimao, H., Khern-am-nuai, W., Kannan, K. N., & Cohen, M. C. (2025). Strategic best-response fairness framework for fair machine learning. *Information Systems Research*, 36, 2391–2403
- Obermeyer, Z., Powers, B., Vogeli, C., & Mullainathan, S. (2019). Dissecting racial bias in an algorithm used to manage the health of populations. *Science*, 366(6464), 447–453
- Rambachan, A., Kleinberg, J., Ludwig, J., & Mullainathan, S. (2020). An economic perspective on algorithmic fairness. *AEA Papers and Proceedings*, 110, 91–95 [Exception to FT50/UTD]
- Autor, D. H. (2015). Why are there still so many jobs? the history and future of workplace automation. *Journal of Economic Perspectives*, 29(3), 3–30 [Exception to FT50/UTD]

- Brynjolfsson, E., Rock, D., & Syverson, C. (2018). Artificial intelligence and the modern productivity paradox: A clash of expectations and statistics. In *The economics of artificial intelligence: An agenda* (pp. 23–57). University of Chicago Press [Exception to FT50/UTD]