

## Course Outline

**Course Code** : MKT4761K  
**Course Title** : SIM: Marketing Technology  
**Semester** : Semester 1, AY 2023/2024  
**Faculty** : Mr Alvin Tan  
**Department** : Marketing  
**Email** : [Click here to enter text](#)  
**URL** : <https://bschool.nus.edu.sg/marketing/faculty/>

### Overview

Rapidly evolving technologies, like ChatGPT, are a double-edged sword for marketers. While they offer unprecedented access to MarTech tools and solutions, they also reshape consumer behaviour and experiences. Companies are increasingly leveraging MarTech, such as chatbots, AR/VR, and the metaverse, to develop high-tech touchpoints that deliver new customer value.

This course, designed as a marketer's guide to MarTech, presents through experiential learning on the latest MarTech tools and solutions augmenting customer journeys. Through hands-on workshops and real-world case studies, you will learn how to assess and develop effective MarTech strategies for customers of tomorrow.

### Course Objectives

At the end of this course, students should be able to:

1. Analyse the impact of rapidly evolving technologies on consumer behaviour and customer experiences.
2. Identify the different MarTech tools and solutions, and explain the technologies powering them.
3. Evaluate the managerial implications of MarTech deployment along the customer journey.
4. Develop innovative MarTech strategies that can effectively deliver value to customers.

*Note: This course aims to help you gain the knowledge and confidence to effectively communicate and collaborate with technical specialists, such as software developers and data scientists, on MarTech projects. You will experience and experiment with various no-code/low-code MarTech tools to appreciate the underlying technology and evaluate the managerial implications for marketing.*

### General Guide & Reading

This course adopts selected frameworks from the recommended textbook. However, **you are not required to purchase it for this course**. The recommended textbook is available for loan at both NUS and NLB libraries. Suggested readings and references will be provided to enhance your understanding of the topics covered.

### Recommended Textbook

- Kotler, P., Kartajaya, H., & Setiawan, I. (2021). Marketing 5.0: Technology for Humanity.

### Assessment

Assessment Components	Weightage
Online Quiz (OQ1: 5%. OQ2: 5%)	10%
Class Participation	20%
Discussion Boards (DB1: 15%, DB2: 15%)	30%
Group Project	40%

### Assessment Outline

- **Online Quiz:** Each online quiz will include a set of MCQs. You can complete it on your own time before the deadline. We have a total of 2 online quizzes.
- **Class Participation:** The sectionals are designed to help you experience and reflect through the case discussions and hands-on workshops. You can contribute to the class through active participation in the various in-class learning activities.
- **Discussion Board:** The discussion boards serve as a post-class online forum to internalise your in-class learning and share your explorations on real-world use cases with your peers. You will post and comment on the discussion boards. We will have a total of 2 discussion boards.
- **Group Project:** You will work with your group to develop a MarTech strategy aimed at enhancing the customer experience for a business through the use of high-tech touchpoints along the customer journey. You can create your MarTech solution for a real or fictitious company. You will present your MarTech strategy, solution and prototype at the group project presentation.

### Study Group

You can form your own study group consisting of up to 5 members. You will collaborate with your group on both the in-class learning activities and group project.

### Academic Honesty & Plagiarism

Academic integrity and honesty is essential for the pursuit and acquisition of knowledge. The University and School expect every student to uphold academic integrity & honesty at all times. Academic dishonesty is any misrepresentation with the intent to deceive, or failure to acknowledge the source, or falsification of information, or inaccuracy of statements, or cheating at examinations/tests, or inappropriate use of resources.

Plagiarism is 'the practice of taking someone else's work or ideas and passing them off as one's own' (The New Oxford Dictionary of English). The University and School will not condone plagiarism. Students should adopt this rule - You have the obligation to make clear to the assessor which is your own work, and which is the work of others. Otherwise, your assessor is entitled to assume that everything being presented for assessment is being presented as entirely your own work. This is a minimum standard. In case of any doubts, you should consult your instructor.

### Additional guidance is available at:

- [Administrative Policies](#)
- <http://www.nus.edu.sg/registrar/administrative-policies-procedures/acceptance-record#NUSCodeofStudentConduct>
- <http://nus.edu.sg/osa/resources/code-of-student-conduct>

## Schedule and Outline

Week	Topic	Activity / To-Do
1	<p><b>MarTech for Customers of Tomorrow</b></p> <ul style="list-style-type: none"> <li>Marketing Technology and Kotler's 5As Customer Path</li> <li>High-Tech Touchpoints and Customer Experience</li> </ul> <p>Topic Questions</p> <ul style="list-style-type: none"> <li>How will technology shape the customers of tomorrow?</li> <li>How can brands use MarTech to create new customer experiences?</li> </ul> <p>Reading</p> <ul style="list-style-type: none"> <li>Tordjman, K. L. (2023, March 20). High-Tech Touchpoints Are Changing Customer Experience. Harvard Business Review.</li> </ul>	<p><b>Activity</b></p> <p>Ice-Breaker Course Overview Group Discussion</p>
2	<p><b>Aware: Attract Customers with AI Machine Learning</b></p> <ul style="list-style-type: none"> <li>Introduction to AI and Machine Learning</li> <li>Machine Learning and Customer Experience</li> </ul> <p>Topic Questions</p> <ul style="list-style-type: none"> <li>What is the role of machine learning in marketing?</li> <li>How can brands leverage machine learning for customer experience?</li> </ul> <p>Case: Disney+ and Machine Learning in the Streaming Age</p> <ul style="list-style-type: none"> <li>McTigue K. and Anderson T. (2023, January 27) Disney+ and Machine Learning in the Streaming Age. Northwestern Kellogg School of Management.</li> </ul> <p>Reading</p> <ul style="list-style-type: none"> <li>Siegel E. (2023, March 24) How Machine Learning Can Improve Customer Experience. Harvard Business Review.</li> </ul>	<p><b>Activity</b></p> <p>Group Discussion Case Discussion</p> <p><b>Assessment</b></p> <p>Discussion Board 1 (Due: End of Week 3)</p>
3	<p><b>Aware: Attract Customers with AI Machine Learning</b></p> <ul style="list-style-type: none"> <li>Automated Machine Learning Models</li> <li>Generative AI for Content Creation</li> </ul> <p>Workshop</p> <ul style="list-style-type: none"> <li>Building and deploying machine learning models</li> <li>Exploring generative AI tools for content creation</li> </ul>	<p><b>Activity</b></p> <p>Hands-on Workshop</p>
4	<p><b>Appeal: Build Customer Relations with CRM Automation</b></p> <ul style="list-style-type: none"> <li>Introduction to Robotic Process Automation (RPA)</li> <li>Customer Relationship Management (CRM) Automation</li> </ul> <p>Topic Questions</p> <ul style="list-style-type: none"> <li>What is the role of automation in marketing?</li> <li>How can brands build customer relations with CRM automation?</li> </ul> <p>Case: HubSpot and Motion AI: Chatbot-Enabled CRM</p> <ul style="list-style-type: none"> <li>Avery J. and Steenburgh T. (2018, February 12) HubSpot and Motion AI: Chatbot-Enabled CRM. Harvard Business School.</li> </ul> <p>Reading</p> <ul style="list-style-type: none"> <li>RPA For Marketers: How Marketers are Getting More Done with Software Robots. UiPath.</li> <li>What is CRM Automation? Automation Anywhere.</li> </ul>	<p><b>Activity</b></p> <p>Group Discussion Case Discussion</p> <p><b>Assessment</b></p> <p>Discussion Board 2 (Due: End of Week 5)</p>

5	<p><b>Appeal: Build Customer Relations with CRM Automation</b></p> <ul style="list-style-type: none"> <li>• CRM Software System and Components</li> <li>• Automated CRM Email Marketing Campaign</li> </ul> <p>Workshop</p> <ul style="list-style-type: none"> <li>• Exploring CRM for customer relationship building</li> <li>• Building an automated email marketing campaign</li> </ul>	<p><b>Activity</b> Hands-on Workshop</p>
6	<p><b>Ask: Create Customer Engagements with Chatbots</b></p> <ul style="list-style-type: none"> <li>• Introduction to Chatbot and Large Language Model</li> <li>• Engaging Customers with AI Chatbot and Avatar</li> </ul> <p>Workshop</p> <ul style="list-style-type: none"> <li>• Interacting with an AI chatbot avatar</li> <li>• Building an AI chatbot avatar</li> </ul>	<p><b>Activity</b> Group Discussion Hands-on Workshop</p> <p><b>Assessment</b> Online Quiz 1 (Due: End of Week 6)</p>
<b>Recess Week</b>		
7	<p><b>Act: Design O2O Retail Experiences with AR/VR</b></p> <ul style="list-style-type: none"> <li>• Introduction to AR/VR</li> <li>• Online-to-Offline (O2O) Commerce</li> </ul> <p>Topic Questions</p> <ul style="list-style-type: none"> <li>• How is O2O commerce reshaping e-commerce?</li> <li>• How can brands use AR/VR to create immersive retail experience?</li> </ul> <p>Reading</p> <ul style="list-style-type: none"> <li>• Gibbons, S. (2023, April 18). Online-To-Offline (O2O) Could Revolutionize E-Commerce Business. Forbes.</li> <li>• Papagiannis, H. (2021, November 1). How AR Is Redefining Retail in the Pandemic. Harvard Business Review.</li> </ul>	<p><b>Activity</b> Group Discussion Case Discussion</p> <p><b>Assessment</b> Group Project (Due: End of Week 12; Present: In Week 13)</p>
8	<p><b>Act: Design O2O Retail Experiences with AR/VR</b></p> <ul style="list-style-type: none"> <li>• Devices and Platforms for AR/VR Content Creation</li> <li>• Creating Immersive Shopping Experiences with AR/VR</li> </ul> <p>Workshop</p> <ul style="list-style-type: none"> <li>• Experiencing AR for O2O commerce</li> <li>• Designing AR for immersive shopping experience</li> </ul>	<p><b>Activity</b> Hands-on Workshop</p>
9	<p><b>Advocate: Empower Brand Communities in the Metaverse</b></p> <ul style="list-style-type: none"> <li>• Introduction to Metaverse: Web3, NFT and Virtual Land</li> <li>• Building Brand Communities in the Metaverse</li> </ul> <p>Topic Questions</p> <ul style="list-style-type: none"> <li>• Metaverse marketing: Fad or Future?</li> <li>• How can brands build loyal communities in the metaverse?</li> </ul> <p>Case: Nike: Tiptoeing into the Metaverse</p> <ul style="list-style-type: none"> <li>• Sawhney M. and Goodman P. (2022, May 26) Nike: Tiptoeing into the Metaverse. Northwestern Kellogg School of Management.</li> </ul> <p>Reading</p> <ul style="list-style-type: none"> <li>• Marketing in the metaverse: An opportunity for innovation and experimentation. (2022, May 24). McKinsey.</li> <li>• Purdy M. (2023, April 2). Building a Great Customer Experience in the Metaverse. Harvard Business Review.</li> </ul>	<p><b>Activity</b> Group Debate Case Discussion</p>

10	<p><b>Advocate: Empower Brand Communities in the Metaverse</b></p> <ul style="list-style-type: none"> <li>• Devices and Platforms to Access the Metaverse</li> <li>• Creating Brand Experiences in the Metaverse</li> </ul> <p>Workshop</p> <ul style="list-style-type: none"> <li>• Exploring brand experience in the metaverse</li> <li>• Designing immersive virtual brand experience</li> </ul>	<p><b>Activity</b> Hands-on Workshop</p> <p><b>Assessment</b> Online Quiz 2 (Due: End of Week 10)</p>
11	<p><b>Becoming a Future-Ready Marketing Leader</b></p> <ul style="list-style-type: none"> <li>• Future of Work for Marketing</li> <li>• Future Cone and Backcasting</li> </ul> <p>Topic Questions</p> <ul style="list-style-type: none"> <li>• What is the future of work for marketing?</li> <li>• What are the desired attributes of modern marketers?</li> </ul> <p>Reading</p> <ul style="list-style-type: none"> <li>• 21 Marketing Jobs of the Future (2019, April). Center For The Future of Work, Cognizant.</li> <li>• Lewnes A. and Keller K. 10 Principles of Modern Marketing (2019, April 12). MITSloan Management Review.</li> </ul>	<p><b>Activity</b> Group Discussion</p>
12	Group Project Consultation	
13	Group Project Presentation	