| Subject Code                                 | MM6414   |  |  |
|--|--|--|--|
| Subject Title                                | AI Management and Marketing Strategy   |  |  |
| Credit Value                                 | 3  |  |  |
| Level  | 6  |  |  |
| Normal Duration                              | 1-semester   |  |  |
| Pre-requisite/<br>Co-requisite/<br>Exclusion | None   |  |  |
| Objectives                                   | This subject contributes to the achievement of the DBAI program outcome by increase students' ability to meet transformative challenges in AI and BI revolution (Outcome 2: Attaining profound expertise in digital technologies within the realms of AI, BI, and Generative AI industries).  The primary objective is to equip students with advanced knowledge and skills in strategic management of Artificial Intelligence technologies within the context of marketing. This  |  |  |
|  | <ol> <li>Provide a deep understanding of how AI transform marketing strategies and practices.</li> <li>Develop critical thinking and analytical skills to evaluate and implement AI-Driven marketing solutions.</li> <li>Foster the ability to formulate and execute AI-powered marketing strategies.</li> <li>Prepare students for leadership roles in academia, industry, or research focused on AI management and marketing innovation.</li> </ol>  |  |  |
| Intended Learning<br>Outcomes                | <ul> <li>By the end of the course, students will be able to:</li> <li>a. Analyze and assess the impact of AI on marketing functions, including customer segmentation, targeting, and personalization;</li> <li>b. Develop AI-driven marketing strategies that enhance customer engagement, loyalty, and business performance;</li> <li>c. Contribute to the advancement of AI management and marketing research and innovation;</li> <li>d. Communicate AI-Driven marketing insights and strategies effectively to diverse stakeholders.</li> </ul>  |  |  |
| Subject Synopsis/<br>Indicative Syllabus     | <ul> <li>Introduction to AI in marketing: Overview of AI technology and its relevance to marketing; Historical context and key developments in AI-aided marketing.</li> <li>AI for customer insights and personalization: Customer data analytics and predictive modelling; Customer journey mapping with AI.</li> <li>AI and marketing automation: Chatbots, virtual assistants and conversational AI; A/B testing and optimization with AI algorithms; AI marketing automation platform.</li> <li>AI in content creation and optimization: AIGC and copywriting; SEO and content marketing with AI; Visual recognition and content recommendation systems.</li> <li>AI in market research and competitive analysis: AI-driven market segment and trend analysis; Competitive intelligence and AI-powered benchmarking; Brand sentiment analysis</li> </ul> |  |  |
| Teaching/Learning<br>Methodology             | The teaching format of the subject will be a combination of lectures, case studies, guest speakers, individual research and assessments. The intensive learning experience will foster student engagement, encourage application of knowledge, problem-solving, and critical thinking skills. Active participation is essential.   |  |  |

Assessment Methods in Alignment with Intended Learning Outcomes

| Specific assessment methods/tasks                 | %<br>weighting | Intended subject learning outcomes to be assessed (Please tick as appropriate) |          |          |          |
|---|----------------|--|----------|----------|----------|
|   |                | a.   | b.       | c.       | d.       |
| Continuous Assessment*                            | 100%           |  |          |          |          |
| 1. Group project                                  | 30%            |  | ✓        | ✓        |          |
| 2. Individual research report                     | 40%            | ✓  |          | ✓        |          |
| 3. Individual reflection on AI marketing strategy | 10%            | <b>√</b>   | <b>✓</b> |          | <b>√</b> |
| 4. Class discussion & Presentation                | 20%            | ✓  | <b>✓</b> | <b>√</b> |          |
| Total   | 100 %          |  |          |          |          |

<sup>\*</sup>Weighting of assessment methods/tasks in continuous assessment may be different, subject to each subject lecturer.

**Explanation of the appropriateness of the assessment methods in assessing the intended learning outcomes:** The chosen assessment methods are carefully designed to ensure comprehensive evaluation of all students in this subject.

Group project: The group project offers students a valuable opportunity to conduct a behavioral experiment. Working collaboratively in small teams, students are tasked with designing and implementing an experiment. They begin by selecting an intriguing area and conducting research on a proposed topic. Subsequently, the team narrows down the topic to a few falsifiable research problems and formulates theory-driven and testable hypotheses. Using these hypotheses, students design the experiment, collect and analyze data, and report their findings.

Individual research report: The individual research report aims to develop students' ability to independently carry out practical research work. Each student takes the initiative to discuss research ideas with classmates and lecturers, eventually selecting a specific research topic for further exploration. Students are required to write a comprehensive report outlining their research plan. This assessment method enhances their understanding of qualitative approaches to research.

Individual reflection: The individual reflection assesses students' comprehension of how qualitative and quantitative methods can be applied to AI marketing strategy and entrepreneurship topics.

Class participation and interaction: As a crucial assessment method in this advanced workshop, class participation and interaction provide valuable feedback to each classmate regarding their research ideas. The experience sharing session in the workshop is evaluated based on active participation, which helps clarify concepts, methodologies, and critical success factors in conducting research projects.

Immediate feedback: Following presentations, students receive immediate feedback, and all students are encouraged to participate in the subsequent discussion.

To pass this subject, students are required to obtain Grade D or above in the Continuous Assessment components.

| Student Study                  | Class contact:  |          |  |  |  |  |
|--------------------------------|---|----------|--|--|--|--|
| Effort Expected                | <ul><li>Lectures</li></ul>  | 30 Hrs.  |  |  |  |  |
|                                | Other student study effort:   |          |  |  |  |  |
|                                | <ul> <li>Preparation for lectures</li> </ul>  | 30 Hrs.  |  |  |  |  |
|                                | <ul> <li>Preparation for assignment / group project and presentation</li> </ul>   | 60 Hrs.  |  |  |  |  |
|                                | Total student study effort  | 120 Hrs. |  |  |  |  |
| Reading List and<br>References | Huang, MH., & Rust, R. T. (2020). A strategic framework for artificial intelligence in marketing. Journal of the Academy of Marketing Science, 49, 30–50.   |          |  |  |  |  |
|                                | De Mauro, A., Sestino, A., & Bacconi, A. (2022). Machine learning and artificial intelligence use in marketing: a general taxonomy. Italian Journal of Marketing.   |          |  |  |  |  |
|                                | Stone, M., Aravopoulou, E., Ekinci, Y., Evans, G., Hobbs, M., Labib, A., Laughlin, P., Machtynger, J., & Machtynger, L. (2020). Artificial intelligence (AI) in strategic marketing decision-making: a research agenda. The Bottom Line.  Davenport, T. H., Guha, A., & Grewal, D. (2021). How to Design an AI Marketing Strategy. Harvard Business Review.  Huang, MH., Papagiannidis, E., Mikalef, P., & Krogstie, J. (2021). Artificial Intelligence and Business Value: a Literature Review. Information Systems Frontiers. |          |  |  |  |  |
|                                |   |          |  |  |  |  |
|                                |   |          |  |  |  |  |
|                                | Tiautrakul, J., & Jindakul, J. (2019). The Artificial Intelligence (AI) with the Future of Digital Marketing.   |          |  |  |  |  |
|                                | Varadarajan, R. (2018). Research in marketing strategy. Journal of the Academy of Marketing Science.  |          |  |  |  |  |

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