High-Tech Marketing (MOT133A)

Project Assignment 2023-2024

Introduction BLOCK 1	The MOT133A group assignment 2023-2024 allows you to deliver a project that meets your (group) needs, wishes, and interests. You will work on strategic marketing management ("what companies want") in BLOCK 1. You will explore in an empirical text mining part what online customer groups want (BLOCK 2). You will translate the results from BLOCK 2 into a creative marketing campaign in BLOCK 3.
Brand selection	Select three (3) branded products (services, events, experiences, or ideas) within the same – dynamic – market environment. Brand 1 must be an established market leader or Top-5 challenger; Brand 2 must be a start-up with cause-related marketing orientation; Brand 3 must be an established nicher with a product orientation.
	As a group you should select three (3) high-tech branded products in a high-tech market environment of your own choice that meet these specified criteria. Thus, you will have a large market leader or challenger, a start-up in the same industry that furthers a cause, and a nicher that tries to be the best.
	NOTE that the focus must be on the offerings (i.e., <i>product brands</i>), and NOT on the companies themselves.
Elements of the assignment	Your group assignment must consist of the following formal components for BLOCK 1:
	 (a) A review of the brand history and value proposition for each brand (Brands 1, 2 & 3) with emphasis on the market environment you selected. (b) A competitive strategy (for Brands 1, 2 & 3). (c) A marketing plan (for Brands 1, 2 & 3, excl. financial paragraph).
	The components are explained below.
Brand history & value proposition	Reconstruct the frames of reference for the three (3) brands you selected. Answer questions like: Where does Brand 1 stand in the market? What's the history of the brand? What makes it different from any other brand in this market? What makes it potentially vulnerable for competitors? The same questions should be addressed for Brands 2 and 3. Focus on each brand's value proposition, mission statement, points-of-difference and points-of-parity.
Competitive Strategy	High-tech companies that invest in new technologies fare well compared with companies that don't (Hoffman et al. 2022). In highly dynamic markets, being first-to-market often means first-to-fail (see Golder & Tellis, 1993, 2004). Many competitive market strategies aim at "leapfrogging" the market leader (i.e., taking over the dominant

position of the market leader and become the new no. 1). The market leader, in turn, aims at preventing leapfrogging. How could Brand 1 (the market leader / challenger) prevent Brand 2 (the cause-related start-up) to "leapfrog" Brand 1? Develop a fitting competitive strategy for Brand 1. Ground your competitive strategy on the product life cycle that, in your opinion, best fits Brand 1 and the market you selected for the group assignment: (1) a traditional product life cycle, (2) a fashion / fad life cycle, or (3) a long tail lifecycle. How could Brand 2 (the cause-related start-up) "leapfrog" Brand 1, and stay safe from competing Brand 3? Propose & develop a fitting competitive strategy and suitable product life cycle for Brand 2. How could Brand 3 (the product-oriented nicher) "leapfrog" or stay safe from competing Brand 1 and Brand 2? Propose & develop a fitting competitive strategy and suitable product life cycle for Brand 3. **Marketing Plan** A marketing plan summarizes what the marketer learnt about the marketplace, and indicates how a brand should reach its objective. In your case, take the perspective of Brands 1, 2 and 3, respectively, and provide a marketing plan that should enable each of these Brands to prevent leapfrogging (Brand 1) or to leapfrog (Brand 2 & Brand 3). Follow the components outlined in Ch. 2 of your textbook, excluding the financial projections. It is recommended to carry out (1) a traditional SWOT analysis (Ch. 2 of your textbook) first. Consider the traditional marketing mix (the 4 'P's) and the alternative 7 'P's (described in Parts 4-6 of your course book). Note that for the situation analysis, you have freedom of choice. Do you wish to re-brand those brands (Ch. 8)? If so, you could use modify the personality of your brand (Aaker, 1997) and formulate a new brand mantra with the help of a mental map (Ch. 5; see also Lovett, Peres, & Shachar, 2013). **Methods** Literature (desk research), company (white) paper review, and applied creativity.

BLOCK 2	
Empirical (text mining) part	A marketing strategy plan illustrates what the company seeks to achieve with a branded product; social media tells you what customers actually think about the branded product. As a group,
	 Explore how online customers probably evaluate Brand 1, Brand 2, and Brand 3 in social media forums. What are their current (positive or negative) sentiments? Use text mining on product reviews posted online by customers of each brand to create these (positive or negative) sentiments. Further analyze the (positive or negative) sentiments for each brand with topic modelling. What is it that set the positive and negative sentiments apart per brand? Evaluate and discuss the implications of these results for a creative marketing campaign for each of the three Brands.
Constant de	The components are explained below.
Sample selection	Social media forums (Reddit and others) are rich sources of product-related debate between real online customers. Find and select representative sample(s) from social media that most appropriately discuss your Brand 1, Brand 2, and Brand 3. Explain your sample selection (what were the underlying selection criteria). Discuss how your sample selection may influence your sentiment analysis and topic modelling results.
Data	Collected text data needs further processing before it can be analysed.
(pre)processing	Pre-processing steps one typically takes are tokenisation (e.g. assign each word to a separate row in a table), removing words that one considers non-informative for the analysis (e.g. stop words or expressions of profanity), stemming (reducing words to their root form), applying frequency filters, and consolidating synonyms. In the assignment, explain which of these steps you took and why.
	 Sentiment analyses use dictionaries to evaluate opinions or emotions in texts. You can use an existing dictionary or develop one yourself. Regardless of which strategy you choose, substantiate why you did so. The actual sentiment analysis involves giving an overview of the different counts per sentiment for a product. This basic overview provides starting points for your analyses. For example, one could conduct a temporal analysis to see if particular product sentiments develop over time. As another
	 example, a comparison between brands regarding the occurrence of one or more sentiments could be made. Regardless of which tests you will conduct, these steps require further processing of the data beyond what is needed for the sentiment analysis and explanation thereof. Topic modelling is an unsupervised classification technique that

	is used to look for clusters of similar words. Latent Dirichlet Allocation (LDA) can be applied to discover the topics within such texts. The analysis can give you detailed insight into which topics the customers of Brand 1, Brand 2, and Brand 3 consider positive and/or negative, respectively.
Results	Present your results with summary statistics (tables, figures, statistics), and report the right statistical tests for each analysis provided. Based on your sentiment analysis and topic modelling results, what did you learn, formally, for the marketing strategy per brand?
Methods	Text mining, topic modelling, statistics (descriptives, chi-squared, t-test, regression, ANOVA, etc.)
BLOCK 3	
Reflection on results (creative)	Marketing is both a science and an art. Based on your sentiment analysis and topic modelling results, how should Brand 1, Brand 2, and Brand 3 develop and/or modify their marketing campaign strategies? How will each campaign look like? Work on the timeline of each campaign (will your marketing campaign strike only once, or will you use a multiple-stages campaign strategy to create online buzz for your Brands (recommended)? Be creative, make, visualize & describe your campaign!
Elements of the assignment	 (a) An explanation what problems for each brand, as identified in BLOCK 1 & 2, you will address in the marketing campaign. (b) A sketched/ visualized marketing campaign plan (for Brands 1, 2 & 3, incl. a planning horizon / timeline with campaigning moments) as reflection on your findings from BLOCK 2. (c) What will you communicate specifically? You may wish to use some other qualitative marketing methods to get the message across?
Research ethics	Each of the strategic and situational analyses from BLOCK 1 can be done using available library, company and Web source materials. Delft University of Technology does NOT allow data collection among managers, entrepreneurs without explicit permission (see TUD Human Research Ethics webpage).
Plagiarism and use of Generative AI	The group assignment should be written according to scientific standards. References to the works of others (scientists, consultants, companies, generative AI) should be properly referenced, cited, and reported. Use of generative AI tools (ChatGPT, Copilot and Gemini, etc.) and present it as your own text, is not allowed, and will be formally considered fraud (Article 7 in the Rules and Guidelines of the Board of Examiners, Academic year 2023-2024). Your group assignment may be checked for plagiarism with the help of a plagiarism scanner (Article 7b in the Rules and Guidelines of the Board of Examiners, Academic year 2023-2024).

References	Aaker, J. (1997). Dimensions of brand personality. <i>Journal of Marketing Research, 34 (August)</i> , 347-356. Golder, P.N., & Tellis, G.J. (2004). Going, going, gone: Cascades, diffusion, and turning points of the product life cycle. <i>Marketing Science, 23(2)</i> , 207-218. Golder, P.N., & Tellis, G.J. (1993). Pioneering advantage: Marketing Logic or marketing legend. <i>Journal of Marketing Research, 30 (May)</i> , 158-170. Hoffman, D.L., Page Moreau, C., Stremersch, S., & Wedel, M. (2022). The rise of new technologies in marketing: A framework and outlook. <i>Journal of Marketing, 86</i> (1), 1-6. Lovett, M.J., Peres, R., & Shachar, R. (2013). On brands and word of mouth. <i>Journal of Marketing Research, 50 (August)</i> , 427-444.
Supervisors	Dr. Laurens Rook, dr. Sander Smit
Format	Max. 25 pages A4 incl. references (we prescribe RMarkdown, a format that allows for alternating between text and code).
Deadline	June 12, 2024 (midnight); PDF per Brightspace