

Mapping the pre-purchase customer journey of premium livestock feeding technology: a manufacturing company case study

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ABSTRACT,

Customer journey mapping is a method that has recently attracted significant attention from managers and academics. It integrates the activities, decisions, touchpoints, emotions, and pain points that customers encounter throughout the buying process into a map. Having a comprehensive overview of the customer journey gives businesses a competitive advantage. This study intends to map the pre-purchase customer journey of farmers seeking to purchase a feed mixer (B2B), including the value generation process along the route. It attempts to define the steps that comprise the pre-purchase phase based on a conceptual framework that is validated by customer interviews within a manufacturing company. There are three steps in the pre-purchase customer journey: (1) problem recognition, (2) information search, and (3) alternative evaluation. However, these steps are not sequential, as suggested by the majority of research. Customers frequently transition between stages. This implies that firms must optimize touchpoints while concentrating on offering value. This study contributes to the existing body of knowledge by focusing on the pre-purchase phase of the customer journey from the perspective of an agricultural B2B manufacturing firm.

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Keywords

Customer journey, customer value, customer experience, pre-purchase, business to business, value creation, customer journey mapping

1. INTRODUCTION

The customer journey of B2B organizations has evolved significantly over time. Customers now have access to a multitude of ways to interact with both product and service providers (Chheda et al., 2017; Leeftang et al., 2014). In addition, the huge array of digitally accessible information has diminished buyers' reliance on sellers, which has complicated the customer journey (Marvasti et al., 2021). The customer journey is the process or sequence by which a customer gains access to or uses a business's product or service (Følstad & Kvale, 2018). According to Grewal et al. (2015), nearly 60 percent of the journey is already completed before the potential buyer interacts with company representatives. Due to this loss of control over the customer and the increase in potential touchpoints, it has become more challenging for businesses to design, manage, and control each customer's experience and journey (Lemon & Verhoef, 2016; Edelman & Singer 2015). Consequently, the need for a customer journey map (CJM) of the experience as perceived by the customer has increased (Grewal et al., 2015). According to Følstad & Kvale (2018), a customer journey map is characterized as a flow type visualization technique where the visualizations are made in an abstract or diagrammatic form and represent the unfolding of the service process across time. Customer journey mapping is lauded by both academics and practitioners for its utility in comprehending an organization's customer experience (Rosenbaum et al., 2017). Therefore, a thorough understanding of the customer experience can provide a substantial competitive advantage for an organization.

To sum up, the literature demonstrates the growing interest of academics in the customer journey (Tueanrat et al., 2021). This rapid increase in literature has resulted in the emergence of five major themes: (1) customer experience, (2) customer response, (3) co-creation, (4) channels, and (5) technological disruption (Tueanrat et al., 2021).

However, past literature mainly focuses on the purchase phase while less emphasis has been put on the other two stages of the journey (Tueanrat et al., 2021). Moreover, customer experience and customer journey are frequently viewed as separate concepts, whereas the combination of the two offers the organization superior insights. Knowing which decisions customers make is essential but understanding the reasoning behind these decisions is even more valuable to an organization.

This study aims to fill this gap by exploring the pre-purchase phase of the customer journey from the perspective of a B2B manufacturing organization in the agricultural sector. The paper is guided by the following research question: "How do European farmers navigate through the customer journey of a feed mixer?". It explores both the customer journey and the customer experience, taking into account the value that customers perceive throughout the phase. The manufacturing organization will be referred to as 'AgriFeed Ltd.'. AgriFeed Ltd. is a company located in the eastern Netherlands that develops, produces, and sells machines and systems for feeding livestock. Their products range from 'simple' silage cutters to fully automated feeding systems. AgriFeed Ltd. is active in Europe, North America, South America, Asia, the Middle East, Africa, Australia, and New Zealand.

The paper is organized into four chapters. Included are the theoretical background, research design, results, discussion, and conclusion. The first chapter will describe the theoretical framework that served as the study's guiding principle. The second chapter will delve deeper into the research design employed, including data collection and analysis procedures. The results obtained from the analysis will be discussed in the third chapter. In the fourth chapter, the conclusion and discussion, including managerial implications, will be presented.

2. THEORETICAL FRAMEWORK

2.1 Customer journey

Due to the emerging prominence of the customer-centric philosophy in the marketing field, both academics and practitioners have embraced the concept of the customer journey (Crosier & Handford, 2012; Tueanrat et al., 2021). The rapid increase in literature concerning the customer journey has given rise to a lot of definitions. In general, the term customer journey refers to the process or sequence that a customer goes through to access or use an offering of a company (Følstad & Kvale, 2018). It is described as the recurring interactions between a service provider and a customer (Meroni & Sangiorgi, 2011). It can thus be seen as a walk in the customer's shoes (Holmlid & Evenson, 2008).

However, recent research indicates that the customer journey addresses more than just the processual aspects from the customer's perspective. It should also emphasize the experiential aspects of interactions and co-creation of value. (Sahhar et al., 2021; Kankainen et al., 2012; Witell et al., 2020). According to Ng et al. (2012), the customer journey is more accurately characterized as a service system in which agents collaborate and integrate resources to co-create value. This view is also reflected by Sahhar et al. (2021). They refer to the customer journey as "the process in which customer experience is accumulated and formed throughout phases and across touchpoints." Kankainen et al. (2012, p. 221) emphasize the importance of the customer and describe the customer journey as "the process of experiencing service through different touchpoints from the customer's point of view". The increased importance of experiential factors and value co-creation necessitates a new conception of the customer journey. The customer journey will therefore be conceptualized as: "a service system in which customer experience is accumulated by agents interacting with and integrating resources for value co-creation." (Ng et al., 2012; Sahhar et al., 2021).

2.1.1 Phases

Even though each customer's journey is unique, scholars have attempted to classify the customer journey into distinct phases. Haines et al. (1970) were among the first to segment the customer journey into phases. They divided the customer journey into multiple steps that reveal the number and structure of the buyer's decision rules.

Recent research indicates that customers do not always follow these steps sequentially, but rather move back and forth between stages (Wolny & Charoensuksai, 2014; Lemon & Verhoef, 2016). This non-linearity of the customer journey is emphasized by Molenaar's ORCA model, which illustrates the

concept of shopping 3.0 (Wolny & Charoensuksai, 2014). This model divides the customer journey into the orientation, research, communication, and action phase.

Lemon and Verhoef (2016) also contributed to the literature by dividing the customer journey into three phases. Based on their findings, the customer journey can be divided into the pre-purchase, purchase, and post-purchase phases. This study will concentrate on the pre-purchase phase; other phases will not be elaborated upon. The pre-purchase phase is defined as the period preceding the actual purchase and can be further subdivided into problem recognition, information search, and alternative evaluation (Dewey, 1910). The research will conceptualize the following phases of the pre-purchase phase of the customer journey: (1) problem recognition, (2) information search, and (3) alternative evaluation. However, there is sufficient room for unanticipated adjustments in these phases due to significant events, setbacks, or unexpected developments (McColl-Kennedy et al., 2019; Sahhar et al., 2021).

2.1.2 Touchpoints

During the customer journey, customers have both conscious and unconscious contact with the company and its products. These interactions are the foundation of the customer journey and are often referred to as touchpoints. Touchpoints can be everything that transfer some type of information from the supplier to the client or vice versa (Aichner et al., 2017). More specifically, touchpoints are “points of human, product, service, spatial, and electronic interaction collectively constituting the interface between an enterprise and its customers over the course of the customers’ experience cycle” (Dhebar, 2013).

In a B2B context, touchpoints encompass all conscious and unconscious verbal and nonverbal interactions that a business customer has with a supplier company (Homburg et al., 2017).

For the purposes of this study, touchpoints will be defined as: “All verbal and nonverbal incidents that a business customer experiences, either consciously or unconsciously, related to a supplier firm.” (Homburg et al., 2017).

According to Lemon and Verhoef (2016), four touchpoints’ categories can be identified which will be used as a guiding principle for this research. The four categories are (1) brand-owned touchpoints, (2) partner-owned touchpoints, (3) customer-owned touchpoints, and (4) social/external touchpoints. A definition of the distinct categories along with examples can be found in Table 1.

Table 1 Different touchpoint categories

Touchpoint category	Definition	Examples
Brand-owned	Customers interactions during the experience that are designed and managed by the firm and under the firm’s control	Website, advertisements, trade show, demonstrations, brochures
Partner-owned	Customer interactions during the experience that are jointly designed, managed, or controlled by the firm and	Contact with dealer, dealer open day

	one or more of its partners	
Customer-owned	Customer actions that are part of the overall customer experience but that the firm, its partners, or others do not influence or control	Thoughts about the product, needs and desires
Social/external	Customer interactions with others in the customer experience	Colleagues, independent information sources, social media

2.2 Customer value

Customer value has received increased attention from both scholars and managers over the last two decades (Eggert et al., 2018; Alvarez & Molnar, 2021). The literature has seen a shift from resource exchange and value in exchange to an emphasis on resource integration and value in use (Alvarez & Molnar, 2021). Understanding and communicating customer value has become a primary objective in business-to-business marketing and can result in a significant competitive advantage (Babin & James, 2010; Woodruff, 1997).

A generic definition of customer value is given by Zeithaml (1988). Customer value is defined as the difference between what a customer "gets" and what they must "give up". This traditional definition of customer value emphasizes the tradeoff between the benefits of the product and the sacrifices that the customer must make. Gale (1994, p. 14) also adopts this benefit/sacrifice perspective on customer value by defining customer value as perceived quality adjusted for the relative price of the product.

Recent findings, however, have introduced a new value perspective that emphasizes the interactive, relativistic, and experiential nature of customer value (Prahalad & Ramaswamy, 2004; Sandstrom et al., 2008; Vargo & Lusch, 2004). By initiating the service-dominant logic, Vargo and Lusch (2004) were among the first to adopt this new perspective. According to this logic, customers do not purchase goods or services: they purchase offerings that render services that create value in use (Vargo & Lusch, 2004). The compromise between benefits and sacrifices is no longer the focal point. Instead, value creation is a continuous process centered on the customer's experiences, logic, and ability to extract value from the goods and other resources they consume (Gronroos & Voila, 2012). According to this logic, the supplier is characterized as the facilitator of customer value, whereas the customer creates value by transforming the offering into real value during the consumption and value-creation process (Gronroos, 2008; Gronroos, 2017). Users’ accumulated experiences with resources, processes, and contexts are thus the core of value creation and have a significant impact on the customer journey (Helkkula et al., 2012). This suggests that value is created not only when the product is used, but also at earlier stages of the customer journey when resources and information are made available. Woodruff’s (1997) definition incorporates both perspectives. He defines customer value as “perceived preference for and evaluation of those product attributes, attribute performances, and consequences arising from use that facilitate (or impede) achieving the customer's goals and purposes in use situations.” (Woodruff,

1997). His model of customer value proposes that individuals begin at the bottom of the hierarchy by evaluating the desired product attributes and attribute performances. The following level of the hierarchy focuses on the desired outcomes in use situations, as reflected by value in use. The highest level of the hierarchy reflects the objectives and goals of customers. At this level, customers learn to desire certain consequences according to their ability to help them achieve their goals and purposes (Woodruff, 1997).

The broad perspective of Woodruff's customer value hierarchy model, which not only focuses on value in use but also incorporates value that derives from the attributes and performance of the product, makes this a suitable model for the research. Consequently, customer value will be conceptualized as: "The perceived preference for and evaluation of those product attributes, attribute performances, and consequences resulting from use that facilitate (or impede) achieving the customer's goals and purposes in use situations" (Woodruff, 1997).

2.3 Customer experience

In recent years, designing a superior customer experience has emerged as one of the most significant challenges for the corporate strategy. Understanding how the customer experience unfolds throughout individual interactions, as well as how these discrete experiential episodes combine to form the end-to-end experience is now essential for businesses to maintain a competitive advantage (Bolton et al., 2014; Voorhees et al., 2017; Zomerdijk & Voss, 2010). This increased attention among both managers and scholars has given rise to multiple definitions of the concept.

According to Gupta and Vajic (2000, p. 34) experiences are created because of the interaction with different elements of a context created by the service provider. Zomerdijk & Voss (2010) expand on this definition by stating that customers have experiences whenever they "touch" any part of a product, service, brand, or organization, across multiple channels and at different times (Pantano & Milena, 2015). According to Lusch et al. (2009), customer experience is more than a collection of interactions across multiple touchpoints. They indicate that customer experiences are collaborative and interactive. This indicates a more active participation on the part of the customer.

Lemon and Verhoef (2016) are one of the most significant contributors to the customer experience literature. They define the customer experience as a multidimensional construct focusing on a customer's cognitive, emotional, behavioral, sensorial, and social responses to a company's offerings and actions.

In B2B contexts, the emphasis is on understanding and delivering value in use (Eggert et al., 2018; Lemke et al., 2010). Value in use is the individual judgment of the sum of all the functional and emotional experience outcomes. This suggests that customer experience is individually interpreted and experienced by the customer during the process (Jaakkola et al., 2015; Edvardsson et al., 2005; Helkkula, 2011; Sahhar et al., 2021).

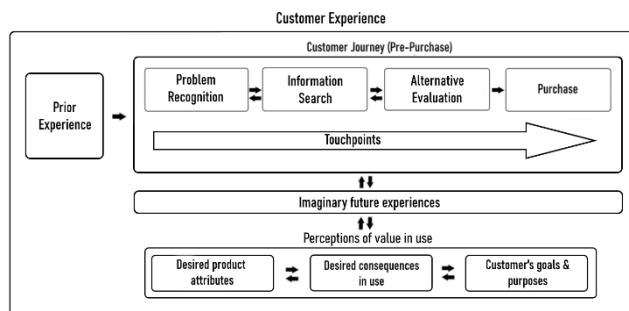
In this paper, the customer experience will be conceptualized as: "The accumulated experience that arises each time a customer 'touches' any part of the product, service, brand, or organization, across multiple channels and at various points in time." (Zomerdijk & Voss, 2010).

2.4 Conceptual framework

Based on the current literature a conceptual framework can be formed. The conceptual framework combines the customer journey with customer value and customer experience. The conceptual framework is depicted in Figure 1. The customer experience is viewed as the concept that integrates both the customer journey and perceptions of value in use. In addition to

the current experience influencing the customer journey, previous and imagined future experiences also play a significant role (Helkkula et al., 2012; Lemon & Verhoef, 2016). According to the conceptual framework, the actions and decisions of customers that comprise the customer journey are based on a combination of touchpoints that are influenced by both past and imagined future experiences that are formed based on the perceptions of value in use and vice versa.

Figure 1 Conceptual framework



3. METHODOLOGY

In this chapter, the research design will be elaborated on. This includes an extensive explanation of the methods used for data collection and data analysis.

3.1 Research design

The primary purpose of this study is to gain a comprehensive understanding of the steps and decisions customers make prior to purchasing a feed mixer. This includes learning what farmers feel, know, and think before purchasing a feed mixer. In addition, the research will illustrate how co-creation of value occurs during this phase of the customer journey. To achieve this objective, the research is designed as a qualitative descriptive study. Qualitative research is commonly employed when depth, insight, and knowledge of a phenomenon are required; hence, it is the most suitable approach for this study (Gill et al., 2008). Due to the uniqueness of each interviewee's customer journey, the questions must be constructed so as not to steer the interviewee in a particular direction. For this reason, semi-structured interviews were conducted to ensure adequate space for extra inquiries.

The grounded theory (Strauss & Corbin, 1998) will serve as a guiding principle for the research. This paradigm emphasizes that data collection and analysis should occur simultaneously. This enables us to make real-time decisions regarding whether additional data collection will result in novel or additional contributions to the theory-development process, and hence whether additional sample collection is required (Strauss & Corbin, 1998, p. 294-295).

3.2 Data collection

Data must be collected to gain a comprehensive understanding of the value creation process and the steps and decisions customers make prior to the actual purchase of a feed mixer. Several methods exist for gathering qualitative data. According to Gill et al. (2008), focus groups and interviews continue to be the most prevalent data collection techniques for qualitative studies. In addition, a holistic perspective is necessary because, as customers, the overall experience of interacting with any enterprise cannot be fully captured by the simple addition of separate experiences at different touchpoints (Dhebar, 2013). Interviews facilitate a better understanding of concepts, opinions, and experiences, and are therefore the most appropriate method for collecting data for this study (Bhandari, 2021).

Therefore, data is collected through semi-structured individual interviews. Interviews were conducted with both AgriFeed Ltd. employees and customers. This practice is known as data triangulation. Data triangulation is the use of multiple data sources within a single study (Denzin, 1970). Data triangulation increases data reliability and provides researchers with a more comprehensive view of the customer journey (Thurmond, 2001).

The first group of interviewees consisted of AgriFeed Ltd.'s employees. Interviewing AgriFeed Ltd.'s employees allowed for a comprehensive overview of the customer journey from their perspective. The interviewees were an export manager, a sales manager, and a product manager. The export manager and sales manager were chosen due to their close relationship with the client and the distributor. The product manager was chosen due to his clear understanding of the value delivered by the machines and the customer's desires. These interviews provided a solid foundation for expanding our knowledge with customer interviews.

The second group of interviewees consisted of Dutch, German, Ukrainian, and Belarusian customers of AgriFeed Ltd. These nations will serve as a representative sample of AgriFeed Ltd.'s customers (units of analysis). Customers of AgriFeed Ltd. were interviewed to create a complete picture of the customer journey. The interviews took place between May and June of 2022. As shown in Table 2, in-person interviews were conducted in the Netherlands, while the remaining interviewees were contacted via phone or online meeting platforms such as Microsoft Teams and Skype. The interviews lasted between 30 and 60 minutes and were recorded to ensure an extensive transcription. Following that, supplementary notes were made to the recording. The protocols for both interviews can be found in appendix A.

Table 2 Overview of interview methods

	N° of interviewees
In person	5
Telephone	2
Online	1

3.2.1 Sampling

During the research, non-probability sampling will be used. Non-probability sampling is used when respondents are non-randomly selected based on convenience, or other selection criteria (McCombes, 2022). The downside of a non-probability sampling technique is the higher risk of sampling bias because some members of the population are more likely to be included than others (Bhandari, 2021). Therefore, a clear framework for selecting respondents must be established. In this study, respondents are chosen according to the criteria listed in Table 3.

Table 3 Selection criteria

Variable	Criteria
Location	Europe
Product	Machine A, Machine B, and Machine C
Type of livestock	Dairy cows

The ideal respondent can thus be described as a European dairy farmer who owns a feed mixer from AgriFeed Ltd. Interviewees were selected from the customer database of AgriFeed Ltd. These people were contacted both via phone and email. In total twenty people were contacted.

3.2.2 Validity & reliability

Validity and reliability threats associated with interviews must be addressed to ensure valid and reliable research. Frequently, the validity of qualitative research is discussed in terms of three fundamental threats to validity: researcher bias, reactivity, and respondent bias. (Lincoln & Guba, 1985, p. 194-201). The unfavorable influence of the researcher's prior knowledge or preconceptions on the study is known as researcher bias. (Kriukow, n.d.). Reactivity, on the other hand, refers to the researcher's potential impact on the examined situation and individuals (Kriukow, n.d.). Respondent bias occurs when respondents do not provide truthful responses for a variety of reasons, such as their perception of a topic as dangerous or their desire to "please" the researcher with comments they deem desirable (Kriukow, n.d.). A valid interview reduces these biases, resulting in comprehensive, pertinent, and clear responses (van der Kolk, 2017).

Reliability in qualitative studies largely depends on "being thorough, careful, and honest in conducting research" (Robson, 2002, p. 176). Therefore, a reliable interview ensures that interviewees provide consistent responses. To enhance this consistency, the interviewer should verify responses and report any inconsistencies (van der Kolk, 2017). Validity and reliability of the research are ensured by actively verifying interviewee responses and data triangulation. Following each interview, the customer journey was reviewed with the interviewee and any errors were rectified. In addition, the interviewee led the interview, which decreased researcher bias.

3.3 Data analysis

During the analysis of the data, Braun and Clarke's (2006) methodology was utilized. This methodology divides data analysis into the following six steps: (1) familiarization, (2) coding, (3) themes, (4) reviewing themes, (5) defining themes, and (6) writing. The data that was collected comprises both notes taken during the interviews and recordings of the conversations. The responses were transcribed to create a unified, coherent narrative. One of the benefits of data transcription is that it facilitates navigation (Gibbs, 2018, p. 18). The next step in the analysis of the data is coding. Through the process of coding, the researcher divides the data and organizes it by the ideas contained within (Jacelon & O'Dell, 2005, p. 218). After the data is coded and sorted into manageable pieces of information, these pieces were organized with the use of tables. When the pieces of code are organized, the analysis continues by looking at the relationships within and between codes (Jacelon & O'Dell, 2005, p. 218). Once the data has been converted into findings, the final step of the data analysis will be to effectively communicate the findings to the reader. A customer journey map is the most effective way to communicate the results of this study.

4. FINDINGS

In this chapter, the research's findings will be presented. First, the structure of the pre-purchase phase will be discussed. Following that, each stage is discussed in greater detail, with a focus on the actions, decisions, and touchpoints encountered along the customer journey. In conclusion, the role of customer value and prior experience in the customer journey will be examined.

4.1 Structure of the pre-purchase phase

To investigate the structure of the pre-purchase phase, respondents were asked how they moved through the customer journey. According to the responses, the pre-purchase phase of the customer journey consists of three steps. The subsequent sections will elaborate on these steps.

4.1.1 Problem recognition

The first step within the pre-purchase phase is problem recognition. Every customer journey commences with a 'trigger' that motivates the search for a new feed mixer. Based on the interviews, several triggers stir up the customer journey. The most prominent trigger that was analyzed in the data was the "wear and tear of the old machine." This is demonstrated by the following quote:

"The bottom of our old mixer wagon was almost worn out, and the auger was not in an optimal state. That is why we have decided to look for an alternative."

In addition to customers who purchase a new feed mixer because their old one is worn out; some customers begin looking for a new feed mixer because their current machine lacks sufficient capacity. This condition typically occurs when customers increase their livestock numbers or relocate. One of AgriFeed Ltd.'s employees mentioned:

"When farmers increase their livestock, their machine often lacks capacity, they either spend more time on feeding or they look for alternatives."

Some customers mentioned both causes. Both the deterioration of the old machine and its limited capacity prompted the search for a replacement. This is exemplified by the following quote:

"Our old feed mixer required feeding twice a day, this cost us too much time. In addition, there were signs of wear. Both the lack of capacity and the wear and tear of the old machine were deciding factors to look for other options."

Finally, a small number of customers desire to be at the forefront of cutting-edge technology (early adopters). These customers purchase a different system due to the technology it incorporates.

4.1.2 Information search

After identifying the problem, the customer typically begins to inform himself on the various systems, brands, and dealers available on the market. This is shown by the following quote:

"I started the search by orienting myself on the internet. What is on the market and what are the alternatives? This gave me a clear overview of which machines are available and which ones would suit me."

The step from problem recognition to information search may take some time. After recognizing the machine's deterioration, it may take several years before it is replaced. Typically, when customers observe signs of machine wear and tear, they begin to orient themselves. A participant in the interview mentioned:

"You can foresee wear and tear which allows you to make decisions in advance."

According to the data, there are two possibilities of information search. There is a distinction between customers who are unwilling to switch systems and those who are open to other systems. The information search of a customer who is open to other systems typically begins with an examination of the various available systems. Feed mixers, self-loading feed mixers, self-propelled feed mixers, automatic feeding systems, silage cutters, self-loading silage feeders, and stationary feed mixers are currently available systems. After evaluating and selecting his preferred system, the customer will return to the information search to become familiar with the various brands and dealers that sell the chosen system. A customer who does not wish to switch systems typically focuses their information search on

brands and dealers that sell the desired system. This point of view is expressed in the following quote:

"We wanted to have the same system but with a separate door at the back and a belt or chain at the front. This system fits perfectly into our company and therefore, there is no reason to look for other systems."

For these customers, the information search phase is shorter than for customers that are open to other feeding systems. They move through the information and evaluation stage once, while the others walk through the stages twice.

4.1.3 Alternative evaluation

The next step in the pre-purchase phase is the evaluation of alternative options. In this step, the customer evaluates all the alternatives that were obtained from the information search based on the criteria he specified.

A customer who does not consider alternative systems typically evaluates only brands, products, and dealers. He evaluates brands, products, and dealers in accordance with predetermined criteria. According to the data, the following factors play a significant role in this evaluation: (1) the dealer, (2) the ease of work, (3) the price, and (4) the attributes and performance. The fact that customers evaluate different alternatives based on attributes and performance is clarified by a quote from a customer in the Netherlands:

"The features that are required on a feed mixer are a blade that takes care of the silage, no mill. In addition, I must be able to lift the cabin for an optimal overview."

A customer who has not yet chosen a preferred system evaluates systems first. Once the preferred system has been determined, the customer returns to the information search, where he becomes acquainted with various brands, their products, and dealers. The customer then returns to the alternative evaluation to assess these brands, products, and retailers. The customer that has no clear preference for a system thus makes a loop from alternative evaluation back to information search.

4.2 Problem recognition

4.2.1 Touchpoints

During the problem recognition stage, a lot happens within the customer's mind. Nevertheless, touchpoints with the company itself are typically absent at this stage. The customer must be the one to identify the issue. During the interviews, customers were asked if interactions with AgriFeed Ltd. revealed a need for a new feed mixer. All customers who were interviewed indicated that AgriFeed Ltd. did not play a role in revealing the need. However, it is possible that interactions with AgriFeed Ltd. could prompt the search for a new feed mixer in some instances. It is possible that the dealer or a salesperson visits the customer and demonstrates alternatives to their current system, prompting them to search for a new feed mixer. Only in this situation will a customer's interaction with a company cause them to seek out alternatives.

4.2.2 Actions and decisions

As previously stated, the actions and decisions made during this step of the customer journey usually happen within the customer's mind. This step is therefore largely out of the company's control unless the company actively stimulates the need to seek for alternatives.

In this phase, the customer makes decisions regarding the current condition of the feed mixer. The customer often determines the current state of the feed mixer first. The customer then determines whether the current capacity still meets his needs. The customer also determines when he wishes to trade in

the feed mixer for a new one. Once the customer determines that one of the mentioned items does not meet his requirements, appropriate action will be taken. The customer could, for instance, begin searching for new feed mixers or locate an alternative solution to the problem.

4.3 Information search

4.3.1 Touchpoints

During the information search, the customer interacts with AgriFeed Ltd. on numerous occasions. These touchpoints are a combination of online and offline interactions. According to the data, there are very few online touchpoints throughout the customer journey. While there is an increase in online touchpoints, customers still prefer offline touchpoints. One of the interviewees emphasizes this point:

“I prefer to have personal contact with the organization because it provides trust.”

According to the data, the most frequent online touchpoint during the information search is AgriFeed Ltd.'s website. In addition, machinery marketplaces play a key role in this step. As previously stated, most information search touchpoints are offline. According to the data, AgriFeed Ltd.'s dealer or salesperson is the most common touchpoint during this step. In addition, some customers cite trade shows and trade magazines as points of contact with AgriFeed Ltd. Lastly, customers frequently investigate the experiences of colleagues to gain a comprehensive understanding of how others meet their needs. Observing the machine in operation provides the customer with valuable information about its functioning. This is demonstrated by the following quote from a Dutch customer:

“Coincidentally, my neighbor had a demo of an automatic feed mixer shortly afterwards I recognized the need for a new feed mixer. I went there to see if automatic feeding would fit within our company.”

In the latter stages of an information search, it is common to request quotes for a variety of products. These quotations also serve as a point of contact with the company. Requests for quotations are made to determine the prices of various products. The prices will be assessed in the subsequent phase.

4.3.2 Actions and decisions

Several actions and decisions are made by customers during the information search prior to the evaluation of alternatives. Customers must take multiple steps to obtain an overall view of everything on the market. Due to the excessive amounts of data, the majority of customers begin their information searches on the internet. This is demonstrated by the following quote:

“We started our information search ourselves, especially via the internet a lot of information was looked up.”

After conducting an online information search, customers rely on offline actions. Sharing the experience with other customers was one of the actions mentioned frequently during interviews. Hearing the experiences of other customers provides an accurate representation of the machine's functionality and is therefore a common method of orientation. In addition, many customers have conversations with the dealer's salesperson or directly with the company. A customer from Ukraine stated that the dealers in his country do not provide adequate service, so he prefers direct contact with the company's salesperson. This is demonstrated by the following quote:

“Due to the bad service that dealers in Ukraine provide, we had direct contact with the salesman of AgriFeed Ltd.”

Another action that is well represented in the data is the attendance at trade shows for the purpose of orientation. A customer from Belarus stated that tradeshow are preferred because all brands are present at the same time. This is exemplified by the following quote:

“The advantage of these trade shows is that you can have contact with distinct brands all at the same place.”

The final action frequently mentioned in the data is the demonstration of various brands and products. Visits to demonstrations provide customers with a reliable overview of the machine's performance in operation. A Dutch customer exemplifies this:

“We have visited several demonstrations of the feed mixer. Based on that, we eventually made the decision to go for a self-propelled vehicle.”

Because the information search stage is primarily concerned with gaining an understanding of the current market, few decisions are made during this step. Customers must decide how to search for information and what information is necessary to evaluate alternatives.

4.3.3 Pain points

During the information search, the price of the machines is the pain point that most customers encounter. Due to the superior quality of their products, AgriFeed Ltd. charges a higher price than the competition. This increase in price is one of the customer's struggles. However, most customers indicated that they are willing to pay more if the added value is proportional to the higher price.

4.4 Alternative evaluation

4.4.1 Touchpoints

Throughout the evaluation of alternatives, customers encounter multiple touchpoints. Additionally, offline touchpoints are more prevalent in this phase than online touchpoints. The only mentioned online touchpoint is testimonials. Testimonials are the experiences of others that provide the customer with a clear understanding of the product. The advantage of testimonials over farm visits is that it requires significantly less effort to read a testimonial than to visit multiple farms to obtain information about the machine. During the pre-purchase phase, both the company salesperson and the dealer's salesperson appear to play a significant role. Also in the alternative evaluation, salesperson contact is frequently mentioned in the data. This is demonstrated by the following quote from a Dutch customer:

“Throughout the purchase process, I always stayed in contact with the salesman of AgriFeed Ltd.”

The most frequently mentioned offline touchpoint during this phase is the machine demonstration. Frequently, demonstrations are used to convince customers of the performance of feed mixers. These demonstrations may also occur during the information-gathering phase, depending on the customer's preferences.

4.4.2 Actions and decisions

The objective of the alternative evaluation stage is to select a machine that meets the customer's requirements to the greatest extent possible. Because not every customer searches for the same machine, everyone's alternative evaluation is unique. However, the actions taken, and the decisions made are frequently identical. In this stage, one of the activities performed by customers is the evaluation of the various products that were selected based on a variety of criteria and values. Most respondents indicated that they evaluate alternatives primarily

based on the machine's characteristics and performance. This is illuminated by the following quotes:

“I also got a quotation from another self-propelled machine, which was cheaper. However, the machine of AgriFeed Ltd. uses a knife instead of a mill for extraction, which appealed to me because it results in less heating in the silage.”

“We did not like the installation of the competitor; we do not want a feed kitchen with such a gigantic crane. It does not seem accurate and fresh enough, since there is always food spilled.”

However, alternatives are not only evaluated based on attributes and performance. Another action that is often performed is the comparison of distinct brands and dealers. A lot of interviewees mentioned that the dealer plays a significant role in the evaluation process because of the responsibility for the service and repairs of the machine. This is clarified by a quote from a customer in the Netherlands:

“Our current dealer has a lot of knowledge and experience regarding the products of AgriFeed Ltd, this gives us trust.”

The most important decision a customer must make is determining what he values most in a feed mixer. Based on these values, he can evaluate the various brands and products. Following this, the most important decision of the customer's journey is made: "which system best meets their needs?"

4.4.3 Pain points

There are also pain points in the alternative evaluation phase. The price is still frequently mentioned as a concern. Next to the cost, the specifications are a source of irritation. When a brand fails to provide what the customer desires, he may switch to a competing brand. Lastly, the delivery time of the machine is a frequently mentioned drawback.

4.5 Customer value along the customer journey

Knowing what characteristics customers seek in a new machine can provide a company with a competitive advantage. This research examines how these desired values shape the customer journey and the selection of touchpoints. During the interviews, we inquired about the value respondents seek in a new feed mixer. Most customers started to list attributes and performance of the machine itself. But there were also customers who provided values that referred to the machine's intended use and the objectives they desired it to accomplish. These desired values are explained in greater detail in the sections that follow.

4.5.1.1 Desired product attributes and performance

When describing the value that a feed mixer should provide, the majority of customers mention product attributes. Two customers mentioned that they prefer a cutting blade over a mill for silage extraction. This is demonstrated by the following quote:

“The feed mixer must give a clean and neat finish during the removal process so that as little silage as possible is lost. Therefore, we prefer a cutting blade instead of a mill”

Another frequently mentioned value is fuel efficiency. Because mixing feed requires a significant amount of fuel, every liter saved contributes to the organization's efficiency. One of the Dutch customers mentioned the following:

“During the demo, fuel consumption was exceptionally low, and the time savings were enormous. This contributed to our choice for a self-propelled feed mixer.”

Other product attributes that are valued by the customer are durability, its ease of use, and the fact that it mixes vertically as opposed to horizontally.

4.5.1.2 Desired consequences in use

Prior to the purchase of a feed mixer, the customer has already considered the desired consequences in use. The most frequently mentioned benefit of the machine is its reliability and performance. All customers desire a reliable and consistent feed mixer due to its extensive application. In most cases, the feed mixer is utilized daily, so it should not be out of service for too long. This is demonstrated by the following quotation:

“For me, a feed mixer must above all be reliable. You need it every day and when you need it, it must function.”

In addition to this, numerous customers emphasized the importance of ease of use. This is explained by the following quote from a Dutch customer:

“I must be able to work easily with a feed mixer, which is why ease of work is of paramount importance to me.”

Lastly, customers mentioned that efficiency and precision are important values in use.

4.5.1.3 Customer's goals and purposes

The customer seeks a feed mixer that meets his goals and needs to the greatest extent possible. Therefore, we asked the interviewees what objectives a feed mixer should achieve. Nearly every customer mentioned that a feed mixer should provide a thoroughly mixed ration. A quote from a Ukrainian consumer clarifies this point:

“Of course, we must not forget that a well-mixed ration is the most important. That is what earns the money.”

4.5.2 Value co-creation

Along the customer journey, the organization and the customer co-create value. As is evident from the data, the organization provides value propositions to its customers. At each touchpoint, the customer creates value. The combination of these touchpoints produces perceived customer value. We asked interviewees which touchpoints contributed the most to the value creation process. According to their responses, AgriFeed Ltd.'s most significant contributions to value creation are product demonstrations and personal contact. According to the data, product demonstrations provide the customer with a realistic and comprehensive overview of the machine's performance in use scenarios. This is demonstrated by the following quote:

“The demo gave a clear picture of the machine and was the decisive factor in choosing a self-propelled machine. It convinced me of the performance of the machine.”

Personal interaction with AgriFeed Ltd. also contributes to the process of value creation. According to a customer from Belarus, the relationship with the company creates value. This is demonstrated by the following quotes:

“As a company you obviously have to sell a superior product, but the value mainly lies in the relationship with AgriFeed Ltd.”

“A relationship with a company, if well maintained, has a lot of influence on the customer journey. You are not going to switch quickly.”

4.6 Prior experience and the customer journey

To investigate the impact of prior experience on the customer journey, respondents were asked to describe their prior experience and to what extent it impacted their customer journey. The data revealed that many customers had prior experience with AgriFeed Ltd. This is demonstrated by the following quotes:

“Before this feed mixer, we also had a mixer wagon of AgriFeed Ltd. This feed mixer had been running for 5 years without any problems.”

“We have had two other machines of AgriFeed Ltd. before these feed mixers. A self-loading feed mixer and a self-propelled feed mixer.”

In addition, respondents were asked to describe whether and how this prior experience affected their customer journey. Based on the data, it is evident that a positive prior experience with AgriFeed Ltd. products positively affects the customer journey. A customer's trust in AgriFeed Ltd.'s products is bolstered by a positive experience which speeds up the customer's journey. Customers are less likely to switch brands if the organization continues to meet their needs. This is demonstrated by the following quotes:

“The previous experiences with AgriFeed Ltd. gave a lot of confidence”

“The previous experience with AgriFeed Ltd. has had a major impact on the customer journey. We have not even looked at another type or brand. We have a lot of confidence in the company.”

Previous experience with the company thus inspires confidence and eliminates most uncertainties. Customers are less likely to switch brands when they are aware of what to expect from both the machine and the company.

5. CONCLUSION AND DISCUSSION

5.1 Key findings

This study aimed to provide a comprehensive overview of the customer journey of a feed mixer, with a great focus on the actions, decisions, and value creation that took place throughout the pre-purchase phase. Based on the results of the data analysis, it is possible to conclude that the pre-purchase phases of a feed mixer are identical to those proposed in the conceptual framework. The pre-purchase customer journey is comprised of three primary steps: (1) problem recognition, (2) information search, and (3) alternative evaluation. It is also possible for customers to head back during the process. It became apparent that customers frequently switch between the information search and alternative evaluation stages when system-related uncertainties arise. This will result in the subsequent steps: (1) problem recognition (2) system information search (3) system alternative evaluation (4) search for information about products and brands (5) alternative product and brand evaluations. This implies that customers select a system before orientating and evaluating the various brands and products pertaining to the selected system.

Throughout these stages, customers have numerous interactions with the company. Examining these touchpoints in their various stages reveals that offline touchpoints predominate over online touchpoints. While there are few customer touchpoints during the initial stage, the number of customer touchpoints increases in subsequent stages. Along the customer journey, customers appear to favor offline touchpoints while utilizing online touchpoints less frequently. The most significant touchpoints along the customer journey appear to be the dealer, the salesperson of AgriFeed Ltd, and product demonstrations. However, the increased significance and influence of online touchpoints such as the website and customer testimonials must not be overlooked.

When examining the actions and decisions that customers make throughout the customer journey, it can be concluded that the most significant actions and decisions are made in the later stages. The majority of customers will only

purchase a new machine if the old one no longer meets their needs. Afterwards, they will likely utilize the available channels to inform themselves on the various machines and brands on the market. The customer will then evaluate the alternatives and come to a purchase.

Throughout the customer journey, the customer creates customer value by processing information and resources provided by both the company and third parties. The machine's desired values are unique per customer and per product. Nonetheless, there are recurring themes throughout the data. Based on the analysis, it can be concluded that the most desired attributes and performance of the machines are (1) a cutting blade rather than a mill, (2) fuel efficiency, (3) the machine's robustness, (4) simplicity, and (5) the fact that it mixes vertically rather than horizontally. The desired consequences in use can be summed up by the following themes: (1) reliability, (2) ease of use, (3) efficiency, and (4) precision. When examining the process of value creation during the customer journey, it became evident that both the customer and the organization contribute to the creation of customer value. The company's objective is to provide the customer with sufficient information and resources to create a clear picture of the machine's value. Based on the data analysis, it can be concluded that product demonstrations and personal contact with the company create customer value in this instance. Demonstrations and personal interaction allow customers to develop perceptions of value in use.

According to the data about prior experience, it can be concluded that prior experience with the company's products positively affects the customer journey. A positive prior experience instills confidence in both the company and its products. Customers are familiar with the machine's value and therefore move more quickly through the customer journey. This means that new customers will progress more extensively through the customer journey. They must first be convinced of the machine's value. In most instances, new customers have a longer customer journey that requires greater effort from both the customer and the organization. In Appendix B, a customer journey map can be found that summarizes these key findings.

5.2 Managerial implications

Having a comprehensive understanding of the customer journey can provide a significant competitive advantage to an organization. This study provides managers with several implications that can assist organizations in gaining this competitive edge. The study provides managers with a customer journey map that incorporates the actions, decisions, touchpoints, and pain points that occur during the pre-purchase phase of a feed mixer. The customer journey map is applicable to CRM software for the case organization. In addition, the customer journey map can serve as a solid foundation for other organizations' research into the customer journey. The study also provides managers with an understanding of the value creation process during the pre-purchase phase. It provides insight into the "moments of truth" and value creation activities that define the customer journey.

Personal contact and product demonstrations are the two activities that create the most value for the customer. Therefore, it is crucial for businesses to prioritize these two activities and optimize them throughout the customer journey. Customers who may be interested in a new product can be invited to product demonstrations.

Touchpoints are essential to the customer journey, so managers should strive to optimize them. Because offline touchpoints are still preferred in this industry, it is crucial that managers optimize these offline touchpoints. However, presence in online channels should not be neglected. One of these touchpoints is the dealer, who is a significant deciding factor for

many customers. It is vitally important for the organization to ensure that the dealers have the appropriate knowledge and provide the appropriate service. A dealer lacking in knowledge and experience may negatively impact the customer journey.

In addition, interviewees identified trade shows as a common touchpoint during the information search phase. Therefore, it is essential for businesses to participate in these events so that customers can form an impression of who they are and what they sell. Sharing experiences with other customers is one of the ways in which the customer orients himself regarding the product. To ensure that customers are satisfied with their product, it is crucial for the business to have an effective after-sales trajectory. This increases the likelihood that individuals will share their positive experiences.

In the stage of problem recognition, the organization has limited influence. Therefore, it may be profitable to actively promote the need for a new feed mixer in an effort to increase this control. When a new product is introduced, organizations can increase awareness by proactively introducing it to the customer via their preferred channels. Several implications result from examining the pain points. Customers frequently cited the product's price as a source of frustration. Therefore, it is essential for the business to ensure that the machine's values reflect its high price. Customers are more likely to switch to a competitor if a cheaper machine can provide the same value. The specifications are also frequently cited as a source of difficulty. Occasionally, customers desire features that are unavailable on the machine of their current brand. Customers will be more likely to switch brands when other brands offer the desired specifications. As a result, it is crucial for businesses to pay attention to their customers' wants and needs and to innovate accordingly.

5.3 Limitations & future research

While interpreting the research's results and conclusion, certain limitations must be recognized. During the study, several customers from various nations and possessing a variety of products were interviewed. These customers may have unique requirements, necessitating a distinct customer journey. In lieu of the service process as experienced by each individual customer, an aggregated customer journey was developed. Every customer, country, and product has a personalized customer journey. Consequently, future research could investigate how the customer journey varies by product, customer, and country. In addition, future research might investigate the customer journey of a particular product in a particular country, for instance.

Another limitation of the research is that it is written in case study format. This indicates that the study is tailored to the needs of the organization. During the study, only company customers were interviewed, which may have affected the study's generalizability. By investigating the customer journey of farmers in general, future research can improve generalizability.

Even though respondents were asked about touchpoints during the interviews, they may have had trouble recalling them accurately. This restriction is especially applicable when the customer has had the product for a considerable amount of time and the touchpoints are no longer remembered. To ensure that all touchpoints are successfully captured, future research may combine interviews with observations.

The final limitation of the study is the sample size. During the research, only eight people were interviewed, which severely compromises the data's reliability. Future research may increase the sample size to improve the reliability.

6. REFERENCES

- Aichner, Thomas & Gruber, Benjamin. (2017). Managing Customer Touchpoints and Customer Satisfaction in B2B Mass Customization: A Case Study. *International Journal of Industrial Engineering and Management*. 8. 131-140.
- Alvarez, C. F., & Molnar, G. (2021, October 12). What is behind soaring energy prices and what happens next? – Analysis. IEA. Retrieved 11 April 2022, from <https://www.iea.org/commentaries/what-is-behind-soaring-energy-prices-and-what-happens-next>
- Babin, B. J., & James, K. W. (2010). A brief retrospective and introspective on value. *European Business Review*, 22(5), 471–478. <https://doi.org/10.1108/09555341011068895>
- Bhandari, P. (2021, December 8). Sampling bias: What is it and why does it matter? Scribbr. Retrieved 4 April 2022, from <https://www.scribbr.com/methodology/samplingbias/>
- Bolton, Ruth & Gustafsson, Anders & McColl-Kennedy, Janet & Sirianni, Nancy & Tse, David. (2014). Small details that make big differences: A radical approach to consumption experience as a firm's differentiating strategy. *Journal of Service Management*. 25. 253-74.
- Braun, V., & Clarke, V. (2006). Using thematic analysis in psychology. *Qualitative Research in Psychology*, 3(2), 77–101. <https://doi.org/10.1191/1478088706qp063oa>
- Chheda, S., Duncan, E., & Roggenhofer, S. (2017, March 17). Putting customer experience at the heart of next-generation operating models. McKinsey & Company. Retrieved 4 April 2022, from <https://www.mckinsey.com/business-functions/mckinsey-digital/our-insights/putting-customer-experience-at-the-heart-of-next-generation-operating-models>
- Crosier, A., & Handford, A. (2012). Customer Journey Mapping as an Advocacy Tool for Disabled People. *Social Marketing Quarterly*, 18(1), 67–76. <https://doi.org/10.1177/1524500411435483>
- Deasi, G. (2019, June 25). 65 Questions for Understanding the B2B Customer Journey. *Customer Journey Marketer Blog*. Retrieved 2 May 2022, from <http://customerjourneymarketer.com/understand-b2b-customer-journey/>
- Denzin, N.K. (1970). *The research act: A theoretical introduction to sociological methods*. Chicago: Aldine.
- Dewey, J. (1910). *How we think*. Online Teacher Training of Cognition and Learning in Education. <https://doi.org/10.1037/10903-000>
- Dhebar, A. (2013). Toward a compelling customer touchpoint architecture. *Business Horizons*, 56(2), 199–205. <https://doi.org/10.1016/j.bushor.2012.11.004>
- Edelman, D., & Singer, M. (2015, October 1). The new consumer decision journey. McKinsey & Company. Retrieved 18 May 2022, from <https://www.mckinsey.com/business-functions/growth-marketing-and-sales/our-insights/the-new-consumer-decision-journey>
- Edvardsson, B. (2005). Service quality: beyond cognitive assessment. *Managing Service Quality: An International Journal*, 15(2), 127–131. <https://doi.org/10.1108/09604520510585316>

- Eggert, A., Ulaga, W., Frow, P., & Payne, A. (2018). Conceptualizing and communicating value in business markets: From value in exchange to value in use. *Industrial Marketing Management*, 69, 80–90. <https://doi.org/10.1016/j.indmarman.2018.01.018>
- Følstad, A., & Kvale, K. (2018). Customer journeys: a systematic literature review. *Journal of Service Theory and Practice*, 28(2), 196–227. <https://doi.org/10.1108/jstp-11-2014-0261>
- Gale, B. (1994). *Managing Customer Value: Creating Quality and Service That Customers Can See* (1st ed.). Free Press.
- Gibbs, G. R. (2018). Thematic coding and categorizing. *Analyzing Qualitative Data*. <https://doi.org/10.4135/9781526441867>
- Gill, P., Stewart, K., Treasure, E., & Chadwick, B. (2008). Methods of data collection in qualitative research: interviews and focus groups. *British dental journal*, 204(6), 291–295.
- Grewal, R., Lilien, G. L., Bharadwaj, S., Jindal, P., Kayande, U., Lusch, R. F., Mantrala, M., Palmatier, R. W., Rindfleisch, A., Scheer, L. K., Spekman, R., & Sridhar, S. (2015). Business-to-Business Buying: Challenges and Opportunities. *Customer Needs and Solutions*, 2(3), 193–208. <https://doi.org/10.1007/s40547-015-0040-5>
- Grönroos, C. (2017). On Value and Value Creation in Service: A Management Perspective. *Journal of Creating Value*, 3(2), 125–141. <https://doi.org/10.1177/2394964317727196>
- Grönroos, C. (2008). Service logic revisited: who creates value? And who co-creates? *European Business Review*, 20(4), 298–314. <https://doi.org/10.1108/09555340810886585>
- Grönroos, C., & Voima, P. (2012). Critical service logic: making sense of value creation and co-creation. *Journal of the Academy of Marketing Science*, 41(2), 133–150. <https://doi.org/10.1007/s11747-012-0308-3>
- Gupta, S. and Vajic, M. (2000) The Contextual and Dialectical Nature of Experiences. In: Fitzsimmons, J. and Fitzsimmons, M., Eds., *New Service Development*, Sage, Thousand Oaks, 33-51. <http://dx.doi.org/10.4135/9781452205564.n2>
- Haines, G. H., Howard, J. A., & Sheth, J. N. (1970). The Theory of Buyer Behavior. *Journal of the American Statistical Association*, 65(331), 1406. <https://doi.org/10.2307/2284311>
- Helkkula, A., Kelleher, C., & Pihlström, M. (2012). Characterizing Value as an Experience. *Journal of Service Research*, 15(1), 59–75. <https://doi.org/10.1177/1094670511426897>
- Helkkula, Anu. (2011). Characterising the concept of service experience. *Journal of Service Management*. 22. 367–389. [10.1108/09564231111136872](https://doi.org/10.1108/09564231111136872).
- Holmlid, S., & Evenson, S. (2008). Bringing Service Design to Service Sciences, Management and Engineering. *Service Science, Management and Engineering Education for the 21st Century*, 341–345. https://doi.org/10.1007/978-0-387-76578-5_50
- Homburg, C., Jozić, D., & Kuehnl, C. (2015). Customer experience management: toward implementing an evolving marketing concept. *Journal of the Academy of Marketing Science*, 45(3), 377–401. <https://doi.org/10.1007/s11747-015-0460-7>
- Jaakkola, E., Helkkula, A., & Aarikka-Stenroos, L. (2015). Service experience co-creation: conceptualization, implications, and future research directions. *Journal of Service Management*, 26(2), 182–205. <https://doi.org/10.1108/josm-12-2014-0323>
- Jacelon, C. S., & O'Dell, K. K. (2005). Analyzing qualitative data. *Urologic Nursing*, 25(3), 217–220.
- Kankainen, A., Vaajakallio, K., Kantola, V., & Mattelmäki, T. (2012). Storytelling Group – a co-design method for service design. *Behaviour & Information Technology*, 31(3), 221–230. <https://doi.org/10.1080/0144929x.2011.563794>
- Kriukow, J. (n.d.). Validity and Reliability in Qualitative research. *Qualitative Researcher*. Retrieved 4 April 2022, from <https://drkriukow.com/validity-and-reliability-in-qualitative-research/>
- Leeflang, P. S., Verhoef, P. C., Dahlström, P., & Freundt, T. (2014). Challenges and solutions for marketing in a digital era. *European Management Journal*, 32(1), 1–12. <https://doi.org/10.1016/j.emj.2013.12.001>
- Lemke, F., Clark, M., & Wilson, H. (2010). Customer experience quality: an exploration in business and consumer contexts using repertory grid technique. *Journal of the Academy of Marketing Science*, 39(6), 846–869. <https://doi.org/10.1007/s11747-010-0219-0>
- Lemon, K. N., & Verhoef, P. C. (2016). Understanding Customer Experience Throughout the Customer Journey. *Journal of Marketing*, 80(6), 69–96. <https://doi.org/10.1509/jm.15.0420>
- Lincoln, Y. S., Guba, E. G., & SAGE Publishing. (1985). *Naturalistic Inquiry*. SAGE Publications.
- Lusch, R. F., Vargo, S. L., & Tanniru, M. (2009). Service, value networks and learning. *Journal of the Academy of Marketing Science*, 38(1), 19–31. <https://doi.org/10.1007/s11747-008-0131-z>
- Marvasti, N. B., Huhtala, J. P., Yousefi, Z. R., Vaniala, I., Upreti, B., Malo, P., Kaski, S., & Tikkanen, H. (2021). Is this company a lead customer? Estimating stages of B2B buying journey. *Industrial Marketing Management*, 97, 126–133. <https://doi.org/10.1016/j.indmarman.2021.06.003>
- McCull-Kennedy, J. R., Zaki, M., Lemon, K. N., Urmetzer, F., & Neely, A. (2019). Gaining Customer Experience Insights That Matter. *Journal of Service Research*, 22(1), 8–26. <https://doi.org/10.1177/1094670518812182>
- McCombes, S. (2022, January 19). An introduction to sampling methods. *Scribbr*. Retrieved 4 April 2022, from <https://www.scribbr.com/methodology/sampling-methods/>
- Ng, I., Badinelli, R., Polese, F., Nauta, P. D., Löbner, H., & Halliday, S. (2012). SD logic research directions and opportunities: The perspective of systems, complexity and engineering. *Marketing Theory*, 12 (2), 213–217.
- Pantano, E., & Viassone, M. (2015). Engaging consumers on new integrated multichannel retail settings: Challenges for retailers. *Journal of Retailing and Consumer Services*, 25, 106–114. <https://doi.org/10.1016/j.jretconser.2015.04.003>
- Prahalad, C.K. and Ramaswamy, V. (2004), "Co-creating unique value with customers", *Strategy & Leadership*, Vol. 32 No. 3, pp. 4-9. <https://doi.org/10.1108/10878570410699249>
- Robson, C. (2002). *Real World Research: A Resource for Social Scientists and Practitioner-Researchers* (2nd ed.). Wiley-Blackwell

- Rosenbaum, M. S., Otolara, M. L., & Ramirez, G. C. (2017). How to create a realistic customer journey map. *Business Horizons*, 60(1), 143–150. <https://doi.org/10.1016/j.bushor.2016.09.010>
- Sahhar, Yasin & Loohuis, Raymond & Henseler, Jörg. (2021). Towards a circumplex typology of customer service experience management practices: a dyadic perspective. *Journal of Service Theory and Practice*. ahead-of-print. 10.1108/JSTP-06-2020-0118.
- Sandström, S., Edvardsson, B., Kristensson, P., & Magnusson, P. (2008). Value in use through service experience. *Managing Service Quality: An International Journal*, 18(2), 112–126. <https://doi.org/10.1108/09604520810859184>
- Sangiorgi, Daniela & Meroni, Anna. (2011). Design for Services. 10.4324/9781315576657.
- Strauss, A., & Corbin, J. (1998). *Basics of Qualitative Research: Techniques and Procedures for Developing Grounded Theory*. Thousand Oaks, CA: Sage Publications, Inc.
- Thurmond, V. A. (2001). The Point of Triangulation. *Journal of Nursing Scholarship*, 33(3), 253–258. <https://doi.org/10.1111/j.1547-5069.2001.00253>.
- Tueanrat, Y., Papagiannidis, S., & Alamanos, E. (2021). Going on a journey: A review of the customer journey literature. *Journal of Business Research*, 125, 336–353. <https://doi.org/10.1016/j.jbusres.2020.12.028>
- van der Kolk, H. (2017, January 1). Data collection - Validity and reliability threats in interviews [Video]. Vimeo. <https://vimeo.com/user29453510/review/203982781/c0bfff942b>
- Vargo, S. L., & Lusch, R. F. (2004). Evolving to a New Dominant Logic for Marketing. *Journal of Marketing*, 68(1), 1–17. <https://doi.org/10.1509/jmkg.68.1.1.24036>
- Voorhees, C. M., Fombelle, P. W., Gregoire, Y., Bone, S., Gustafsson, A., Sousa, R., & Walkowiak, T. (2017). Service encounters, experiences, and the customer journey: Defining the field and a call to expand our lens. *Journal of Business Research*, 79, 269–280. <https://doi.org/10.1016/j.jbusres.2017.04.014>
- Witell, Lars & Kowalkowski, Christian & Perks, Helen & Raddats, Chris & Schwabe, Maria & Benedettini, Ornella & Burton, Jamie. (2019). Characterizing customer experience management in business markets. *Journal of Business Research*. 116. 10.1016/j.jbusres.2019.08.050.
- Wolny, Julia & Charoensuksai, Nipawan. (2014). Mapping customer journeys in multichannel decision-making. *Direct*. 15. 10.1057/dddmp.2014.24.
- Woodruff, R. B. (1997). Customer value: The next source for competitive advantage. *Journal of the Academy of Marketing Science*, 25(2), 139–153. <https://doi.org/10.1007/bf02894350>
- Zeithaml, V. A. (1988). Consumer Perceptions of Price, Quality, and Value: A Means-End Model and Synthesis of Evidence. *Journal of Marketing*, 52(3), 2–22. <https://doi.org/10.1177/002224298805200302>
- Zomerdiijk, L. G., & Voss, C. A. (2010). Service Design for Experience-Centric Services. *Journal of Service Research*, 13(1), 67–82. <https://doi.org/10.1177/1094670509351960>

7. APPENDICES

7.1 Appendix A: interview protocols

7.1.1 Interview protocol customers

Persona

1. Age?
 2. Gender?
 3. Location?
 4. Role in the organization? (Owner, manager, tenant)
 5. Type of livestock?
 6. Type of feeding mixer?
 7. The main goal of the business?
1. What values do you think a feed mixer should deliver (and which values are most important to you)?
 - a. Which features/functions are indispensable on a feed mixer?
 2. Did you have previous experience with AgriFeed Ltd. before this purchase?
 - a. How did this experience look?
 - b. To what extent has this influenced the customer journey?
 3. What were the buying triggers, events or circumstances that made you look for a feed mixer?
 - a. Have touchpoints with AgriFeed Ltd. revealed this need? (Ads, etc.)
 4. After the need was identified, what was the next step in the process?
 - a. What touchpoints did you have with AgriFeed Ltd. during this step?
 - b. How did AgriFeed Ltd. add value in this step?
 - c. How did you experience these touchpoints?
 - d. What was the purpose of this step?

Repeat until purchase

5. Why did you choose AgriFeed Ltd. (or not)?
 - a. Which factors/features played a role in this decision? (Dealer distance, service, etc.)
6. What is your overall experience of the interactions with AgriFeed Ltd.?
 - a. Do you think the touchpoints (both online and offline) were sufficient and at the right time?
 - b. Did you experience pain points during the trip?
 - i. What are improvements AgriFeed Ltd. could make to resolve this?

7. Did you get a clear picture of what AgriFeed Ltd. had to offer before purchasing?
Regarding:
Mixer wagon (attributes and performance)
Value that the machine can deliver during use
Results (improvements) that the mixer wagon can bring about in your situation.
 - a. To what extent has this influenced the customer journey?

7.1.2 Interview protocol employees

Persona

1. Name?
2. Role within the organization?

Customer Journey

1. What are the buying triggers, events or circumstances that cause a farmer to look for a feed mixer?
 - a. How does AgriFeed Ltd. try to expose this need? (Ads, etc.)
 - b. What is usually the first moment of contact with AgriFeed Ltd. (how and when?)
2. How do farmers find information about the different feed mixers on the market? (Which channels do they use?)
 - a. Why this method?
 - b. What actions and decisions are taken?
 - c. What kind of information are they looking for?
 - d. What are the most important touchpoints in this phase?
 - i. How do farmers experience these touchpoints?
 - e. How does AgriFeed Ltd. add value during the information search?
3. How are the alternatives evaluated?
 - a. What actions and decisions are taken?
 - b. What are the most important touchpoints during this phase?
 - i. How are these contact moments experienced?
 - c. Why do farmers choose AgriFeed Ltd. (or not)?
 - i. What factors play a role in this decision? (Dealer distance, service, etc.)
 - ii. Which factor is usually decisive?
 - iii. In what value do you think AgriFeed Ltd. is superior?
4. What do you think is the farmer's overall experience of interactions with AgriFeed Ltd.?
 - a. Do you think that the touchpoints (both online and offline) are sufficient and at the right time?
 - b. Are there any known pain points during the trip?
 - i. What are any improvements AgriFeed could make to resolve this?
5. To what extent does previous experience with AgriFeed Ltd. influence the customer journey?

Value

6. What is the most important value that the feed mixer delivers?
 - a. Which product features are most important? (Functions/possibilities)
 - b. What are the desired results in use cases? (What is the use value?)
 - c. What is the main goal the customer is trying to achieve by using the mixer wagon?
 - i. In general, is the customer able to achieve these goals?
 1. If not, what is a common reason why not?
 - d. How well does AgriFeed's product deliver the value that the customer expects?
 - e. To what extent do these expectations of value influence the customer journey/touchpoint selection?

7.2 Appendix B: the customer journey of AgriFeed Ltd.

