

## Topics for the Master thesis – summer term 2023

## General information

- Below you will find an overview of topics from which you can select your preferred topics for your Master thesis.
- Please select at least four topics and prioritize them (→ indicate topic number and title) in your CV together with the usual information.
- We will do our best to consider your prioritizations as much as possible.
- Students who have indicated our research group as priority 1 will be given preference in the allocation of topics.
- The specific design of the topic will be discussed in the individual meetings with your supervisor.
- The papers should preferably be written in English writing in German is also possible.
- The topics are subdivided into those that are more a) theory related b) both practice and theory related

# Topics for the Master thesis

## a) Thesis type: Literature review

## 1. Data Processing and Data Management in Companies

The collection and use of data is becoming increasingly important - both in science and in practice. The process of how the data is collected, stored and processed plays a central role. The goal of this thesis is to analyze different approaches to this process and to develop a framework that helps companies to obtain a guideline for the area of data management. The guideline should map all relevant steps from collection to use of the data and provide important recommendations for each step.

## b) Thesis type: Empirical Study

#### 2. The impact of Corporate Sustainability on Viral Marketing

The phenomenon of word of mouth (WOM) was already taken up in research in the 1960s. The growing popularity of social networks has given word-of-mouth marketing a new importance. The proliferation of digital technologies has enabled consumers to share their consumption-related opinions online, creating electronic WOM (eWOM). Because of this, viral marketing has become one of the trends for marketers to promote their products worldwide. Successful eWOM can be a decisive factor for the market success of companies. Moreover, thanks to social media, unsuccessful marketing campaigns, Page 1 of 5



corporate mishaps or scandals can spread quickly and cause great damage to companies. Particularly in the case of such a current, relevant and at the same time sensitive topic as sustainability, opportunities and risks need to be examined in detail. The aim of this paper is first to show the current state of research on the topic of eWOM and viral marketing. Based on this, it is to be found out whether and how corporate sustainability becomes a success factor in viral marketing. Does a perceived sustainability provide for a higher recommendation intention and word of mouth? Which sustainability aspects promote these intentions? What are the risks for companies?

#### 3. Perceived Barriers of Sustainable Consumption

Many consumers state that they consider the sustainability of a product when making a purchase decision. However, the market share of sustainable products is still significantly lower than that of conventional products. There are different barriers that prevent consumers from choosing the sustainable product alternative, such as the concern that sustainable products are qualitatively inferior to conventional product alternatives. The aim of the thesis is to investigate why sustainable products are not chosen. On the one hand, the associations, prejudices and concerns of consumers towards sustainable products will be shown and explained. On the other hand, the question should be answered how sustainable products can be made more attractive by removing these supposed barriers and thus increase the consumption of sustainable goods. The final paper will shed light on the current state of research and provide an outlook for future research. To test hypotheses, an own experiment could be set up and analyzed.

#### 4. The impact of knowledge on sustainable consumption

A more sustainable lifestyle of consumers is essential to mitigate impending critical climate events. There are many factors (e.g. psychological or socio-demographic) that can influence sustainable consumption. The aim of this thesis is to investigate the influence of knowledge about sustainability on sustainable consumption decisions. The first step is to investigate which sustainability problems exist in connection with which products (e.g. soil degradation in the case of avocados). Based on this, it will be analyzed (with the help of an experiment) which aspects of sustainability are considered particularly important by consumers when deciding to consume sustainably and whether these correlate with the objective sustainability problems. The thesis will shed light on the current state of research and provide recommendations on how consumer knowledge can be promoted in order to achieve more sustainable consumption.

#### 5. Technology Acceptance of Task oriented vs. humanized Chatbots

Technology acceptance research is a well-established area of research in which statements are made about why people use or do not use a technology. The acceptance of a specific technology or a general acceptance of technologies can be investigated. Chatbots (text- or voice-based) are increasingly used by companies, either for first level customer support or for marketing purposes. The acceptance of the technology by the user plays a decisive role and can have consequences for the image of the company. In this thesis, technology acceptance research will be applied to the context of the use of Al-based chatbots. In particular, the difference in acceptance of primarily task-oriented chatbots compared to "humanized" chatbots (i.e. chatbots that are very human in their communication) should be worked out. To answer this question, an empirical study is to be conducted and analyzed.



#### 6. Sentiment Analysis of Customer Data

Sentiment analysis is the use of natural language processing to systematically identify, extract, quantify, and study affective states and subjective information. Sentiment analysis is widely applied to voice of the customer materials such as product reviews or chatbot / customer support conversations. The goal of this thesis is to identify a suitable data set for a sentiment analysis (e.g. with product/customer reviews or chatbot conversations) and to conduct and evaluate a sentiment analysis with the help of this data set.

#### 7. Applying Social Media Network Analysis To Real-World Data

Social media network analysis is the process of investigating social structures through the use of social media networks. It characterizes networked structures in terms of nodes (individuals, e.g. people) and the ties, edges, or links (relationships or interactions) that connect them. For example, the structure of a community or the people engaging with social media content could be analysed. The goal of this thesis is to conduct analyses using social media and/or online community data. The research group will assist in obtaining the data through official APIs provided by different platforms (e.g. Instagram). The student should be interested in learning how to extract, describe and analyse large amounts of data, particularly with network analysis methods.

## 8. Marketing Analytics - A Systematic Review and Benchmarking Of Software

Marketing analytics is the practice of using data to evaluate the effectiveness and success of marketing activities. It is a highly relevant topic due to today's high amount of marketing data that is accessible to marketers, practitioners and researchers. The goal of this study is to summarize the research landscape surrounding marketing analytics (i.e. which analysis can be used at which stage of the customer journey and with which raw data) and to benchmark existing marketing analytics software.

## 9. Perfect Posts On Social Media" - A Content Analysis Of Real-World Data

Millions of posts get uploaded to social media networks on a daily basis. Companies can, for example, spread information or advertise products through their content. This results in companies being interested in maximizing the effectiveness of each image or video uploaded to the respective platform since marketing budgets are limited. Effectiveness can be measured in terms of engagement reached (e.g. likes or comments on a post. This thesis aims at discovering characteristics of successful posts based on the analysis of a real-world dataset of social media posts. The dataset is provided to the student but the student communicate wishes regarding the accounts/platforms/industries considered.

#### 10. More Media, More Money? How To Maximize The Effect Of Media Usage in E-Commerce

There are always multiple ways to display information on a website ranging from simple formats such as pure text to media objects and even combinations of the two. Media objects can again be divided into simple formats like images and videos to more advanced technologies such as 3D elements, augmented reality (AR) and virtual reality (VR). The goal of this thesis is to provide an overview of the literature and to conduct several small-scale experiments in which different media settings are evaluated. For example, the perceived website quality, purchase intention or perceived risk could be measured while varying the amount or type of media objects shown. The media objects investigated



will range from images and videos to complex types such as 3D, AR and VR. The website needed for the experiment will be provided by the research group and no programming expertise is required.

#### 11. The Potentials of Virtual Influencers - Can Fake Be Authentic?

Influencer Marketing is receiving an explosion of academic interest. Current research investigates the differences between nano, micro, macro and mega influencers operating on Youtube, Instagram, TikTok and other social media platforms. However, an important type of influencers, namely artificial influencers, has been underinvestigated so far. An example of this type of influencer is Lil Miquela with over 3 million followers on Instagram. We currently do not know if these artificial influencers are as effective as human influencers in promoting products and services. This is an interesting starting point for future research since these influencers increasingly cooperate with firms, too. The goal of this thesis is to conduct an experiment to investigate the difference of artificial and real influencers.

#### 12. Dynamic Website Optimization – Perceived Fit Versus Perceived Persuasiveness

Nowadays, websites can be personalized and improved through A/B tests and machine learning methods. This is important since it is impossible to know which design will lead to the best results without studying the data generated by website users. Potential questions in this regard could include: How should products be presented? Which information should be shown first? Which button will be clicked more often? Where to position the elements? How to adapt the menu for specific users groups? The goal of this thesis is to structure current approaches for (dynamic) website optimization (e.g. A/B tests or methods using machine learning algorithms) and to conduct an experiment on an experimental / real website (decided via discussions with the research group). Prior experience in webdesign/web development is not mandatory. However, students should be interested in learning how to program during the course of the thesis. Guidance in this regard will, of course, be provided.

#### 13. Livestreams On Twitch – What Factors Lead To Chat Usage, Donations And Subscriptions?

Livestreams on platforms such as Twitch and TikTok are becoming increasingly popular and successful streamers can accumulate thousands, sometimes even tens of thousands of concurrent viewers. The goal of this thesis is to empirically investigate consumer reactions during such streams, for example with regards to messages sent, money spent, reactions to product placements or the emotions they feel. Furthermore, reasons for livestream consumption are investigated and the (parasocial) relationships developed by consumers towards livestreams are considered. A real cooperation with a popular livestreaming channel from Germany will be conducted (Topic: Gaming).

#### 14. Shrinkflation or price increase - price adjustment options of companies

"It's a matter of survival", says the owner: A Frankfurt kebab house has raised the price of a kebab to ten euros. The customers' reactions range from understanding to indignation (Spiegel, 2022). No matter whether it is food, energy or raw materials - almost all companies are affected by inflation. Hardly any company can afford to avoid price adjustments in the long run. The aim of this paper is to discuss options for price adjustments. In an experiment, the options for price adjustments of the companies are to be examined. For example, should a company reduce the quantity or quality and



keep the price the same? Or leave the product as it is and increase the price? Does the communication of e.g. reasons or improvements play a role?

#### 15. Study today - shop for luxury tomorrow! Demands of Gen Z on luxury brands

The strategy consultancy Bain predicts that by 2025 35% of the customers of luxury companies will belong to Gen Y (1980-1995). By 2035, this is expected to change fundamentally: Gen Z could then account for up to 40%. But what is important to this generation? Which brands do they currently like and why? What should brands pay attention to in their positioning in order to prepare for the change in the global market? How do the luxury consumers of the future want to shop? The aim of this work is to conduct an experiment, to work on the exemplary questions and thus to develop strategies for a luxury brand of the future.

#### 16. More ads, please!

Have you ever seen an online advertisement and thought to yourself, "Wow! I'd like to see more!"? In the age of AdBlockers, it is becoming increasingly important for companies to run ads that are actually relevant to customers. Nevertheless, this supposedly simple goal is quite complex: Which advertisements do customers actually want to see? What makes good advertising? When do customers actually want to click on an advertisement and are willing to spend more for a product? The aim of this thesis is to improve online advertising and to work out factors that make potential customers more likely to want to buy from a company.