



**BUSINESS
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CUSTOMER INTERACTIONS WITH AI

How can Marley Spoon optimize its chatbot performance to improve the touchpoint experience along the customer journey?

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Abstract

The purpose of this in-company project is to identify chatbot optimization recommendations for Marley Spoon to improve the touchpoint experience along the customer journey. Customer interactions with Artificial Intelligence became a relevant part of communication channels within business processes and are already applied in many marketing strategies. Grace to its machine learning capability, chatbots can combine natural language processing and natural language understanding in order to offer an automated customer experience.

Nowadays, AI-chatbots are not only able to operate on a mechanical and thinking level, but are also developing on a feeling level. Hence, chatbots can also understand human emotions and adapt empathically to different moods and circumstances. In this way, a well implemented chatbot should not only be used as a simple FAQ machine, but also be implemented for different marketing purposes such as customer attraction and retention.

The results of this research are based on a profound literature review with recent articles of well-respected researchers in this field. Moreover, a primary research was conducted in form of in-depth interviews with different specialist of the company and a customer satisfaction survey collected by the chatbot platform. Deriving from the findings of this research, there are three recommendations provided to the company, which should be implemented to improve the touchpoint experience. Those three implementations should be a be a new chatbot interface with more customer engagement, integrating the chatbot to different customer journey stages and setting up a chatbot superteam with specified scope and responsibilities.

Keywords – Artificial Intelligence, Chatbot, Customer Interaction, Customer Engagement, Customer Journey, Automated Customer Experience, Superteams.

Resumo

O objetivo deste projeto em empresa é identificar recomendações de otimização de chatbot para Marley Spoon, de modo a melhorar a experiência touchpoint ao longo da jornada do cliente. As interações dos clientes com a Inteligência Artificial tornaram-se uma parte crucial dos canais de comunicação integradas nos processos de negócios, sendo que já estão a ser aplicadas em muitas estratégias de marketing. Devido à capacidade de aprendizagem, os chatbots podem combinar processamento de linguagem natural com compreensão de linguagem natural, de maneira a oferecer uma experiência automatizada ao cliente.

Nos dias de hoje, os AI-chatbots não só são capazes de operar num nível mecânico e de pensamento, mas também estão desenvolvidos a nível de sentimento. Os chatbots podem inclusivamente entender as emoções humanas e adaptar-se efetivamente diferentes estados de espírito e circunstâncias. Desta forma, um chatbot eficiente não deve ser usado apenas como uma simples máquina de resposta a perguntas frequentes, mas também deve ser utilizado para diferentes fins de marketing, como a atração e retenção de clientes.

Os resultados da pesquisa foram retirados da análise de conceitos teóricos da literatura científica, focada em artigos recentes de investigadores referenciados nessa área. A pesquisa primária foi realizada em forma de entrevistas com diferentes especialistas da empresa e, também, através de uma pesquisa de satisfação de cliente na plataforma chatbot. Com base nos resultados desta pesquisa, há três recomendações facultadas à empresa, que devem ser implementadas para melhorar a experiência touchpoint. Uma nova interface chatbot com mais comprometimento com o cliente, integrando o chatbot em diferentes estágios da jornada do cliente e configurando uma superteam chatbot com intuito e responsabilidades especificados.

Palavras-Chave – Inteligência Artificial, Chatbot, Interações dos clientes, Comprometimento com o cliente, Jornada do cliente, Experiência automatizada ao cliente, Superequipas.

Abbreviations

Abbreviations	Meaning
AI	Artificial Intelligence
ACX	Automated Customer Experience
CSAT	Customer Satisfaction
ML	Machine Learning
NLP	Natural Language Processing
NLU	Natural Language Understanding
TAM	Technology Acceptance Model
UX	User Experience
CE	Customer Engagement
FAQ	Frequently Asked Questions
CI	Customer Insights
CVMA	Customer Value Management & Analysis

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1. Introduction

Throughout the customer journey, customers can communicate with a company at different touchpoints. Interactions between companies and its customers in the pre-purchase, purchase and post-purchase stages have thereby a considerable impact on the overall customer experience (Lemon & Verhoef, 2016). Artificial intelligence (AI) offers new possibilities and insights to enhance this experience by facilitating customer interactions on a more customized and personalized level. Powered by AI, chatbots are rapidly emerging with new applications and technologies and enable automated service interactions between companies and its customers (Perez-Vega, Kaartemo, Lages, Razavi & Männistö, 2020). According to Huang and Rust (2018), a so-called “feeling AI” will be able to recognize, emulate and respond properly to human emotions and different customer moods. Nowadays, chatbots are already used to engage human-like interactions with customers to maintain relationship management and loyalty (Ma & Sun, 2020). Furthermore, recent research state that AI is expanding the variety of service interfaces and delivers more opportunities for customers and companies to interact along the customer journey (Singh, Nambisan, Bridge & Brock, 2020). Consequently, AI is having a high impact on future marketing strategies and at the same time provides new opportunities for customer service options (Davenport, Guha, Grewal & Bressgott, 2019). Nonetheless, due to the lack of AI’s empathy level, the acceptance and adoption of such chatbots still needs to be further researched and developed in order to improve the customer engagement level (Castelo, 2019). Marley Spoon is an innovative food-tech company with a customer-centric view and implemented such an AI chatbot software on their website. In the competitive and fast-growing meal kit market, customer engagement is an important factor to build brand loyalty and long-lasting relationships with their customers, which is why the chatbot should be further optimized to unleash the full potential of customer interactions with AI.

Guided by the research question “How can Marley Spoon optimize its chatbot performance to improve the touchpoint experience along the customer journey?”, this in-company project is about the topic *Customer Interactions with AI* and follows a step-by-step approach to drive recommendations for the company Marley Spoon. First, the company is introduced by describing its vision and values and showing the developments of recent years. Then, the problem statement is defined, followed by an evaluation of the research gap, which then leads to the compiling of specified project aims. In the second part of this project, the literature

review is conducted by executing a preliminary investigation in form of desk research. By focusing on exploring theory through searching and reviewing models and methods in the relevant fields, secondary data is obtained for the further execution of the project. The next step is executing the main research through qualitative and quantitative research by conducting in-depth interviews and retrieving relevant company data, such as satisfaction surveys collected by the chatbot. As a result of secondary and primary data collection, an exposing data analysis explains the relevant correlations and findings of the collected data and insights. Based on those findings, a set of different implementation opportunities and optimizations are given. Finally, the conclusion sums up the relevant results and provides an outlook for further research in this topic.

1.1 About the company

Marley Spoon is a food-tech startup from Berlin and was founded in 2014. The vision of Marley Spoon is to facilitate day-to-day routine and delight customers by offering a meal kit service. This meal kit service includes a weekly recipe menu designed by the chefs of Marley Spoon, from which customers can choose their favourite meals according to their taste preferences and dietary. From the weekly menu, which currently includes 30 different recipes, they can choose 3-5 meals and decide on which weekday it should be delivered. The cut-off deadline for choosing recipes and making changes to orders is usually 6 days before the delivery day. Afterwards the ingredients will be sourced by the procurement and then delivered to the customers delivery address on the delivery day. Finally, customers cook the recipes with the pre-portioned ingredients and enjoy their fresh meals. The value propositions of Marley Spoon are to save money, plan easily, convenient and direct door delivery, healthy eating and being eco-friendly (see figure 1 & 2).



Figure 1: Marley Spoon's value propositions (Marley Spoon, 2021)

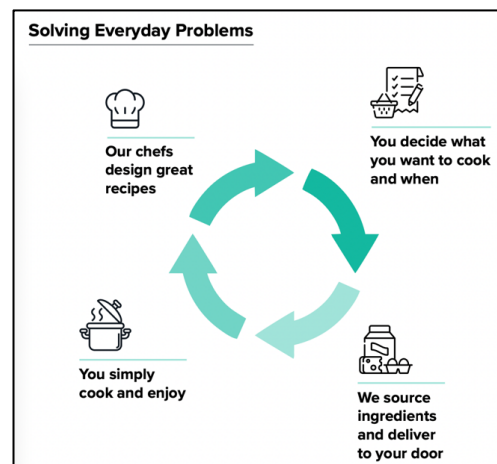


Figure 2: Marley Spoon's meal-kit service (Marley Spoon, 2021)

Since its foundation in 2014, Marley Spoon became a global and fast-growing online consumer brand business. The company is currently operating in the US, Australia, and some countries in the EU, which are Germany, Austria, Belgium, Netherlands, Denmark and Sweden. The global grocery market size is estimated worth \$7 trillion, while the online grocery share is currently at only 3-4%. In this way there is enormous growth potential, and the growing food and beverage online penetration is estimated to reach 8.3% by 2025. At this point, Marley Spoon is already reaching ~190m households and seeks to further invest in digital capabilities to deliver better customer experience. As can be seen in the company history graph below, Marley Spoon achieved a remarkable growth in their first 6 years and reached net revenue of 254€ million in 2020 with the prediction to grow by another 25-30% in 2021 (see Appendix A).

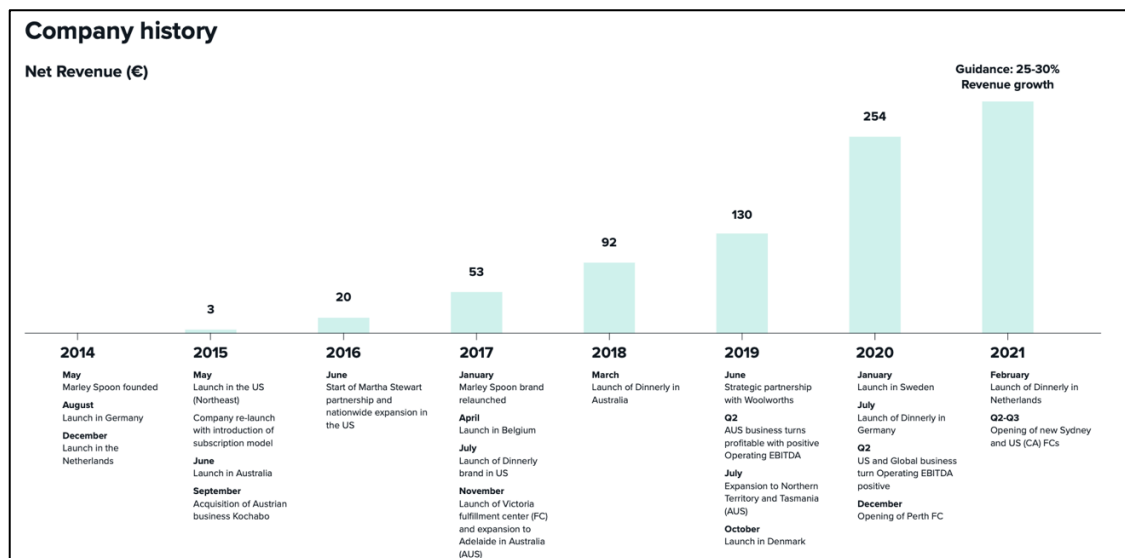


Figure 3: Revenue development in million (Marley Spoon, 2021)

Due to the subscription approach with weekly delivery of orders, Marley Spoon offers a dynamic membership, that causes a broad range of customer requests. There are several customer communications channels, in which potential or current customers can interact with the company. At Marley Spoon, those contact channels are phone calls, e-mails, web forms, social media and live chat, either with the chatbot or a service agent (see figure 4). Except the social media and review platforms, on which potential or current customers can reach out via the platform itself, all channels can be reached via the website of Marley Spoon (see Appendix B). The contact channels have in common that they all strive to handle customers request as fast and adequate as possible to achieve a high customer satisfaction level. Both, customer

satisfaction and service quality are two of the most fundamental constructs within the marketing theory and practice (Bowden, 2009). In fact, according to Bowden (2009) high levels of satisfaction lead to more customer loyalty, purchase intentions and word-of-mouth recommendations, which eventually result in more profit, market share and ROI. Since the focus of this in-company project lays on customer interactions with AI, the relevant communication channel for this research is the chatbot. During this project it will be pointed out, that the chatbot should not only be used as a simple FAQ machine, but it can also be integrated as a valuable touchpoint experience during the customer journey.

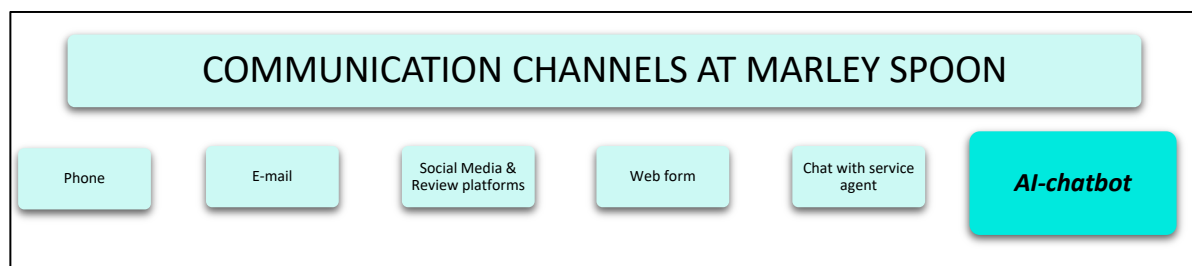


Figure 4: Communication Channels at Marley Spoon (author's elaboration)

At Marley Spoon, there are different kind of request categories that are used to keep track on all the inquiries. The four most used categories are “Account Admin”, “Complaint”, “General Question” and “Logistics”. *Account admin* includes everything related to the customer’s account, such as email and password and the subscription plan. The *Complaint* category covers everything customers might complain about regarding procurement, fulfillment-center and other departments. *General Question* refers to all kind of questions about the membership, such as recipes & ingredients or packaging & recycling. *Logistics* includes delivery requests and proactive communication with the shipping partners. In fact, those categories can be further divided into different stages of the customer journey. While e.g. complaints, logistics and account admin requests usually take place in the purchase and post-purchase stage, general questions are usually more applied in the pre-purchase stage.

1.2 Problem statement & Aim of the project

Marley Spoon has implemented the Ada AI-chatbot software on all their website domains in 2017. Ada is a Canadian registered company and provides conversational artificial intelligence solutions for customer support. Currently the chatbot function of Marley Spoon is set up at its basic function to operate as a FAQ machine with a simple interface and low

visibility (Appendix C). However, the AI software is capable of more features and capabilities to provide personalized user experience and can be implemented according to specific stages of the customer journey. Within the chatbot analytics of Ada there are multiple metrics that can be tracked and observed to evaluate and improve the performance. Those metrics are *handoff conversations, recognition rate, engagement rate, answer performance, average handle time, clarification rate, containment rate* and *popular answers*. For the execution of this project, it will be pointed out on which metrics there is most improvement potential and capabilities. Next to those measurable metrics, the HI-AI collaboration plays an important role for an effective implementation. A relatively new concept is the so called *superteams*, which is a “a group of people and intelligent machines working together to solve problems, gain insights, and create value” (Denny, Volini, Schwartz, Mallon, Durme, Hauptmann, Yan & Poynton, 2020). In this way, it is important to find the right approach for human-robot cooperation in order to get most potential of both AI and HI (Tuomi, Tussyadiah, Ling, Miller & Lee, 2020). Having the right approach and a good balance in combining the strengths and capabilities of both HI and AI, a company like Marley Spoon can benefit from the opportunities within the business processes. However, this implies both readiness and willingness of the company to implement new AI technologies and also an excellent understanding of customer behavior and their acceptance regarding such technologies. Therefore, this research is providing valuable insights to the company, accommodated by both scientific sources and primary research, to convince the responsible managers to invest more time and budget in the optimization of the chatbot.

As customer interaction plays an important role within communication strategies and AI offers extensive capabilities to interact with customers, the topic “Customer interactions with AI” is of great relevance for innovative and customer-centric companies, such as Marley Spoon. The aim of this in-company project is therefore to provide recommendations how to further develop and personalize the chatbot of Marley Spoon from a static FAQ integration to a more dynamic and engaging automated customer experience, which understands how to interact with chatters on different levels of the customer journey. Based on the findings it will be elaborated to what extent the AI chatbot is able to improve the overall customer satisfaction (CSAT) and could be used for marketing related tasks and activities. This research will also help the company to understand the full potential and limits of the chatbot within the different request categories to define an adequate AI-HI collaboration. Hence, the overall goal of this research is to elaborate implementation opportunities to *optimize Marley Spoon’s chatbot performance to improve the touchpoint experience along the customer journey*.

2. Literature Review

2.1 AI in Marketing

Artificial intelligence (AI) is the art of simulating and replacing aspects of human intelligence (HI) by combining several technologies, such as machine learning (ML) and natural language processing (NLP) amongst others (Davenport, 2018; Huang & Rust, 2018). Many previous and recent research assume that AI will change the future of marketing and the future business in general. The article “Artificial Intelligence in business: State of the art and future research agenda” is providing an overview of relevant research on AI in the business context and suggests an outlook for further research (Loureiro, Guerreiro & Tussyadiah, 2020). Their state of the art research offers an extensive source of relevant and reliable sources, which are useful for the literature review of this in-company project. Loureiro et al. (2020) propose questions for future research, such as “How will the engagement process evolve between humans and AI-enabled machines?”, which is also linked to this research in terms of relationship marketing. According to Rust (2020), AI is one of the technological trends, which will have a dominating impact in business and will also shape the future of marketing. Since AI is holding an immense marketing transformation potential, there are already specialists evaluating and consulting the best AI solutions for marketing functions to gain a competitive advantage (Verma, Sharma, Deb & Maitra, 2020). Verma et al. (2020) also emphasize that AI is able to provide valuable consumer insights, which can then be used for customer attraction and retention. Moreover, they underline the importance of customer experience, which can be even further enabled by AI to meet the expectations of the customer. Implementing AI into the marketing process provides two big advantages: On the one hand, AI offers the potential to increase revenue by enhancing customer engagement, on the other hand the automation of simple marketing tasks and customer service can reduce costs (Davenport et al., 2019).

Since AI can be used to engage customers in the pre- and post-purchases stages of the customer journey, Davenport et al. (2019) argue that marketing departments should take a lead role in implementing AI disciplines. Furthermore, Rust and Huang (2014) claim that the increasing capabilities of customer communication, data collection and customer analyses are the key long-term trends within the technology developments. Grace to its two defining characteristics, self-learning and connectivity, AI can adapt to changing needs (Huang, Rust & Maksimovic, 2019). Huang and Rust (2020) state that AI offers benefits on different levels such as mechanical, thinking and feeling level. According to their research, mechanical AI can

be used for automating repetitive marketing functions, thinking AI can be used for processing data to derive strategic decisions, and feeling AI can be used for analysing customer interactions and human emotions. In addition, Huang and Rust (2020) propose that the three AI levels can be applied to the marketing STP framework, whereby mechanical AI would support the segmentation, thinking AI the targeting and feeling AI the positioning. While mechanical AI is good for standardization, thinking AI is good for personalization and feeling AI applicable for relationalization. Therefore, in order to achieve relational benefits, feeling AI should be considered in marketing functions to be used for interaction and communication, grace to its competence to recognize emotions (Huang & Rust, 2020). In this way, feeling AI can be applied for customer understanding in terms of existing and potential customers. For existing customers, feeling AI can indicate whether and why they are satisfied with the service and for potential customers feeling AI can elaborate what they want and why. Another research by Huang and Rust (2018) discovered the role of Artificial Intelligence in service. In their evolution model of AI, there are four intelligences that are developed, based on learnings and adaptations. The first level is mechanical, which is at the minimum. Next, there is analytical, which is based on data. The next level is intuitive, which is based on understanding. The latest evolution will be empathetic, which is based on experience (see figure 5).

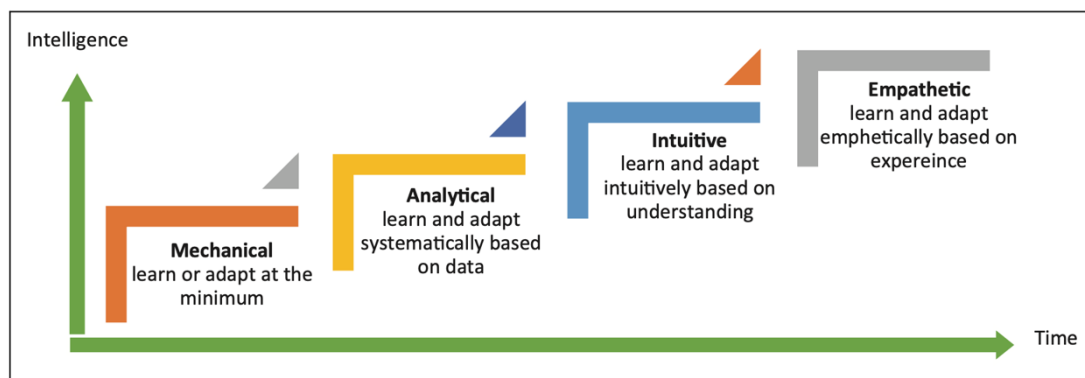


Figure 5: The evolution of AI (Huang & Rust, 2018)

Kaplan and Haenlein (2018) did a research on interpretations, illustrations and implications of AI. In their article they cluster AI into three different stages, which are *Artificial Narrow Intelligence (ANI)*, *Artificial General Intelligence (AGI)* and *Artificial Super Intelligence (ASI)*. In the ANI stage, AI is seen below HI and applied to specific areas because it is unable to autonomously solve problems in other areas. The AGI stage applies AI to several areas and is on a level with HI. The ASI stage implies, that AI is above HI and outperforms humans in all areas. Furthermore, they classified three types of AI systems, which are

Analytical AI, Human-Inspired AI and Humanized AI. On top of that, as a recommendation for companies, they elaborated the three Cs of organizational implications of AI. Those three Cs stand for *Confidence, Change and Control* and include both internal and external implications (Kaplan & Haenlein, 2018). A recent research by Ma and Sun (2020) connects computing power to human insights and designs an AI-driven marketing landscape. As can be seen in figure 6, this landscape takes into account the marketing trends, which are interactive and media-rich, personalized targeting, real-time automation and customer-journey focus. The landscape basically shows that AI has the potential to support marketing actions while also emphasizing current industry trends.

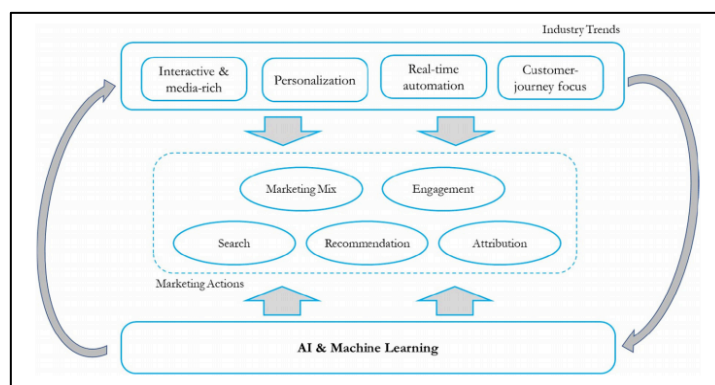


Figure 6: AI-driven marketing landscape (Ma & Sun, 2020)

2.2 AI & HI: collaborating, augmenting and replacing

Nowadays, the fourth industrial revolution implies the ongoing automation of traditional manufacturing and industrial practices by using smart technology, such as AI. The so called “Industry 4.0” describes the ongoing and impending transformations as a consequence of rapidly emerging technologies (Tuomi, Tussyadiah, Ling, Miller & Lee, 2020). However, this automation can be seen from two perspectives: On the one hand, AI offers new opportunities to create job functions for many people, on the other hand, there are also concerns that the implementation of robots will decrease the demand for human jobs. It is therefore assumed that AI, with the ability to replace HI, will lead to job losses for humans in certain tasks and responsibilities (Huang & Rust, 2018). Wilson and Daugherty (2018) published an article in the Harvard Business Review about “collaborative intelligence”, in which they specify that companies reach bigger performance achievements when humans and smart machines collaborate. As a result, companies gain more operational flexibility and speed, better decision making and increase the personalization of its products and services. In his article “The Future

of Marketing” Rust (2020) is also pointing out the importance of managing AI and HI as a team and suggests finding new algorithms in order to serve customers better. HI has the ability of leadership, teamwork, creativity and social skills, while AI offers speed, scalability, and quantitative capabilities. In fact, combining the complementary strengths of both AI and HI, companies will achieve the most significant performance improvements (Wilson & Daugherty, 2018).

According to the WEF (2018) there will be 75 million jobs replaced by automation in the next five years and 133 million new jobs created. Examples for new jobs are roles, which are training the machines to perform a certain task, explain the outcome of those tasks and sustain the responsibility of it (Wilson & Daugherty, 2018). An example for replacement would be AI chatbots replacing human agents within the customer services. The advantage of such chatbot implementation would be a 24/7 availability and taking over simple human agent tasks in order to place them for more complex cases, in which HI is more required (Davenport et al., 2019). On top of that, Huang and Rust (2018) also imply that AI is not yet able to replace human empathy, those jobs threatened to be replaced are therefore more on the mechanical and analytical level. It is also stated that customers might get uncomfortable when they realize that they are interaction with a bot (Davenport et al., 2019). Castelo (2019) further elaborated that customers are less keen to trust in AI tasks, which are including subjectivity, intuition and affect, due to the lack of empathy.

As reported by Frey and Osborne (2016) there are three important challenges regarding the computerization of jobs. Those are perception and manipulation tasks, creative intelligence tasks and social intelligence tasks. They claim that robots are still unable to match the depth and breadth of human perception. Furthermore, they state that AI is already on a high creativity level, but it seems unlikely that jobs, which require a high degree of creative intelligence can be completely replaced. In addition, as human social intelligence is relevant in a wide field of work tasks, affective computing must be further evolved to challenge real-time recognition of natural human emotions, which are crucial for negotiations, persuasion and care (Frey & Osborne, 2016).

2.3 Customer engagement and interactions

Customer engagement is a psychological process which forms and helps to maintain customer loyalty (Bowden, 2009). Moreover, according to McEwen (2004) engagement has an important place in contributing to better understanding of customer outcomes and service performances. Engagement therefore helps to form emotional and rational bonds with a company and includes feelings of confidence, integrity, pride and passion towards a brand (McEwen, 2004). Bowden (2015) established a framework that displays the drivers and outcomes of customer engagement. The four drivers are satisfaction, trust, affective commitment and rapport, which lead to self-brand connections and customer loyalty. Gremler and Gwinner (2000) define rapport “as the personal, enjoyable and harmonious connections that are formed within customer-to-provider interactions.”, which demonstrates the importance of interactions within customer engagement. In fact, customer-firm interaction is a key element in the study of customer engagement. According to Singh et al. (2017), an interaction can strengthen and adjust customer engagement by either increasing or decreasing it. They further elaborated that seamless, harmonious and reliable interactions throughout the customer journey are crucial to decrease the customer churn. Seamless interactions signify that a subsequent interaction takes up where the previous interaction concluded, harmonious interactions imply that a subsequent interaction matches with previous interactions and moves forward effectively, and reliable interactions indicate that the style of harmony and continuity repeat across the different stages of the customer journey.

Vega et al. (2020) conceptualized new opportunities to make use of AI to enhance customer engagement behaviours. In their framework they divided online customer engagement behaviour into unsolicited and solicited. Unsolicited means customer-initiated engagement like e.g. social media activities while solicited implies firm-initiated engagement like e.g. feedback forms as well as collaborative and passive engagement such as existing CRM databases. The AI organism then enables information processing systems and real time customer insights in order to either provide an automated firm response by AI or a manual firm response by a human (see figure 7).

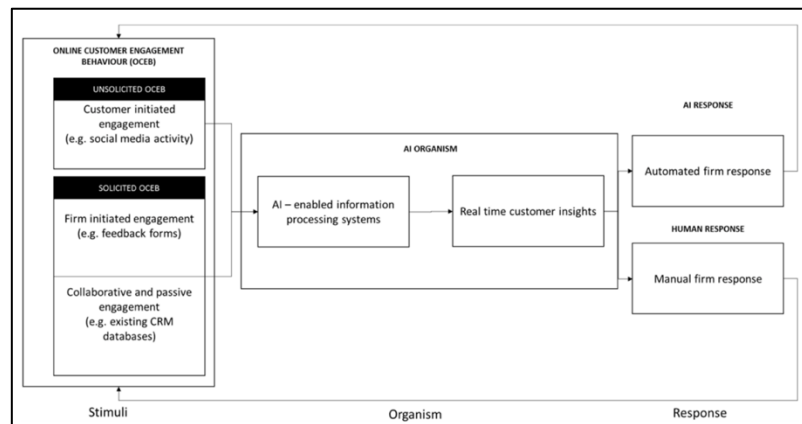


Figure 7: Customer Engagement Behaviors (Vega et al., 2020)

2.4 Chatbot interactions state of the art

Chatbots are a powerful example of the capabilities of AI and have a huge business potential (Luo, Tong, Fang & Qu, 2019). They can be used for digital marketing purposes as well as for customer relationship management activities. Grace to its natural language understanding (NLU) and natural language processing (NLP) chatbots have the ability for instant messaging, which is able to identify and respond to chatters needs (Huang & Chueh, 2020). Huang and Chueh (2020) also claim that “chatbots are the mainstream applications in the business world and led the surge of conversational commerce”. Moreover, they state that chatbots learn from conversation databases to predict message inputs and generate corresponding outputs. In their research “Chatbot usage intention analysis” they applied the technology acceptance model (TAM) in order to understand behavioural intentions to use the chatbot for veterinary consultations. This model interrelates the perceived accuracy, perceived completeness and perceived ease of use with the user satisfaction and links it with the behavioural intention to use. Another factor that impacts the behavioural intention to use is the perceived convenience (see figure 8). While this model was applied in a questionnaire design, in which the participants were members of a pet network community, it could also be applied on other industries and services, such as the grocery market industry. The outcome of the research was, that the perceived accuracy, perceived completeness and perceived ease of use affect user satisfaction and that both user satisfaction and perceived convenience affect user’s behavioural intention to use chatbots (Huang & Chueh, 2020).

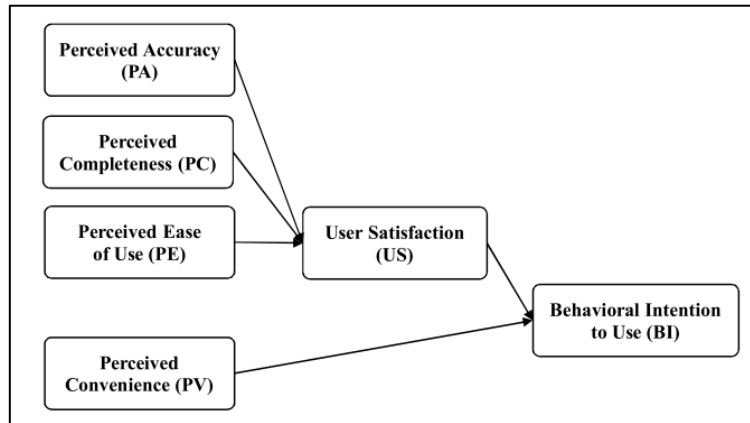


Figure 8: TAM model (Huang & Chueh, 2020)

Within the current state of the art AI chatbot technologies, there are different conversational chatbot classifications and design techniques (Hussain, Sianaki & Ababneh, 2019). In general, chatbots interact through text based or voice based conversations, in which the user usually initiates the conversation by asking a question and the chatbot answers by using natural language. Chatbots are supported by Artificial Intelligence Make-up Language (AIML), which delivers predefined responses for either task-oriented or non-task oriented goals. According to Hussain et al. (2019), task-oriented chatbots are designed for a particular task and are set up to have short conversations, usually within a closed domain. Non-task oriented chatbots however, can also simulate conversations with a person and seem to perform chit-chat for entertainment purpose in open domains. Hussain et al. (2019) also embrace, that due to the arrival of new technologies, the chatbot field has become more dynamic with different scopes of their use. In this way, chatbots can be classified into various categories based on several criteria, like the mode of interaction, knowledge domain, or the usage and the design techniques. Hussain et al. (2019) therefore also see in chatbots the potential for personalization in the interaction between humans and computer systems (see figure 9).

Nowadays, chatbots are already applied in lots of companies for task-oriented goals, such as FAQ machines within the customer service. Huang and Rust (2018) mention that there is no true feeling AI yet, and hence customer interactions and emotional data analysing is currently more based on thinking AI. However, grace to rapid innovations and new technologies, chatbots will be further developed and eventually improve the customer service, service quality and productivity simultaneously, also on non-task oriented levels (Wirtz, Paluch & Kunz, 2020). According to a study by Schneider (2017), 85% of customer interactions will be without a human agent by 2025. Nonetheless, Wirtz et al. (2020) point out the importance

of knowing how to make use of service robots in the most efficient way. In another research, Wirtz et al. (2018) developed the service robot deployment model (see figure 10). While this model is based on characteristics of service robots in the frontline service, it can also give insights to make better use of chatbots. The model shows, that HI is more applicable for complex tasks that need emotional skills and AI can better handle complex tasks grace to its cognitive and analytical skills. This underlines the importance of a adequate human & robot collaboration.

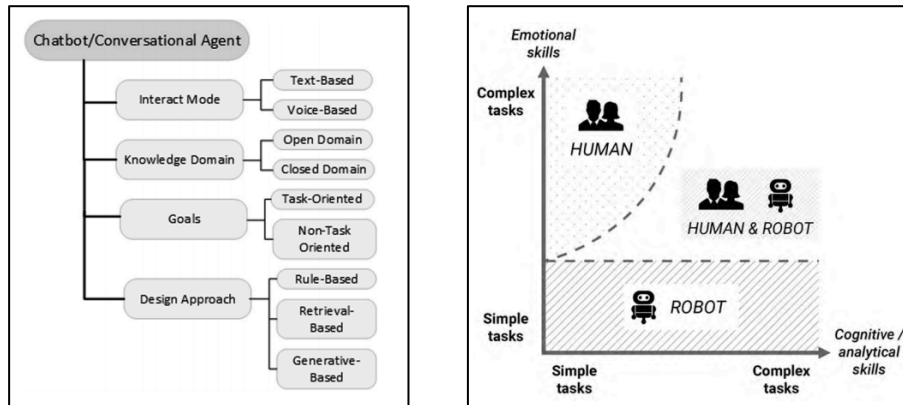


Figure 9: Chatbot classifications (Hussain et al., 2019) Figure 10: The Service Robot Deployment Model (Wirtz et al., 2018)

Many leading companies, such as Amazon or Facebook, have already implemented chatbots for commercial commerce purpose (Thomson, 2018). It is predicted that the market size of chatbots is growing rapidly. According to Pise (2018) the market size will expand from \$250 in 2017 to over \$1.34 billion in 2024. Luo et al. (2019) list a couple of business benefits provided by AI. Those benefits lay in the automation of customer communications, an always friendly attitude towards customer interactions and the effectiveness of large volume handling of customer requests. Davenport et al. (2019) confirm that prior research argues that robots have potential in involving customer interactions. A previous research by Huang and Rust (2018) underlines the empathetic intelligence of AI in the future. They point out that AI can learn and adapt empathetically based on experience and has the skill for communication style learning, which implies that chatbots can communicate with customers and learn from it (Huang & Rust, 2018). Hoyer, Kroschke, Schmitt, Kraume and Shankar (2020) elaborated that AI-chatbots are able to collect information, facilitating imagination and enable better customer service. Consequently, by making use of technology-based interactions in a customer-centric way, companies can create new value to customers (Rangaswamy, Moch, Felten, Bruggen, Wieringa & Wirtz, 2020).

Nonetheless, as mentioned before, there are also doubts in implementing such chatbots, as customers might feel uncomfortable when they realize that they are talking to a chatbot, as humans prejudice a lack of feeling and empathy towards such machine learning tools. Yadav and Pavlou (2019) made a research on technology-enabled interactions in digital environments. They conclude that AI might evolve to “augmented intelligence” and will exceed HI at one point. In this way, AI-chatbots can be a valuable complement for consumer to company interactions. Nevertheless, they also point out the concerns about AI technologies and suggest that companies need to evaluate carefully when to deploy their AI systems most effectively to automate existing interactions (Yadav & Pavlou, 2019).

2.5 AI and the customer journey

In the traditional approach, the customer journey was described as the “buying process”, which starts with the need recognition, results in the purchase and follows up by the evaluation (Haines, Howard & Sheth, 1970). Previous research and literature point out that there are many kinds of different customer journey approaches. Argo, Tsai and Inman (2017) elaborated even 12 different shopper journey archetypes. However, in general, the customer journey consists of main 3 stages, which are pre-purchase, purchase and post-purchase. Throughout the customer journey, the consumer is confronted by multi-channels and different interaction choices (Barwitz & Maas, 2018). Kuehnl, Jozic and Homburg (2019) describe thematic cohesion, context sensitivity and consistency of touchpoints as a key dimension for effective customer journeys. On top of that, new technologies are transforming the customer experience, which also impacts the customer journey (Hoyer et al., 2020). Their research offers a modern typology of the role AI-powered technologies in the customer journey. The framework implies that chatbots can help to select, advise and customize in the pre-purchase stage, in the purchase stage they could negotiate or cross-selling as part of the transaction and in the post-purchase stage chatbots can collect feedback and recommendations or offer discounts based on a churn model. As a result of the research, the authors summarize virtual assistants, chatbots and robots with a high impact potential at the pre-purchase and purchase stages and a medium impact potential at the post-purchase stage (see figure 11).

New technology	Pre-transaction	Transaction	Post-transaction
IoT	High	Medium	Low
AR/VR/MR	Medium	Low	Low
Virtual Assistant/Chatbot/Robot	High	High	Medium

Figure 11: Impact of new technologies (Hoyer et al., 2020)

As can be seen in figure 13, during the customer journey stages consumers are confronted with several numerical information, such as budget, price, product attributes, product ratings, health and nutrition information, time related information and more aspects (Santana, Thomas & Morwitz, 2020). As a result of digital technologies and new communication channels, customers nowadays have more opportunities for interaction touchpoints, which makes the customer journey more extensive and versatile (Edelman & Singer, 2015). Due to the amount of different touchpoints during the customer journey and due to proliferation of new touchpoints customers are more empowered to design their own journey from the search to the purchase phase (Herhausen, Kleinlercher, Verhoef, Emrich & Rudolph, 2019). Herhausen et al. (2019) define the customer journey as “customers’ search and purchase usage of all online and offline touchpoints from various sources, including retailer-owned, competitor-owned, and additional touchpoints“. They explored how the relationship among product satisfaction, journey satisfaction, customer inspiration and customer loyalty can distinguish depending on the segment and use of mobile device. In this way they determine 5 different segments which are store-focused shoppers, pragmatic online shopper, extensive online shoppers, multiple touchpoint shoppers and online-to-offline shoppers (Herhausen et al., 2019). Figure 12 shows the modern customer journey, taking into account the journey characteristics, customer characteristics and the antecedents of customer loyalty, in which the journey satisfaction plays an important role.

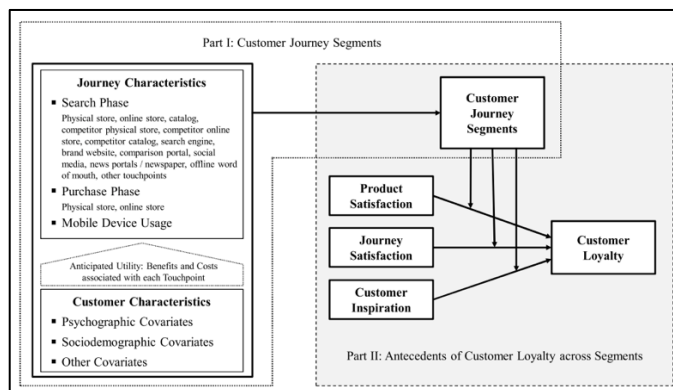


Figure 12: The Modern Customer Journey (Herhausen et al., 2019)

Decision Stage	Need Recognition	Information Search and Evaluation	Purchase	Post-Purchase Evaluation
Types of Numeric Information	• Budgets	• Product Ratings • Product Rankings • Product Attribute Information • Price Information • Brand Identifying Information • Caloric Information	• Price Information • Promotion Information • Quantity Information • Time Information • Financial Information	• Consumer Ratings • Price Recall • Promotion Recall
Mental Representations	• Symbolic Representations • Intuitive Analog Representations			
Judgment Strategies and Heuristics	• Anchoring • Availability • Numeric Fluency • Representativeness • Numerosity • Numeric Associations • The Number Zero • Framing Effects • Comparison and Evaluation Heuristics			

Figure 13: Numerical information during customer journey (Santana et al., 2020)

Nowadays, the digital customer journey is guided by automated systems, which is mostly unperceived by the consumer (Ma and Sun, 2020). Ma and Sun (2020) suggest the use of machine learning methods to support the entire customer purchase journey in order to develop decision support capabilities and to perform holistic market structure analysis like brand

positioning and competitor analyses. They point out different machine learning techniques during the customer purchase journey, which are listed in the following example:

- When a customer is searching for something on the web, the search results on the search engine result page (SERP) are generated by a **sophisticated Google ranking system**, combined with so called paid ads, which are on top of the SERP and automatically **generated using bidding machines**.
- When a customer then clicks on the link, the content at the websites is customized based on her profile through **website morphing**.
- Furthermore, if a customer asks something via the **chatbot**, the answers provided are **automated service interactions**.
- The reviews are placed prominently as they are deemed helpful by an **evaluation algorithm**, and the ads are delivered through retargeting **algorithms via real-time bidding**.
- The coupon which then offers the personalized price is generated by the firm's **pricing engine** at just the right time.
- Finally, posts on social media are collected by **social listening engines** and analyzed for sentiment and feedback.

In addition, Vakulenko, Shams, Hellström and Hjort (2019) conducted a research about the e-customer journey in terms of service innovations in the growing e-commerce market. The authors suggest that service innovation in the e-customer journey both increases customer expectations and concerns. Furthermore, they claim that the initial customer interaction with the new service touchpoint defines the future e-customer journey (Vakulenko et al., 2019). In their article “Understanding Customer Experience throughout the Customer Journey”, Lemon and Verhoef (2016) point out the importance of measuring the different touch points as the customer journey became more complex due to the amount of interaction channels and changing customer behaviour. They developed a process model for customer journey and experience, in which they identify four customer experience touch points, which are brand-owned, partner-owned, customer-owned and social/external (Lemon & Verhoef, 2016). The chatbot is therefore a brand-owned touch point, that is designed for interactions with the customer, and managed by the company under the company’s control.

3. Methodology

3.1 Research design and paradigm

To achieve the goal of this research, which is providing recommendations to improve the chatbot performance at Marley Spoon, a systematic investigation was applied. This methodology chapter outlines the methodological paradigms by explaining the research approach, describing the selected research methods, and clarifying the sampling techniques for a valid and reliable research. The research design of this project is a combination of desk research using secondary data and field research collecting primary data. As a result from analysing the findings of both the primary and secondary data collection, the researcher is able to deliver profound implementation suggestions and draw justified conclusions.

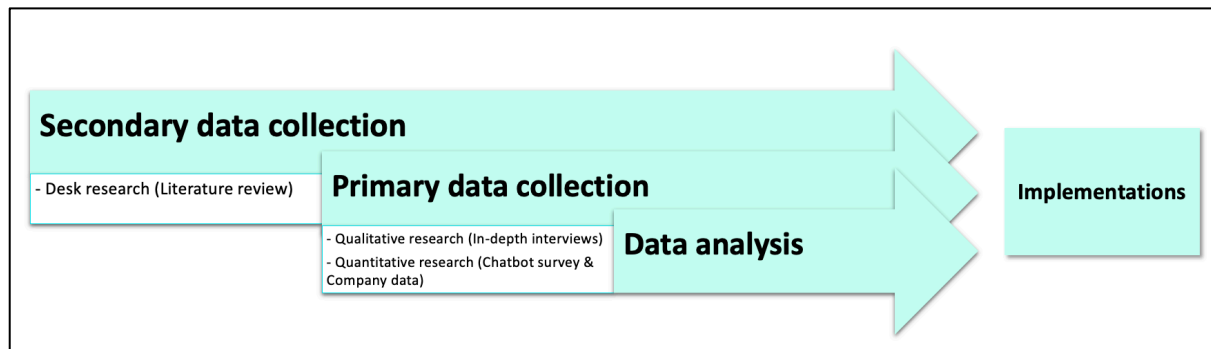


Figure 14: Research design (author's elaboration)

For the secondary data collection, a desk research was conducted in form of a literature review. A total of about 35 relevant articles were reviewed from scientific sources of the ScienceDirect and Scopus online libraries as well as reputable websites such as the Harvard Business Review and Deloitte. The majority of the articles, in fact 29 of them, have a recent publishing date from 2018 and onwards. They help to get an understanding of the undertaken literature for relevant key terms of this research such as AI in marketing, interactions with AI, AI-HI collaboration, customer engagement and the customer journey. Grace to the validity, reliability, credibility and integrity of the reviewed articles, this in-company project is therefore supported by relevant and recent literature explaining several methods, models and perspectives in the field of AI. For the primary data collection two field research are conducted: Qualitative research in form of in-depth interviews with experts of the company and quantitative research in form of data collection by the company, retrieved and provided by Marley Spoon.

3.2 Qualitative research

Qualitative research implies collecting and analysing non-numerical data to understand concepts, opinions, or experiences and can be used to gather in-depth insights into a problem or generate new ideas for research (Scribbr, 2020). According to Sale and Thielke (2018) qualitative research generates meaning through a systematic approach that is based on interpretivism and constructivism. They also state that qualitative research is essential for applying scientific methods to human studies, grace to its induction and deduction (Sale & Thielke, 2018). Since implementations of AI technologies is a controversial topic, the qualitative research helps to reflect such contemporary conflicts and is therefore fundamental to validate scientific sources.

In-depth interviews

Interviews are one of the common methods of to gather qualitative data and according to Thelwall and Nevill (2020) interviewing is the most used approach within qualitative research. The conduction of the interview intends to analyse the current status quo, readiness and perspective of customer-AI interactions at Marley Spoon, with special focus on the chatbot and AI-HI collaboration within the company. For this research a structured interview method is applied, which follows an interview protocol with 4 different interview moments. First of all, some general questions about AI are asked. Secondly, the focus of questions lays on interactions with a chatbot. After that, the questions refer to the collaboration of AI and HI. Finally the interview ends with some questions about the future outlook of AI. In total, there are 21 questions in common that are asked to the interviewees. On top of that, some of the interviewees are asked some dedicated questions, depending on their role and function within the company.

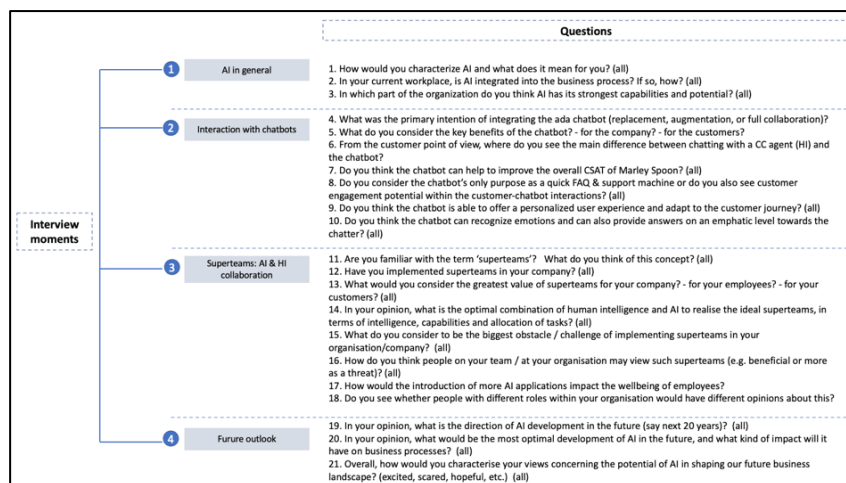


Figure 15: Interview design (author's elaboration)

Sample characterization and validity

The interviews are conducted with different experts from Marley Spoon. Regarding validity, the selected experts all fulfil the required qualifiers, meaning they all have direct experience with AI implementations. In order to generate different opinions and experiences, the interviewees come from different departments, such as Marketing and Customer Insights. In total there are 5 specialist that are interviewed for this research, being in charge of specific roles and responsibilities. The interviewees are Tristan (Global CI specialist), Ammar (Head of CVMA), Dijana (MD Marketing EU), Katalin (Chief Customer Officer) and Joana (Senior Manager CI), they all work at Marley Spoon for at least one year and are responsible for different tasks within the company (Appendix D). Due to the current home office policies, the interviews are conducted and recorded via Zoom. As mentioned before, a structured interview method is applied and the interviews take about 30 minutes.

3.3 Quantitative research

According to Scribbr (2021), quantitative research is the process of collecting and analysing numerical data and can be used to find patterns and averages, make predictions, test causal relationships, and generalize results to wider populations. Quantitative research can be descriptive, correlational, or experimental, providing the advantages of replication, direct comparisons of results and using large samples. This way, quantitative research supports this project to implement analytical company data and survey provided by the company. As valuable contribution for this in-company project, Marley Spoon provided relevant data of the Ada chatbot software: *Chatbot metrics and Customer satisfaction survey*.

Chatbot metrics

Within the Ada chatbot software there are multiple metrics that currently can be tracked to track the performance of the chatbot. *Handoff conversations* are chats that were handed off to a human agent because the chatbot was not able to handle the request or the chatter explicitly asked for it. *Recognition rate* is the percentage of question that were understood and answered with confidence by the chatbot without any clarification needed. *Engagement rate* is the percentage of launched chats, in which the chatter saw the greeting message and then at least sends one message or clicks a quick reply button. *Top answers* are the answers which lead to a handoff request and therefore requires more attention to be optimized to avoid the handoff in future conversations. *Training opportunities* are a list of answers, which the chatbot wasn't

confident enough to answer. That means, the answer can be trained in order to give the chatbot more confidence. *Most popular answers* are a list of answers, which are used most in the chatbot conversations. They give insight in order to provide additional content for the chatbot, specialists or website. Last but not least the *containment rate*, also called *self-serve rate*, is the percentage of engaged conversations that were fully automated and didn't require any human help.

Customer satisfaction survey

In order to evaluate the chatbot performance from the customers point of view, the chatbot is collecting feedback in form of a Likert scale before closing the chat (see figure 16). The Likert scale, which was invented by the psychologist Rensis Likert, is a psychometric scale and commonly used in research supported by questionnaires. It usually adopts a five-level format, in this case it measures the customer satisfaction from 1 (very dissatisfied) to 5 (very satisfied). The survey also includes an optional field for further feedback (CSAT Comment) to get a more detailed explanation of the score and then closes with a feedback confirmation. As part of the data extraction from the Ada survey, other valuable information such as conversation minutes and typed messages are included. The total set of survey data contains 9402 chatters from the time frame between 01.01.2021 and 31.05.2021. From those 9402 chatters 3751 were solved completely by the chatbot and 5651 had a handoff to a service agent.

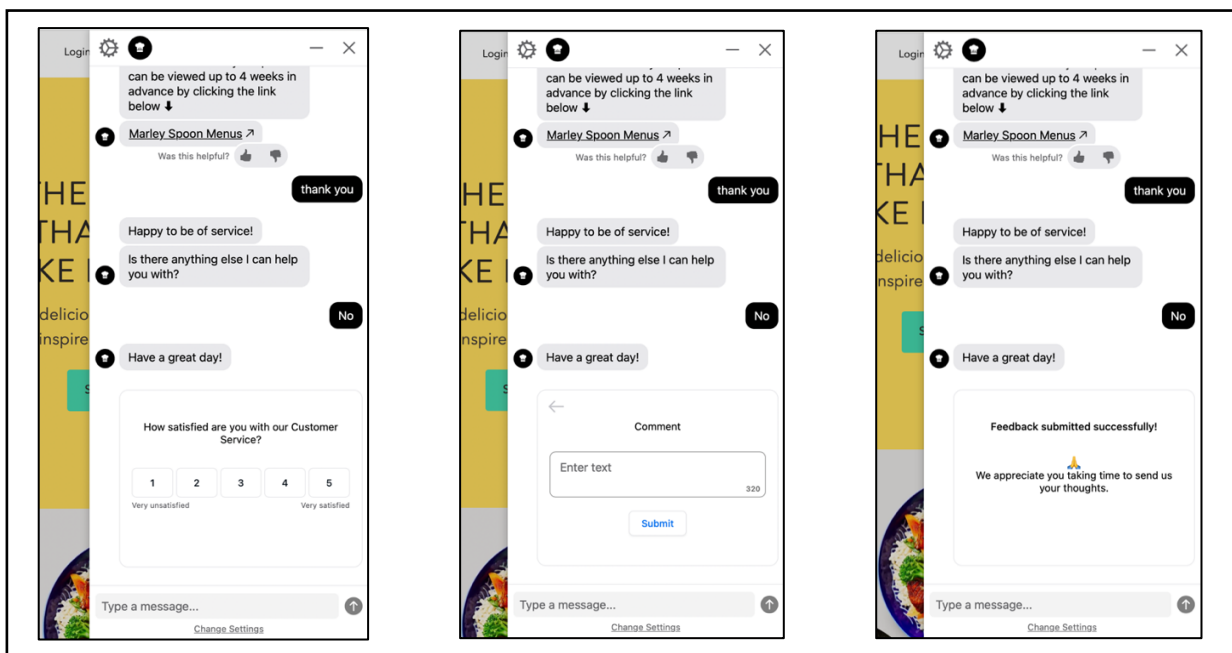


Figure 16: Customer Satisfaction Survey (<https://marleyspoon.com>, 2021)

4. Analysis of the results

The objective of this analysis chapter is to describe, connect and interpret the data from both the primary and secondary data collection of this research. Based on the analysis, the implementations in the next chapter will deliver improvement suggestions for the company. Since there were different data collection methods applied, there are also different analysis techniques to properly evaluate the findings. First, the questions of the in-depth interviews with the company experts are exploit. Secondly, the results of the chatbot satisfaction survey and the company data are analysed. Whenever suitable, connections to the literature review are drawn to combine findings of the primary and secondary data. For the results of the chatbot satisfaction survey, the program SPSS is used to find possible correlations between different factors.

4.1 Analysis of qualitative research

The structured in-depth interviews delivered insightful data provided by experts of the company. According to Malhotra (2017) there are four distinctive stages for qualitative data analysis. Which are *data assembly*, *data reduction*, *data display* and *data verification*. The main display techniques for analysing the interviews are word clouds, pie charts and graphs. According to the Cambridge dictionary, word clouds are “an electronic image that shows words used in a particular piece of electronic text or series of texts. The words are different sizes according to how often they are used in the text.” Word clouds are hence a visual representation of a text and point out the significant keywords. For a relevant visualisation of frequency and significance of the interview answers, stop words were removed and words mentioned in both its singular and plural form were combined to one count, e.g. human and humans. The more significant the word is, the bigger and darker the word is shown in the word cloud. As for the pie charts and graphs, the obtained data was inserted to excel in order to create the charts. On top of the word clouds and graphs, SmartArts were created to better visualize the answers of the experts, which is helpful to point out important findings. As previously mentioned in the interview design, there were 21 questions, from which 16 questions were the same for all interviews. Those 16 common questions will be analysed first, followed by the expert-specific questions. The recordings of the interviews were transcribed by the AI-powered tool called “Otter.ai” and can be found in the Appendix E.

How would you characterize AI and what does it mean to you?



Figure 17: Wordcloud AI characteristics (<https://www.wordclouds.com>, 2021)

To get a better idea how the experts think about AI, the first question asked about a general definition and opinion of AI. As a matter of fact, the most used terms in this context were “humans” and “machines”, followed by “technology”, “improve”, “task” and “people”. Overall, the answers of the experts have in common, that they believe humans

can improve their performance by making use of the capabilities that AI machines offer. They see the main benefit of such technology to support in specific tasks such as predicting and processing, while also freeing people’s time to do tasks that still cannot be solved by AI. Ammar, the head of customer value management and analysis describes AI as *“In the typical sense how AI is characterized these days, it's more about all this prediction, modelling and a lot of number crunching. And, you know, then some people also differentiate between AI and two different domains. So they would be like, data science and machine learning.”* This implies, that on the one hand AI can be used to handle big data and on the other hand learn from customers behaviours in order to proactively communicate or automate specific tasks.

In your current workplace, is AI integrated into the business process? If so, how?

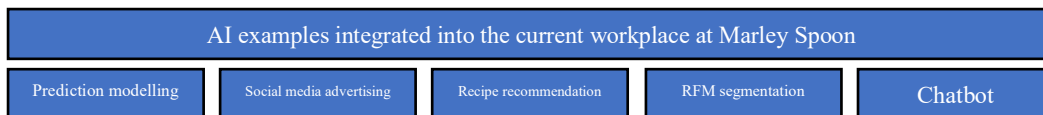


Figure 18: AI at Marley Spoon (author’s elaboration)

Since all interviewees are working in the same company, it was expected to receive similar answers to this question. However, the answers slightly differ from different experts, depending on the department they are working for. Ammar and Dijana, which are both within the marketing department, mentioned that AI is uses for prediction modelling and social media advertising. Another example is the recipe recommendation engine for customers, which suggest the right recipes depending on the history and taste profile of the account, and RFM segmentation, which is a tool to identify the best customers for a company by measuring recency, frequency and monetary value. While the marketing experts already mentioned a couple of examples, Tristan, Katalin and Joana, which are working for the Customer Insights and Customer Communications, mainly referred to the chatbot as an example for AI. According to them, AI is still having some limitations for direct customer implementations and think that

it is currently integrated on as basic level into the business process. All experts have in common, that they see high potential in extending and improving AI into the business process.

In which part of the organization do you think AI has its strongest capabilities and potential?



Figure 19: Wordcloud AI capabilities (<https://www.wordclouds.com>, 2021)

With regards to this question the experts did not limit their answer to only one part of the organization. In fact, a common answer was that AI has capabilities and potential everywhere and for many parts of the organization, such as production, marketing, culinary, finance and accounting. As a customer-centric company, the experts see the strongest capabilities of

AI in order to improve the service for the customers, which was the most mentioned keyword within the answers of this question. For instance, Katalin, the CCO of the company said “We are living from the customer, right? The more we know about the customer and their circumstances, the better way we can select in everything.”

Do you think the chatbot can help to improve the overall CSAT of Marley Spoon?

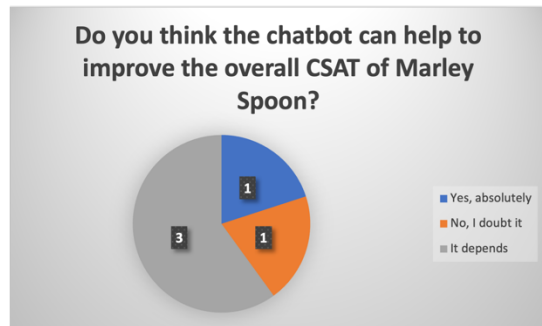


Figure 20: Chatbot CSAT influence (author's elaboration)

As mentioned before, Marley Spoon is a customer-centric company and always strives to improve the customer satisfaction (CSAT). This question therefore helps to understand, to what extent the experts see the chatbot as a tool to improve the CSAT level. Three of the experts answered that it depends on the implementation of the chatbot. One

expert said it can absolutely help and one expert doubted that it has a high correlation. In terms of availability and efficiency the chatbot has the potential to improve the CSAT, but in terms of human touch and empathy it depends a lot on the integration. Joana also mentioned that the chatbot can decrease the CSAT, if it is not helping the customer and leads to frustration. As for now, it depends also on the type of request, but for more simple conversations it can already help as Tristan says “It does depend on the issue, sometimes they just want something very simple. And they just get the clear, nice answer, which actually can be a better experience.”

Do you consider the chatbot's only purpose as a quick FAQ & support machine or do you also see customer engagement potential within the customer-chatbot interactions?

The outcome of this question was that all experts see customer engagement potential within the customer-chatbot interactions. Even though it is currently more used as a FAQ support machine, they all see more opportunities for the chatbot. Tristan points out that “it depends a lot on the time and effort of the integration, but it can definitely be more dynamic and targeted on certain customers”. In Ammar’s opinion the chatbot should be able helping the customers to navigate to the right place. Dijana says the chatbot could also be used for surveys or playing games with the customers. Another advantage for the engagement is that chatbots are not stressed or in a bad mood, unlike real agents. This way chatbots can also eventually lead to better interactions.

Do you think the chatbot is able to offer a personalized user experience and adapt to the customer journey?

In line with the previous question, the experts think the chatbot is able to offer a personalized user experience and adapt to the customer journey. As Ammar says “So if a customer asks, for example, oh, when am I receiving my next order? Or, you know, oh, what, how much did I pay for my previous order? The chatbot, ideally should be able to answer that. So that should be able to pull that right data for the customers.” According to Dijana it depends on the right input, but with the right input it can adapt to the customer journey “I think it's just a matter of figuring out the right inputs. So taking the example of newer existing customers, like their inputs that can help the channel determine that, but then we need to build out the communication.” This being said, the experts also agree that the current chatbot integration needs to be improved and that the data input from different backends has to work in harmony.

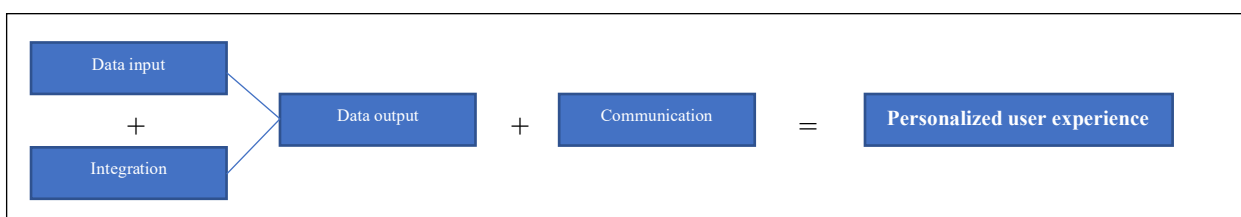


Figure 21: Chatbot personalization (author's elaboration)

Do you think the chatbot can recognize emotions and can also provide answers on an empathetic level towards the chatter?

The question delivered some answers that go in line with the theory of Huang & Rust, which also mentions the empathetic level of AI, that is one of the most recent and advanced

technology developments within AI. Consequently, all experts believe an AI-chatbot should be able to recognize emotions and provide answers on an empathetic level. Ammar and Katalin refer to the machine learning concept and NLP domain of data science. Ammar also mentioned neuro linguistic programming and describes it as “those algorithms can be trained to pick up on the customer emotion or sentiment, whether it's negative or positive, or how upset the customer is or is the customer happy.” However, Katalin also believes that the empathetic level and communication skills of the well-trained human agents is difficult to reach by the chatbot. Joana also thinks a chatbot can be relatively good in understanding emotions but has some limitations when a chatter is using irony. In her opinion a chatbot should also realize the moment when it is not able to provide a proper support and should then hand over the conversation to a real agent.

Are you familiar with the term ‘superteams’? What do you think of this concept?

In fact, the answer to this question was that none of the experts was familiar with the term superteams. However, by reading the definition “*This refers to groups of people and intelligent machines working together to solve problems, gain insights, and create value.*”, the experts all agreed that it makes sense and is a good concept. Joana thinks about the concept as “a combination of two very important things, which is gaining efficiency through machine learning and having actually use all of this technology that we have access to, but never losing the human side.” and Tristan describes it as “the strengths of human emotional intelligence and the strengths of artificial processing power.”.

Have you implemented superteams in your company?

This question helped to evaluate the status quo in terms of AI-HI collaboration within the company. According to the answers of the experts, the company is making use of AI technologies and therefore collaborates in a certain way, but there are no determined superteams yet. Tristan mentioned the chatbot, Dijana mentioned the advertising algorithms, Katalin mentioned complaint management and Joana mentioned customer insights by using NLP on customer comments. On top of that, Ammar referred to the business analysis team, which is supported by machines to analyse bigger data way faster and hence creates more efficiency. Furthermore, Ammar mentioned the data science team, which is building models for other teams. Other key performance indicators of AI-HI collaboration, that were mentioned are quality enhancement, improved customer experience, saving time.

What would you consider the greatest value of superteams for your company? - for your employees? - for your customers?

For the customers the experts consider the greatest value of superteams the overall customer experience. Other values that were mentioned for the customers are efficiency grace to better and faster service, personalization due to a more tailored service and innovation grace to new trends and technologies. For the company, and especially the employees, the greatest value of superteams is efficiency. Dijana says that “I really think it's time and the ability to focus your attention into areas that are still not conquered by programmed algorithms. So this is the benefit I see for for employees, spending time on things that they like to do not spending time on things that are too manual, too granular or too repetitive. And just like ideally, making work a bit more delightful.” Other advantages of superteams for the company and its employees, are skill improvement, cost reduction, revenue increase, better customer satisfaction, makes work more delightful and enhances data capabilities.



Figure 22: Superteam values for the customer (author's elaboration)

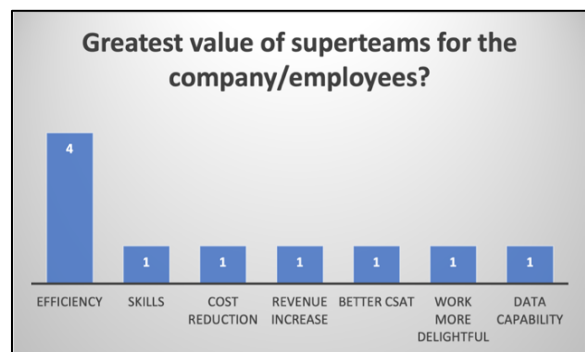


Figure 23: Superteam values for the company (author's elaboration)

In your opinion, what is the optimal combination of human intelligence and AI to realise the ideal superteams, in terms of intelligence, capabilities and allocation of tasks?

This question helped to understand how the experts see the ideal HI-AI collaboration for the company. In fact, they all agreed it depends on the team and the task, but AI is not going to replace HI completely. Some tasks, e.g. customer acquisition from Facebook or Google can be done by AI, in order to target the right people and bid the right amount of money. However, HI is still needed to decide on a certain budget and provide this budget to the AI tool. Also, the positioning against your competitors should still be done by HI, because it defines the company's strengths and values. Another example is within the customer care team, as Ammar says “For example, in Customer Care, yes, you can have AI in a lot of places, but you still need that human touch to talk to the customer.” For Dijana it is all about making the customer happy.

She says that “So in the projects that we go towards making customers happy, and employees happy, there are certain sub tasks that can be done by humans and by AI. And we figure out the combination of that level, the goal should not be to have super teams with 60% of human intelligence, the to make employees happy. And if that means 40% of their job is on their computers, that's great.” Katalin also says it would be too early to generally set up a proportion for AI and HI allocated tasks, on the one hand she expects that machines will take over more and more tasks but on the other hands new jobs will be generated. “I also believe that there will be new type of jobs managed by humans which do not exist today, but we have been necessary for the new jobs, so this will balance out in the end.”

What do you consider to be the biggest obstacle / challenge of implementing superteams in your organisation/company?



Figure 24: Superteam obstacles (author's elaboration)

For Ammar, the interview expert who is the most involved and engaged into AI technologies at Marley Spoon, pointed out that “**proving** that AI can do certain things better than humans can.” is one of the big obstacles and challenges. This relates to both convince people within the company but also potential or current customers as Ammar says “So getting that buy in from people who are not familiar with AI is as challenge quite often, just because of that thing that it's hard to explain what goes on inside the box. So I think that is kind of that biggest obstacle, now we're getting that right level of buy in from different people. And the time it takes to get to that level very develop something, deploy something and then prove that it works.” Tristan, who was responsible for setting up the chatbot considers the **integration** in terms of skills and time to be the biggest obstacle. Dijana points out that it mainly depends on the right **training** and taking the time, especially for people that are not so savvy in technology, which is an unfair disadvantage for them. For Katalin the biggest challenge is to create an **infrastructure** for technological capabilities for a proper data flow. In her opinion the company is a little bit behind to set up this infrastructure but in general the company and its employees are open for such AI implementations. Joana goes more into the psychological challenge of implementing such teams, as people sometimes tend to be **afraid of changes** and might feel threatened by AI in losing their jobs.

How do you think people on your team / at your organisation may view such superteams (e.g. beneficial or more as a threat)?

This question delivered a clear result showing the general openness and willingness of the company to implement superteams and more AI technologies. All experts think that the teams would see it as beneficial and would not feel threatened by it, as Marley Spoon is a young company and customer obsessed. So it would more be a question of change management process but culturally the people are definitely accepting new technologies that help to improve their work.

In your opinion, what is the direction of AI development in the future (say next 20 years)?

Tristan believes that AI will be used a lot for marketing and selling purposes to personalize the experience. According to Ammar companies embracing AI technologies it slowly but in the next 20 years there will be quite some developments and adaption as he puts his thoughts as follows:” I think a lot of the things that we do today are going to get replaced by AI in one way or another. Now, it does not mean humans are going to get replaced by machines, it just means I think what's going to happen as the humans would become kind of like, more of knowledge workers that work based on that take decisions based on their experience on, you know, human emotional element, which machines might not be that good at. So they would still be driving those machines. But the machines would be doing the actual work.” In Diana’s opinion “whatever machine can do should do” but she thinks it is difficult to predict. Katalin believes that AI will be “making our life better” and hopes that it will be good for the society. Joana’s opinion is that “Artificial intelligence can be very, very developed, but we'd never should never lose this human touch.”

In your opinion, what would be the most optimal development of AI in the future, and what kind of impact will it have on business processes?

For Tristan the most optimal development on business would be “will be the labour automation, and how the world reacts to automation.” Ammar thinks that “AI is going to reduce a lot of inefficiencies in the business process things which are currently there, because of humans, and because we have certain limitations of what things we can process in our brain or how fast we can do the things right. So in general, I think it's going to be a positive impact on the business processes.” However, he also expects that the competition is staying, because if all companies are doing the same, it will level out eventually. Dijana says that AI should not be further developed without having certain goals and expectations of it, which should be societal

improvements. So in her opinion the most optimal development would be to “be for improving people's well-being and benefit in the overall society benefits, people having more time to spend.” For Katalin and Joana the most optimal development of AI would be in favour of the customers, e.g. to “understand more from the customer perspective, what is important for them.” and apply AI to personalize “as people like to be value balanced”.

Overall, how would you characterise your views concerning the potential of AI in shaping our future business landscape? (excited, scared, hopeful, etc.)



Figure 25: Wordcloud AI future (<https://www.wordclouds.com>, 2021)

The last question of the interview asked about the expert's view concerning the potential of AI in shaping our future business landscape. Overall, all experts are excited about the potential of AI and see lots of opportunities for Marley Spoon. They think AI will be helpful for decision making and that both the company and customers can benefit from it.

However, they also point out that the human touch and humanity should never be completely replaced by AI and that it is important that humans control the new technologies. If this is still given, then the experts are optimistic and hopeful that AI will have a great impact on the future business landscape and the company is very technological and innovative.

Now that the common questions have been analysed, the more expert specific questions are evaluated. Expert specific questions mean that they have been answered by 2 – 4 experts, as the question was not in scope for all the experts. Tristan and Katalin were asked the question ***“What was the primary intention of integrating the ada chatbot (replacement, augmentation or full collaboration)?”*** For Tristan it is full collaboration as he was saying “give more time for the agents to do more complex interactions. And to allow the customer to have always have a 24 hour experience to their questions to be answered.” He also says the main goal is to “minimise the amount of customer requests that we're getting and also provide any customer education as well.” According to Katalin the first big intention was also to implement the chatbot for generic questions. Furthermore, she mentions that competitors are implementing chatbots as well, so it was also for competitive reasons. On the long term, she also has the expectation that the chatbot should be to “learning continuously about the costumers.”, and takes insights not only from new customers but also existing customers.

The question “*What do you consider the key benefits of the chatbot for the company and for the customer?*” was answered by Tristan, Katalin and Joana. They all consider that the main benefit for the company is effectiveness and efficiency about also saving costs. Katalin is also saying that “learning more about the customers and having higher and higher predictive capability based on these data patterns” will be an advantage for the company. For the customers the main benefit is a 24/7 availability and a quicker handling time. While customers sometimes have to wait a bit longer for an answer of a real agent, a chatbot delivers quick responses without long waiting queues.

Another question was “*From the customer point of view, where do you see the main difference between chatting with a CC agent (HI) and the chatbot?*” This was a very valuable question to understand what is still missing for chatbots to be more accepted by customers and what should be the goal of future implementations. All in all, the 3 experts have the same opinion about it. First of all, a real agent can better understand and generate context from all kind of aspects related to a customer account. For the chatbot this is still limited, as the tool is not connected to all kind of customer info, such as order and credit history. On the other hand, an advantage of the chatbot is that it is designed to navigate through the process and can provide quick answers or links depending on the keyword a chatter was typing. While it would take a more time for an agent to provide all the options, including the chance to forget one of the options, the chatbot can always show all options immediately. For Katalin it is important to find the right balance between chatbots and human parts and figure out “what are the most important drivers for the consumers and at each touchpoint in their engagement, where they need to have the human interaction.” Consequently, the human touch is still an important factor when it comes to customer service and interactions. Customers want to feel like their concerns and feedback is really understood and valued, and forwarded to the right person or department. A real agent can also better refer to personal circumstances and understand emotions or irony. This means that a chatbot should also be able to understand such emotions and being able to provide a compensation or solution that goes beyond the given credit policy. However, at the current state of the art, a sorry from a real agent gives more affection than a sorry of a chatbot.

Finally, there were two more questions related to superteams. One of them was “*How would the introduction of more AI applications impact the wellbeing of employees?*”. Regarding the wellbeing the experts Tristan, Ammar, Dijana and Katalin agree that AI should

not have a negative impact on the wellbeing of employees but rather help and improve it. The concern of being scared that the job might be replaced depends on the alternative that a company is offering as e.g. Katalin is saying “by time AI will take over some jobs which exists today. I think this should be a positive thing. As long as we show some new avenues for people and for those necessarily that we upskill or entirely retrain the members for other areas”. AI should also eliminate easy and repetitive tasks and create a feeling that work is more purposeful by focusing on tasks that are more relevant. In this way it can help to optimize work and take better decisions. They also suggest that AI should not be seen as replacing task but more as cooperating in order to improve productivity as feeling productive has a positive impact on wellbeing. More AI introductions should also help improving the work-life ratio by e.g. recognizing when an employee is too tired or stressed and then suggesting to get some rest or sleep. All in all the experts assume that can have a positive impact on the wellbeing, if it is properly integrated into the job and society in general.

The last question was ***“Do you see whether people with different roles within your organization would have different opinions about this?”***. In general, also since Marley Spoon is a young company and has a flat hierarchy, the experts are convinced that the company is heading the same way and direction. However, they also say that everyone has their own opinions and feelings about it, which might also depend on the role and function. Ammar thinks that the opinion can differ from top management and frontline staff saying that “top management is also I would say, fairly young, and they are looking for these kinds of opportunities. Frontline staff, I think they would also welcome the change, to be honest. But they might have more concerns how it might affect their work in the sense that they might need to do things differently.”, which refers back to the earlier mentioned obstacle of integrating AI. Dijana says that “the difference with hierarchies is that just different decisions are made on this level. So it would have different needs to get acquainted for the topic with different inputs. So having said that, you have different backgrounds with different inputs and different needs of understanding the topic.” which then can lead to different opinions.

4.2 Analysis of quantitative research

Quantitative data was provided by the company to support this project. For the scope of this research, recent data from this year, 01.01.2021 – 31.05.2021 was extracted. The data received by the Ada survey contained 9402 conversations, from which 3751 chatters only interacted with the chatbot and 5651 chatters requested to get transferred to a real service agent. On top of that the previously mentioned chatbot metrics are helpful to measure the performance and drive conclusions for optimizations. Before the survey is analysed by using excel and SPSS, first the data from the chatbot metrics is presented.

Analysis of the Ada chatbot metrics data

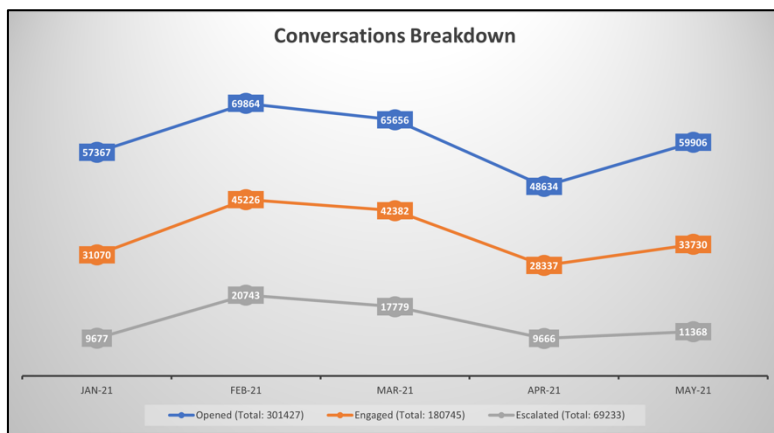


Figure 26: Conversations breakdown (author's elaboration)

First of all, the conversations breakdown shows the total number of conversations initiated, engaged and escalated using the chatbot for all countries during 01.01.2021 and 31.05.2021. The total number of opening the chatbot was 301427 times. From those

301427 opening the chatbot interface, 180745 people actually started to chat with the chatbot, which is an engagement rate of almost 60%. From those 180745 interactions 69233 conversations resulted in a handoff to a real agent, which means the chatbot has a self-serve rate (containment) of 62% and 38% result in hand-offs to a real agent. This shows that both engagement rate and containment rate can still be improved in the future.

Regarding the average handle time it is noticeable that the average of chatting with an agent (10 min 20 seconds) is approx. 3 times longer than chatting with the chatbot (3minutes 19 seconds). The average handle time before

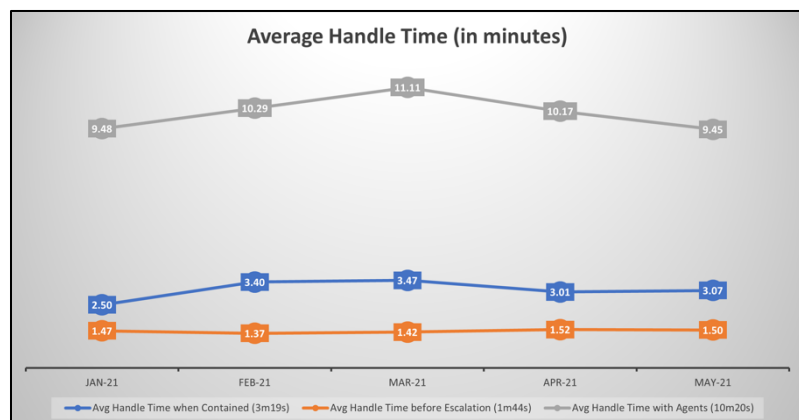


Figure 27: Conversations time (author's elaboration)

escalation to an agent is 1 minute 44 seconds. The average handle time over the months is more or less stable so the month does not have an impact on the handle time. It is also important to keep in mind that for the average handle time with an agent there is also a transfer time included, meaning the time between the handoff from the chatbot to the next available agent.

There are currently about 150 answers built in the Ada chatbot software for Marley Spoon. In the following the 20 answers that appear most often in conversations, the 20 answers most often preceded a chatter’s request for a live agent and the 10 answers with the highest hand-off rate are presented. This gives an idea about the type of customer request and which answers are not performing that well. The indication therefore provides an overview on the most common interactions with the chatbot. Based on the answer performance, the chatbot can be optimized and evaluated. Between 01.01.2021 and 31.05.2021, the chatbot gave 477.283 answers in total. The most used answers in this period can be seen in the graph chart below. The top answer was “Not understood” which indicates there are still quite some phrases that the chatbot does not understand. The second most used is “View upcoming recipes”, which is providing a link to the menu of Marley Spoon. Number three is related to delivery issues such as delays. Since many people don’t want to interact with a chatbot the answer hand-off to support is the fourth most used answer. The fifth most used answer is regarding edit recipes, which means the chatbot explains how a customer can choose recipes from the menu in the account.

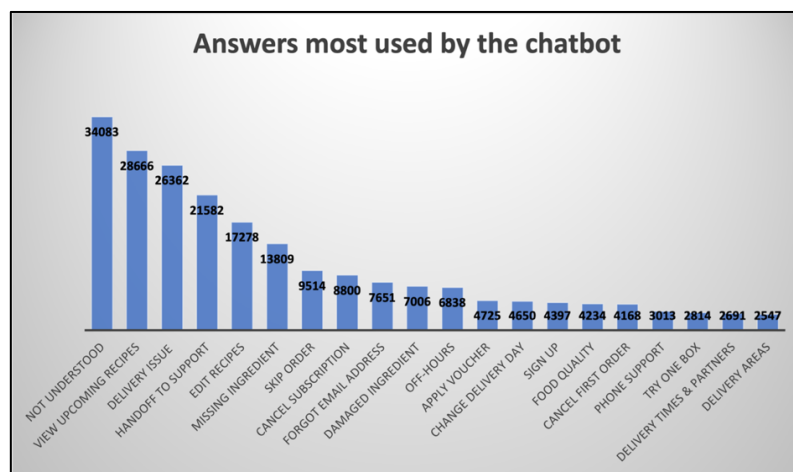


Figure 28: Most used answers (author’s elaboration)

As already mentioned before, there are different contact topics in which the requests are categorized. The table below shows in which categories the top 20 answers are the most required for interactions with the chatbot. In fact, it can be stated that the answers are distributed in all 5 categories, which proves that the chatbot is able to cover different categories. Therefore,

the chatbot can be used in different stages of the customer journey, as the answers are used in different stages.

Chatbot related (4)	Account settings (6)	Complaint (3)	Logistics (4)	General Question (3)
<ul style="list-style-type: none"> - Not understood - Handoff to support - Off-hours - Phone support 	<ul style="list-style-type: none"> - Edit recipes - Skip order - Cancel subscription - Forgot email address - Apply voucher - Cancel first order 	<ul style="list-style-type: none"> - Missing ingredient - Damaged ingredient - Food Quality 	<ul style="list-style-type: none"> - Delivery issue - Change delivery day - Delivery times & partners - Delivery areas 	<ul style="list-style-type: none"> - View upcoming recipes - Sign up - Try one box

Figure 29: Table answer categories (author's elaboration)

The next graph shows the answers most resulting in hand-offs, in other words, topics that a chatter asks for support by a real agent. This is very important to analyse as it shows the limits but also chatter's resistance of using the chatbot. Out of the 20 most used answers of the chatbot, 14 answers are also in the top 20 of the answers most resulting in hand-offs. The answer, which is most resulting in a hand-off is when it comes to delivery issues. This can imply delivery delays, customers asking when the box will arrive, where the box was delivered and other complaints about the delivery partner. The chatbot is currently not able to give a detailed answers about delivery status, which is then resulting in the chatters request to chat with a real agent. Other answers that are quite often resulting in hand-offs are regarding the ingredients of the box, either missing, damaged or quality related. Even though this is a topic that the chatbot can handle quite well and accurate, there are many people that still prefer to get support by a real agent regarding such issues. The fourth answer most resulting in hand-off is the greeting message of the chatbot, which means the chatter immediately wants to chat with a real agent, without even trying if the chatbot would be able to help accurately. Number six is the not understood answer, which implies that chatters patience is short since they want to switch to a real agent if the chatbot does not understand the issue in the first place.

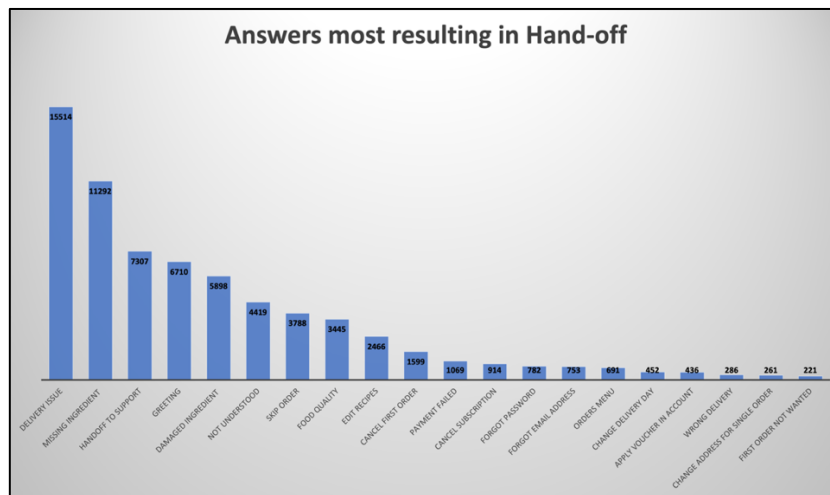


Figure 30: Most hand-off answers (author's elaboration)

Overall, it can be stated that there are some answers that lead to the hand-off due to the inability of the chatbot, but there are also answers that the chatbot is actually capable of but the chatter just prefers to chat with a real agent. The table below shows again the distribution of answers in different categories. The two categories, that cause the most hand-offs are regarding account settings (9 answers) and complaints (4 answers). In this way it can be concluded that hand-offs appear more in the post-purchase stages, as complaints and account settings refer to chatters that already have a customer account, while general questions usually appear more in the pre-purchase stage.

Chatbot related (3)	Account settings (9)	Complaint (4)	Logistics (3)	General Question (1)
<ul style="list-style-type: none"> - Not understood - Handoff to support - Greeting 	<ul style="list-style-type: none"> - Edit recipes - Skip order - Cancel subscription - Forgot email address - Forgot password - Apply voucher - Cancel first order - Payment failed - First order not wanted 	<ul style="list-style-type: none"> - Missing ingredient - Damaged ingredient - Food Quality - Wrong delivery 	<ul style="list-style-type: none"> - Delivery issue - Change address for a single order - Change delivery day 	<ul style="list-style-type: none"> - View upcoming recipes

Figure 31: Table answer categories hand-offs (author's elaboration)

The next graph shows the answers with the highest hand-off rate. All answers and conversations considered, the average hand-off rate is 38%. The answers with the highest hand-off rate are all coming from the complaint category, such as damaged ingredients (84%) food quality and missing ingredient (both 82%), wrong delivery (67%) and FSQA (59%). The interaction flow of this answers is actually set-up well, however it does not provide an immediate solution and compensation, that's why customers probably are not satisfied and ask for a real agent. Payment failure (64%), password reset (47%), apply voucher (40%) and skip order (40%) not necessarily require a real agent but it depends on the situation. Delivery issues have a hand-off rate of 60%, but considered the total amount of answers (25.938) this is still feasible as the chatbot is currently not able to give detailed info about the delivery.

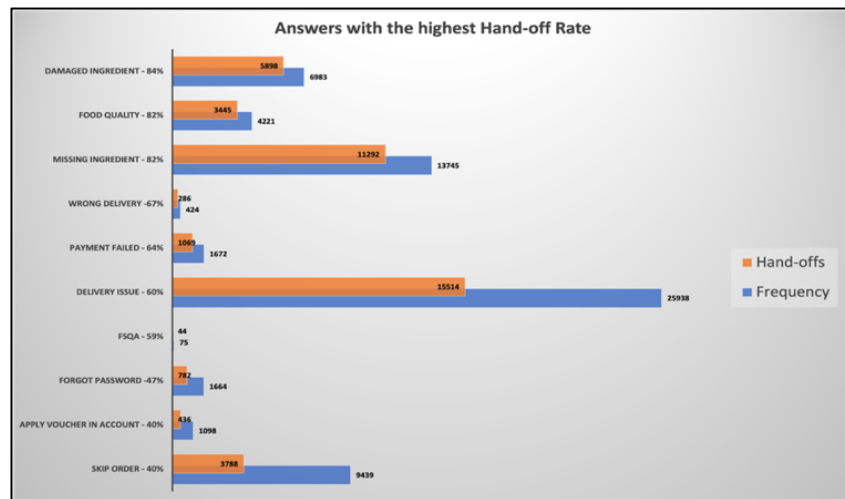


Figure 32: Highest hand-off rate answers (author's elaboration)

Analysis of the Ada chatbot satisfaction survey

The following analysis evaluates the data collected by the Ada survey software. The total number of participants between 01.01.2021 and 31.05.2021 were 9402 participants of which 3751 rated the chatbot performance and 5651 rated the experience chatting with a real service agent. Besides the CSAT score and feedback comments, the data set also contains info about the interaction count, conversation duration, and negative as well positive responses. In order to further enrich this analysis, certain variables have been crossed with the CSAT score to find possible correlations such as time factor and responses.

First, the two pie charts below show that the overall CSAT score of chatting with the chatbot is higher than the average score chatting with a service agent. The average CSAT score for the chatbot performance is 3.4, which is in between neutral and satisfied. The average CSAT score for the live agent performance is 2.6, which is in between dissatisfied and neutral. With the chatbot 30% are very dissatisfied or dissatisfied, while with the live agents 54% are very dissatisfied or dissatisfied. Moreover, 55% of the chatbot participants are satisfied or very satisfied with the conversation performance and only 33% of the live agent participant are satisfied or very satisfied with the conversation performance. This implies that generally the chatbot has the potential to have a more satisfying conversation than a real agent.

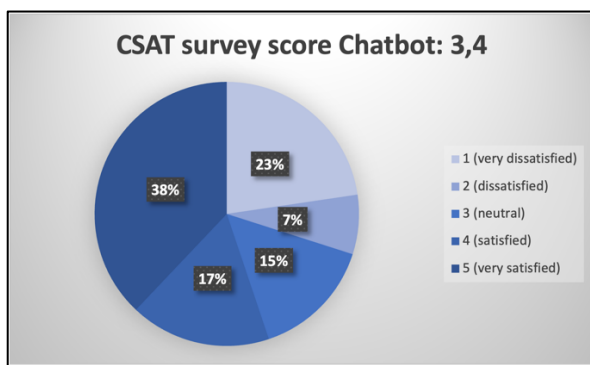


Figure 33: CSAT score chatbot (author's elaboration)

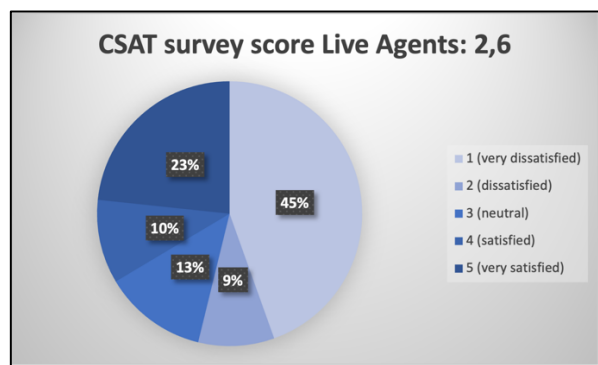


Figure 34: CSAT score live agent (author's elaboration)

Besides the CSAT score, the participants also had the chance to leave a comment to describe their satisfaction or dissatisfaction. In this way it can be analysed more detailed, what the participants like and dislike about chatting with a chatbot. In order to do so, all comments for a CSAT score 4-5 have been extracted and put together and the same for all comments for the CSAT score 1-3. Since there were different languages involved, the non-English comments (German and Dutch) have been translated to English. Afterwards 11 different categories have been pointed out for the positive feedback and then the comments assigned to its category. Two of the 11 comment categories are not considered for this research as one of them is just saying

“Thank you” and the other one not related to the interaction with the chatbot. The results of the nine comment categories are shown in the 2 following graphs.

For the satisfied and very satisfied scores of 4 and 5, the most mentioned feedback is that the **chatbot answered quickly** and therefore the conversation are fast without taking too much time. An example for those 50 comments is “All answered immediately and quickly”. The second most mentioned comment is that **the chatbot was easy to use**, which was given 36 times with an example given “I love how easy it was to get my question answered”. Number three most mentioned feedback is that the **chatbot was helpful**, which was named 24 times with an example given “The automated answers were very helpful and I only had to enter a few words relating to my question and I received a comprehensive answer.” Number four and five both gave **positive feedback comments about the chatbot experience**, while 17 explicitly commented that “For automated responses, I can see you have gone to great lengths to cover all questions that might come up. I am very impressed at your thoroughness. It makes me feel confident choosing your service”, which implies they are positively impressed by the chatbot performance. Number seven and eight most mentioned feedback was that the **chatbot was comprehensive** (16x) and that the **chatbot was descriptive/informative** (9x). An example for comprehensive comment is “Chatbot has quickly recognized the problem and helped. The result is pending therefore 4/5 stars” and an example for descriptive is “Explained how to skip order”. Seven people mentioned that the **chatbot was efficient** (“Very efficient and easy to use”) and two people mentioned that the **chatbot was kind and polite** (“Kind and nice”).

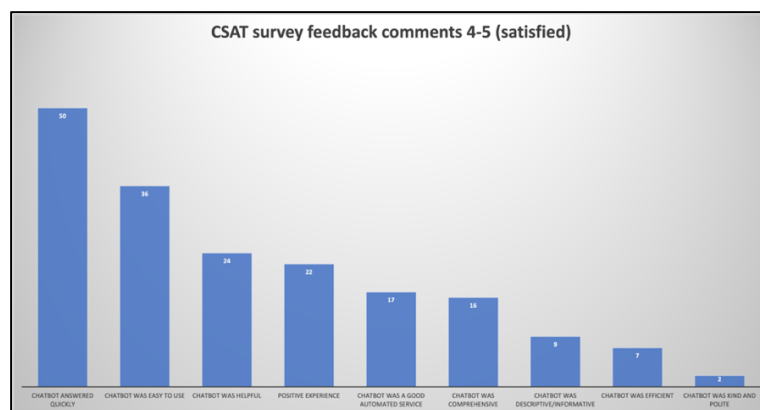


Figure 35: Positive feedback (author’s elaboration)

For the unsatisfied and neutral comments, 10 categories have been identified. Most of the negative comments (102x) were that the **chatbot was not able to help with the problem**, an

example comment is *“Besides generic pre-set answers of a bot, I was not helped here. My problem continues”*. The number two most negative comments (81x) were that **the chatbot did not answer to the question or did not even understand it** with *“Automated system couldn't understand what information I was looking for”* is an example of the comments given in this regard. Number three and four most negative answers were that they would **prefer a real agent** (77x) and 28 times it was explicitly mentioned that they **don't want to speak to a robot**. The two examples of this comments *“Can't I chat with a real person?”* and *“I don't like talking to a computer!”* express the chatbot resistance of a certain group of people. However, it needs to be differentiated between people that prefer talking to an agent and people that obviate talking to a chatbot in general. 27 times it was commented that they are now **waiting for feedback or follow up**, that is promised by the chatbot. An example for those comments is *“I don't trust that they'll really get back to me via email, not sure what the solution will/could be”*. The goal of Marley Spoon is always to get back to the request withing 24 hours, therefore the person will usually get a quick feedback to the conversation they had with the chatbot. Other comments were that the chatbot was **frustrating** (16x), had **limited capability** (14x), was **impersonal** (10x) or left them **confused** (9x). An example for the frustration would be *“I was told have a fine day!!! really guys????”*, an example for limited capability would be *“Quick and easy to submit complaint, but issue isn't resolved yet, so I can't provide a higher rating”*, an example for impersonal would be *“Not personal. Didn't answer my question at all”* and for confused *“I'm so confused and don't know if my request even makes sense with the automated help. I don't feel like my problem has been addressed”*. Another remark was that the chatbot **not always provides an immediate solution**, which was mentioned eight times.

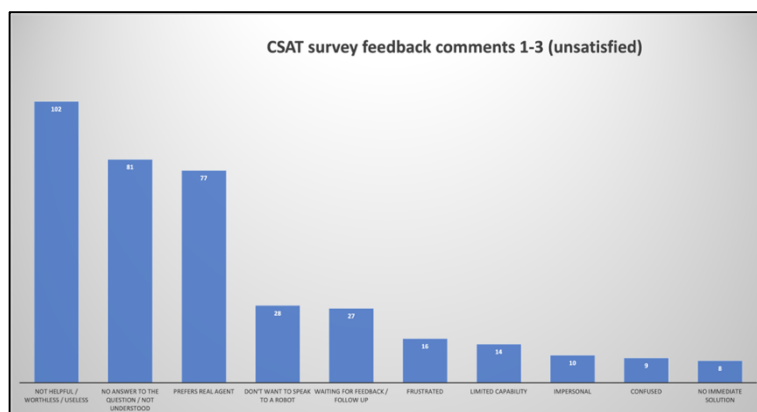


Figure 36: Negative feedback (author's elaboration)

Now that the general CSAT survey has been analysed regarding both positive and negative aspects, the next step of this analysis will discover if there are certain factors that influence the satisfaction score. The factors which are going to be analysed are conversation duration, and negative and positive responses. As method for calculating the correlations the Pearson’s r was applied, which measures the relationship between two variables. Pearson’s r always ranges between -1.00 and +1.00, whereas correlation of 0 means that there is no relationship at all. Since the time factor was the most mentioned reason for 4-5 satisfaction scores, it was expected that the shorter the conversation duration, the higher the CSAT score. However according to the Pearson’s r method there is no relationship between those variables, as the Person Correlation is -.047, which is almost 0. However, it must be stated that the conversation time is still counted when the chat window is not closed, even if the actual conversation is already done, which is why this correlation is not quite accurate. Regarding the negative and positive responses, it can be stated that negative responses have a negative impact on the overall satisfaction score (-.247) and positive answers have a positive impact on the overall satisfaction score (.161), even though not quite strong.

Correlations			
		CSAT_Score	Conversation_Duration
CSAT_Score	Pearson Correlation	1	-.047*
	Sig. (2-tailed)		.022
	N	2403	2403
Conversation_Duration	Pearson Correlation	-.047*	1
	Sig. (2-tailed)	.022	
	N	2403	2403
*. Correlation is significant at the 0.05 level (2-tailed).			

Correlations			
		CSAT_Score	Negative_Res poneses
CSAT_Score	Pearson Correlation	1	-.247**
	Sig. (2-tailed)		<.001
	N	2403	2403
Negative_Responses	Pearson Correlation	-.247**	1
	Sig. (2-tailed)	<.001	
	N	2403	2403
**. Correlation is significant at the 0.01 level (2-tailed).			

Correlations			
		CSAT_Score	Positive_Res poneses
CSAT_Score	Pearson Correlation	1	.161**
	Sig. (2-tailed)		<.001
	N	2403	2403
Positive_Responses	Pearson Correlation	.161**	1
	Sig. (2-tailed)	<.001	
	N	2403	2403
**. Correlation is significant at the 0.01 level (2-tailed).			

Figure 37: Satisfaction correlations (author’s elaboration)

5. Implementations & Recommendations

Now that the literature review and data analysis of the primary research have been conducted, this chapter will present the implementation suggestions regarding the chatbot for Marley Spoon. As a result of the findings, this chapter will exhibit three different recommendations, which should be considered by the company in order to improve the chatbot performance. Those three implementations are *new chatbot interface and more engagement*, *applying the chatbot to different customer journey stages*, and *setting up a chatbot superteam with specified scope of tasks*. Each of the three implementations is somehow related to each other and will be further explained in the following, by explaining the reason for the recommendation and demonstrating examples.

1. New chatbot interface with more engagement

2. Apply chatbot to different customer journey stages

3. Set up a chatbot superteam with specified scope

5.1 New chatbot interface with more engagement

Both, scientific sources, and the in-depth interviews, propose that there is more engagement potential for the current chatbot integration. This implies that the chatbot needs to be adjusted in terms of its interface and communication style. Regarding the interface it is important to keep the e-servicescape of the company into account, which means adapting to the overall brand image and visuals. At its current integration, the chatbot is used as a simple FAQ tool but not integrated as a real brand-owned part of the company. Therefore, the suggestion would be to adjust the integration and present the chatbot more as a belonging of Marley Spoon, with its own character and personality. An improved visibility and interface should not only trigger the people, which are already willing to interact with the chatbot, but also convince people, which are currently still sceptical and hesitating towards chatbots. Having said this, the integration should consider both the satisfying and dissatisfying aspects of the chatbot satisfaction survey, by demonstrating its strengths but also revealing its limits to avoid frustrations and dissatisfaction. Referring to the satisfying aspects of the chatbot, the main strengths are quickness, ease of use, and helpfulness of the chatbot. On the other hand, the dissatisfying aspects are that the chatbot is being useless, not understanding the question or a real agent is preferred. Keeping this in mind, the chatbot can better communicate its satisfying strengths and navigating people to another a service agent, in case it is not able to handle the request. As mentioned by the experts, the outcome of the chatbot depends a lot on the input.

The chatbots input is currently focused on giving answers to the questions, it has not much input in terms of communication style and engagement. The following chatbot style guide is a template and covers multiples aspects such as *customer base*, *language and communication style*, *brand/personality of the chatbot*, and *human escalation process*. The suggestions can be used for best practices to improve the chatbot performance and are based on the findings of the literature review and data analysis.

Customer base

<p>Customer demographics</p> <p>What are the demographics of the intended bot audience? Consider: Age, technical ability, expertise, etc.</p>	<ul style="list-style-type: none"> - 25-35 (millennials) - Tech-savvy - Middle and upper middle class
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Language & communication style

<p>Grammar</p> <p>Does the bot speak in the first person? Consider if the bot will use the “royal we” or refer to your organizations’ name, etc.</p>	<ul style="list-style-type: none"> - Informal, speaking in the first person
<p>Bot entity</p> <p>How will you refer to the bot? Examples: Virtual Agent, Digital Assistant, Bot, Chatbot, etc.</p>	<ul style="list-style-type: none"> - Digital cooking assistant
<p>Human agent terminology</p> <p>How do you typically refer to your human customer-facing staff? Examples: Live agents, Care Team, Support Staff, Specialists, etc.</p>	<ul style="list-style-type: none"> - Service agent
<p>Brand-specific terminology</p> <p>What are some specific industry- or company-specific words that are likely to be used throughout the bot content? Example: product names, processes, etc.</p>	<ul style="list-style-type: none"> - Recipes - Menu - Cooking - Complaint - Cut-off - Delivery

Brand/Personality of the chatbot

<p>Bot persona</p> <p>What are some details about your bot’s persona? Consider: Name, visual representation, descriptors, etc.</p>	<ul style="list-style-type: none"> - Hi, I am the Spoonbot, Marley Spoons digital cooking assistant. How can I help you today?
<p>Bot scope</p> <p>How should expectations be set in the bot’s Greeting? Example: I can help with common issues such as...</p>	<ul style="list-style-type: none"> - Even though I am not human, I will do my best to answer your questions about our meal kit service.
<p>Bot tone</p> <p>What’s your bot’s voice? Examples: College professor, knowledgeable professional, sassy, funny, know-it-all, etc.</p>	<ul style="list-style-type: none"> - Mix of knowledgeable and funny

<p>Error handling</p> <p>How should the bot react in the case of an error or complaint? Consider whether the bot should be apologetic or not.</p>	<ul style="list-style-type: none"> - Apologetic and accommodating
<p>Emojis</p> <p>Will your bot use emojis? Consider whether emojis will be used to draw attention to specific content, and if certain emojis should be used frequently or avoided.</p>	<ul style="list-style-type: none"> - Yes, but should be selected carefully depending on the conversation topic. (e.g. no emojis withing the complaint categories)
<p>Visuals</p> <p>What types of multimedia will your bot include and are there any accessibility requirements to follow? Examples: Images, GIFs, Videos</p>	<ul style="list-style-type: none"> - Integration of gifs and Images to be more engaging

Human escalation process

<p>Email / Ticketing</p> <p>If the bot will be creating email tickets, what information should be collected and what email address should be used? If using a specific ticketing platform, please note which one.</p>	<ul style="list-style-type: none"> - Zendesk ticketing platform
<p>Live Chat</p> <p>If the bot will be handing off to a live chat agent, what information should be collected in advance? Consider if only certain topics should hand off to live chat and how easy you want it to be for your customers to connect to a human agent.</p>	<ul style="list-style-type: none"> - Email address, should be easy to connect
<p>Hours of Operation / Schedules</p> <p>What are the hours of operation for your support team? Consider live chat, phone agents, departmental differences, etc.</p>	<ul style="list-style-type: none"> - 8:00 – 20:00 Monday to Friday
<p>Routing</p> <p>Should certain customer intents be routed to specific departments or agent groups? Consider your current support flows and note any specifics.</p>	<ul style="list-style-type: none"> - Differ between potential customers and actual customers
<p>Tagging</p> <p>Does your current support system use tags to organize customer inquiries, if so, what are they? Consider creating a bot-specific tag to differentiate inquiries that originate from the bot if there are multiple ways for your customers to contact you.</p>	<ul style="list-style-type: none"> - Use tags (according to request categories)
<p>Response Service Level Agreements</p> <p>When should customers expect to hear back from your human agents? Consider whether this should be stated by the bot specifically.</p>	<ul style="list-style-type: none"> - Should be saying “We will handle your request as soon as possible and one of our service agents will get back to you.”

For the *customer base* it is important to understand what the demographics of the intended bot audience are. It should consider the age, social class and technical ability. The intended target group for the chatbot interactions are customers between 25-35 years old, which count as millennials and are usually tech-savvy. Their income is considered middle and upper middle class, implying that they usually have a fulltime job and income to afford the service, but also have a full-time schedule and therefore might be in need of a meal-kit support. Next, the *language and communication style* defines the way the bot is answering. The general tone of voice of Marley Spoon should be also implemented for the chatbot, meaning that it has a friendly and helpful attitude speaking in the first person and not being too formal, unless a customer is requesting it. The chatbot itself should be referred to as digital cooking assistant, which is showing the readiness and willingness to help and support the customers. For the human agent terminology, the chatbot should refer to human service agents, implying that there will be a real person providing immediate help, if the chat takes place during the operational hours. Brand-specific terminology would be words such as, recipes, menu, cooking, delivery, fresh and quality. Regarding the *brand and personality of the chatbot*, it will be crucial to make some adjustments in order to increase the engagement level and recognition factor of the chatbot. This implies making the bot more brand specific and encouraged. Therefore, the suggestion is to give a name to the chatbot and add an avatar to it. The chatbot could be named *The Spoonbot*, which is a mix of the company's name and chatbot, which is then still identifying as a bot. The Bot's tone should be both knowledgeable and funny and handling errors in an apologetic and accommodating manner. Moreover, the chatbot should be using more emojis when the context allows and also send images and GIFs to trigger more engagement. Regarding the engagement potential it was also mentioned that the chatbot could play some mini games with the customers to have some gamification within the touchpoint experience. A potential game could be to display a list of 50 ingredients and the chatter has to select up to 10 ingredients, which would form a tasty recipe. Based on an algorithm created by the culinary department and the AI-software, the chatbot could then give as result 1-5 stars, which is indicating the cooking skills of the chatter. On top of that, the recipe could then be submitted to the culinary department and eventually implemented in the future menus, which would then be a co-creation with the customer. Another game could be that the chatbot is showing a specific recipe and the chatter then has to select the ingredients that he or she thinks are belonging to that recipe. If it is correct, then the chatbot can provide a voucher for the first order, when it is a potential customer, or to the upcoming order, when it is a loyal customer. The goal of this games would be to trigger the appetite of the chatter, but also create

engagement and making the chatter feel more involved. Moreover, the Spoonbot's interface could also adapt to different seasons and events, like e.g. Christmas. This way the customer experience can be improved and connected to specific campaigns and topics. Finally, the **human escalation process** can also be improved by giving more specific information about the availability of service agents and the response time. This is very important as both, recent literature and interview experts suggest that HI and its empathetic communication skills is still important to handle certain customer requests. However, it was also stated that technology developments within AI will be able to understand certain customer emotions, which then can be handled by a chatbot accordingly. Moreover, the routing can be adjusted by separating between non-customers and actual customers, which will be elaborated in the second recommendation "Apply chatbot to different customer journey stages".

To give an idea how the new chatbot design could look like, figure 38 was designed to suggest how the interface could look like in the company colours and a picture of the Spoonbot avatar. The avatar symbolizes a friendly attitude and combining the new name in form of a chatbot icon and the spoon, which is part of the official Marley Spoon logo. In this way more brand connectivity is given to the chatbot and it seems more brand-owned. In addition, the yellow brand colour of Marley Spoon is added to the interface and a phrase "Happy to assist you!" pinned on the top of the conversation. As the current engagement rate is only at about 60%, the new interface should help to engage more people to start a conversation, after they opened the chat window.

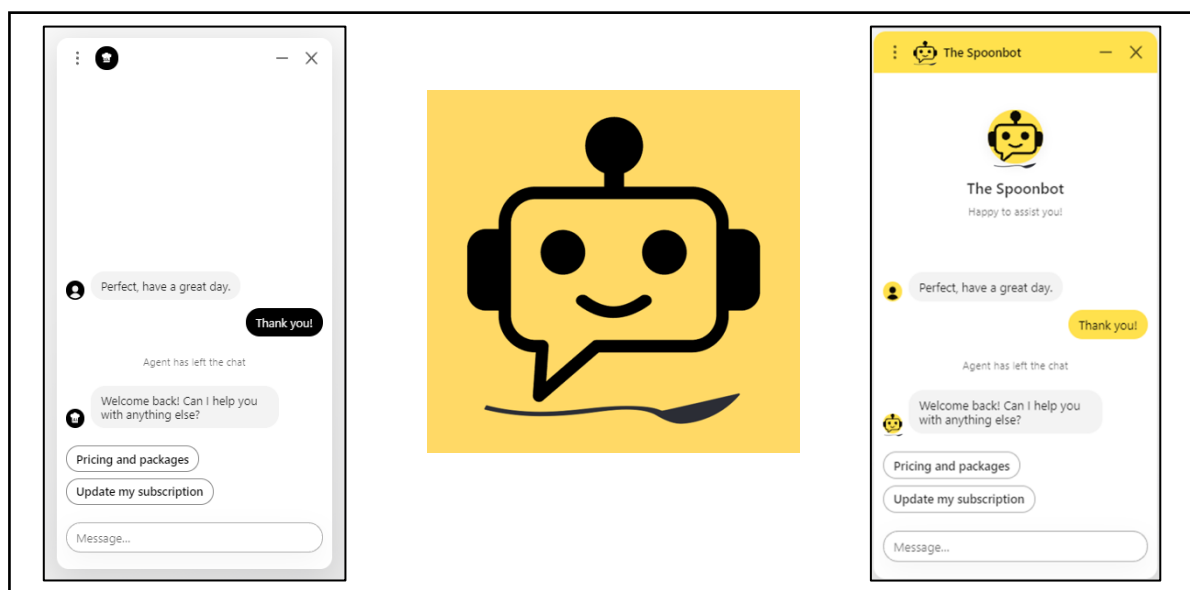


Figure 38: Current interface (left), New chatbot avatar (middle), New chatbot interface (right) (author's elaboration)

As mentioned in the problem statement of this research, the current chatbot visibility, which is a simple question mark at the bottom right corner and the interface, which is a simple chat window with a greyish text box are at its basic integration (see appendix C). The new Spoonbot avatar should therefore replace the question mark to open the chat window in order to create more visibility on the website. Furthermore, the chatbot option should also be presented on the contact page. On the contact page the chatbot CTA could be “Chat with our Spoonbot” and on the website the chatbot CTA could be “Do you need any help?” (see figure 38). In this way more website visitors will be triggered to open the chatbot window.

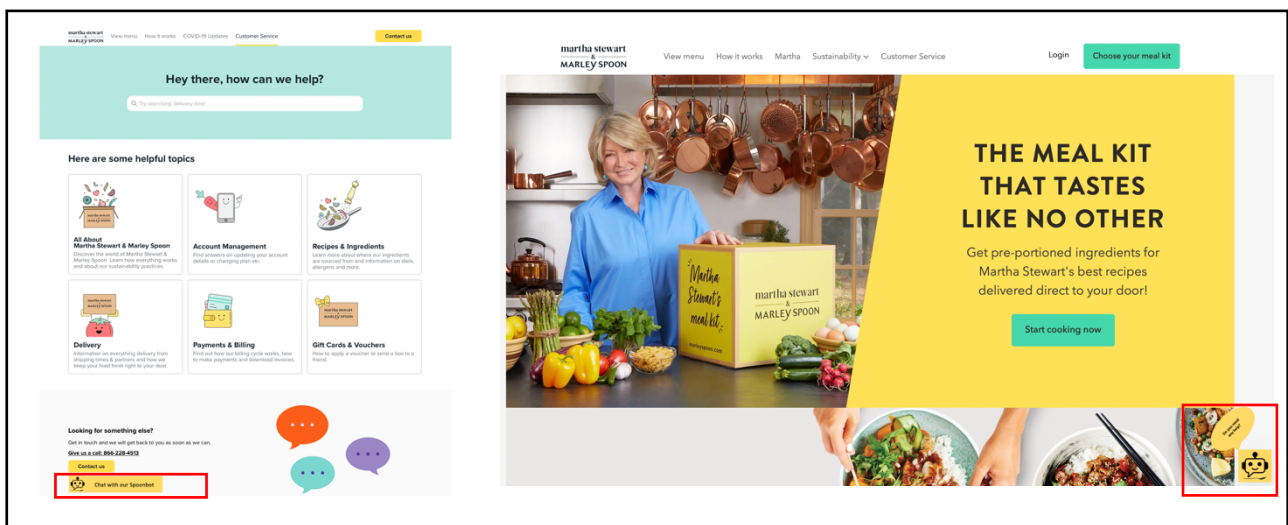


Figure 39: Improved chatbot visibility (author's elaboration)

5.2 Apply chatbot to different customer journey stages

As mentioned before, the chatbot is a brand-owned touchpoint experience and therefore it ideally should also recognize different customer journey stages. People, that use the service of Marley Spoon, are usually pragmatic online shoppers, that would like to save time and receive pre-portioned ingredients ready to cook. The company aims to gain more market share by also convincing store-focused shoppers, people that do their groceries in the supermarket. This is why the online touchpoints should be implemented well and the chatbot can play an important role in replacing the common interactions. The experts of Marley Spoon agreed that the chatbot can be more dynamic and targeted on certain customers or landing pages, as right now it is a rather static integration and does not differ between potential or actual customers. For a chatbot personalization in different customer journey stages, it depends on the right data input and integration. Implementing the right input and integration, the chatbot will be able to generate the data output in combination with the given communication style in order to offer a

more personalized user experience. In this way the chatbot should be able to navigate the chatter to the right place, whether being a potential customer or actual customer. Since the chatbot is one of many touchpoint opportunities, it is important to reach a thematic cohesion, context sensitivity and consistency with the other touchpoints, such as social media. Ideally, the chatbot should continue the path where the website visitor came from, which implies connecting different learning techniques, like website morphing and retargeting algorithms. If for example a potential customer sees a social media advertisement, which leads to the Marley Spoon website, the chatbot should remind the visitor of this campaign and offer the voucher. Furthermore, the chatbot should be able to provide the right information, according to the decision stage of the conversation.

Since there is many numerical information involved during the customer journey, the chatbot should identify the decision stage by analysing the request type of numeric information and then reply accordingly. In the pre-purchase stage, the chatbot should provide information about the product, price and brand identifying info. During the purchase stage the chatbot should provide promotion info, quantity info and evaluate cross-selling opportunities. In the post-purchase it should collect feedback and provide price and promotion recalls. Figure 40 presents a suggestion how to apply the Marley Spoon chatbot at different stages of the customer journey. It contains the function, customer group, request types, chatbot pop-up triggers and marketing activities. Nonetheless, in order to apply the chatbot to different customer journey stages, it requires a combination of data input, integration, data output and communication style. Consequently, a superteam should be implemented, that works together with the AI-chatbot to gain valuable insights and to create value for the customer. The chatbot superteam set-up will be therefore suggested in the third recommendation.

	Pre-purchase	Purchase	Post-purchase
Function	<ul style="list-style-type: none"> Help to select, advise and customize 	<ul style="list-style-type: none"> Negotiate or cross-selling 	<ul style="list-style-type: none"> Collect feedback and recommendations
Customer group	<ul style="list-style-type: none"> Potential customers 	<ul style="list-style-type: none"> Ready-to-buy customers 	<ul style="list-style-type: none"> New customers (1-9 orders) Loyal customers (10+ orders)
Request types	<ul style="list-style-type: none"> View the menu How to sign up Ingredient sourcing 	<ul style="list-style-type: none"> One box trial How to apply voucher 	<ul style="list-style-type: none"> Complaints Delivery requests Account settings
Chatbot pop-up trigger	<ul style="list-style-type: none"> After clicking through 5 different pages On the first registration page (after 30 seconds) 	<ul style="list-style-type: none"> During the registration steps (after 45 seconds) 	<ul style="list-style-type: none"> Within the account settings
Marketing activities	<ul style="list-style-type: none"> Offering welcome voucher / mini game Links to the menu, sustainability page and procurement 	<ul style="list-style-type: none"> Offering welcome voucher Referring to positive reviews such as Google Review and Trustpilot 	<ul style="list-style-type: none"> Link to blog and social media Mini games (if it is not a complaint or delivery request)

Figure 40: Chatbot in the Customer Journey (author's elaboration)

5.3 Set up a *superteam* with specified scope of tasks and responsibilities

The initial intention of the chatbot integration was to serve as FAQ machine to reduce the inbound of simple questions for the customer service agents of Marley Spoon. Hence, the chatbot currently falls under the responsibility of the Customer Communications team and has no direct input from Marketing or Customer Insights. In fact, the initial goal is already achieved and the chatbot handles a high amount of inbound to free service agents for more complex tasks. Consequently, the chatbot should now be integrated to a more advanced level and not only serve as support for the Customer Communications team, but also to collect valuable data for the Customer Insights team and as a communication tool for Marketing. It was pointed out, that the chatbots performance depends mainly on the integration and the input. The term “superteam” was not familiar to the company experts, but they all agreed that it would be a good idea to combine human emotional intelligence with the strengths of artificial processing power. For the customers the greatest value of superteams would be the experience and for the employees the greatest value would be efficiency, so it would be an overall benefit for the company.

Even though there are already a couple of AI technologies implemented within the business processes of Marley Spoon, there are no dedicated superteams yet. The suggestion as an outcome of this research is therefore to set up a chatbot superteam with a specific scope of tasks, goals and responsibilities to gain collaborative intelligence and keeping the three Cs of organizational implications of AI in mind, which are confidence, change and control. In this way, the company can establish an optimal combination of HI and AI for the chatbot and better scope its performance. Moreover, it can be worked together on the obstacles of implementing superteams in the company, which are the integration, training, infrastructure of data flow, fear of changes and finally proving that AI can do certain tasks better. The chatbot should not only be considered as FAQ tool for the Customer Communications team, but also as data collection tool for the Customer Insights team, used by Marketing as communication tool and designed by the UX team with a proper interface. Consequently, the chatbot superteam should be set up as shown in the figure below (see figure 41). Regarding the responsibilities, the Customer Communications team would still be responsible for the FAQ part and human escalation requests. The Customer Insights team would be responsible for both data collection and interpretation. In this way the CI team can also draw connections with the net promoter score (NPS) and the general CSAT score. The responsibilities of the Marketing team would be to

integrate the right communication style and promotions to the chatbot. Moreover, as mentioned before regarding the customer engagement, the Marketing team should consider some gamification and create some mini games on the chatbot. Finally, the UX team should be responsible for a proper interface and design. As one of the implementation suggestions is to use more pictures and videos in the chatbot, it is important to use the right content within the brand book guidelines. The chatbot superteam would also be responsible to improve the chatbot regarding its weaknesses. It was mentioned in the feedback comments of the chatbot CSAT score, that the chatbot was not able to help with the problem and did not answer to the question. Therefore, it should be dived more into the hand-off rates in order to optimize and train the chatbot answers accordingly.

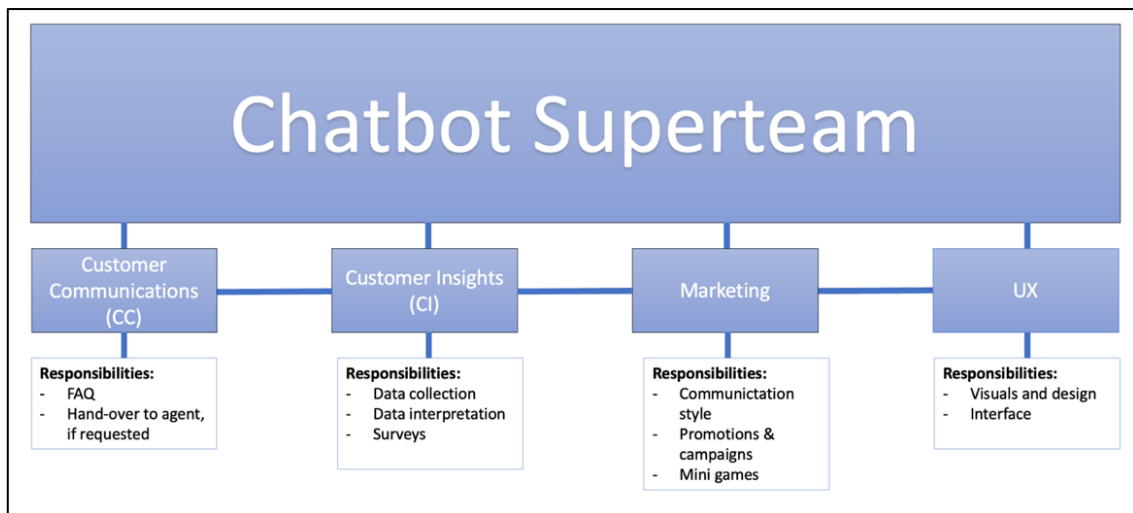


Figure 41: Chatbot superteam set-up (author's elaboration)

6. Conclusion and further research

This in-company project delivered valuable insights into the topic customer interactions with AI. By combining both, the perspective of recent literature and in-depth company expert interviews, but also considering the perspective of customers through analysing relevant survey data, this research is built on a profound source of information. The research pointed out, that AI powered interactions have a high potential as communication touchpoints during the customer journey. Key characteristics of a chatbot, such as 24/7 availability, fast handling speed and quantitative capabilities with regards to processing big data insights, are the main advantages compared to HI service agents. Moreover, AI interactions are not only based on mechanical and analytical learnings anymore, but also developing towards intuitive and empathetic intelligence. Grace to this technological evolution, chatbots can provide an automated customer experience and will be able to understand human emotions in order to react to different customer moods. In this way, the findings of this research suggest to release more of the chatbot potential and integrate the chatbot from a static FAQ machine to a dynamic brand-owned interaction touchpoint. In fact, conversational AI can help to optimize the customer journey by using proactive outbound messaging to increase the customer engagement and conversion rate on a personalized level. However, as the human touch is still very crucial for customer interactions, the technology of feeling AI still has to improve in order to make the chatbot more empathetic and accepted.

Regarding the chatbot of Marley Spoon, it is recommended to integrate the AI-software into a more personalized marketing chatbot. As a result of this research, there are three implementation recommendations to improve the touchpoint experience. First, the chatbot should be implemented more brand-owned and receive a new interface and avatar. Using the colours of the brand and creating an avatar that complies to the brand visuals of Marley Spoon, will help to create more engagement and level-up the brand interactions. Second, the chatbot should be applied according to different stages of the customer journey. By doing so, the chatbot can better understand the visitors needs and expectations of the conversation and provide the needed information. It is important the different touchpoints are consistent and built up on each other. Consequently, the chatbot can also be more proactive and create pop-ups, depending on the landing page and the information search. Third, it is recommended to set up a superteam, which is responsible for the chatbot integration and keeping track on the newest

trends in this field. The team should consist of Customer Communication, Customer Insights, Marketing and UX and having a specified scope and responsibilities.

Nevertheless, the customer survey results and well-respected research show, that not everyone is ready or willing to interact with an AI-chatbot. To understand more about the customer expectations of interactions with AI, further research and analysis should be conducted. Especially when it comes to food, which is a sensitive and important part for a daily routine, a chatbot usage intention analysis in the food sector would be helpful to evaluate an adequate integration. Therefore, it is recommended to apply the technology acceptance model to discover the behavioural intention to use chatbots when it comes to online groceries and meal-kits. Moreover, it would be beneficial to do benchmarking analysis and compare the Marley Spoon chatbot performance against other chatbots and best use cases to reveal potential improvement opportunities. The comparison with other successful chatbot integrations can help to achieve the goals for the company's chatbot. Finally, it is recommended to keep track on recent AI-developments and stay up to date with the newest trends and chatbot innovations, as it keeps evolving and can help to get competitive advantage for the business processes.

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8. Appendixes

A. Annual Results Marley Spoon 2020

Mmm!
DINNERLY

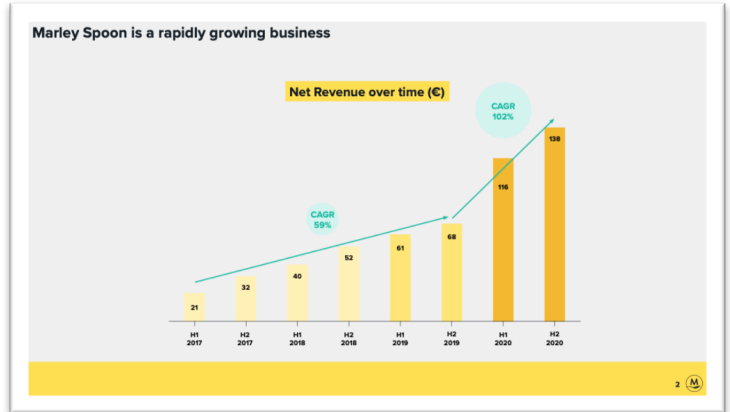
MARLEY SPOON

FY 2020 Results Presentation
February 25, 2021

This announcement has been authorized for release to ASX by the Board of Directors of Marley Spoon AG

Yum!
Tasty!
Delicious

martha stewart
MARLEY SPOON



Summary

2020 was a year of significant growth and key financial milestones:

- Doubled net revenue to €254m and grew active subscribers >80%
- Expanded Contribution Margin 4 percentage points YoY
- Delivered three consecutive quarters of positive Operating EBITDA, landing the year breakeven
- Delivered positive FY 2020 Cash from Operating Activities (CFOA) for the first time in Marley Spoon's history
- Simplified the balance sheet and increased flexibility with a sizable capital raise, debt repayment and conversions of derivatives

2021 is starting off strong with a focus on:

- Continued investment in favorable customer acquisition environment
- Operational improvements to support significant scale and enhance the customer experience
- Further benefiting from the shift in consumer behavior from offline to online shopping
- Investment in capacity expansion, digital platforms and our people
- Balancing delivery of Revenue/Operating EBITDA/CFOA and investment flexibility

*on a constant currency basis

We are a global and fast-growing online consumer brand business

	H2 2019	H2 2020	FY 2019	FY 2020
Active Subscribers*	123,963	227,431	123,963	227,431
Net Revenue (€m)	68.2	137.8	129.6	254.0
CM %	25.7%	28.3%	25.0%	29.2%
Operating EBITDA (€m)	(12.6)	1.5	(29.8)	(0.5)
Operating EBITDA %	(18.5%)	1.1%	(23.0%)	(0.2%)
Operating Cash Flow (€m)	(13.0)	(3.7)	(30.3)	4.4
Equity Ratio %			(96.6%)	11.1%

*Active Subscribers represent figures at Q4 2020 and Q4 2019

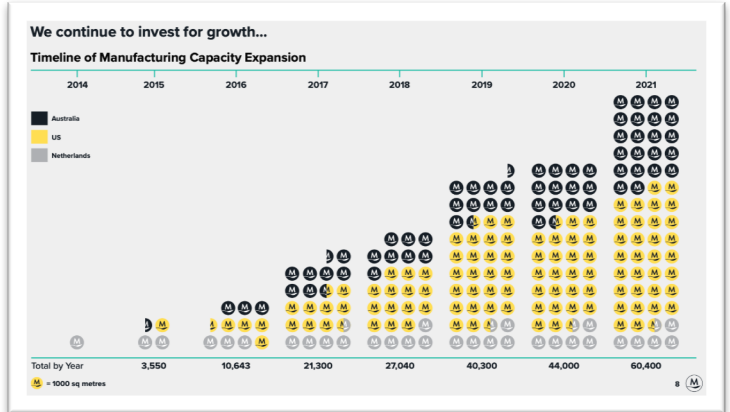
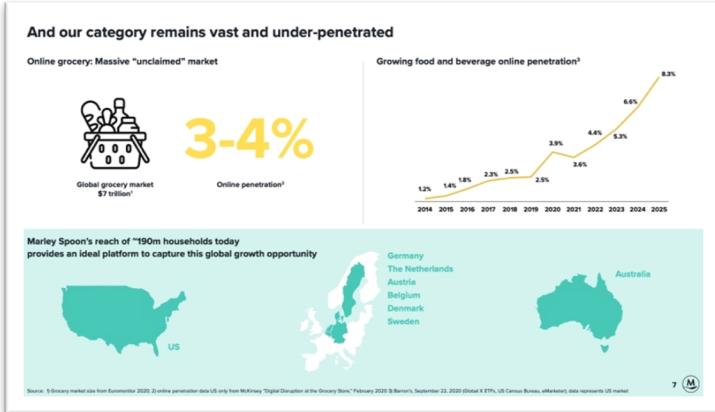
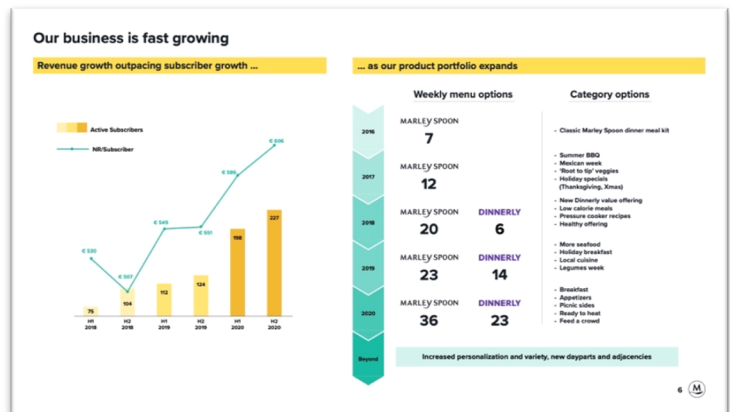
We make life easier & cooking delightful

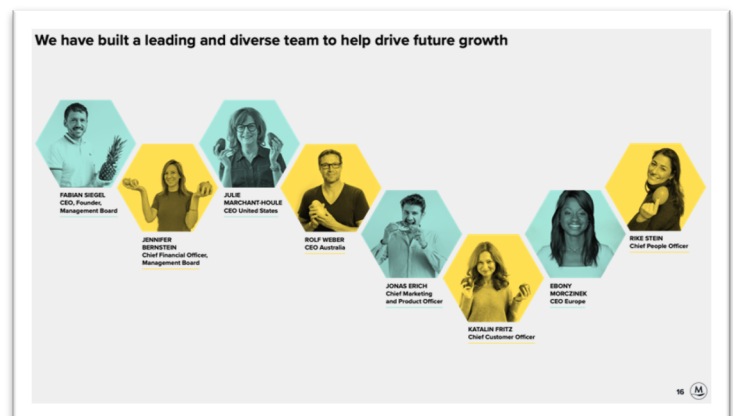
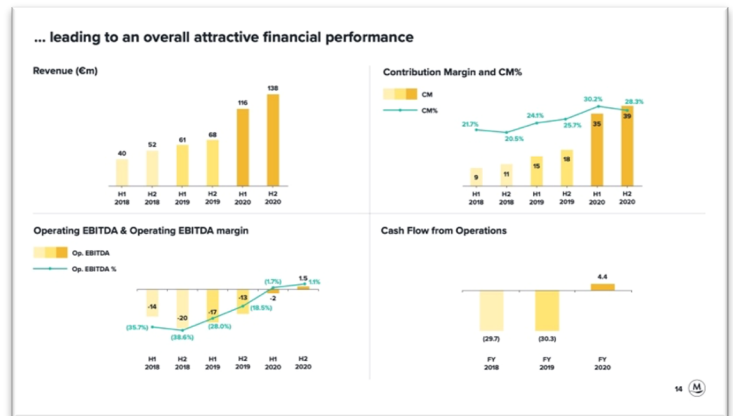
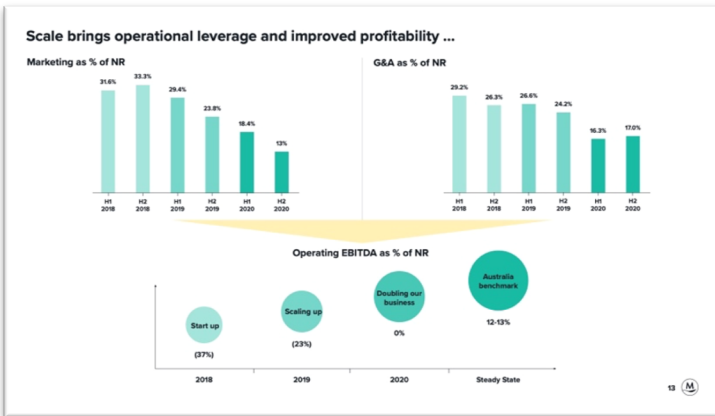
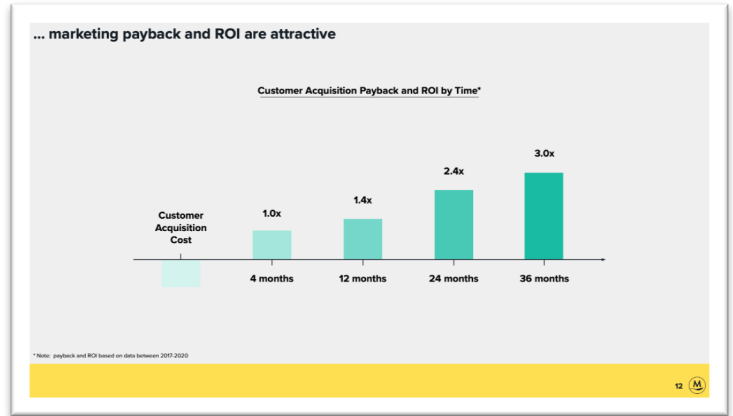
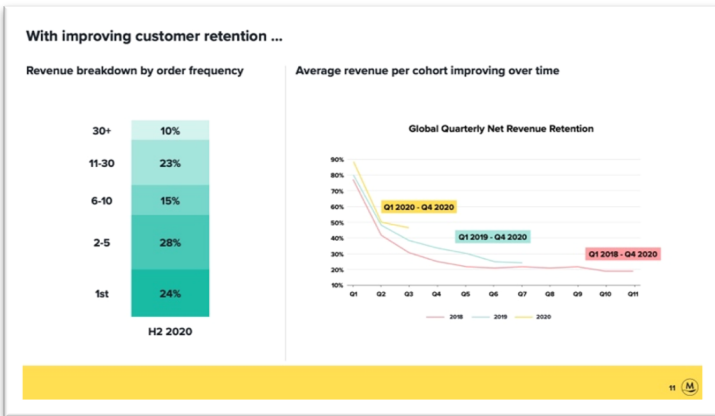
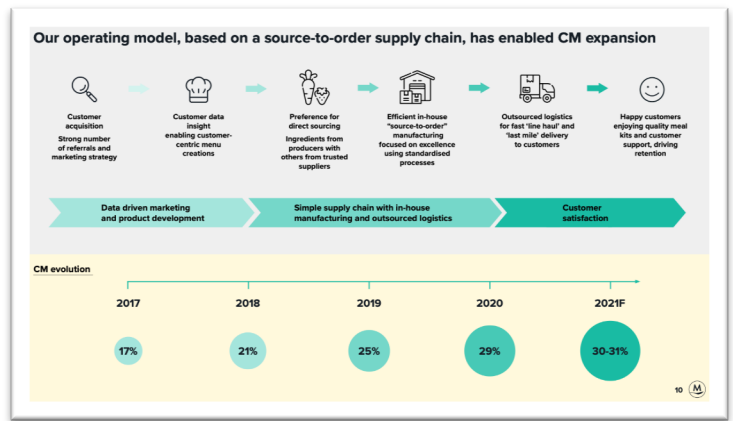
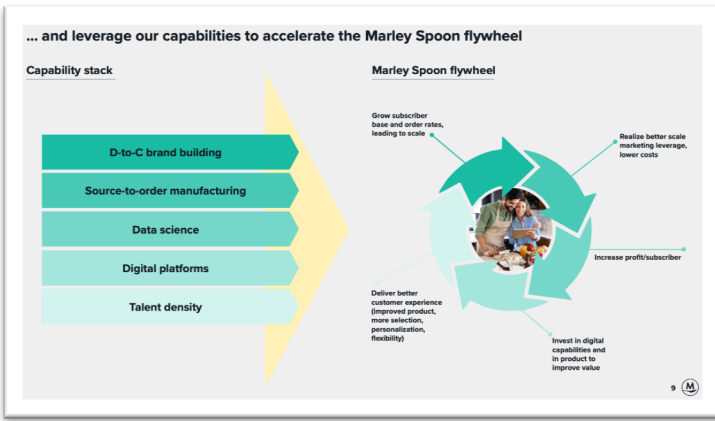
Solving Everyday Problems

- Our chefs design great recipes
- You simply cook and enjoy
- You decide what you want to cook and when
- We source ingredients and deliver to your door

Compelling Value Proposition

- Save money
- Plan easily
- Convenient direct delivery to your door
- Healthy eating: Free fresh & diverse recipes
- Eco-friendly: No waste of food, recycling of packaging






We are committed to sustainability

Reduce food waste


Source-to-order manufacturing limits waste

We only purchase what you will cook and eat

Leftovers are donated



Environmental sustainability



Climate neutral
Company

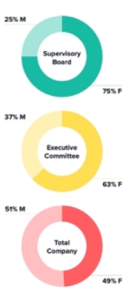
We cut emissions by:

- Reducing food waste
- Reducing energy usage
- Offsetting the balance (35,000 tons in 2020)

Marley Spoon is operating as a carbon neutral company

ClimatePartner.com/12486-1704-1001

Diversity



25% M / 75% F (Supernary Board)

37% M / 63% F (Executive Committee)

51% M / 49% F (Total Company)

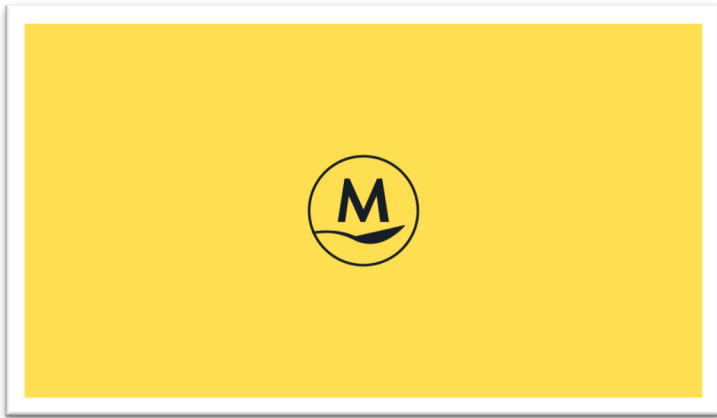
2021 Guidance

2021 Guidance

25-30%
Net Revenue growth

Investment priorities:

- Exploit favorable customer acquisition environment
- Extend range to solve everyday food problems
- Expand fulfillment center capacity
- Broaden customization and personalization through digital platform development
- Strengthen team leadership capabilities and bench



Key Customer Metrics

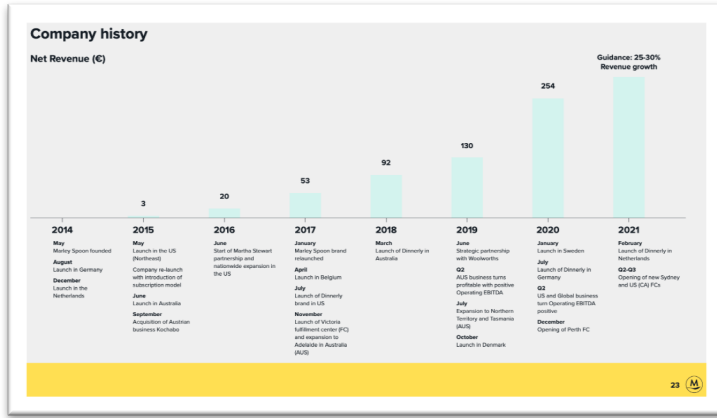
Group	Operating KPIs		FY2020 vs FY2019			
	H2 20	H2 19	% vs. FY	FY2020	FY2019	% vs. FY
Australia						
Active customers (k)	327	182	80%			
Active subscribers (k)	227	124	83%			
Number of orders (k)	3,099	1,537	102%	5,622	2,969	89%
Orders per customer	9.5	8.4	12%			
Orders per subscriber	13.6	12.8	10%			
Meals (m)	38.8	11.9	117%	46.7	22.4	109%
Average order value (€, net)	44.5	44.4	0%	45.2	43.6	4%
USA						
Active customers (k)	99	68	46%			
Active subscribers (k)	67	42	60%			
Number of orders (k)	1,012	600	69%	1,848	1,070	73%
Meals (m)	8.9	4.9	83%	16.2	8.6	88%
Europe						
Active customers (k)	161	80	101%			
Active subscribers (k)	112	54	108%			
Number of orders (k)	1,532	644	138%	2,761	1,272	107%
Meals (m)	12.7	4.9	158%	22.8	9.4	142%
Other						
Active customers (k)	67	35	91%			
Active subscribers (k)	48	28	72%			
Number of orders (k)	554	293	89%	1,014	627	62%
Meals (m)	4.3	2.1	101%	7.8	4.5	72%

Income Statement

	H2 20	H2 19	vs. PY	v%	FY2020	FY2019	vs. PY	v%
Revenue	137.8	68.2	69.6	102%	254.0	129.6	124.4	96%
Cost of goods sold	73.2	37.4	35.8	94%	133.3	71.8	61.5	86%
% of revenue	53%	55%	(2 pts)		52%	55%	(3 pts)	
Fulfillment expenses	25.6	13.3	12.3	92%	46.6	25.9	21.1	83%
% of revenue	19%	20%	(1 pts)		18%	20%	(1 pts)	
Contribution margin (CM)	39.0	17.5	21.5	123%	74.1	32.4	41.7	129%
% of revenue	28%	26%	2 pts		29%	25%	4 pts	
Operating CM %	27%	25%	2 pts		27%	24%	3 pts	
Marketing expenses	11.9	16.2	1.7	10%	39.3	34.2	5.1	15%
% of revenue	13%	24%	(11 pts)		15%	26%	(11 pts)	
SGA expenses	23.4	16.6	6.8	42%	42.3	32.9	9.4	29%
% of revenue	17%	24%	(7 pts)		17%	25%	(9 pts)	
EBIT	(2.9)	(15.2)	13.1	(86%)	(7.4)	(14.8)	27.4	(79%)
Operating EBITDA	1.5	(12.6)	14.1	(112%)	(0.5)	(29.8)	29.3	(98%)
% of revenue	1%	(18%)	19 pts		(0.2%)	(23%)	23 pts	

Cash Flow Statement

€ in millions (preliminary and unaudited)	H2 20	H2 19	FY2020	FY2019
Operating EBITDA	1.5	(12.6)	(0.5)	(29.8)
Change in working capital	(5.7)	0.1	4.9	0.8
Interest & taxes paid, other	(0.2)	(0.3)	(0.3)	(1.0)
Net cash flows from operating activities	(4.7)	(12.8)	(0.3)	(30.0)
Net cash flows from investing activities	(4.7)	(3.2)	(8.6)	(6.3)
Net proceeds from the issuance of shares	32.4	1.5	41.6	4.0
Proceeds from the exercise of share options	2.1	-	2.1	-
Net change in borrowings	(7.5)	1.5	(5.3)	3.0
Payments of principal for lease liabilities	(2.4)	(2.5)	(4.7)	(3.7)
Net cash flows from financing activities	24.4	10.8	33.7	33.3
Net increase in cash & cash equivalents in the period	16.2	(5.1)	29.5	(1.2)
Cash and cash equivalents at period end	34.6	9.2	34.4	9.4



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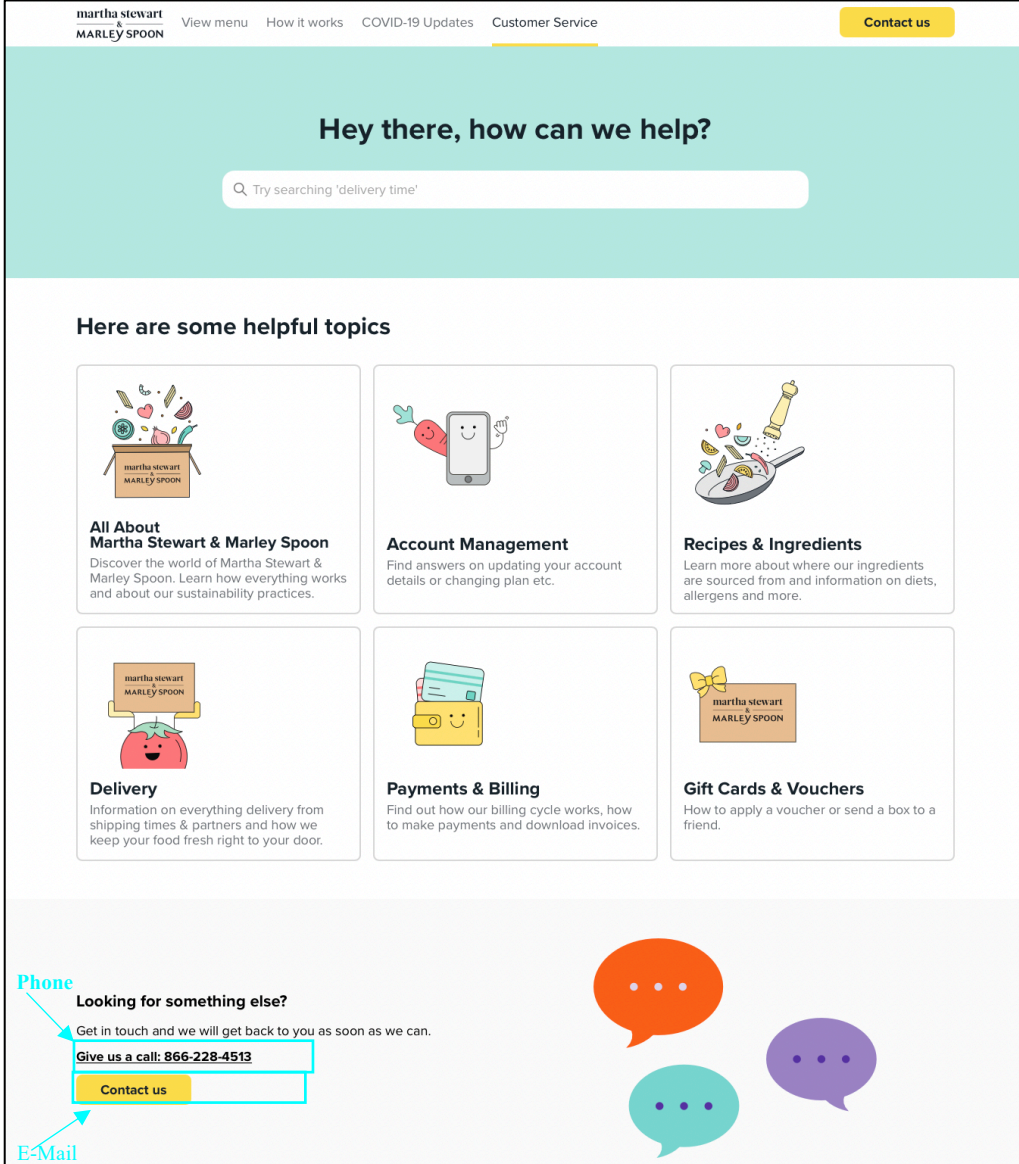


Company contacts: **Forsten Segel** (CEO), **Janette Bernheim** (CFO)

Investor relations: **Michael Brown**, **info@marleyspoon.com**, **mrbrown@pegasusmail.com.au**

B. Communication channels at Marley Spoon

Via the website:



martha stewart
MARLEY SPOON

View menu How it works COVID-19 Updates Customer Service **Contact us**

Hey there, how can we help?

Try searching 'delivery time'

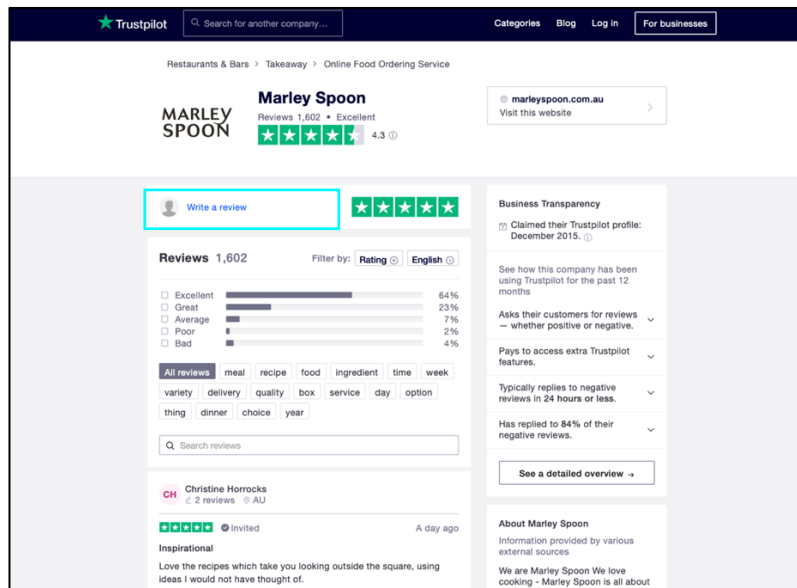
Here are some helpful topics

- All About Martha Stewart & Marley Spoon**
Discover the world of Martha Stewart & Marley Spoon. Learn how everything works and about our sustainability practices.
- Account Management**
Find answers on updating your account details or changing plan etc.
- Recipes & Ingredients**
Learn more about where our ingredients are sourced from and information on diets, allergens and more.
- Delivery**
Information on everything delivery from shipping times & partners and how we keep your food fresh right to your door.
- Payments & Billing**
Find out how our billing cycle works, how to make payments and download invoices.
- Gift Cards & Vouchers**
How to apply a voucher or send a box to a friend.

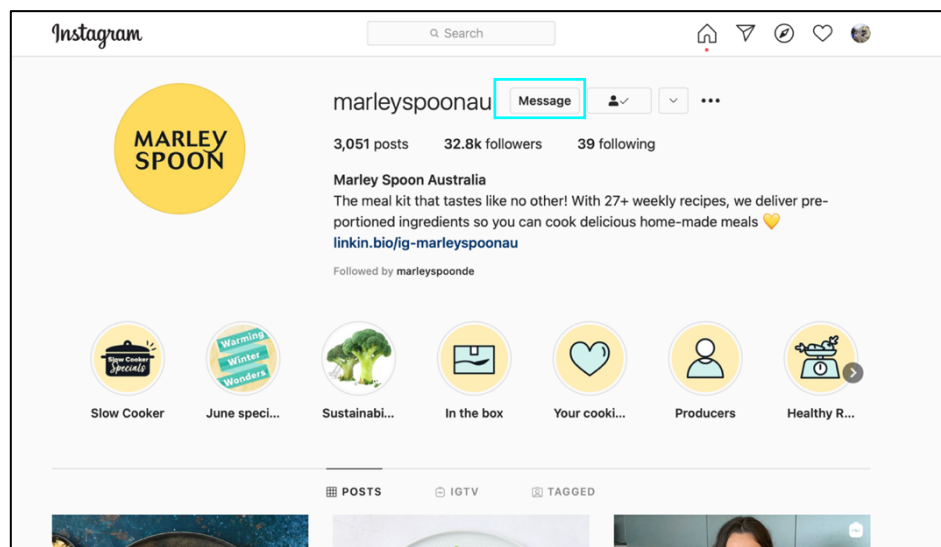
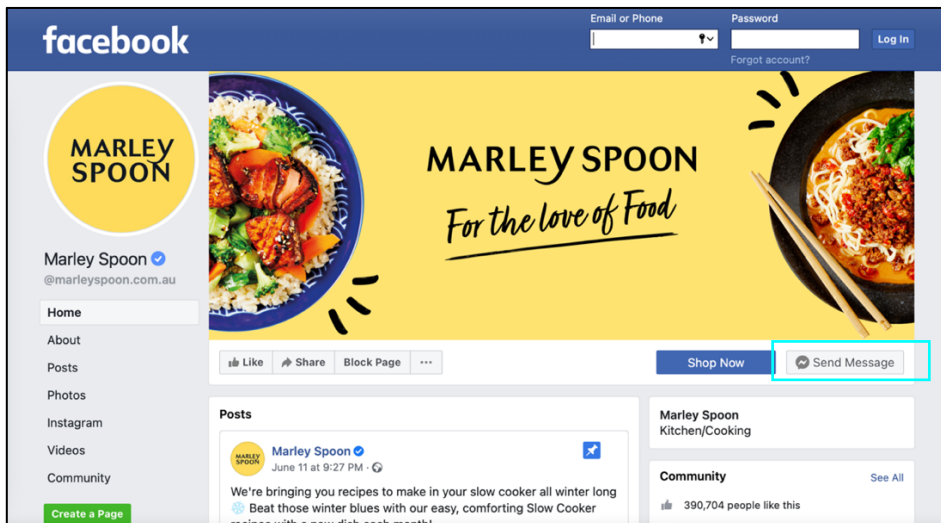
Phone
Looking for something else?
Get in touch and we will get back to you as soon as we can.
Give us a call: 866-228-4513
Contact us

E-Mail

Via review platforms e.g. Trustpilot:

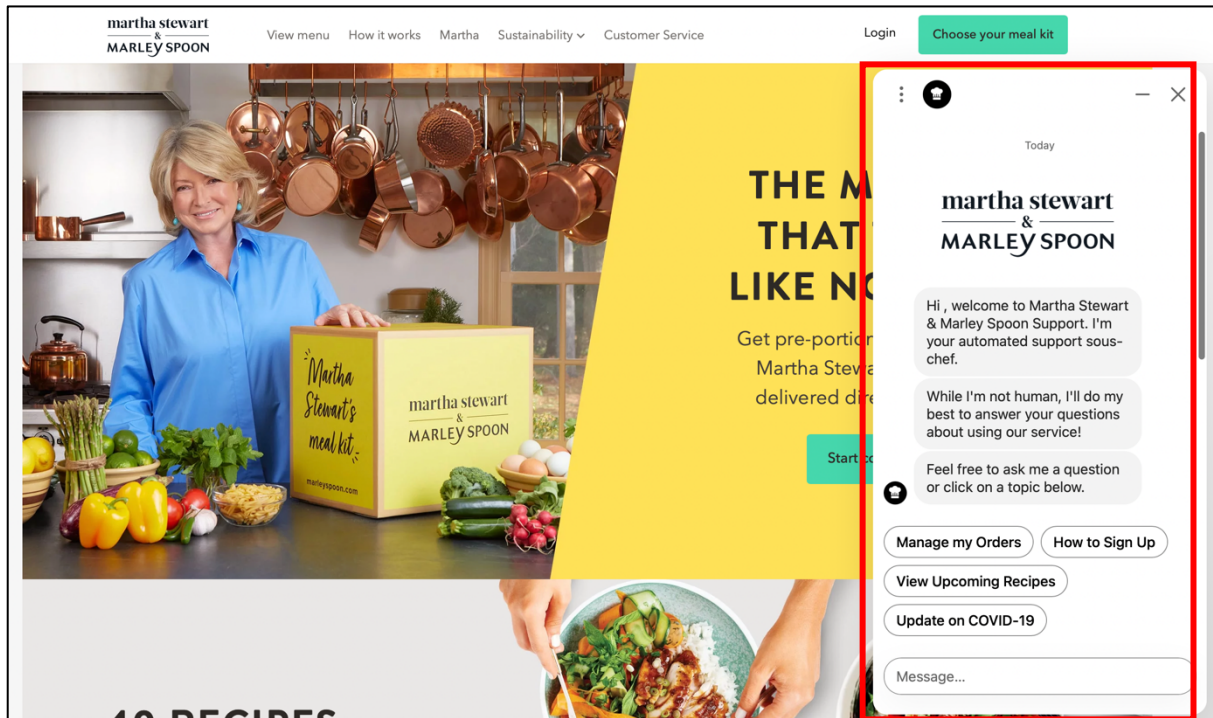


Via Social Media e.g. Facebook or Instagram (either by direct message or commenting posts)

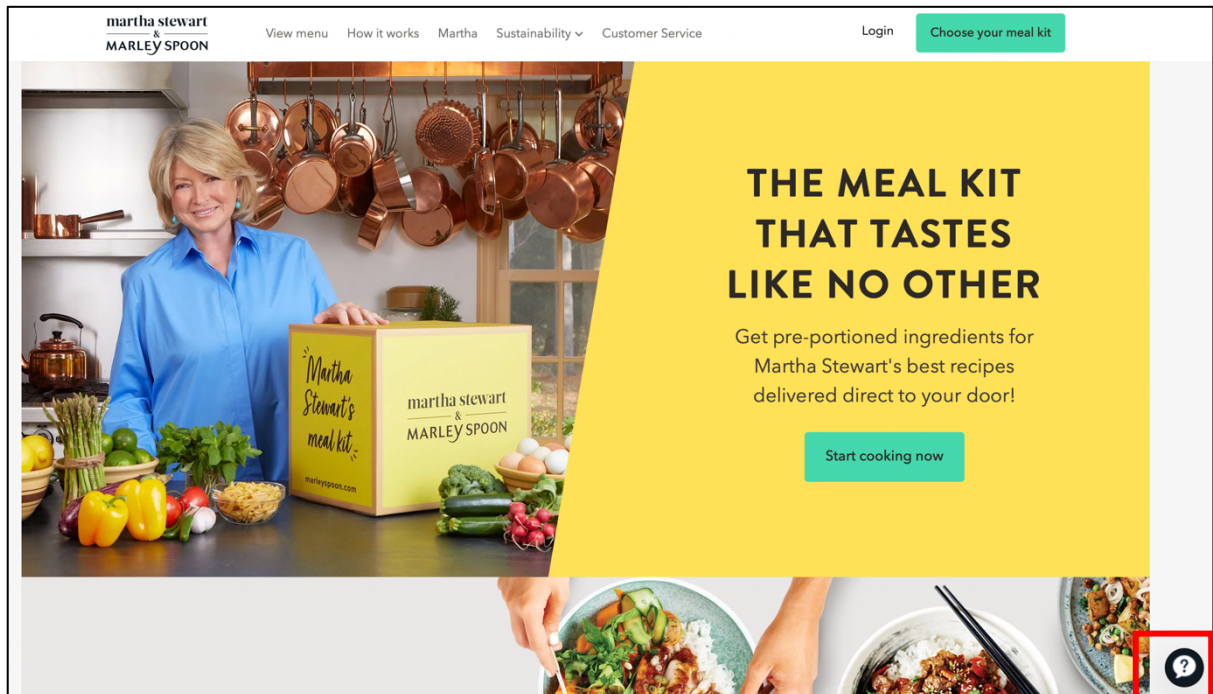


C. Chatbot visibility and interface

Chatbot interface



Chatbot visibility



D. Interviewee profiles

Tristan Eichorn: Global CI Specialist

Interactions between customers and companies through a virtual assistant (AI)
How can Marley Spoon make their chatbot more engaging in order to acquire and retain (potential) customers?



Interviewer: Jakob Rösler
 Interviewee: Tristan Eichorn
 26.02.2021



- Since 3 ½ years at Marley Spoon
- Developing technical communication internally and externally
- Help-center and chatbot

Ammar Qureshi: Head of CVMA

Interactions between customers and companies through a virtual assistant (AI)
How can Marley Spoon make their chatbot more engaging in order to acquire and retain (potential) customers?

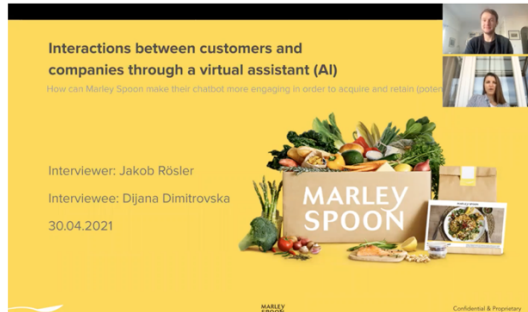


Interviewer: Jakob Rösler
 Interviewee: Ammar Qureshi
 16.04.2021



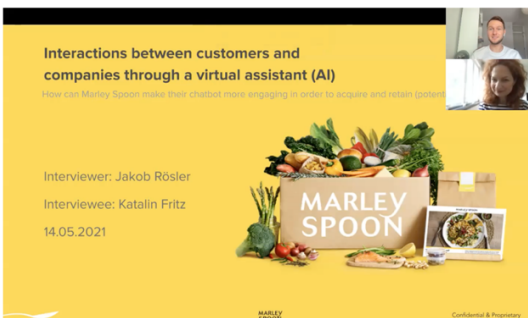
- Since 3 years at Marley Spoon
- Customer Value Management & Analysis
- Responsible for business analysis, personalized menu, marketing forecasting, CRM data

Dijana Dimitrovska: Head of Brand



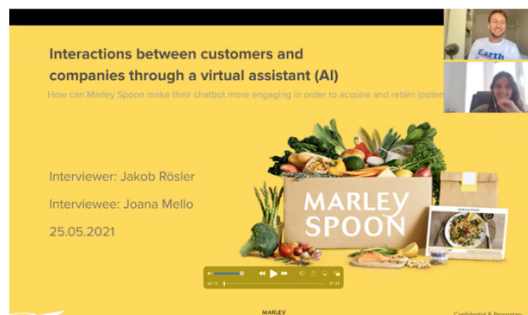
- Since 4 years at Marley Spoon
- Managing director marketing
- Responsible for global branding, strategy and positioning, as well monitoring market research and trends

Katalin Fritz: Chief Customer Officer (CCO)



- Since 4 ½ years at Marley Spoon
- Managing director of Lisbon shared service center
- Globally responsible for customer service and customer insights analytics

Joana Mello: Senior Customer Insights Manager



- Since 1 year at Marley Spoon
- Being the “voice of the customer” by analyzing concerns and satisfaction scores
- Translate data into valuable and actionable insights to the other departments

E. Interview transcripts

Tristan

**RESEARCH PROTOCOL: AI & Superteams****INTERVIEW GUIDELINES****Interviewer:** Jakob Roesler

- EU CC expert at Marley Spoon (SME social media and chatbot optimizations)
- MSc student in Marketing at ISCTE Business School Lisbon
- Interview purpose: In-company project at Marley Spoon about customer interactions with AI

Target & qualifiers: owners / top managers / experts

- Direct / first-hand experience with AI implementation (from initial to more advanced stages of development)
- Representative of Hospitality OR Retail industry

Basic introduction:

- Interviewee: Tristan Eichorn
- Function: Global CI specialist
- Main responsibilities: Developing communication both internally and externally, help-centre and chatbot,
- Number of employees in team:
- Number of years spent at the organisation: 3 ½ years

Lisbon, 26.02.2021, conducted and recorded via ZOOM

In-Company Project by Jakob Roesler

Confidential use only

Questions:

1. General AI:**1.1) How would you characterize AI and what does it mean for you?**

"Okay, in a general way, I suppose it is development. I probably looked at it overall as a kind of natural development of human innovation as in we're like kind of merging ourselves with the machines. It's a way to that humans are kind of trying to solve problems with technology. So they're going to be trying to replicate their own processes, but make them better by using technical help and technological developments. If that becomes emotional, or becomes in biological improvements, and I suppose it's a way to the whole point of everything is really to maximise human capacity for information processing, and using technology to improve that. And then you'll get to a stage eventually, where it'll be able to replicate itself, and humans will become obsolete. But we need to take advantage of that so we can always live on holiday, you know? So it can go either way, you know, it could be used for good and evil. But I'm certainly very, very, probably, in the top three, or maybe even the bad, most exciting innovation or thing, you know, dangerous, exciting thing."

1.2) In your current workplace, is AI integrated into the business process? If so, how?

"Yeah, is but I mean, it's a very basic level, probably as basic as you can get by, you know, it's simply called AI at this stage is probably slightly an overstatement. But it's certainly a big at the beginning stages of something that you could kind of begin to call AI, which is simply just recognition on a customer request, and giving an answer based upon these kind of patterns. Right. But there's, but there's lots of room for improvement and everything, you know, the whole process is machine learning. And yeah, so I mean, it is it is a thing, and I definitely think that it's going to be we're very, very early stages. And there's lots and lots of room for development. And eventually it's going to be, you know, you I expect to stage in probably within 20 years where it's almost on record, you know, on distinguished from human interaction at some point. Yeah. I mean, yeah, it's integrated, but it's very, very, very early stage. Yeah."

1.3) In which part of the organization do you think AI has its strongest capabilities and potential? (production, customer service, customer insights, marketing and sales, HR, culinary, accounting and finance, other)

"I mean, I think I think all but I think some would be more useful than others in the short term. So for example, the short term, I would say that, that, yeah, customer communication is probably where, you know, fixing basic issues is probably, you know, how it can be utilised in the short term, but I can also see it in, in other areas, such as productions, such as, you know, in terms of, you know, simply monitoring ingredients to go through, like, you know, I'm sure that the diamond in terms of how ingredients weighed, you know, and making sure these are correct, also just production, I'm not sure if that's AI, it's more mechanical, but there is definitely a potential in that where you're kind of, you know, maybe you're streamlining, streamlining processes, you know, you're wearing a dish bag or something like that, to make sure it's the correct, it's going to have the right ingredients, that should be correct. So you know, things like this, which is kind of not necessarily where it is, at some point, there's gonna be some programming in there, which is going to be going to have certain, you know, yeah, it's going to have some to make some sort of decision. And things like I would say things like marketing and sales, probably, I'm currently are probably much more in the future, because they rely a lot more urgent, and I think that that's a bit of a long way to go. But, you know, eventually, I think I think these things can be utilised in some sort of way. Maybe not how we see them now, but I'm sure that there are tools and finance accounting. Yeah, I mean, I think these are they I think I think like I mean, I don't know, where you draw the line between a computer and AI. Right. But I'm certainly we're finance. Yeah, I mean, everything is just developing, but it's just where you ways where you say this is really artificial intelligence, but in terms of its going to be in terms of interactions with web solve with problem solving, right, and leverage on the customer side. So yeah, okay."

2. The Marley Spoon Chatbot:**2.1) In which year did you start with the integration of the ada chatbot software?**

"It's been two years now."

2.2) What was the primary intention of integrating the ada chatbot (replacement, augmentation, or full collaboration)?

"I wouldn't say replacement, because we ended up hiring new people. So it wasn't like we got rid of people to, to put the chatbot in. But because we actually, were building the team, but it was, it was mainly to allow one to soak up a lot of the basic question, the repetitive work there was to get rid of, you know, give more time for the agents to do more complex interactions. And to allow the customer to have always have a 24 hour experience to prepare questions to be answered. And yes, I think I think that's the main the it really is like we were getting we were getting way too many unnecessary questions that could that we believe that you can you can use to answer without monotonous tasks, lot of repetitive repetition. So moving that way. And really the main of the main goal is to to minimise the amount of customer requests that we're getting. And yeah, and also any customer education as well. So yeah, lots of different."

2.3) What do you consider the key benefits of the chatbot?
- for the company?
- for the customers?

"As a company you're saying you're saving lots of lots of money on you know, labour costs to replicate 2007 So the chatbot offers are very expensive. And, you know, it would also not be the most stimulating job in it. But you know, so yeah, that. And for the customers giving a 24 hour 24, seven, you know, answer to their questions they might have without having to wait for a response. So that also benefits company because for example, in the time that they could be waiting for an answer, they could go and buy a new product or the knows. So yeah, that would be the main thing."

2.4) From the customer point of view, where do you see the main difference between chatting with a CC agent (HI) and the chatbot?

"The two main things would be first, just obviously, an agent can understand context, a lot better tone. And yeah, especially a company like ours, where we have lots of kind of specialised terms and stuff, but they can also be crossed over, for example, if someone talks about their recipe, that can be like a few different things, really. So it's difficult for a bot to always know this. But what we've tried to make with the chat bot is design a kind of path that the customer use to help them navigate their way through the chatbot and not use it like speaking to an agent. So we give the quick answers below, where a customer can click on instead of actually just typing in like a conversation. And as to make sure you know, try and push them in the right directions. And if being for example, landed an answer, that's not quite correct, we always try to make sure that below that they'd be we give them an option of what they actually could have been an agent is going to be a very different kind of interaction."

2.5) Regarding the acceptance of customers chatting with a chatbot: Do you think they trust and accept answers being provided by a chatbot?

"Yeah, I think they do on the majority. I think obviously, you see the ones that they don't. But if you actually look at the numbers of people that using the chat bot, overall, the majority majority, you know, seems to find what they're looking for. So So yeah, I think sometimes, of course it doesn't. But I'd say if you don't, yeah, if you just look at the hard numbers, and how much the chatbot takes and doesn't end up handing off to an agent, then the only answer would be would be yes."

2.6) Do you think the chatbot can help to improve the overall CSAT of Marley Spoon?

"I think it can more in the future? I think it can but not really, by the way that we think not, I think, I do think that all customers would prefer to have a human interaction 24. Seven. But, you know, we don't have a capacity for this. And I think it's better for them to have an answer straight away than to have to wait for maybe, you know, on some occasions a couple of days for an answer. So that we've got a yes. But I think if you're talking about the quality of the conversation, like, you know, having a chatbot or having a person on hand, that, you know, it does depend on the issue, sometimes they just want something very simple. And they just get the clear, nice answer, which actually can be a better experience. Because, for example, say you ask a simple question in the chat bot, it can give you a very comprehensive overall answer. Well, actually, the human is going to be bad timing is good. This, you know, trying to actually be might be more simple. So actually, the chatbot can give a bit more information. But I still think overall, just for the understanding, kind of sense, then then customers still prefer human interaction. But if you say can help, then yes, it can help."

2.7) Do you consider the chatbot's only purpose as a quick FAQ & support machine or do you also see customer engagement potential within the customer-chatbot interactions?

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"There is so many so much potential in it? I mean, it could it could help with, you know, creating orders and stuff, it could, it could, it should be able to do stuff in their account and create actions, which be nice. There's much potential for it, not necessarily to be an FAQ or support machine, but like a guide, or kind of like, you know, live kind of, you know, I guess it is still a support machine. But I mean, that's a little bit, I think, I think it can definitely be more dynamic, or it can be more more targeted on certain customers. And since, you know, what issues are having, like, you know, these kind of things before, you know, the problem they're having before they have it. That definitely lots of potential there. Yeah, I mean, now, it's definitely, you know, definitely is more than that, but I think in the future, it's all about integration, really, and integrating AI systems with, with the chatbot. And I mean, that's, there's a lot of work to do something like that. But the potential is there."

2.8) Do you think the chatbot is able to offer a personalized user experience and adapt to the customer journey?

"Yeah, I think it is based that it's a lot, a lot of work to create that. And the question is, is that an immediate priority for us? Probably not. But yes, I mean, that's possible in the future. Be definitely. And would that be something that can give value to us and the customer? Definitely, yeah. But again, I think, you know, we're still in a stages, and there's many different, you know, it's difficult to have all these different kind of platforms. We're using our own integrations and actually trying to fit them all together. So they work completely in harmony. It's it's a, it's, you know, not not something you can just switch on and off. It's a sure, kind of, yeah, yeah."

2.9) Do you think the chatbot is capable of recognizing emotions and can also provide answers on an emphatic level towards the chatter?

"And now it's not, but I think it could be? I think it definitely could be. But I think that's probably more on the development on on Ada side or on the chatbot side. I mean, there are probably things that you could do like sense when a customer is using capital letters. Language tone, I think these things can be trained in. And by, but I think we're still very early stage."

2.10) How many employees and how much time is currently involved into the integration of the chatbot?

"I guess it's you and me that are involved into the chatbot? At the moment, right. Sorry, couple of hours a week, unless we're doing something major. Yeah. And then the meetings with HR account consultant to employee employees, and a couple of them, let's say average, I mean, probably average four hours a week seeing that, you know, sometimes you might work a day work on it, but most of the time, I only sometimes get a jacket an hour week and make it you know, make a tiny change pretty quick. But we could definitely in terms of like maintaining the book, we probably don't we probably don't do enough, we probably should do that more. And it because we tend to have it on autopilot. Probably we could utilise it more if we if we spent more attention on it. But, you know, it's something that we set up and it's working well for us. So it's like why Yeah, it's not not really a reason to, to you know, why fix? I mean, it's not broken."

2.11) On a scale from 1 to 5: Marley Spoon is obtaining most of the chatbots potential and capabilities. (1: strongly disagree, 5: strongly agree)

"Yeah, I wish I wouldn't say a four because, I mean, maybe it could be a four. Like, I agree, I think there's stuff that we could do is kind of like would take a lot of work to to, to implement, and the benefits would be there. But I don't know how much benefits would there be there? So we say, No, I think we're utilising the most basic functions of it, what is meant for everything else, there's definitely more that can be done. But the stuff that can be done is not 100% how effective that will be. And it's, you know, a lot to implement. But I mean, that there's a B. So I think a for, I think, for if we are talking about, you know, the last years, but I think now is a time where we're going to start, you know, actually maybe it's going to start going down, maybe we should start using it more."

3. AI & superteams at Marley Spoon:

3.1) Are you familiar with the term 'superteams'?

[If No: This refers to groups of people and intelligent machines working together to solve problems, gain insights, and create value.]

3.2) What do you think of this concept?

"I mean, yeah, I mean, to make make sense, I think the you know, I don't know exactly if that, you know, I think the name is a bit unnecessary. But I mean, everything should be a mix of right, using, you know, the strengths of human emotional intelligence and the strengths of artificial processing power is probably yes. Make sense? Right."

3.3) Have you implemented superteams in your company?

[If Yes: what was your main purpose of implementing superteams (e.g., cost reduction, quality enhancement, improved customer experience)?]
[If No: How likely are you to foresee the development of such superteams in your organisation?]

"Yeah, I guess so. If you consider us this? Isn't the chatbot Yeah, I mean, isn't in the chat. But, uh, yeah, maybe not soup? I wouldn't call it a super. I mean, in terms of Yeah, we use the chat bot. We use the we use the technology of the chat bot, but we're also using our our intuition."

3.4) What would you consider the greatest value of superteams for your company?

- for your employees?
- for your customers?

"I mean, efficiency, right? I guess, for both sides."

3.5) In your opinion, what is the optimal combination of human intelligence and AI to realise the ideal superteams, in terms of intelligence, capabilities and allocation of tasks? (ref to feeling economy, feeling jobs, division between soft and hard tasks, transactional/routine vs. Relational tasks).

"I would say that ever going towards ever pushing the human side out of it until it's only the necessary you know, what can a human do better than, than a machine? Probably it's probably humans are doing too much now. Though, So, yeah, I mean, really, the humans just should just be like the puppet masters right. And machines should be doing all the hard work we want."

3.6) What do you consider to be the biggest obstacle / challenge of implementing superteams in your organisation/company?

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"Integration. Like you know, technical coding developing Yeah, integrating different systems every company is using you know, their own have their own complete setup, actually using these tools that are going to like completely just fit into how an organ a company set up right and that takes unique. Like, yeah, yeah, just go for it. And skills of course."

3.7) How do you think people on your team / at your organisation may view such superteams (e.g. beneficial or more as a threat)?

"I think beneficial. Hmm. Well, I think I think beneficiary was when there's a I think if if the team members were to go back 20 years ago and do the same job, that'd be absolutely shocked about the amount of money work. And I can also I can confirm like, it's, the shepherd is already a big cap, like taking over lots of work from from us the CC agents, so yeah, I wouldn't feel threatened by it."

3.8) How would the introduction of more AI applications impact the wellbeing of employees?

"Thinking about like, other things, I think this is a bit of a, like, I understand what like, you know, okay. Are they going to be scared that AI is going to take the job, really, but for me, I'm not sure if it's really the kind of companies I mean, it is company's responsibility in a way, but this is more of a on a societal question, right? Like, you know, we should be we should alternate, ultimately be happy that any of these jobs that that can be done for a lot cheaper, and a lot more efficiently. But I understand the concern of people saying that, you know, you know, what are we going to do now, but I mean, ultimately, that's the kind of society's problem to solve. And it's a good problem to solve, because really, we should people should be using their skills and doing things they love doing. And so, you know, maybe it probably won't, maybe we'll never get there. But in my eyes, it should be seen as an opportunity for that. I think that the human role is in this is not going to go away anytime soon. So definitely have a long time to kind of mode mould us into a way, you know, which, which is beneficial. So, so yeah, I think. And like I said, when we did introduce chatbot, when it wasn't like we were replacing anyone we were simply building, we're scaling up. So we, you know, we built the chatbot, as well as bought in more and more employees. And we could, you know, I think the tasks they are doing probably felt more or less mundane than they did before. Because before without the chatbot, you're you're answering 50 customer requests a day of just where's the menu, and then they were just copying and pasting the menu link into a chat, that can be pretty monotonous after a while. And, yeah, I think it really depends on the strategy. But how are you? In that? Yeah, so it's down. So you kind of take us to the AI to take away those kind of pointless tasks? And then if that's but then it's the company's responsibility at that stage, I suppose to make sure that, that Pete, their employees are then feeling like that. Work is purposeful."

3.9) Do you see whether people with different roles within your organisation would have different opinions about this? (e.g. top management / managers / employees / frontline staff)

"Um, I think most people are heading in the same, I would look in the same direction, I think people would have their own opinions. And but I think most people understand that using technology to support and to grow companies positive thing I would say, especially in a company like ours, which is kind of one of the values is to constantly grow. But I think everyone will always have their, their own personal feelings about, you know, the kind of how they like to work or how they like to, you know, that how they like to have, you know, that what their perfect idea of customer service is, essentially, um, but I didn't think that be much, you know, I didn't think it'd be angry disagreement, maybe different opinions. Sure. But yeah."

4. Future outlook:

4.1) In your opinion, what is the direction of AI development in the future (say next 20 years)?

"Um, Wow, it probably will just be used for marketing and for, you know, selling people stuff and for stealing good, you know, sharing your data and do we just go down there actually we've been going on, that's improbable, at least the most thing that will be most out in the open. But I think that there will be very exciting things happening by people that are developing really interesting technologies. And I think the most the most exciting, but dangerous is actually the kind of probably like, Well, I know that this was a tale that was, there was a bit it was like, that was the kind of the chip in the brain kind of idea. I think that's probably the you know, that the mixing with human? I think that's probably, maybe that's maybe that's after 20 years. But yeah, and in terms of everything else, you know, let's be honest, it would probably be just really, really selective, amazing, it'd be perfect more personalization."

4.2) In your opinion, what would be the most optimal development of AI in the future, and what kind of impact will it have on business processes?

"Well, the the most optimal is when when AI can replicate itself, right? Or when, when So? So, once, if you can, you could, you could, you can create an AI that can build an AI. And then and then, and in the space of, you know, can process the amount of think thinking that would take human 1000 years in a matter of seconds? And then it just replicate itself? And the problem is, is the problem the problem is, is, is the programming of the intentions? But there's the also the old fallacy, which is you build a replicating stapler, or something like that, and it just, you know, it just will go on to, to make turn the world into a stapler? Or, you know, like, that kind of thing, right, just so yeah, that's its main purpose is to just make sure it's stapled as much as possible. And so I'm probably getting a bit ahead of myself. I don't know, I don't know, it's very, very exciting. So I think you'll have a huge impact. I think the biggest impact on business will be the the labour automation, and how the world reacts to automation. And yeah, but at some point, you know, it will be beneficial for businesses to have to subsidise these kinds of things, because otherwise who's gonna be buying their products if no one's got the job? So governments to you know, roll out some sort of UBI Yeah, but I think I think the ramifications of AI goes far further than business processes, and the business processes are going to have to react to that, more than actually, how reacting to how the AI is, is, no, just the day, their day to day work, right. I think, you know, further outlook, that's going to be the the main thing that we can we can we can improve our processes as much as we can, at the end of the day, that we're still living in a world which is going to be heavily impacted by by these kinds of technologies. So it's how the businesses react to that, or how governments react to that. Actually, how people react to that, like, whether people don't have a purpose anymore, if they don't have a job, and how do we find purpose?"

4.3) Overall, how would you characterise your views concerning the potential of AI in shaping our future business landscape? (excited, scared, hopeful, etc.)

"I think that's, like, I hope that that can be a great thing. But I you know, and I think, again, people can do work, that's not necessarily going to be the stamp of AI such as you know, you know, art sport music. Human teach, you know, these kind of much more emotional Kind of, yeah, just interactive kind of jobs. But because yeah, I mean, we could in terms of, you know, customer again, I still stand by the point that people still prefer, you know, people prefer to go to a people who prefer to go to a bar and have a human serve them or a restaurant and a human side of them, rather Yeah, I mean those saying that, you know, you do go to McDonald's and probably I would always go for the bloody machine. No. But I still think I still think there would always be, there will always be a place. And then we just have to we just have to emphasise where best how to how to utilise humanity strengths and how to utilise the technology that in the end, we still created."

4.4) Would you like to see more AI integrations within your customer insights team?

"Yeah, that's a simple answer. Yes."

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Ammar



MARLEY SPOON

RESEARCH PROTOCOL: AI & Superteams**INTERVIEW GUIDELINES****Interviewer:** Jakob Roesler

- EU CC expert at Marley Spoon (SME social media and chatbot optimizations)
- MSc student in Marketing at ISCTE Business School Lisbon
- Interview purpose: In-company project at Marley Spoon about customer interactions with AI

Target & qualifiers: owners / top managers / experts

- Direct / first-hand experience with AI implementation (from initial to more advanced stages of development)
- Representative of Hospitality OR Retail industry

Basic introduction:

- Interviewee: Ammar Qureshi
- Function: Head of CVMA (Customer Value Management & Analysis)
- Main responsibilities: Business analysis, personalized menu, marketing forecasting, Data Pm + CRM
- Number of years spent at the organisation: 3

16.04.2021, conducted and recorded via ZOOM

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Questions:

1. General AI & chatbots:

1.1) How would you characterize AI and what does it mean for you?

"That's, that's a tricky one. Everyone has a different definition of AI. So I mean, artificial intelligence for me. And then very simple words, I would say it's, it's basically anything that we use machines for, to improve the performance of let's say, humans are things or to do things humans, humans are not necessarily capable of doing. So that would be like the very simplest definition. In the typical sense how AI is characterised these days, it's more about all this prediction, modelling and a lot of number crunching. And, you know, then some people also differentiate between AI and two different domains. So they would be like, data science and machine learning. And this is artificial intelligence. So AI is considered more of like, you know, the top class of within within prediction modelling, it's like, you know, when you start going into into robotics and all that stuff. So that's, that's typically how most people would look at AI. But for me, I would just put it in very simple terms, which would be anything where humans use machines to improve their productivity to do computations, which they are not necessarily capable of doing themselves."

1.2) In your current workplace, is AI integrated into the business process? If so, how?

"Yes, and so it is it is partly integrated. So, for example, I mean, if we talk about prediction modelling are in and more and more kind of top notch definition of the AI. So there are a few processes where we do have AI. So for example, we have a recipe recommendation engine for the customers. So every customer that goes on the website, and you have a menu of 2025 recipes, the order in which you see the rest of these is different for every customer, depending on what they have ordered in the past what data we have then, right. So that is already fully integrated into into the complete process end to end. That's one there are, we're also doing some for example, forecasting of which recipe is going to sell how much and that's the eight weeks or 10 weeks from now, that is also for the integrated process. We have churn prediction there, we predict whether an active customer might churn in the next seven days. Because they had a complaint because we see other signals in the data, they're skipping too much or you know, they they pressed on some button, they went into the cancellation flow, but then decided not to cancel, right, things like that. So in quite a few places, it's integrated into the business processes, whether it's integrated everywhere, and whether we are doing everything we can with the I definitely not think that there is a lot more to be done."

1.3) In which part of the organization do you think AI has its strongest capabilities and potential? (production, customer service, customer insights, marketing and sales, HR, culinary, accounting and finance, other)

"Mike, I would say I would say all of them, it's a different use cases, but if I had to rank them, I would say HR and accounting maybe not so much. You can tell this parts of it but maybe not the highest potential. But production, Yes, customer service. Yes, customer insights, marketing, finance, culinary, all of them have a huge potential for AI."

1.4) Business analysis, Personalized menu, Marketing forecasting, data PM + CRM are your main responsibilities at Marley Spoon. To what extent is AI already involved within your tasks and responsibilities?

"Okay, so personalised menu is like fully AI, or intercessor, that is 100% ai, that that's part of what the data science team does. So it's one model within the scope of the data science team. So that one is for the AI business analysis. We do parts offered through AI, not everything, because a lot of analysis is like very simple. It's simply reporting or some ad hoc analysis, you don't really need AI for that, because you will end up spending more time writing the code than doing the analysis of the next sale or whichever other to marketing forecasting. Currently not AI, something you're working on at the moment. So that should be based on the a fairly soon. CRM parts of it are driven through AI. So for example, churn prediction feeds into the CRM system. And then CRM triggers certain offers to certain customers based on that. We also have customer segmentation, which is done by you know, AI, which also decides which customer gets what type of communication. So CRM, as I would say, 30% driven by AI, the other 70% is currently not driven by AI, whether it be 100%. Now, there are still things that humans have to do."

1.5) What is your opinion about chatbots?

"I do, I think chatbots word crate aware there is a very high volume of customers, we're trying to reach customer service, for example. And if the chat board is smart enough to route these customers to, to the right place, or, you know, to the right, for example, customer service agent or someone. So my opinion is a bit divided on chatbots for that reason, because I've seen some chat bots that work very well. And so for example, if you look at it maybe Vodafone's chatbot and they they really like go into detail and take the customer to the right place. And if that's really an issue, then they say okay, you can raise your ticket here, and it goes to the right person. And that is without any interaction with any human said. So they already kind of kind of cut out a lot of the volume that's going to come in to customer care. But then I also see a lot of chat bots, which are very basic, they are just like FA Q's. So which is just like, you know, having this FAQ on page on the website, and all those chat bots are doing is customer asked a question, they pick some answer from, you know, from that FAQ database, right. Which I would say is mine. Yeah, it still works. But yeah, I would say in my in my opinion, that's probably not the best use of chatbots. Because that's simply like having an FAQ page and someone you know, pressing Ctrl F and typing in two keywords. Yeah. Oh, we are looking for this and it just crowds down automatically. So that's kind of my opinion. It's like, it's not like 100% in favour. It's not 100% not in favour. It really depends on the use case"

1.6) Do you think a chatbot can help to improve the overall CSAT of Marley Spoon?

"I doubt it. If you're honest, I that this is a seaside is more about customer satisfaction. I think what a lot of chatbots are used for as as getting the customer to the right place and channelling the volume of inbound to the right place, or maybe cutting down that volume. So it's kind of some cost efficiencies and operational efficiency. Does that really have an impact on CSR? I would have a question that I think at the end of the day, depends how good the chatbot is. But the impact on Sisa, but I'm not sure. In fact, on other KPIs, probably there's a there's a higher correlation."

1.7) Do you consider a chatbot's purpose as a quick FAQ & support machine or do you also see customer engagement potential within the customer-chatbot interactions?

"Yeah. Again, I would say proper chatbot should have its it shouldn't just be FAQs. I mean, it's more about you know, engaging the customer taking them to the right place and having that interaction."

1.8) Do you think a chatbot is able to offer a personalized user experience and adapt to the customer journey?

"Yes, it shouldn't be able to do that. Again, the top notch chatbot should be able to personalise everything. So if a customer asks, for example, oh, I I'm, when am I receiving my next order? Or, you know, oh, what, how much did I pay for my previous order? The chat bot, ideally shouldn't be able to answer that. So that should be able to pull that right data for the customers. That's should be very personalised chance."

1.9) Do you think the chatbot is capable of recognizing emotions and can also provide answers on an emphatic level towards the chatter?

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"Yes. should be able to do that. I mean, it's, it's, it's the NLP domain of data science, right. And neuro linguistic programming. So usually, those algorithms can be trained to pick up on the customer emotion or sentiment, whether it's negative or positive, or how pissed off the customer as or as the customer happy. And you can kind of tailor the journey within the chatbot depending on that."

2. AI & superteams at Marley Spoon:

2.1) Are you familiar with the term 'superteams'?

[If No: This refers to groups of people and intelligent machines working together to solve problems, gain insights, and create value.]

"The term itself now, but I think I know what you mean by but I haven't heard this particular term."

2.2) What do you think of this concept?

"This concept, I think it's already there in a way, right? I think super teams is just just a label on top of it in a way, but I think because humans and machines, they already work together in a lot of domains or in a lot of teams. So it's a matter of labelling whether you call them super teams or not."

2.3) Have you implemented superteams in your company?

[If Yes: what was your main purpose of implementing superteams (e.g., cost reduction, quality enhancement, improved customer experience)?]

[If No: How likely are you to foresee the development of such superteams in your organisation?]

"I think that there are quite a bit of super teams and more or less, some of them are with me or not with me. So for example, we have the business analysis team, which according to this definition, is a super team. So we're there. I mean, the main purpose as basically being able to do better analysis, maybe pick up on things human wouldn't be able to write to take forever to kind of, you know, pick up on all types of combinations within the data, which our machine would be able to do in like 10 seconds, right. So it's kind of send that in the goal is to improve that efficiency, get insights which you might not be To pick up on events, what else? There is a CRM, of course, over there, it's better customer service. Revenue improvement, cost reduction. Not really. But so yes, it's over there. It's about productivity, revenue, improved customer experience, and CRM. There is data science team, which was actually in a way, the AI team, they build these models for other teams, right? So they basically help other teams become super teams. So that's like the super super team in a way. But yes, I mean, other than this, so those other teams with me other than that, there are also quite a few other teams that that count there as customer insights team, which use NLP to a certain degree on customer comments. So so that's also I would say, it's a super team powered by AI. cc, I don't have complete visibility on but I think parts of it are like you guys are working with chatbot? I'm sure there are other areas as well. So yes, I think we are super teams all over the place."

2.4) What would you consider the greatest value of superteams for your company?

- for your employees?

- for your customers?

"For the customers, better customer experience, more personalization, tailored experience. That's a small mainly that for the employees. In one thing is, it's just interesting, because they would, they would see things and learn things, which they wouldn't have been able to tell themselves. That's also in our way, rather than just interesting. I mean, it's kind of what's good from a skills point of view as as an employee, because that's kind of where the word that's moving, right, so so you should, in the future, be able to understand AI to a certain degree if not being able to do it yourself. So that's kind of like improving your skill set as well, as a company. Of course, there is a lot of value, there's a reason everyone is moving towards that direction, right. So there is there is cost reduction, there is revenue, improve profits, operational efficiency, better csod. So all kinds of things you can think about."

2.5) In your opinion, what is the optimal combination of human intelligence and AI to realise the ideal superteams, in terms of intelligence, capabilities and allocation of tasks? (ref to feeling economy, feeling jobs, division between soft and hard tasks, transactional/routine vs. Relational tasks).

"I think it depends on team to Team To be honest, I don't think there is a generic answer to that. I don't think AI is going to replace humans. That's a question as I've been asked before, you know, in your opinion, is AI going to replace humans going to replace the CRM team or the CC team? I don't think so. At least not for the next 1015 years that And beyond that, no one knows. You need humans to run these AI tools and to hit computers only understand what you have kind of good at them to understand. Right? So there is still a human element to that. The right division of kind of task, or how much should be AI versus how much should be human intelligence, I think it really depends from team to team. For example, in Customer Care, yes, you can have AI in a lot of places, but you still need that human touch to talk to the customer. You know, no one wants to talk to a machine. And marketing depends within the team. So for example, ai could on the customer acquisition side, for example, if you're trying to acquire customers from Facebook, or Google AI does manage and can manage a lot of which people you target with your ads? Or are you are you bidding the right amount of money for those ads to be placed at the right places? But still, there has to be a human who takes that decision. You know, who knows, okay, this is my budget or, you know, this is what I want to put out what the competitors are doing radio machines currently cannot do that. So, as I said, so that, I think that the breakdown really depends from team to team, how much you actually want to use there and how much kind of human the human thinking has still has to be there."

2.6) What do you consider to be the biggest obstacle / challenge of implementing superteams in your organisation/company?

"And more or less prune the biggest obstacle. I think it with the proving that AI can do certain things better than humans can. The reason I say that is AI takes a bit of time to build every single use case takes a bit of time, then proving that it actually works and does something better than we were doing before. takes another few months, right? Because you have to do proper measurement of KPIs, test versus control, then all that. So getting that buy in is not always the easiest thing. Also, with AI, the other thing is, sometimes it turns into a black box. So there are a lot of things you can explain what's happening within these algorithms. But then there are a lot of things that you cannot explain, because it's so personalised. Like for example, the recipe recommendation engine. If someone comes and asked me, hello, do the recipes that have I don't know, less proteins? Do they sell more or less? There is no one answer to that, because it's not really personalised that a customer they want, right? So and then a lot of people who are not familiar how AI works, they don't like those kinds of answers. When when you say okay, you know, but it's hard to explain it, we can tell it words, we can show him the KPIs it works, when we cannot give like these generic answers. So getting that buy in from people who are not familiar with AI is as challenging quite often, just because of that thing that it's hard to explain what goes on inside the box. So I think that is kind of that biggest obstacle, now we're getting that right level of buy in from different people. And the time it takes to get to that level very develop something, deploy something and then prove that it works."

2.7) How do you think people on your team / at your organisation may view such superteams (e.g. beneficial or more as a threat)?

"I think, beneficial. I haven't heard of anyone saying or thinking that it's a threat. I know it happens and some of the old fashioned organisations, so very typical big corporate companies, where people have been working for 20 years, and someone comes and says, you know, hey, let me try to automate this for you or do it in a better way, and then they start pushing back because they see it as a threat without doing understanding that, you

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know, not necessarily a threat, it's just an opportunity to improve their work. But at more or less wound, I don't think people look at it as a threat. thing, it's still a very young company with a lot of young people."

2.8) How would the introduction of more AI applications impact the wellbeing of employees?

"the well being of the employees. To to that that's an interesting angle to it. I don't think humans are going to get replaced by machines anytime soon. So I mean, that that thinking that it's a threat, but maybe but but a couple of decades too early. But the well being in general, I mean, it helps optimise your work, and helps you take better decisions. So it comes down to the definition of well being by well being You mean, more productivity, more insights, higher efficiency, yes, it helps with that. By a well being You mean, people are going to start feeling healthier or something more, more satisfied at their jobs? That's a bad question. Everyone, depends if you're using AI in the healthcare sector, that's a different topic. But AI in most cooperates. Doesn't really impact that kind of well being it helps with productivity, more insights can make the job more interesting. But if the definition of wellbeing here, as you know, I don't know, less trends are things like that. I'm not sure if the impacts the well being of employees in that sense."

2.9) Do you see whether people with different roles within your organisation would have different opinions about this? (e.g. top management / managers / employees / frontline staff)

"Yes, definitely, they would have different answers to this. I think that answers between employees and managers are going to be more or less the same. Given that at a young organisation, there wasn't that much of a huge difference in all that. top management may be slightly different, but not that different again. Now, we're top management is also I would say, fairly young, and they are looking for these kinds of opportunities. frontline staff, I think they would also welcome the change, to be honest. But they might have more concerns how it might affect their work in the sense that they might need to do things differently. So for example, if you introduce a guy and our production centres, some things might change, right? They might have the production line is running in a certain way. Then we might say, Oh, can I turn needs to run in some other way? Because we have introduced AI. And that means change of how they do things. And as we know who as, as humans? The majority of the humans don't like change, right. But I don't think they're that much of a difference. And more this one in particular, because, again, young organisation, young people, yeah."

3. Future outlook:

3.1) In your opinion, what is the direction of AI development in the future (say next 20 years)?

"I think, yeah, AI is the future. If we also look at what is happening in the world, and how companies are embracing it slowly, but surely, next 20 years, I think a lot of the things that we do today are going to get replaced by AI in one way or another. Now, it does not mean humans are going to get replaced by machines, it just means I think what's going to happen as the humans would become kind of like, more of knowledge workers that work based on that take decisions based on their experience on, you know, human emotional element, which machines might not be that good at. So they would still be driving those machines. But the machines would be doing the actual work, which humans do in a lot of fields really. So for example, I don't know. What example can you take? I mean, if let's say, let's say, a CRM, today, a copywriter has to, you know, write the email off, you know, what should be the kind of the copy of the email? I think it's not too far off maybe next five years, actually, where that here computers would be even to write that email right? Now does not mean people are going to get replaced, it just means that role is slightly going to change instead of a human sitting down and writing that and making sure eyes the grammar, right, am I using the right kind of wording that will change to a slightly differential where they are kind of training that machine to do our job for them or, you know, doing the final proofreading that hey, yes, machine, give me this kind of wording. But do I actually want to send that to this particular group of customer? Does it make sense. So for example, someone might be, there might be a customer who is, you know, very pissed off at you. So then the wording of the email he sent to them should ideally be a bit different, your customer is very happy with you, right? So so the roles are going to change a little bit. But a lot of this tasks are eventually going to be taken over by by here."

3.2) In your opinion, what would be the most optimal development of AI in the future, and what kind of impact will it have on business processes?

"okay, most optimal development of AI what kind of impact I know that's a bit hard to pinpoint. And I think AI is developing in all sorts of domains. And that's probably going to continue developing in all sorts of doing. So it's hard to say, what is going to be the most optimal because of AI, the thing is, you usually have to try things and see what works cited, right? So someone might be developing something, which might look very futuristic. But is it actually optimal on the time tells that in a way, when you actually put it into production, and you test it out? So in general, I think it still need to turn up in all sorts of domains, whether it's in a language processing, or it's simple data science, or robotics, or whatever else there is. The impact on the business processes, I think, positive, if you ask me, again, I'm more of a data person. So I'm going to six positive, but I'm sure different people that have different opinions about it. Again, I see people as becoming more off kind of knowledge, experts, knowledge workers. So AI is going to reduce a lot of inefficiencies in the business process things which are currently there, because of humans, and because we have certain limitations of what things we can process in our brain or how fast we can do the things right. So in general, I think it's going to be a positive impact on the business processes. But then I also think all that companies are gonna do it. So when all the companies join, does it actually help any one particular company? Probably not? Because then you're at the same level of competition, right? Do you reduce your costs or increase your revenue by introducing AI? Making our process more efficient, all the other companies are going to be the same. So the competition is gonna stay there. But my I would say in efficiencies would be reduced in that way."

3.3) Overall, how would you characterise your views concerning the potential of AI in shaping our future business landscape? (excited, scared, hopeful, etc.)

"And more, this one in particular, excited, I think there is a lot of time to be honest. And if he asked my personal opinion, I had said we were a little late in the game to get started with the AI. So there's a lot of catching up to do. And while we are doing catching up, there's also a lot of other ideas which are there in all domains, whether that's production, customer care, marketing, finance, HR supply chain logistics, and they already a lot of cases of AI and all domains. So I'm personally excited for more soon in particular, just because there's so much opportunity."

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Dijana



MARLEY SPOON

RESEARCH PROTOCOL: AI & Superteams**INTERVIEW GUIDELINES****Interviewer:** Jakob Roesler

- EU CC expert at Marley Spoon (SME social media and chatbot optimizations)
- MSc student in Marketing at ISCTE Business School Lisbon
- Interview purpose: In-company project at Marley Spoon about customer interactions with AI

Target & qualifiers: owners / top managers / experts

- Direct / first-hand experience with AI implementation (from initial to more advanced stages of development)
- Representative of Hospitality OR Retail industry

Basic introduction:

- Interviewee: Dijana Dimitrovska
- Function: MD Marketing EU
- Number of years spent at the organisation: 4 ½

30.04.2021, conducted and recorded via ZOOM

In-Company Project by Jakob Roesler

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Questions:**1. General AI & chatbots:**

1.1) How would you characterize AI and what does it mean for you?

"So AI in terms of artificial intelligence, so it's, it's interesting, the way that I would characterise It is something similar to what my boss a couple of years ago said, which was, machines should do things that people don't want to do anymore. Whatever machine can do, it should. So I see it, I see these programmes that are intended for specific purposes that humans are, it will take us too long to compute or add too much time or too much work or too much too much effort. So highly specialised pieces of programmes for specific tasks. That if all power is is focused on on that it does it better than a human?"

1.2) In your current workplace, is AI integrated into the business process? If so, how?

"So this is a bit of an interesting one, right? Because if you think about all the technologies to use and love the various things from technology through using, like AI is our everyday. And the thing is that as the whole field evolves, we start considering things to artificial intelligence at all right? So we look at our phones, we don't consider this very smart one, even if they were called smartphones, or we use Siri ways with voice recognition, we we chat with bots, and we consider this not to be AI anymore, because it's chatbot, or it's a phone, or, of course, my phone recognises my face. But actually, all of these things maybe years ago, they were considered to be the next step of artificial intelligence. Right, the next frontier is we need to we need to conquer. So I would say that we use AI every day personally. And in our in our business life, just by interacting with with everyday technology. Yes, in terms of, let's say, in advertising, like all of our algorithms for advertising for online are based on artificial intelligence. Right. So it's an everyday thing. We use Google Analytics queries, forecasts and prediction models based on programmes that are basically additional intelligence. So every time I don't compute something for the computer does, I am using some sort of artificial intelligence, maybe just not that smart."

1.3) In which part of the organization do you think AI has its strongest capabilities and potential? (production, customer service, customer insights, marketing and sales, HR, culinary, accounting and finance, other)

"I mean, everywhere, right? It doesn't need to be either either or strongest of the capabilities and potential I mean, I think for for marketing in acquisition in a CRM, we do use it a lot, a lot. And you see that the capabilities of the algorithms and the AI is actually quite quite strong. But also production would be an amazing place to up the game then. In the financial world, for sure. culinary as well, if you think about the taste profiles of people, and how we can serve them best, because colonies is our base, basically research and development departments, right? Yeah, yeah. So for me, it's not either or, I guess, everywhere, for culinary their personalised menu. I think that's already being used a lot. So, yeah. So that's, that's a thing. So under like, or that there's a data warehouse and the team that that actually works on figuring out, what is the best way for this data to be used, developed and utilised? I guess. So. I guess is the essence is that team that using AI?"

1.4) What is your opinion about chatbots?

"I mean, I have a couple of different opinions about about chatbot. So the first thing is that I think they're just very useful to get squeaky information if you don't feel like reading the website. So that's my first one. So from a customer perspective, it's a it's a shortcut. From a company perspective, it's a great use of resources, because you don't want to keep on answering the same questions again. And sometimes it doesn't matter where you communicate, and people will just want to ask that because it's just faster. So I think it's a nice shortcut, however. It would, it doesn't necessarily, sometimes there is need for a human interaction from both sides, from the company side and for the, from the customer sites or desire from from an interaction doesn't need to be a need. And I'm not sure whether chatbooks need to replace that. So I see complementing human interaction rather than replacing it"

1.5) Do you think a chatbot can help to improve the overall CSAT of Marley Spoon?

"Maybe as a stretch, like, if people, let's say, if there's a lot of people that want to talk to the customer service, but they can't get to it, and then chatbot enables them to get their problem results faster I would get. So I would just wonder whether it would help the child what needs to be very advanced to help the problems that people would need solving. So I guess, yes, it depends how far how much time we invest into it. For what incremental of customer satisfaction. So it's interesting with technology, like sometimes, like you can implement it too early, it doesn't make the change and it's a little effort and sometimes you just need to be at the right moment to implement it. Yes, but it depends."

1.6) Do you consider a chatbot's purpose as a quick FAQ & support machine or do you also see customer engagement potential within the customer-chatbot interactions?

"And definitely both. I mean, you can use it for for surveys for asking questions for playing games with the customers, if you if you want to say things they're like, I don't see it as a quick FAQ, I think that that might be the bulk of its use. But and they think it should be limited to that."

1.7) Do you think a chatbot is able to offer a personalized user experience and adapt to the customer journey?

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"I think that the chatbot is a tool. So this will depend on how good our input is, and how advanced the technology is, like whether the chatbot on its own as a technology would be capable of doing that? I think so it's just a matter of figuring out the right inputs. So taking the example of newer existing customers, like their inputs that can help the channel determine that, but then we need to build out the communicate. So if you think of the chatbot, like a marketing channel, it just depends which one you're working on, you tailor the journey. But that's also the thing like it's, it's important to figure out like, what does that person care about? And what information point about them? Do we know that will help us solve their problem better?"

1.8) Do you think the chatbot is capable of recognizing emotions and can also provide answers on an emphatic level towards the chatter?

"Similar handset to the previous one? I don't think it would can recognise emotions that it can can recognise inputs that we say that can we perceive a certain emotion? So three exclamation point, signifies frustration or etc. And then we can tailor the answers for that kind of reaction. But I think that the question would be misguided if we say that what the chatbot would recognise is emotion, it's just an input. And then whether it's empathic. Well, they can respond empathically, again, depends on their input, right? We can make it not respond empathically. And then you have the additional element of when it comes to reading emotions, like computers are as good as humans, and humans are not 100% graded as well. So, you know, I guess, in general, just a question like this. Yes. really depends on the like, in theory, yes. I think it really depends on the on the input, input."

2. AI & superteams at Marley Spoon:

2.1) Are you familiar with the term 'superteams'?

[If No: This refers to groups of people and intelligent machines working together to solve problems, gain insights, and create value.]

"I read I read what it was. Yeah. So that wasn't before this."

2.2) What do you think of this concept?

"Makes sense."

2.3) Have you implemented superteams in your company?

[If Yes: what was your main purpose of implementing superteams (e.g., cost reduction, quality enhancement, improved customer experience)?]

[If No: How likely are you to foresee the development of such superteams in your organisation?]

"You know, again, for me, this is something that that is already happening, but not necessarily, I'm not sure what is the line between this is business as usual now, and we don't see it as such. And there is a massive improvement to get to something like super teams. So if you ask me with a person in the computer working together to solve problems, like, again, most of our advertising is, is a person, the super computer, and the whole artificial engine and algorithm power from third party partners, right? Like, are better than so. Like, we have implemented people that work with certain tools with very high artificial intelligence capabilities in them. I don't think we call them super teams, but maybe they would like that, basically. I mean, I think the biggest benefit for me, but it's just a bit personal. For me implementing super themes, or this way of working is just like the time reduction, like, yes, it's cost reduction is it's Quality Enhancement, improve customer experience, for sure. But like, it saves a lot of time, as well. And then you can spend time on doing things that are strategic and creative, or just doing less things are fine."

2.4) What would you consider the greatest value of superteams for your company?

- for your employees?
- for your customers?

"So for employees, I really think it's time and the ability to focus your attention into areas that are still not conquered by programme algorithm. So the general composition of like machines are going to replace us like, no, they're going to replace aspects of your job that, let's be honest, you don't really care about doing or necessarily care about doing or, or you can spend time to learn doing something different is that easily, easily replicable? Is there a is an air quotes. So this is the thing and this transition is scary, right? Because it forces the person to do something instead of sticking with the status quo, which is don't happen to live in an environment where sticking with the status quo is possible. So this is the benefit I see for for employees, spending time on things that they like to do not spending time on things that are too manual, too granular or too repetitive. And just like ideally, making work a bit more delightful. So if you ever had this feeling when you didn't have a report, and all of a sudden you have this report, and then your tiny save, so the first one agenda is company, I would spend four hours every Monday building a report to be able to see my data. It's a lot of time. And I'm I was kind of fascinated, so often does building on that. Yeah, that's what I see. And thanks for the customers. So they should see all the benefits of that. So if you have company, please spending time not repeating on repetitive stuff, but on creativity, innovation, strategy, and thinking of ways how to improve stuff and going to improve them. Like they will be happier, they should be happier. So their customer satisfaction is pick up."

2.5) In your opinion, what is the optimal combination of human intelligence and AI to realise the ideal superteams, in terms of intelligence, capabilities and allocation of tasks? (ref to feeling economy, feeling jobs, division between soft and hard tasks, transactional/routine vs. Relational tasks).

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Katalin



MARLEY SPOON

RESEARCH PROTOCOL: AI & Superteams**INTERVIEW GUIDELINES****Interviewer:** Jakob Roesler

- EU CC expert at Marley Spoon (SME social media and chatbot optimizations)
- MSc student in Marketing at ISCTE Business School Lisbon
- Interview purpose: In-company project at Marley Spoon about customer interactions with AI

Target & qualifiers: owners / top managers / experts

- Direct / first-hand experience with AI implementation (from initial to more advanced stages of development)
- Representative of Hospitality OR Retail industry

Basic introduction:

- Interviewee: Katalin Fritz
- Function: Chief Customer Officer
- Number of years spent at the organisation: 5 years

Lisbon, 21.04.2021, conducted and recorded via ZOOM

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Questions:

Intro:

"So my name is Katelyn Fritz. I'm the chief customer Officer of Marley spoon and working for the company for almost five years, a bit longer than four and a half. And my main responsibilities are. I'm a managing director of the Lisbon shared service centre, and responsible globally for the customer services we call customer communications, as well as for the global customer insights analytics. But overall, I would say everything which is customer about customers and directly impact on customers is somehow directly or indirectly, by responsibility."

1. General AI:

1.1) How would you characterize AI and what does it mean for you?

"So to me, without the description of artificial intelligence, I mean, these machine learning based capabilities of building up this automated intelligence capability, and robotics and other aspects, which are helping us to predict things on our area, customer behaviour, and the best way and then act proactively and also automate things. So eliminate the manual efforts, to me personally means great opportunity, but more and more as time goes by a must to have. So it's not anymore. I hide things somewhere far from us in AI in the cloud, but in a grey zone, but much more a daily reality."

1.2) In your current workplace, is AI integrated into the business process? If so, how?

"So currently, as you know, we still have lots of limitations, if I think not on the company, but particularly on the customer communications area, I would love to see much more mature heavy use of, of machine learning in general. So at the moment, that primarily automation part, what we do, as you know, is the chatbot itself, but also within the chat bot, there are still lots of opportunities had to integrate more AI capabilities in general. I think where we have our also benefit that mine and I'm talking more about the company is an AI or the prediction models, what we are building right now, this profile algorithm, the trend prediction algorithm. And other things, there is more the customer insights area, which is also in our team, as you know. I also see there lots of opportunities, and very partially already work with AI capabilities. I've already made more prediction, whenever we use the set data and the willingness of repurchase and then we try to, you know, based on these, create some steel, mainly manual forecasting or prediction, what is the expected behaviour of the customers based on these attributes? Yeah, I think that on company level, the main main achievements in last years have been these taste profiling. And, and the churn prediction prediction algorithm. And, of course, the biggest opportunity we have on our area. Just before we would forget, this is an initiative that we also kicked off, if you remember last year, but second half of last year, which is the customer profiling. So that profiling is also approaching this aspect to learn about the various segments of the customers and then predict more in a more targeted way, what behaviour we can expect from these group and why and what to offer for them where AI also has tons of opportunities. So the segmentation but they refer to is the part of it but it's not because the segmentation where they refer to is primarily commercial segmentation, commercial segmentation in the sense that is based on the purchase behaviour and predict based on the purchase behaviour profiling includes way more aspects like the psychometrics, that demographics the demographics you know, what the demographics what what they what are their circumstances, what are their values, what are the interests? So, and the RFM segmentation which is the one that you reviewed with the marketing team to get their creatives clear understanding or clear understanding who really the consumers."

1.3) In which part of the organization do you think AI has its strongest capabilities and potential? (production, customer service, customer insights, marketing and sales, HR, culinary, accounting and finance, other)

"Obviously the to say this, like all companies, we are living from the customer right, the more we know about the customer and their circumstances, the better select say in everything I'm like, naturally have this prioritisation that everything which is assuming is the top priority. But generally speaking, when you ask about capabilities and potential then all of these have capabilities and potential because that the entire mechanism and machine is working well or, you know, regardless how much or irrelevant how much I know about the consumer, if operations cannot deliver in the fashion that is required for the customer. So in this sense, however, I would say that equal opportunities."

2. The Marley Spoon Chatbot:

2.1) What was the primary intention of integrating the ada chatbot (replacement, augmentation, or full collaboration)?

"Look, they have been two aspects there around was the obvious, which is the automation more we automate those things which are repetitive. And this is the typical approach with automations. What are the what are the repetitive and not high value added tasks? And then when we look on generic questions, answering generic questions, this is the typical opportunity or this. So this was the first big intention to implement chatbot. Besides the fact that more and more companies are using chat bots for is also getting a norm and we didn't want to be somewhere in the middle of the competition. We also did want to lead that we are also one of the first to implement and was proud that this happened. But in the long term, of course, we have a more intentions and plans for the future what we want to do so we continuously put like to teach the machine and the machine learning continuously about the customers about the typical questions or sir but what are those questions what usually the machine cannot answer when we need to enrich and the other thing, but I also very much like to see going forward ideally from PC or any ways that we integrate into the chatbot way more personalised? Yeah. Yeah. So that if the customer is and so not only for new customers is calibrated, but this is really real 100% li use with channel also for existing customers, when they can you know, simple questions can be precisely answered Where Where is your box? Yeah, yeah. direction. Yeah."

2.2) What do you consider the key benefits of the chatbot?

- for the company?
- for the customers?

"A couple of thoughts that the data shows, and this is not Marley spoon data only generally, in my experience, since in the last few years in various organisations, we will be assessing what is the ideal average handling time to manage a contact and more you look on data more, you'll see that short that the current contact is high as high as the satisfaction of the customer. Obviously, this doesn't mean that we shouldn't care about the customer. But customers like to be treated and expect that they are treated person very personally, but they also expect that we handle their requests effectively, or that they can handle their own request effectively. Yeah, without much back and forth. And inequality, of course, that the first time resolution is also appropriate. So I think for the customers, this is one big benefit that they do not need to do any extra for and wait long that they have one touch point, then they can have a quick and quality resolution on their questions or queries. For the company, as mentioned, one effectiveness is that this is an automation, so less manual work, and then we can shift the manual work to value added tasks, this is always the optimum, or the more complex cases where we can get or like the YIP cases that we know where the lifetime high lifetime value customers and then we offer them more or something specifics and so on. So for the company, both benefits are there, what we talk about generally, anyways, today is the machine learning and learning more about the customers and having higher and higher predictive capability based on these data patterns, what we what we generate, but also that we are more cost effective. Yeah, thank you. And also for one advantage is of course, also the availability of the SharePoint which which is 24. Seven, so they can reach out to us at any time when they want."

2.2) From the customer point of view, where do you see the main difference between chatting with a CC agent (HI) and the chatbot?

"Look, I'm not a big fan of the kind of customer services, which are like in this full chatbot approach or full email approach. So I strongly believe and really strongly believe in both in the artificial intelligence machine learning but both in the human part so I'm, or in other words, I don't believe that is a good way to completely eliminate that. And I also don't believe that long term we can you probably know what that there is this famous discussion even between the big minds like I don't know, the jack Ma and Elon Musk, you know, even these guys are continuously in, in the, in this conversation that can can machines replace the human or not? And then you know, no cannot because the humans intervene the machine learning and human is always smarter than the master. I think this is probably a long conversation for the upcoming decades. We'll go to the to the next level. But I think of course, the main difference as of now is that that we need to understand and through so the two things are going and then and because more we learn from

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the machine learning what are the most important drivers for the consumers and at each touchpoint in their engagement, where they need to have the human interaction is the machine learning one more we can find the right balance because of course, answering your question the main difference between the two is simply that, that I there are touch points where I want to or point of times when I want to be you know that. Do I want to see that my senses are in that and usually more coming through a human interaction and telemetric interaction, but they're also things where I don't have any other expectation can be effective and click Yeah. So we need to understand what are those the lighter factors and when and where and to whom because you know, the other specific of every human that everyone are different so you can do as much as much grouping and as much segmentation as you want, but each and every person is different. So we like you as a working frontline you I guess you can confirm that there are no two similar customers, there are similarities but no similar situations and no similar what I mean are reactions on the same things and the same way. So in this sense this is where that where where the human touch is coming in the picture that we can send those slight behavioural differences, like best example scenic comments, like irony. Yeah. Is this is something what none of the machine learning artificial intelligence or? or text analytics can as of today? in the future? Yes. But as of today, none of these can analyse and therefore can. Yeah, these are things that you can immediately sense when you are in conversation with someone."

2.5) Do you think the chatbot can help to improve the overall CSAT of Marley Spoon?

"Yeah, absolutely. Absolutely. And everything, but I just mentioned that number 30. With repetition that more effective we are in specific situations around specific request type. And but at the same time, more personalised in this channel. Higher the satisfaction of the eBay because obviously, as customers we all hate to be to q q. We all hate to be just be a no non personalised, generic and their rush. But at the same time, we also want to live our life. So we have a product that we deliver to the customer, we all believe that this is more and more important part in the life of the customers. But actually, there are many other important part of their life. And he was the one to be effective to it. And of course, my husband wants to make life easier. So then if there's like a fluent of communication, that's also part of it."

2.6) Do you consider the chatbot's only purpose as a quick FAQ & support machine or do you also see customer engagement potential within the customer-chatbot interactions?

"I already answered No. There will be plans for the future that we want to integrate. So the answer is not at all. This is just the beginning."

2.7) Do you think the chatbot is able to offer a personalized user experience and adapt to the customer journey?

"Yes, yes, totally, totally. But for these, of course, we need to have the technology and the full omni channel capability that we are currently building so that, you know, we have a proper backend, data warehouse collecting all this data and interactions that are that is that are also integrated into our overall prediction models, including, for example, this churn prediction what we already mentioned were currently or customer service interactions are not integrated at all. Yep, so I think absolutely, I believe that is able to, but I also believe that we are not there yet."

2.8) Do you think the chatbot is capable of recognizing emotions and can also provide answers on an emphatic level towards the chatter?

"Yeah, but I think this is exactly what the entire machine learning concept is about. The machine is learning about the customer interactions and those patterns then more can recognise that's why it's so important that even if now mainly we are using this for these generic questions, we analyse continuously that they attend, we try to be the more and more specific customer specific things personalization because more we do more the machine is learning and we are give us this, you know, but there has to be at the end. So yeah, I believe. However, as mentioned, I don't believe that this level of empathy but the human might have not everyone but hopefully everyone working on this phone consumer communications have would ever be capable replace a mesh, just a personal opinion."

3. AI & superteams at Marley Spoon:

3.1) Are you familiar with the term 'superteams'?

[If No: This refers to groups of people and intelligent machines working together to solve problems, gain insights, and create value.]

"Yes"

3.2) What do you think of this concept?

"Great. I think this is more or less anyway something what we aim here in the work is so good."

3.3) Have you implemented superteams in your company?

[If Yes: what was your main purpose of implementing superteams (e.g., cost reduction, quality enhancement, improved customer experience)?]

[If No: How likely are you to foresee the development of such superteams in your organisation?]

"So, I already look on our team and how we work on these with generating goals. So the role of Tristan for example, generating customer insights team also that we created this data science team under armours leadership, so you're and and also the recent actions that we took with building the cookbook and now you know, complaint management and various other things will also come there. I think this is already something what is happening. So there has various."

3.4) What would you consider the greatest value of superteams for your company?

- for your employees?
- for your customers?

"I think the same thing what what what I see as main benefit that we will have the real pragmatic capability not only saying that we are living backwards with the customers, but actually having this capability, these data capability matching capability, technology, is this is the main benefit what I expect."

3.5) In your opinion, what is the optimal combination of human intelligence and AI to realise the ideal superteams, in terms of intelligence, capabilities and allocation of tasks? (ref to feeling economy, feeling jobs, division between soft and hard tasks, transactional/routine vs. Relational tasks).

"This is a very complex question you ask? I first thought is in these regards, what I already mentioned that everything and everything and not only in cc because finding this either proportion of machine driven things and human driven things is applying to the entire customer journey not only for the customer communication interactions is crucial. So I think that in this sense, I look on the machine learning part more like driving as long term I mean"

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all the learnings and that we build on these instead of fully optimising and moving ourselves that the machine is leading us. So if you ask if there liking this concept feeling jobs which is also an evergreen conversation I guess nowadays stealing our jobs or not, then I'm definitely sure that lots of jobs who which are existing today via via stolen or taken over by machines that this was always in the history the way and this is what is happening now but I also believe that there will be new type of jobs managed by humans which do not exist today, but we have been necessary for the new jobs will be also created most Republic this will balance out in the end and then these will have also an impact on everything guess what you are asking what are the feeling of economics overall? Given the big things like how many days a human is required to work per week, all jobs will be there like their thing but what I think is so obvious already nowadays that coding for example, will be something What is a norm and or are they in the kindergarden people will start to teach? For example, it's just a new big thing. Formerly spoon and then what is this idea? superteam set up and proportion. But I think it's too early from my statement that 5050 or 37? We will see."

3.6) What do you consider to be the biggest obstacle / challenge of implementing superteams in your organisation/company?

"So I think that the biggest challenge is that we are we are a little bit behind to create these infrastructure technological capability for a proper data flow. And as long as this is not there, and I guess Mr. Probably gave way more colourful thoughts to these what is missing in his view. But overall, if I simplify, there are lots of basic capabilities, what we don't have, and we need to be a disease to be able to come to this level of, of discussion. But But if these basic capabilities will be there, I don't really see big challenge to implement support names, because I think actually the company is also very much looking for this and all. Yeah, so I don't see that there is any to say it is any decline in the company."

3.7) How do you think people on your team / at your organisation may view such superteams (e.g. beneficial or more as a threat)?

"I think more as a more as a benefit everyone. On the other hand, of course, this human aspect is always there that people work in their own areas, despite that, we are still a relatively small and middle sized company. And we like to work together. And we are forced to work as a team, but they but indeed, people are still or teams are still working relatively silos. And this is always a change management process, you know, but culturally, I think I don't have any reason to think that, that there would be a decline and that would be any other view in the organisation can this is a benefit for all of us, because I think the company's customer obsessed enough to and inclusion of all our team members and all of that, seeing that, you know, this is a big benefit and also big strength as if we have this capability."

3.8) How would the introduction of more AI applications impact the wellbeing of employees?

"I think if I think on it, what we just discussed that anyways, by time AI will take over some jobs which exists today. I think this should be a positive thing. As long as we show some new avenues for for people and for these necessarily that we upskill or entirely retrain the members for other areas. And I think that if we do this change process properly and on time, then I think that this is a positive change otherwise on human level of course, if your job is eliminated because you are the company automates and doesn't offer you any alternative, then isn't that bad?"

3.9) Do you see whether people with different roles within your organisation would have different opinions about this? (e.g. top management / managers / employees / frontline staff)

"I'm strong, quite strong in my confidence, that culturally and have a look on these things. In general, we have a very similar view on all of us. So I'm quite confident that there might be of course, in some questions, you are slightly different opinion, but overall, I think that more or less the same, you might hear from the others as well."

4. Future outlook:

4.1) In your opinion, what is the direction of AI development in the future (say next 20 years)?

"Hopefully, but this is at the moment only a hope from AI and hopefully the future is that is making our life better. Yeah. And in the sorry for the wording not in the capitalist way is just about automation, but but way more about how can we use this for good thing and for these I think these recent stories, which are happening in the world, good showing some good opportunities, you know, for society, yeah. The society and I really hope Personally, I really hope that we will use all these capabilities for good and but I will proportion because this is a beautiful thing in the end if we use for the right things."

4.2) In your opinion, what would be the most optimal development of AI in the future, and what kind of impact will it have on business processes?

"The first part button business particularly I think, that will definitely help us. So, primarily, I see the prediction capability as the biggest opportunity or things which are already happening around ourselves are kopernik a couple of years with the most developed more developed augmented reality capability. And, and as mentioned, to eliminate all the repetition in the thing, so that all the waste what we have in every business was in our business, we have lots of ways. So things what we do totally unnecessary, instead of focusing on things which are impacting or influencing the repurchase influencing the commitment of customer commitment or engagement to the company. So I think that this is the thing what I expect in in our business, but in any other businesses that we understand more from customer perspective, what is important for them, and in a sense, this is again, a beautiful thing, because it's forcing us to think this through Yeah, and then and and of course, this is also continuously changing because the customer realities are so continuously changing. So this is not necessarily what will happen in the next few years and then a stable so we continuously learn, say"

4.3) Overall, how would you characterise your views concerning the potential of AI in shaping our future business landscape? (excited, scared, hopeful, etc.)

"I'm super excited. And I'm also super helpful but also a little bit scared for the case if not Marley spoon because in Marley spoon I don't have tapped. But generally in the word there obviously are also risks not to use this in the right way. Just delivering on the fake we there was your question. Yeah. Or it is, you know, how China in various aspects is using already for years to follow up every single steps of, of people over there, which also brings benefits but also brings lots of question marks and go on and on. But bvsr I'm generally an optimistic person, even if by so Lots of downfall of humans. Yeah. I think that that people and the humanity in generally are more, you know, going into the direction that they want to do something good rather than I want to do something bad."

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Joana



MARLEY SPOON

RESEARCH PROTOCOL: AI & Superteams**INTERVIEW GUIDELINES****Interviewer:** Jakob Roesler

- EU CC expert at Marley Spoon (SME marketing and chatbot optimizations)
- MSc student in Marketing at ISCTE Business School Lisbon
- Interview purpose: In-company project at Marley Spoon about customer interactions with AI

Target & qualifiers: owners / top managers / experts

- Direct / first-hand experience with AI implementation (from initial to more advanced stages of development)
- Representative of Hospitality OR Retail industry

Basic introduction:

- Interviewee: Joana Mello
- Function: Senior Manager Customer Insights
- Number of years spent at the organisation: 1

Lisbon, 25.05.2021, conducted and recorded via ZOOM

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Questions:**Intro:**

"I work as a senior customer insights manager. So I work in the customer insights team. Within the big area of CCI, basically so CCNA customer communication, customer insights, and I work in my response since June last year. And yes, do you want me to sail more about your Yeah, some of your responsibilities that would be nice. Yeah. So what we do in the customer insights and my responsibilities is basically in a very, like short ways being the voice of the customer. So what this means is that we analyse and we take a lot of insights from what the customers are saying to us and, and customers main desires and what the customers are, their concerns are the satisfaction of these different KPIs. And then trying to translate this into valuable and actionable insights to the team. So the reason why my role was called managers because I, then we work with all the different teams like regardless marketing, production, whatever, to try to provide this valuable in actionable insights to the company and I, we are a global team. So we work with the entire company, but I work specially with the US market."

1. General AI:**1.1) How would you characterize AI and what does it mean for you?**

"So for me, it's, it's, I know what artificial intelligence is, but I think it's, it's, it's confusing in what can you actually define? Because I think it actually artificial intelligence is, is basically when you have some, like technology and like, you have some sort of technology or computer doing something that human that will support supposed to do, but like, is it that you should be doing a task that a human was meant to do, right? But it's my perception, my confusion then goes to, if this is something that it's any task that that a human could do, or any task that actually implies a higher level of knowledge of intelligence or anything."

1.2) In your current workplace, is AI integrated into the business process? If so, how?

"Yeah, that then leads me to my confusion, like what is actually defined as artificial intelligence, but I think, not a lot. But I think we have like, for example, we were talking about the chatbots. All of this, it's already artificial intelligence. But then, like, for example, in my platform that we use in customer insights, so we use a platform that is not necessarily using artificial intelligence, but I think there's a part of it. Which is like we use Qualtrics, which is a tool to collect and analyse a lot of data that we receive from customers. And there's something that I don't think it can be defined as artificial intelligence, but it's but he has the room to be like that because it basically analyse customers feedback, customer tax, and basically generate some sort of categories and but it's not as crucial intelligence because it doesn't do anything with that, right? Just analyses but so it's a combination from let's say, the human intelligence so you the people from the customer insights and some Machine Learning Centre exactly because it's exactly so it basically it analyses text and it takes the sentiment and the what the meaning of what customers are saying but it requires at first some human like definition. And then due to machine learning now, we don't have to do almost anything like it's already say categorising what people are saying."

1.3) In which part of the organization do you think AI has its strongest capabilities and potential? (production, customer service, customer insights, marketing and sales, HR, culinary, accounting and finance, other)

"I think the strongest capabilities and potential, I would say, so customer insights and customer service actually together. So I think there's, there's a very strong opportunity, I think that we have to combine all of these learnings that we are getting from customer insights, and to actually to apply to them to CC, right. So we know for example, what customers want what customers really complain, like, not only complain, but also we have all of these insights. And I think we will be better if we apply these insights, how we call our we interact with customers when they call us, right. So if for example, if this customer already called us three times, always complaining about the same thing, then we also know that in the recent survey that in the customer insights team, we did. And we know that that customer through we value something, when this customer is calling, maybe the experts can see Oh, I know what I should be talking with this specific person. Right. So I think that that part is I think it's, it has a strong potential. And production may be right, because it's I don't know it's a it's a area that we have a lot of mistakes. And we have a lot of problems, capacity. Like, for example, we are constantly having issues in the US, for example, because we always have different people working. So and any sorts of AI I think will be can be helpful, I think."

2. Chatbots and Consumer Behavior**2.1) What is your opinion about chatbots?**

"I think it's a mix of emotions. So one is I really think it's really valuable. The fact that we have some customers that are contacting for very basic things, right. And it will be way more efficient. If we have like a chatbot, or just to answer the most difficult things. However, I think that we gain a lot from the experts interaction, right? So the experts. There's, I don't, know, what is the limit when in which a chatbot can actually learn all of this, like, we're like to call this implicit knowledge that we have, right? That an expert, he knows if an expert says something like additional, like something nice, maybe the chatbots? Big? Sorry, what I mean is, there will be very basic things that a chatbot can answer. But because it's a very basic thing, a chatbot can just simply answer, but an expert can give something extra. And I think that actually translates the culture of the company. So I think my opinions a big mix of."

**2.2) What do you consider the key benefits of a chatbot?
- for the company?
- for the customers?**

"For the company is efficiency and, and resources, right? So you you save a lot of resources. You can allocate the experts for doing more complicated tickets, and you don't and you don't increase the sorry, you don't compromise the service level of, you know, for the customers, the benefit can be very quick, enter, like very fast, and sometimes the customer just wants to solve something very quick, and they just want to be answered. And so yeah, I think that would be the efficiency also. I think it's efficiency. Both for both. Yeah."

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2.3) Do you think a chatbot can help to improve the overall CSAT of Marley Spoon?

"I think it's, I think it depends. That is my answer. It's not very. I know, it's not maybe the answer that you want. But I think it depends, because it can definitely improve when it comes to customer satisfaction with a dimension that is, if my problems are being solved, yes. But not necessarily like about the type of I think it depends on the artificial intelligence, of course, but on the type of customer service, right. So if a customer imagine a situation, if a customer is really upset about something, and they just want someone to solve their problem, and you have a chatbot, maybe the chatbot, or, like, the interaction between the customer in the chat bot is actually not helping the customer, customer, to human, that I think the chatbot can actually decrease in that sense, right? Because there can be Yeah, not only that, they did not provide me a good service. Now. I tried to complain, and they have a chatbot they did not, you know, yeah, I think I think there's a lot of people that see value customer interaction. And even if you have a really, really good chatbots, like a really good technology in which it's almost like a person talking, even so customers can see that is a chatbot."

2.4) Do you consider a chatbot's purpose as a quick FAQ & support machine or do you also see customer engagement potential within the customer-chatbot interactions?

"I think there's some potential Yes. Because Because it's I think, if we think about the chatbot as a very mechanical thing, saying, yes, no, yes, I can help or no, like, of course, that there's no potential or wherever there is some potential I think, because it's because I think the chatbot also has this advantage is it's that you don't have variability, you can have an expert that is very upset about their day or like any not does not give any positive response, right. But if you actually have a chatbot, that doesn't affect right, so with that your service level does not affect the stress level of the experts, like all of this is not there. So the customer can eventually have an even better interaction. So I know that I'm probably contradicting what I said before. But so I think there's some potential but I think it depends on the quality of this of this service, you know, of the AI."

2.5) Do you think a chatbot is able to offer a personalized user experience and adapt to the customer journey?

"I think it depends on the How is this chatbot actually being? How much data is this actually using? Right? So if I think it can be able, I don't know a lot about how this technology is implemented. But I think you can, you can, you are able potential if there is a potential of personalization, but I think it all depends on how the type of information the level of detail that the technology has access, right? Because otherwise you will be if you don't have access to more personalised or even if it's not personalised to that specific customer, but if it's personalised, like there's a type of customers that usually when they ask about this, they also ask about that. Right. If you have access to all of that personalised information, I think it's possible. Yeah. Okay. But I don't know enough about chatbots to know if they are already able to do this. Yeah. And it also depends a lot on like, let's say, like you said, for many information, we give the chatbot. So let's say at the end, it's a lot about the integration. And how much time we invest in setting up the set chatbot. And of course, the more we information we give to the chatbot, the more he would be able, but yeah, it's always, always requires also input from from our end from the from the humans."

2.6) Do you think a chatbot is capable of recognizing emotions and can also provide answers on an emphatic level towards the chatter?

"I have to tell the story. I have a negative. I think it's able, I think it's capable. Definitely the example that I was giving before about this Qualtrics tool that we use to analyse sentiment. So it's, it's good, it's relatively good in understanding the emotions, if it's a positive, it's so negative. But I think there's always some error, right. And sometimes, for example, I don't know if chat bots are able to, to read the irony, irony, for example, like, if you answer yes, I'm very happy. Yes. You know, like, it's, I don't know, if a chatbot is, is capable of that, right? I know that technology is improving. So Mike, very fast, you're capable of doing that. I have a I have an experience of a personal experience. I was I order something on Uber? Great, I think and never came, I think. And then I talk, I don't know, one of them. And, and I was talking with the chat. And then I realised it was a chatbot. And it was actually really upset. Because not only they were not giving me the food, they were not saying anything, and they were actually helping you. And so at some point, I was like, No, but you have to, like you have to compensate me or something like this. And then the chatbot. Okay, thank you for your feedback by, you know, that was a very not a very good experience on not only the chatbot. In this particular case was not actually it seems like it was not actually following up what what was it also the sentiment, I was getting really, really upset because of because of the fact that it was a chatbot. And, yeah, and, and that was like, Yeah, no, but I think even, I think it's always super important that also the shepherd is giving the opportunity to hand over to a real agent, like, for example, because with some issues, the shepherd can't tell, but then in this case, it shouldn't just be saying thank you, and goodbye. But it also should offer at least help if the shepherd is not able to provide the support by itself to hand over to like an agent, so that we can help further."

2.7) From the customer point of view, where do you see the main difference between chatting with a CC agent (HI) and the chatbot?

"From the customer point of view, the main difference is, it will be when there is something that is really personal to the to the customer, right? I will say that they will see this main difference, because because if it's something that is very personal to the customer, and is really affecting them, knowing that they are talking with another person that also has sent by emotions and sentiments, like, because the machine can understand your emotions and get it Yes, I understand. I'm so sorry. Like, here is your compensation, whatever. But it's only the perception, you know, like it like I think would be the main difference would be that the customer when you're talking with a human, they know, even if you don't care about my problem, you already had some sort of experience in YouTube, in which you feel like that like this, when you're talking with a machine machine can say yes, I'm so sorry. Like, no, you're not right. You're just saying what what? Yeah. So I think that will be the, I don't know from a customer point of view. I would, I would see like that. Especially when you have cultures for example, in the US. Customers in the US are very chatty, right. They complain, like they like to talk a lot. And they like to complain a lot. And they are very focused on service, which is a good thing. So when they are not happy with something they like to say, which for us. It's actually Very valuable because we learn a lot. If they feel that we're actually not listening to them, it's just a machine. Who knows if this machine is going to pass this information to, there's no supervisor, you know, it's Yeah."

2.8) Regarding the acceptance of customers chatting with a chatbot: Do you think they trust and accept answers being provided by a chatbot?

"Yes, because machines don't have the human error, right. So there's always some error, but they trust and accept in a way that they know they are getting the right answer. That expert, for example, did not make a mistake or didn't confuse anything? No, I think I think there's some level of trust. Yes."

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2.9) What do you think are the critical concerns from a customer's point of view, in terms of communication with a chatbot?

"I think it's a lack of understanding, you know, that would be the, it's, it's, you are not really understanding me, because you are just entering to what I'm saying."

3. AI & superteams at Marley Spoon:

3.1) Are you familiar with the term 'superteams'?

[If Yes: This refers to groups of people and intelligent machines working together to solve problems, gain insights, and create value.]

3.2) What do you think of this concept?

"I really liked it. Because it's, it's a combination of two very important things, you know, which is gaining efficiency through machine through machine learning and having actually use all of this technology that we have access to, but never losing the human side and never losing the never use losing. Like this, this human knowledge of it that humans have, right and not sure what it rendered, in our case, in primary school, like his customer knowledge and customer behaviour, there's so much that a machine can actually understand this from this."

3.3) Have you implemented superteams in your company?

[If Yes: what was your main purpose of implementing superteams (e.g., cost reduction, quality enhancement, improved customer experience)?]

[If No: How likely are you to foresee the development of such superteams in your organisation?]

"I think we have like, probably Ammar answer to this question, he talks about this. But then the customer insights, yeah, the customer insights. It's, for example, that example that I was telling you about like, exactly, so, it was implemented as a way for reduce resources and reduce time, right, we will not be able to look at every single customer comments and analyse it, it will take hours. So it was a way for us to take actions and take insights very quickly. But of course, we always have even not only we have the human interaction first to set up this this categories of topics, but we also have after so the Qualtrics gave basically gives us the results. And then we have to have this additional level of analysis right strike. So I think yes, that the main purpose was to use basically is to reduce time and create efficiency, but it's also to really value the fact that customers are selling is something and we need to listen to them, you know."

3.4) What would you consider the greatest value of superteams for your company?

- for your employees?
- for your customers?

"Yeah, I think it would be it's like the chatbot to be efficiency for the employees. It will be. We work in a company that is constantly growing. And and we are, we have a lot of work. So for the employees would be this this like, time saving basically and resource saving to allocate to other more important tasks. And for the customers. Yeah, better, better service, and faster and better service that I think that it's what they are used to with other companies."

3.5) What do you consider to be the biggest obstacle / challenge of implementing superteams in your organisation/company?

"Probably, it's always challenging to change, right. And to, like people are so used to even if it's taking a lot of time, people are so used to do always the same type of thing, that it will be difficult to change how people interact. And I would also say, so it's always the change, and some people getting scared maybe that their job is going to lose, like importance, because now you have also machine doing what you do you I think that will be the truth."

3.6) How do you think people on your team / at your organisation may view such superteams (e.g. beneficial or more as a threat)?

"beneficial, Definitely."

4. Future outlook:

4.1) In your opinion, what is the direction of AI development in the future (say next 20 years)?

"20 years? I don't know if it's, I think, based on what happened in the past years, with all of these advances of technology, I think one thing that we learn is that AI is going to grow a lot and and, and be implemented in almost every single human interaction or human decision making purchase, whatever, but I don't, but I think or at least I hope that we don't lose this human sight. That Yes, artificial intelligence can be very, very developed, but we'd never should never lose this, this human touch."

4.2) In your opinion, what would be the most optimal development of AI in the future, and what kind of impact will it have on business processes?

"It's, like personalization, right? So people like to have an efficiency as well. But it's Nowadays, people like to be value balanced. And they like to know that the company that are working on with really values the person and he knows that right. So it's because there's a lot of companies like Mario is right if you don't offer this type of personalization. It's something that customers can easily change from one company to the other. So I think it's in every single thing it's in our business is how they contact cc is how they receive their books if I don't know if it's when they receive marketing as anything like if we can apply AI to personalise."

4.3) Overall, how would you characterise your views concerning the potential of AI in shaping our future business landscape? (excited, scared, hopeful, etc.)

"I think everybody from everybody, I asked the question at the start of the day, we're all excited. Exactly. Like, especially at Malli. Spoon. That's also what am I said that it's so technological and innovative. Yeah, I was just saying that I think we live, that we work in a company that we really value technology and innovation, but we also really care about our customers. So I think the development of AI and our company will always be an exciting thing, because I know that the customers will always be the focus, you know, so."

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