# Exploring the unknown: anomalies in the customer journey

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#### ABSTRACT:

**Purpose** – The purpose of this research is to identify anomalies in the customer journey. Also, this research explores how companies can anticipate on those identified anomalies.

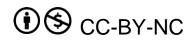
**Design/approach** – This research is conducted using company interviews. For those interviews, marketing professionals from marketing agencies, MarTech experts and B2C companies are interviewed. The results are summarized through the use of the inductive Gioia method and real quotes are used throughout the results section.

**Findings** – The results highlight the importance of contextuality for the assessment and identification of anomalies, Also, hidden anomalies, consumer-centric anomalies and company-centric anomalies are identified. Results on the anticipation methods highlight the importance of adaptability and flexibility when anticipating on anomalies to use those anomalies as a source for growth.

**Managerial and theoretical contributions** – This research contributes to theory by identifying and examining three different types of anomalies in the customer journey, shedding light on a previously fairly unexplored topic. Also, this research shows how companies should anticipate on anomalies, thereby contributing to the management mechanisms of anomalies, highlighting a flexible and adaptive approach to anomalies.

*Future research* – Adopt a micro perspective on why anomalies even occur, trying to identify the motivation and roots behind their existence. Future research could also look into strengthening the understanding of anomalies by interviewing one specific type of companies (e.g. B2C). *Keywords* – Anomalies, Customer Journey, Customer Behavior, Behavioral Deviations

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# 1. Introduction

The increasing pressure that rests on companies to successfully ride the wave of adapting and utilizing new technologies that have appeared and gained in popularity in recent years, is practically reflected in a need for more good strategies and appropriate approaches to attract and retain customers. In practice, notable is the fact that active AI startups have increased by the factor of 14 since the year 2000 (Dilmegani, 2021). Advancements in the AI field, like virtual assistants as tools for customer communication management or Internet of Things (IoT) across the whole Supply Chain, can completely change the way organizations do business, as well largely influencing customers in their online (shopping) experience (Libai et. al, 2019), while also possessing the power to be more and more accurate in predicting customer behavior (Afan et. al, 2016).

With the rise of those technologies and their influence on customers in their purchasing behavior and purchasing decisions, the steps that customers take from need recognition, search, and consideration (Lemon & Verhoef, 2016) for a specific product up to the final purchase with a specific company becomes more and more difficult to understand for companies. This is caused by an always increasing number of touchpoints through which companies and customers interact, ultimately making it a necessity for companies to track and analyze large amounts of data and to make them a part of the customer journey process. In this sense, making the customer journey a more participative process in which company and customer can interact smoothly, is becoming increasingly complex, but worth the effort, as an increased customer involvement enhances trust, commitment, and loyalty towards a company (Brodie et al., 2013).

Given the above-mentioned developments, understanding customer behavior is becoming increasingly important, considering the competition that companies nowadays face and the technological improvements that are happening continuously. Even though companies nowadays are already able to track customers throughout the customer journey with the help of for example website cookies, there is still uncertainty correlated with those customer journeys that do not follow the typical and usual customer behavior, but rather deviate from it at different stages. To date, important contributions for deviating customer behavior are for example done by Fullerton and Punj (2004) in their article about the consequences of consumer behavior, stressing the severity of consumer misbehavior on a company's undertakings. Notable is also the contribution made by Plé and Chumpinatz (2010) with their work on value (co-) destruction as a consequence of customer behavior, which can also affect the experience of other customers. Nonetheless, their work fails to connect customer behavior and behavioral anomalies with one of the most important concepts in modern-day marketing, the customer journey. Accordingly, this research aims at closing this gap by identifying and conceptualizing behavioral deviations in the customer journey.

Anomalies are interesting for multiple reasons. As customer interactions increasingly take place in an online setting, companies can gather an increasing amount of customer information that they can actively use for various purposes in the organization. Through this, it is also very clear that while the amount of data is rising, the amount of anomalous customer behavior is rising as well. Second, as the increase of anomalous customer behavior is a logical consequence of an increasing amount of data, it is crucial that companies identify this behavior and know how to manage/deal with it in the stages of the customer journey to ensure that those real customers do create value for the company by e.g., successfully completing a transaction. Looking at the customer journey, existing literature mainly focuses on the complexity of customer journeys as a consequence of technological developments (Lemon and Verhoef, 2016) and a rapidly growing competition, lacking a perspective of the customer behavioral dimension and its consequence on customer journeys. Important to mention here is that anomalies do not only occur as a phenomenon on the business side of the customer journey, but also from a customer's perspective.

Surprisingly, hitherto, there is very limited research on anomalies in the customer journey context. While recently, methods for anomaly detection were developed (Pereion, n.d.), the actual need to detect anomalies and the value and uncertainty connected to anomalies in the stages of the customer journey is very much unexplored. To add to the existing literature, this research aims to strengthen the understanding of anomalies in the customer journey in general, as there is still no consensus about how a customer anomaly can be defined and which practical implications can be derived from anomalies. As good customer experience management is crucial for the creation of customer loyalty, increased profits and branding (Bhasin, 2020), the need to reduce uncertainty, that is related to anomalies in customer behavior, is apparent.

Closing this gap is particularly critical for managers, as the customer journey is the key concept that displays the customer experience with a company from start to finish (Lemon & Verhoef, 2016). Witnessing a high number of anomalies in this context would therefore show that there are some issues with the customer experience, may it be some website issues or even faulty communication of a product, ultimately leading to less revenue.

To stress this importance even more, it is important to recognize that the customer journey cannot be seen as an always smooth interaction process between customer and company, but rather as a process in which discrepancies between customer expectancy and reality, as well other issues in the interaction occur frequently. Hence, shedding light on those discrepancies and such deviating customer behavior is of high importance for the creation of a good customer experience, as it would otherwise destroy the customer's experience with the company.

To close the gap between the uncertainty of anomalies, the importance of the customer journey and the combined implications for customer experience management, the research question(s) of this research are the following:

#### (1) What are customer anomalies in the customer journey?

#### (2) How can organizations anticipate on customer anomalies in the customer journey?

To tackle the research questions, this research will follow an extensive literature review, which will result in first indications to answer RQ (1). Following this, in-depth interviews will be held that contribute to fully answer RQ (1) and to answer RQ (2). Answering the second research question can only be done with the help of the interviews as real companies and real company representatives will be interviewed, giving insights into how anomalies might affect businesses and the customer journey, as well as how companies can deal with such deviations.

This research contributes to the existing body of research and businesses because a conceptualization of anomalies helps research and marketing employees to reduce the theoretical uncertainty that is coming from anomalies. Similarly, this research contributes by shedding light on a still unexplored topic and would hence extend the small existing body of correlated literature.

The thesis is structured as follows: This introduction is followed by the theoretical framework. This section takes an extensive look at the literature on customer journeys, including its implications for customers, companies, and customer experience management, and discusses the phenomenon of anomalies. Subsequently, the methodology section describes in detail the research design, including data collection and analysis. Next, the result section lays out the findings of this study in different phases of the customer journey. We include lively tales from the interviewees and a careful interpretation of this data. This thesis closes with the Discussion that comprises of reflections, concluding remarks, limitations, and recommendations for future research.

# 2. Theory

# 2.1 Customer Experience

The term customer experience is one of the key marketing concepts for research and practice. In reality, the vast number of studies and literature focused on the topic is leading to considerable confusion towards the term, also reflected in the lack of an overarching definition of the term (Becker and Jaakkola, 2020). As most definitions of the customer journey do not separate the customer experience from the stimuli that customers react to, Becker and Jaakkola (2020) approach the term as a "non-deliberate, spontaneous response and reaction to a particular stimulus", rather than incorporating evaluative concepts such as satisfaction or service quality as a component of the customer experience, as previous definitions, for example Pine and Gilmore (1998) suggest.

Building on De Keyser et al. (2020), the components of customer experience can be split up into three different overarching blocks (TCQ). First, there are touchpoints through which companies interact with customers (explained below). The second block relates to the context. Here, situationally available, internal, or external resources become available to the customer. The third dimension relates to the qualities/attributes that reflect the nature of the customer responses and reactions to interactions with the company. According to De Keyser et al. (2020), combining all three blocks helps researchers and managers to make the concept of customer experience more feasible and manageable by separating the CX into "small bite-sized chunks". Following this language, topics for research can be assessed based on their maturity. Here, the concept of anomalies in the customer journey can be identified as an underdeveloped concept, as there is no previous research connecting the two topics of this research with their combined implications for CX(M).

To understand the importance of customer experience even more, it is crucial to recognize that a company's offering is nowadays not just a collection of the products that are being sold, but rather the entirety of a company's being. In this sense, value in the customer experience is not created through a linear, cognitive process restricted to isolated service encounters, but rather in an ongoing, iterative circular process of individual and collective customer sense making (Helkkula et al., 2012). Sahhar and Loohuis (2022) extend this idea by showing how value experience manifests in value co-creation and co-destruction practice. It appears that different modes of a consumer value experience exist within one's practice, depending on the level of so-called "practice interruptions". The individual and collective experience are in par when smooth (value creation) practices occur, while they are in disharmony when the consumer's value creation

practice is hampered. Thus, consumers are contributors to value when the actual value is cocreated and can be destroyers of value when actual value is co-destroyed (Sahhar and Loohuis, 2022). This finding is especially important as it shows that companies and managers should focus on creating a smooth co-creation process, allowing consumers to create value (also with others) without destroying value and causing disruption to the experience (Sahhar and Loohuis, 2022). In a similar vein, anomalies can be considered as behavior that leads to value co-destruction, with the potential to negatively impact the experience of other customers/consumers significantly.

The concept of collaborative value creation is often referred to as 'co-creation', which is already described above, and which emerges from the collaborative process and interrelationships among members (customers, companies) in the ecosystem (Bolton et al., 2014). In that sense, customers are not only consumers of products, but have become cocreators, whose involvement plays a massive role in the experience creation (Varnali, 2019) for other customers. This is also supported by Helkkula et al. (2012), stating that a customer experience is not determined by a service provider, but rather by the individual's lifeworld and environment, where individual's make sense of their experience in relation to their context. As part of the value co-creation process, customers increasingly shift from a focus on product quality to a focus on company interaction, value in use and their customer experience (Nyström and Mickelsen, 2019). Such a shift cannot be generalized for all customers, as experiences from a customer perspective are based on their cognitive and emotional assessment of the company created, company intended customer experience (Tueanrat, 2021). Connecting this aspect with anomalies, it is apparent that due to the subjective nature of experience perception, there will be deviations from a company's expectation on how customers behave in the customer journey. This is also supported by Meyer and Schwager (2007), stating that customers continuously adjust their perceptions of a brand/company at every touchpoint they encounter, which implies that deviations in customer behavior are a logical consequence of experience perception of customers.

Similarly, through the creation of new touchpoints (through new technologies) in multiple channel and media, the increasing importance of customer experience is inevitable (Lemon and Verhoef, 2016). In this co-creation process, customers and firms play very different, but equally important roles. From a company perspective, the key component is to design and establish an experience that a customer is open to receive by involving the customer's cognitive, affective, emotional, social, and physical senses (Lemon et al., 2009). Opposing to the traditional way of putting experience creation and development fully into the hands of the company, new developments increasingly shift the development of experiences to a state of experience co-creation between companies and their customers. In this aspect, Parmentier and Gandia (2013) discuss the importance of customer experience creation using an example of the video game 'Trackmania', stating that customer experience creation enables the establishment of a community and hence a platform, where all partners participate in value creation and not just the company.

To grasp the customer experience over time, one very important concept is the customer journey. The term customer journey is used to conceptualize the individual's journey with a firm during the purchase cycle across multiple touchpoints (Lemon and Verhoef, 2016), constituting a positive, neutral or negative customer experience (Meyer & Schwager, 2007). Mainly used as a tool to make the customer experience more manageable, the concept of the customer journey is nowadays very much related to the concept of "Customer engagement", which focuses on how a

customer reaches out and behaves in the interaction with the company (Lemon and Verhoef, 2016), This connection is also reflected in a trend to fully map the customer journey with the goal of illustrating all the steps that a customer goes through in the interaction with a specific company. Looking at the behavioral aspect, it is certain that not every customer will go through the customer journey following the same steps or even complete the whole customer journey with every interaction.

So, what does deviating behavior look like? And how can it be conceptualized for the stages of the customer journey?

## 2.2 Anomalies

While the term 'anomaly' can generally be defined as a deviation from a common rule, a so-called irregularity (Mariam Webster, n.d.), this definition is not precise enough to understand customer anomalies in a business context, especially not when considering anomalies in the customer journey. From a more technical standpoint, there will always be a large section of data that the key metrics of the company cannot account for, which in statistical terms is usually described as outliers.

A more appropriate definition of an anomaly is given by Maclvor (2021). She defines (customer) anomalies as a "statistically significant subsequent amount of customer attributes that is significantly over or underperforming against a key business metric". Further, it is necessary to recognize that the severity of anomalies arises in the context of big data and data collection, which is a result of the desire to fully understand and predict customer needs in every interaction and the new advanced technologies that allow companies to do so. While data is gathered to create a 'perfect' customer experience for every customer (Fraser, n.d.), it is important to understand that not every customer follows the same predicted scheme, but rather an individual way through the customer journey. As this customer behavior cannot be fully predicted for every single customer, anomalies in the customer behavior are a logical consequence. Maclvor (2021) also stresses the importance of anomalies as a way to identify the issues and focus points that companies need to dive into to improve their customer experience, which links to the customer journey as a core concept for the creation of the customer journey and customer experience management.

Here, it should be noted that the above given definition of anomalies only focuses on anomalies from an organizational perspective. As anomalies are in fact a consequence of real human behavior, there is also a consumer-centric side to the term. Research has, in the last years, given some attention to consumer misbehavior and the dark side of customer behavior, recognizing that the use of new technologies is a double-sided sword, rather than a purely beneficial interaction tool between customers and companies (Turel et al., 2017). Considering that most technologies are already fully embedded into everyone's daily life (Zolfagharian & Yazdanparast, 2017), tech users quickly become victims of their own and possibly other consumers' perception of a company, consumption habits and dependencies (Zolfagharian & Yazdanparast, 2017). This development could have severe consequences for companies, damaging the customer-company relationship, while simultaneously damaging the company financially (Fullerton & Punj, 2004). Fullerton and Punj (2004) even go as far as saying that a consumer's misbehavior can do as much harm to consumers as a marketers' misbehavior. In this aspect, consumer misbehavior can even result in experience destruction for other company customers (Fullerton & Puni, 2004), which would have lasting impact on companies. Similarly, according to Plé and Chumpinatz Caceres (2010), interactions that involve customers or other actors (other customers) and service providers can facilitate negative experiences, resulting in a loss of well-being for at least one of the parties involved. Such destruction of value and experience usually occurs when a system (firms/customers) accidentally or intentionally misuse their resources by acting and operating in a surprising and unsuitable way (Plé and Chumpinatz, 2010). This is also supported by Echeverri and Skâlén (2021), mentioning that unintended negative experiences (with a company) can result in value (co-)destruction. Concrete behavior that could result in experience destruction for other customers could for example occur in an early stage of the customer journey, where a customer tries to put a company into a bad light, based on previous negative experiences that the customer had with the company. Such a negative impact on the reputation of the company would therefore not only damage the relationship between this explicit customer and the company but could also significantly damage the connection of other (future) customers or even customers that interact with the company on a frequent basis. For this, one could also speak of 'customer resistance', which refers to a customer behavior resulting in no direct harm up to destruction of the company's reputation (Gabriel & Lang, 1995).

Also, Daunt and Harris (2003) note that while consumer misbehavior might occur in very severe and extreme acts, which are destructive and harmful to other people (and their experience), most anomalies and misbehavior actually occur in the day-to-day business, reflecting everyday incidents that erode satisfaction of company personnel and potentially even other customers. While large misbehavior incidents might cause more damage to the company and other customers, they are more easily manageable than the frequently occurring ones (Daunt and Harris, 2003).

Connecting this to the customer journey, such misbehavior (or anomalies) ultimately has different consequences for the respective company, considering the stage that the customers might find themselves in in communicating/engaging with a company, may it be with the intention to purchase a product or even just read a newsletter. To make the concept of anomalies clear and to conceptualize their importance for companies, the concept of the customer journey will be utilized.

## 2.3 The Customer Journey

From a marketing perspective, the concept of the customer journey is crucial for today's datadriven marketing, in which data acts as a service for the company and the customers (Micheaux & Bosio, 2019). Generally, the customer journey refers to a process or sequence that a customer goes through to access or use an offering of a company (Folstad and Kvale, 2018). Following Lemon and Verhoef (2016), the customer journey can be separated into three different stages: pre-transaction stage, transaction stage and post-transaction stage. Here, it should be noted that the customer journey cannot be described as a simple linear process, but rather as an iterative and dynamic concept (Lee et. al, 2018), where customers can go back and forth between the stages, interacting with the company through so-called touchpoints (Wolny & Charoensuksai, 2014; Shankar, 2018). Dividing the customer journey into distinct stages is crucial to understand the impact of new advanced technologies on customers (Hoyer et. al, 2020), which has direct implications on customer behavior by enhancing connectivity and raising customer expectations (The Keenfolks, n.d.). Micheaux and Bosio (2019) stress this importance of the customer journey as the key moment where the customer experience is decisive for the future of the (customer) relationship with the company. Similarly, Rawson et al. (2013) point at the usefulness of the customer journey concept as the main tool for highlighting critical service moments and touchpoints that are significant for experience creation. Consequently, identifying customer behavior across the customer journey is crucial for various reasons: identification of customer pain points, allowing companies to identify how customers feel, their needs and the kind of actions that were taken to get to that specific stage of the journey (Ross, 2017); identifying potential gaps in the customer experience and trying to find solutions (Micheaux & Bosio, 2019), while simultaneously getting valuable insights into what it's like to walk in the customer's shoes when interacting with a company (Marquez et al., 2015).

While the concept of the customer journey is crucial for companies, the customer journey places customers at its heart (Mangiaracina et al., 2009). In the customer journey, customers and companies interact to create value. The concept of collaborative value creation is often referred to as 'co-creation', which is already described above, and which emerges from the collaborative process and interrelationships among members (customers, companies) in the ecosystem (Bolton et al., 2014). In that sense, customers are not only consumers of products, but have become co-creators, whose involvement plays a massive role in the experience creation (Varnali, 2019) for other customers. This is also supported by Helkkula et al. (2012), stating that a customer experience is not determined by a service provider, but rather by the individual's lifeworld and environment, where individual's make sense of their experience in relation to their context. As part of the value co-creation process, customers increasingly shift from a focus on product quality to a focus on company interaction, value in use and their customer experience (Nyström and Mickelsen, 2019). Such a shift cannot be generalized for all customers, as experiences from a customer perspective are based on their cognitive and emotional assessment of the company created, company intended customer experience (Tueanrat, 2021). Connecting this aspect with anomalies, it is apparent that due to the subjective nature of experience perception, there will be deviations from a company's expectation on how customers behave in the customer journey. This is also supported by Meyer and Schwager (2007), stating that customers continuously adjust their perceptions of a brand/company at every touchpoint they encounter, which implies that deviations in customer behavior are a logical consequence of experience perception of customers.

Here, it should be noted that the customer journey as a concept to visualize the interaction between a customer and a company helps with the conceptualization of anomalies, as the customer journey offers a predefined set of stages with their respective characteristics, which make the identification of deviating behavior easier, as it allows to apply, identify and allocate the anomalies to the respective stages. Identifying anomalies without the customer journey as a base concept would therefore be a very messy undertaking. Consequently, the customer journey helps in better understanding anomalies by giving a structure and setting boundaries to where anomalies occur and what such a behavior looks like.

When talking about the customer journey, it is important to consider that even though the customer journey is often seen and considered for the purpose of understanding customer interactions/behavior with companies in the context of a purchase/transaction, the actual customer journey reaches far wider. In this aspect, Lemon and Verhoef (2016) mention that customers interfere with touchpoints that are sometimes not under the firm's control, which again stresses the importance of assessing the customer journey as a wider concept, not just focusing

on a transaction process. The details on what is meant by this is explained for the separate stages down below.

#### 2.3.1 Pre-Transaction Stage

This stage basically represents all aspects of the customer's interaction with a certain brand, category or environment, before a purchase transaction (Lemon & Verhoef, 2016). Traditionally, typical customer behavior in this stage is characterized by a need recognition for a specific product, followed by the search for a product or service and the final consideration of a product, with regards to possible alternatives (Lemon & Verhoef, 2016). More precisely, in this stage of the customer journey, customers are (unconsciously) scanning the marketplace, referring to their own previous experiences. Based on that, consumers build an intention to shop and search for information prior to purchasing (Wolny & Charoensuksai, 2014), which could take place through blogs, reviews or even interaction with friends. Also, more innovative touchpoints can be considered in this stage of the customer journey. Through new technologies like the Internet of Things, which for example enables wearable technologies or self-service stores (Amazon Store), value can be provided, and experiences can be delivered through offering something innovative, allowing customers to interact with a brand before there is a real purchasing need and allowing companies collect data on pre-purchase behavior (Hamilton et. al, 2020).

Looking at this stage from a less purchase-focused point of view, this stage also encompasses every experience that a customer gathers on his/her way to the initial first contact with a company. In this sense, customers can face specific problems in their daily life, orient themselves towards finding a solution to the given problem and potentially even make use of a specific product or service, without getting in contact with the actual service provider. Here, social/external touchpoints (Lemon & Verhoef, 2016) can be considered. Those external touchpoints recognize the important roles that others (customers, peer influences) might have on the individual's customer experience. Peers in that sense may exert influence on the customer experience process (Lemon and Verhoef, 2016), which ultimately influences the experience that customers go through in the interaction with a company. Similarly, other external touchpoints like firm-specific characteristics, as well as industry characteristics and the customer's perception of a company's marketing mix shapes a consumer's attitude towards a company and directly influences the customer experience (Gao et al., 2019).

## 2.3.2 Transaction Stage

While the pre-transaction stage encompasses everything related to the customer's interaction with a company before making a decision, the transaction stage is characterized by the actual choice for a specific product or service, the process of ordering and the payment process (Lemon & Verhoef, 2016). Even though this stage is the shortest one on the time scale, it is not less important than the other two. Critical in this stage is to identify which factors in the customer journey drive the decision to choose, order and pay for a specific product. In this aspect, Lehdonvirta (2009) established that customer decisions are not only driven by the visual presentation of a product, but also by its intangible commodities, showing how important it is to gather data and to create value for customers in the pre-transaction stage and transaction stage of the customer journey. Similarly, new advanced technologies can have a large influence on

such purchase decisions, with Hoyer et. al (2020) establishing that for example virtual assistants have a very high impact in the transaction stage, as they might be able to push customers into a purchasing decision. Through the collection of an increasing amount of data, deviating behavior can be expected. An anomaly in this stage could for example be a large amount of people discarding their shopping carts, which would hinder the company to generate revenue, as there might be an issue in the checkout-process. From an organizational perspective, the damage of anomalies is probably the highest in this stage of the customer journey, as this stage is the one where customers actively decide for a product.

Also, this stage of the customer journey is not only represented in the actual purchase of a product. In this stage, customers are still experiencing different touchpoints that can influence their experience. In this sense, other customers, through their behavior, may influence customers right in the purchase process of products (Lemon & Verhoef, 2016), causing them to rethink their intentions, which in turn has consequences for companies. Also, previous experiences influence the current customer experience through the creation of expectations towards the product (Lervik-Olsen et al., 2015).

#### 2.3.3 Post-Transaction Stage

Generally, the post-transaction stage encompasses every interaction with a company and its services, after the actual purchasing transaction (Lemon & Verhoef, 2016). Typical customer behavior in this stage is characterized by product consumption, product usage, engagement with a product and a company (e.g. through Social Media channels), or service requests. This stage is usually the most important one with regards to customer relationship building and customer loyalty (Otim & Grover, 2006). Similarly, Hoyer et. al (2020) established that virtual assistants can give new possibilities into touchpoint creation in this stage of the customer journey, allowing companies to gather customer data by having smart-enough virtual assistants that can interact with customers properly, potentially even giving them feedback and recommendations for future purchases.

Also, in this stage, the customer experience does not end. Here, also everything related to a company's efforts with the goal of customer retention plays into the experience that customers have with the company. As the customer journey as a concept is not linear, but rather repetitive and iterative, this stage also encompasses every engagement of a company to try to attract customers into another interaction/purchasing process. Similarly, experiences here are also created through the interaction with other users that have bought the same or a similar product. by for example reading product reviews or looking for some help with a faulty product on Social Media (Lemon & Verhoef, 2016). Those touchpoints, that customers interact with during this stage also largely influence their intention to be loyal to the company or to not buy from the respective company again, as for example past experiences (previous interactions with the company) influences current satisfaction, which in turn influences future usage (Bolton and Lemon, 1999). Here, it is also important to consider that a consumer's perception of his/her experience with the company is not created for every single stage separately, but rather as an accumulation of a series of customer interactions with touchpoints over an extended period of time, starting way before the actual need for a product (pre-transaction) and ending after the actual transaction, going beyond the post-transaction phase (Kotni, 2017).

# 2.4 Anticipating on customer anomalies

Looking at the work done by Harris and Daunt in 2003, dysfunctional customer behavior needs to be managed by ensuring that every aspect and moment of service encounters is considered, organized, carefully staged, controlled, and supervised by the firm. Even though this managerial approach might seem outdated, considering the rapid technological improvements that make controlling and fully supervising customer behavior impossible, this approach still holds a lot of truth as modern-day marketing efforts are more than ever centered around the blasphemy of creating the 'perfect' and smooth customer journey, where customers are supposed to be captured in an ongoing cycle of retrigger, repurchase and reconsumption (Court et al., 2009; Siebert et al., 2020). Rather than aiming for a smooth customer journey, Siebert et al. (2020) point at the value that customers might derive from unpredictable experiences, suggesting that 'sticky' customer journeys might keep the customer engaged and yearning for more.

Harris and Daunt (2003) also propose the implementation of a misbehavior audit that not only explores and identifies the type of misbehavior that occurs among customers but also assesses the internal response mechanisms to deal with such behavior (Harris and Daunt, 2003). Consequently, reacting quickly to consumer misbehavior might limit the damages that the company and other customers experience in their journey.

Similarly, according to Nangpiire et al. (2021), companies need to anticipate anomalies by increasingly becoming aware of customer interactions and design appropriate plans and strategies to involve customers for the purpose of value creation. This should specifically be done by reflecting and exploring the value the company aims to generate and thus finding ways to increase value creation, while limiting value destruction. Specifically, Nangpiire et al. (2021) mention that companies should anticipate negative experiences by giving customers space to interact and engage with the company to co-create value. According to the authors, doing so could limit the consequences of deviating customer behavior, where customers engage in value destruction.

Also, Varnali (2018) points out that companies adopt a multiple reality perspective on their customer journey models, which help to identify the spontaneous and deviating nature of customer interactions. Through such models, companies can identify behavior patterns of customers in the customer journey. With those patterns, companies are able to better anticipate on anomalies and react on them appropriately.

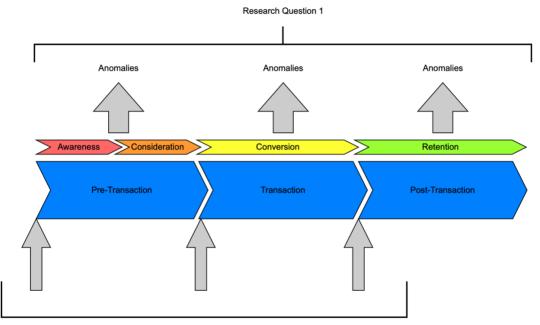
Finally, literature points out that practice interruptions in the customer experience cannot solely be seen as negative, as consumers might sometimes derive value from experiences that are not completely smooth, hereby keeping consumers engaged in the process (Sahhar and Loohuis, 2022). This poses a more nuanced view on the extant focus of always striving for the 'perfect' customer journey. Managers should be aware of the pitfall of excess extraordinary experience for customers as this may lead to customer taking things for granted (Sahhar and Loohuis, 2022). Instead, as these authors state, managers should always consider experience in the customers' practice and may introduce positive artificial interruptions to make customers appreciate their offering.

# 2.5 Reflection on status quo

While there is a substantial amount of literature and customer experience, there is very limited work done on anomalies and the dark side of customer behavior (Moschis, 2017; Heidenreich et

al., 2015; Yagil, 2017), especially with regards to bringing the customer journey and behavioral anomalies in the journeys together. While 'dark' consumer behavior has seen some research in recent times, there is still no work on what such a behavior looks like, especially in the stages of the customer journey, which would have direct implications for the company. The customer journey is hereby used as a concept to track and identify customer behavior across the different stages. As there is no conceptualization of anomalies in the customer journey, this research is trying to close the identified gap by using real-life insights from companies. The importance of bringing those concepts together is also supported by recent calls in literature, stating to look look beyond the sole concept of customer experience and focus on identifying potentially relevant contingencies (for customer experience formation). The investigated anomalies in this research would therefore contribute to this future research agenda by identifying relevant behavioral deviations in the customer journey. Along these lines, this research is going to investigate what anomalous customer behavior looks like with insights from real companies and company representatives.

To make the connections between the above-mentioned topics clearer, they are visualized in figure 1. In this figure, the three different stages of the customer journey are shown. Also, the figure shows that anomalies will be derived from the three different stages of the journey, as well the touching points for the anticipation of anomalies which are answered in RQ2.



How to anticipate anomalies? - Research Question 2

Figure 1: Visual representation of the conceptualized model

# 3. Methods

## 3.1 Research design

This research is qualitative in nature, as it aims at conceptualizing anomalies in customer journeys, rather than identifying data-based relationships between anomalies (as seen in the data) and business metrics. Hence, this research focuses on describing an unexplored issue and phenomenon in business, while at the same time deriving practical insights for marketing managers based on the in-depth interviews with companies and the extensive literature review. A similar method is also followed by Harris and Daunt (2003) in their article on the consequences of dysfunctional customer behavior. Also, according to Churchill (1999), in-depth interviews are best suited for theory generation, which also applies to this research. Such in-depth interviews are frequently praised for their ability to clarify new concepts and relationships (Stainback and Stainback, 1988), and for their flexibility (Bailey, 1994) that the researcher gets by being able to change the phrasing of questions, which allows the interviewer return to a topic several times throughout the interview, without having to stick to a strict, predetermined set of questions. The adaptability of this method also allows the researcher to not constrain the respondents answer and instead support him/her in developing the key issues that are central to this research (Harris & Daunt, 2003). Such characteristics of this research method are especially useful for such an unexplored concept (Harris & Daunt, 2003), as the researched concept can be very sensitive to companies as it can directly affect their business processes and their businesses' well-being.

To clarify the model and this research, the model that is supposed to be conceptualized is shown in figure 1. Here, it should be noted that a very traditional and linear customer journey model is used as the base for simplicity purposes, even though the literature review section established that the customer journey is should actually be seen as a more cyclical process.

## 3.2 Data collection

This research starts by collecting and incorporating related literature to build the core of the conceptualization. In this sense, Scopus and Google Scholar will be used as the main sources for the collection of literature. To bring the topics of customer anomalies and customer journey together, important articles that help with the understanding of customer journeys (see Lemon and Verhoef, 2016) will be utilized, as well as current existing literature on the behavioral anomalies, the dark side of customer behavior and related search terms. From this literature, the main goal is to build a core idea for the conceptualization of anomalies in the customer journey.

To gather insights, well-established companies were contacted and invited to participate in a 30–45-minute semi-structured, in-depth interview (Churchill, 1999). The focus here lies on larger well-established companies because it can be assumed that those companies are more mature in customer experience and therefore may be more aware of customer anomalies compared to startups. Hence, start-ups will be avoided for this research. Marketing agencies might for example have a very high fit with the goal of this research. As large agencies are experts for everything related to marketing, as they are concerned with all marketing practices of their B2B customers, interviewing different people with different expertise from (multiple) agencies might deliver a very good picture of customer anomalies in the customer journey. Here, it should be noted that even though agencies usually operate in a B2B context, their employees are usually concerned with B2C marketing practices (for example UX Design, Campaign Management) and hence do have valuable insights into actual customer behavior. To ensure that the company representatives can give valuable insights into this research, the focus lies on marketing representatives that have experience with marketing data and identification/creation of customer journeys.

In the interview, questions were asked concerning the person's understanding of the customer journey in general, his/her perception of customer behavior in the customer journey and his/her experience with behavioral anomalies in the customer journey. Here, it should be noted that the asked questions do not follow a strict scheme of questions but were often generated and asked during the interview based on the development of the conversation. Nonetheless, some basic questions were asked to start the interview and to navigate the conversation in the direction of this research.

To ensure that the interviewee knows at least some bits about anomalies in the customer journey, every interviewee received a short interview outline with the main topics and concepts before the interview. Also, every interviewee received a consent form before the interview to get consent that the interview will be recorded and used for transcribing.

All interviews were held in either English or German (depending on the company representative). To ensure that also the German interviews can be properly and cohesively analyzed, the German interview(s) will be translated to English.

#### 3.3 Data analysis

After gathering all the interview data, this research will be analyzed by using an inductive approach, facilitated through the Gioia Method. The Gioia Method is useful for the analysis and interpretation of large amounts of non-numeric data, as it helps to compress the data in first-order concepts, second-order themes and aggregate dimensions (Gioia et. al, 2013). In detail, the purpose of this method is to capture and model informant meanings by searching for an informant's understanding of an organizational event (Langley & Abdallah, 2011).

Similarly, the Gioia Method was used as it is the most appropriate method when it comes to data analysis for semi-structured interviews (Gioia et. al, 2013). The goal of the use of the Gioia Method was to create a data structure that allows companies and researchers to recognize the value of anomalies and the importance of properly managing them. Also, practical insights were derived from the analysis, which companies can use to reduce the amount of customer anomalies and to identify what anomalies tell them about their business (processes).

To ensure that all the interviews are transcribed properly for the actual use of the Gioia Method, various online platforms can be considered. Notable in this aspect are get.otter.ai or amberscript.com.

# 4. Findings

This section illustrates the main results of the conducted interviews on the topic of customer anomalies in the customer journey. In this section, there will be a detailed description of the phenomenon 'anomalies in the customer journey' based on illustrative quotations from the interviews, as well as the author's own interpretation of those findings.

To illustrate anomalies for the different stages of the customer journey, this part will be split into three different sections, one for each stage of the customer journey. Also, a perspective

on the technical implications of anomalies in the customer journey will be taken. To get a good overview of the interviews, please refer to figure 2 below, which contains the Gioia table that was used to summarize the findings.

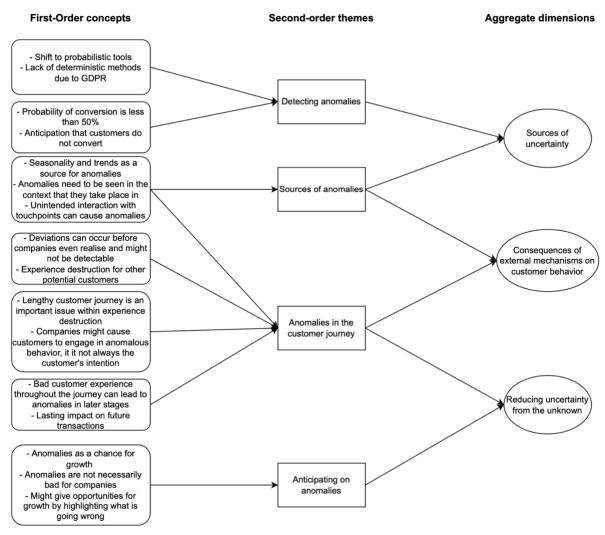


Figure 2: Gioia Table containing the interview results

# 4.1 Anomalies in the customer journey – overall findings

Interviews with marketing experts focusing on the technical measurability of the customer journey gave interesting insights into how the customer journey is perceived in a real-life business context compared to the theoretical picture and importance of the customer journey.

To be able to assess anomalies in the customer journey from a technical perspective, it is important to consider how customer behavior is tracked and followed across the customer journey.

Due to the implementation of the GDPR, all customer tracking online needs to be actively complied to by the customer. With concerns about data privacy and data usage, customers

increasingly reject that companies can track their behavior, which has direct implications on how companies undertake their tracking. In this aspect, interviewee 1 mentioned:

With the GDPR, our measurement tools had to be changed from deterministic tools to tools that are more probabilistic in nature.

This shift has multiple implications for customer journey tracking: while deterministic measurement tools allowed companies to track individual customers based on their interactions with touchpoints across the whole customer journey, building a 'profile' for every customer, where customer behavior can be anticipated based on past experiences with the customer and their experience with touchpoints, probabilistic measurement tools make the creation of profiles practically impossible due to the active consent that customers need to give for every single touchpoint/step in the customer journey.

This is also supported by another interviewee's (person 2) response, mentioning:

Through the GDPR, it is way more difficult to analyze the customer journey with cross-channel attribution models, making it even harder for us to detect anomalies.

Also, probabilistic measurement tools can only calculate the probability that a customer interacts with another touchpoint or even fulfills a conversion, hence only giving indications on whether a customer converts with the company or not.

In this aspect, interviewee 2 followed up, mentioning:

(...) The final step (the conversion), always shows a probability of lower than 50%, which means that we need to anticipate that customers do not convert, even though they interacted with multiple touchpoints.

This statement gives an interesting new perspective on anomalies in the customer journey. As companies now need to anticipate that customers do not convert, even though they interacted with multiple touchpoints, it gives rise to the question whether this customer behavior is to be seen as an anomaly or whether this customer behavior is the new normal, which has also implications on how an anomaly can be defined. When confronted with this, person 2 mentioned:

I wouldn't say that a non-conversion is an anomaly given today's marketing standards. We anticipate that customers do not convert (...). So, I would rather say that a successful conversion is the actual anomaly, even though this might seem counter intuitive.

This directly raises implications on the accuracy of the in-theory established customer journey model, that portrays the customer journey as a concept, where customers go through different stages, ultimately converting with a company after actively deciding for a product (Lemon and Verhoef, 2016), only limitedly accounting for the possibility that a way bigger percentage of customer interactions do not result in a conversion, by mentioning that the customer journey needs to be seen as a more cyclical process, rather than a linear process (Wolny and Charoensuksai, 2014). Including the possibility of non-conversions and deviating customer behavior into customer journey models is necessary, especially considering that, as portrayed above, deviations from expectations are way more common than one might think. Also, including

the possibility of such behavior into customer journey models is important as customer experience does not end when a specific customer touchpoint is not perceived, or a conversion fails. Customer contact can be reinforced by so-called reinforcement touchpoints through which the interaction of a customer and a company can start all-over again, adding to the value that customers experience from a company (Santos et al., 2021), which could lead to a successful conversion in the next interaction.

Interestingly, interviewee 3 stated:

The customer journey as a theoretical concept should always be seen in relation to the product and brand that is supposed to be sold. (...) A cyclical process is probably something that all companies want to have, but most companies invest too little in the loyalty phase. Also, a linear process is sometimes suitable, looking for example at cosmetic hair removals, where customers come to an appointment, get the hair removal, and then leave if the company does not sell any other products. In such a scenario, the brand would then fall out of the relevant set of the customer.

Another interviewee (person 4) added on the same topic:

When you are for example interested in purchasing a house, you go the bank with the intention to get a loan to buy the house that you want. In this setting, an anomaly would for example be a behavior where a potential buyer goes to the bank to finalize all things and then withdraw from the contract of sale (...). In an online setting, things look very different in my opinion. Not purchasing a product or a service is way more common, especially considering that customer interactions with touchpoints might not always be intentional and also considering that customers can engage with various touchpoints from various companies at the same time.

Results from the interview hence showed that anomalies in the customer journey should always be seen in the context that they take place in. Precisely, while behavior in a specific purchasing context might be seen as anomalous behavior for one company, it might be completely different for a different company, because such a behavior would for example fall in their range of anticipated behavior. Hence, if a customer would show the exact same behavior for two different companies with two different sets of products and two different customer journey models, a deviating behavior of this customer might not necessarily be considered as an anomaly for both companies, even though the deviation might take place at the same exact same stage of the customer journey. To clarify this, the example of a house purchase, which was mentioned above, can be considered compared to purchasing behavior in an online setting. While not fulfilling a purchasing process of a house, even though all the necessary documents are fulfilled, can be seen as an anomaly, mainly due to the limited appearance of such a behavior, a non-conversion in an online setting is usually not seen as an anomaly, due to the way more frequent appearance of the behavior and a company's anticipation that such a behavior might occur (also considering the statement that a conversion always shows a probability of lower than 50%).

Those two examples show how a purchasing transaction, and a customer anomaly might be very different in nature and in the outcome, depending on the situation that is assessed. Based on this, it can be summarized that an anomaly in the customer journey is not generalizable and always depends on the company context, their customer journey model and the product that is being sold, meaning that there is no 'typical' anomaly in the customer journey. Even more, interviewee 4 raised the issue of seasonality as a key source for customer anomalies. Interviewee 4 mentioned:

If you see anomalies as deviation from a common rule, it is probably important to also consider seasonality and trends, which can cause a high interest for a specific product, triggered by a platform that was not considered before, like for example TikTok.

This is especially important for companies, as seasonality and trends can cause dynamics that the company might not have considered before. Such a dynamic, where a previously unpopular product rises in popularity due to a trend on a given platform can for example result in a relaunch of the given product with the intention of generating a high number of sales. Such customer behavior therefore also significantly deviates from the anticipated customer behavior and could therefore also be called an anomaly, especially if Maclvor's (2021) definition is considered, where an anomaly is a behavior that significantly over-/underperforms against a key business metric. In the case of trends and seasonality, customers for example significantly overperform against the product awareness business metric.

## 4.2 Anomalies in the pre-transaction stage

From the interviews, it became clear that the pre-transaction stage is probably the stage where anomalies are the hardest to identify and conceptualize. Interviewee 5 mentioned:

In my opinion, it is super hard to identify anomalies in this stage of the customer journey. (...) From our company perspective, we might not even recognize if a customer behavior deviates from the normality, because such an anomaly might for example even occur before the customer even interacts with one of our touchpoints. (...) The consequences for us might be even worse though.

When asked on the potential consequences, interviewee 5 explained:

Imagine a scenario, where a person used to be a customer of our company. If this customer was for instance super unhappy with our product, we would anticipate that our company falls out of the relevant company set if the person intends to purchase a similar product ever again. (...) Nonetheless, this customer might still try to damage our company based on the previous experience he or she had with our company. The customer's potential intention to inflict a lasting damage on the company cannot be anticipated from our side. (...) Ultimately, we might only recognize such a behavior when the customer unintentionally interacts with one of our touchpoints. (...) Such a behavior could also lead to experience destruction for other customers, driving down our sales and hurting our reputation.

From these two statements, one very interesting case of anomalies can be defined. Even though those examples also show one case of such an anomaly, there are more cases, where anomalous customer behavior is undetectable for companies, even though this behavior might have severe consequences for the company. For this research, such anomalies are summarized as "hidden anomalies".

For this type of anomaly, another interviewee (person 6), when asked about potential pretransaction anomalies, mentioned: In our case, that would be not using all the free possibilities to get a first impression of the product. (...) Also, skipping the consideration phase and just move on to impulsively purchasing the product is an anomaly for us. Those customers do not well consider their purchase, leading to problems on both sides.

In this case, the customer directly skips the first touchpoints with the company and the product, directly jumping to the purchasing stage of the customer journey. As the customer does not really interact with touchpoints before the purchase, potential touchpoints, where the customers would get necessary information for the product go completely unnoticed for the customer, often times resulting in wrongly ordered products. This type of anomaly is especially damaging for customer and company, where the product is made-to-order, resulting in a product that leaves both sides unsatisfied. Such an anomaly can therefore also be considered as a "hidden anomaly", as the company cannot anticipate such a purchase and behavior because the customer did not interact with any of the crucial touchpoints that are important for the product and the purchasing process.

# 4.3 Anomalies in the transaction stage

The previously mentioned anomaly, where customers skip the consideration phase and directly move to the purchase stage can also be seen as an anomaly in the context of the transaction stage. Even though the transaction stage is the shortest one timewise, it is the actual breaking point for companies as it is characterized by a customer's choice for a specific product or service, the process of ordering and the payment process (Lemon and Verhoef, 2016).

Interestingly, for this stage of the customer journey, the interviewee's responses about anomalies in this stage were mainly concerned with company-centric conceptualizations of anomalies. Interviewee 6 mentioned:

Anomalies in this stage cannot necessarily be attributed to consumers. Usually, in this stage of the conversion funnel, we attribute anomalies to measurement errors.

#### Person 5 added:

In this stage, the length of the conversion funnel also plays a role. If we for example see many discarded carts in the transaction stage, the reason for such a consumer behavior can in most cases be attributed to company-related issues.

These statements show that anomalies in the transaction stage usually result from company issues related to a destruction of the consumer's experience. Precisely, if customers must go through a very lengthy and complicated process to buy the product, they might be more reluctant to fulfill every step of the customer journey. Similarly, a confusing check out process and for example a limited amount of payment options might cause customers to abandon the checkout process, which has direct implications for the company, as companies usually invest a lot in the awareness stage to attract customers, but fail to make customers convert, implying that they do not earn money.

When asked about why the interviewee thinks that anomalies in this stage are related to experience issues, person 5 said:

It's pretty straightforward. (...) Well, we managed to attract customers and make them interested in our product. If the conversion fails in the very last moments of the customer journey, there are only two options: either the customer suddenly decided not to buy our product, or there is something wrong with our customer journey and the checkout process. From experience, it is usually the latter.

From this, it is apparent that anomalies in the transaction stage of the customer journey can to a large extent be attributed to company related issues in the customer journey and the checkout phase. While also consumer related reasons might be considerable, the interviewees consistently mentioned the own company as the predominant source for anomalies in this stage of the customer journey. To conceptualize this type of anomaly, they will be referred to as company-centric anomalies for the remainder of this thesis. To explain this type of anomaly even more, it is important to note that even though this type of anomaly is caused by a company specific issue, for example length of the customer journey or problems in the checkout process, it is always reflected in real, anomalous customer behavior, where customers abandon their shopping carts and stop the interaction process with the company.

## 4.4 Anomalies in the post-transaction stage

In this stage of the customer journey, anomalies can be more clearly conceptualized than in the transaction stage. This stage of the customer journey relates to every interaction between the company and a customer after an interaction took place (Lemon and Verhoef, 2016). For companies, this stage of the customer journey is especially crucial, as they intend to reinforce their contact with their customers again to make them engaged in repeated purchases. Consequently, a good customer service plays a large role in doing so.

From the interviews, it became clear that most deviating behavior in this stage of the customer journey results from an unsatisfactory experience of the customer with the company. In this aspect, interviewee number 6 said:

A good example of an anomaly in the post-transaction is customers that first write a bad review before reaching out to the customer service. Because we are an online player, we think it is highly important to deliver good customer service. (...) sometimes, customers don't even reach out to the customer service and instantly write a bad review. Something that we find quite remarkable.

This statement shows how customers sometimes deal with bad experiences from companies. Instead of reaching out to the customer service, customers might be more engaged in writing a bad review, before they even try to resolve the problem with the company. Such a behavior can have drastic consequences for the company: other customers might read those reviews and become more reluctant to convert with the company as they see that other customers have unresolved issues with the company; also, bad reviews might influence the experience of other customers, potentially leading to a point, where customers lose the intent to purchase a product. Ultimately, this type of anomaly hurts the company financially, as such a behavior might have enough impact to make other customers rethink their purchasing decision, leading to a decrease in turnover.

Despite the above-mentioned statement, which mentions bad experiences as the source for anomalies in this stage, other behavior patterns are also imaginable. Even though those other patterns were only very slightly touched on during the interviews, they are still noteworthy. In this aspect, interviewee 5 highlighted:

An anomaly could also be applied to the loyalty phase of the customer journey. If you try to get a lasting relationship with a customer and actually succeed in doing so by recognizing that the customer continuously engages with the touchpoints, we would also consider it to be an anomaly, if the customer never actually converts again, even though there is a loyal connection. (...) This also shows the ephemeral nature of such relationships.

From this, it is clear that anomalies in this stage of the customer journey can be both, customer and company related. For this research, an anomaly resulting from a bad customer experience/unsatisfactory product could be considered as a company centric anomaly. The other example, where a previously loyal customer does not convert with the company ever again can be considered as a customer centric anomaly. The reason why such a customer fails to convert with the company are very hard to identify for the company and often remain hidden.

## 4.5 Anticipating anomalies in the customer journey

During the interview sessions, the interviewees were also asked about their take on how companies should anticipate such customer anomalies to avoid/reduce uncertainty in the customer interaction process.

Despite the traditional work of Harris and Daunt in 2003, where the authors mention that deviating customer behavior needs to be carefully managed by ensuring 'that every aspect and moment of service encounters is considered, organized, carefully staged, controlled, and supervised by the firm', the modern approach seems a bit different.

To highlight this more modern viewpoint, interviewee 4 mentioned:

For us in Marketing, anomalies in the customer journey give us a chance to find and test new possibilities and options (...). This is especially crucial when we for example look at the length of the pre transaction stage of the customer journey. Usually, a longer and more complex web shop also leads to lower conversions.

This statement emphasizes the standpoint that modern-day marketing is more focused on the adaptability and the search for growth in deviations rather than being afraid of behavior that might not reflect the anticipated customer behavior. This also includes to recognize and accept the appearance of anomalies as a source for new initiatives, instead of trying to avoid anomalous customer behavior before it even occurs. The statement above was followed up with a question on the interviewee's opinion, whether all anomalies in the customer journey are relevant. The interviewee answered:

I do think that all anomalies are relevant from our perspective (media agency) (...). It's our task to place media triggers, which ideally lead to conversions. If we recognize a high number of anomalies in the customer journey, we adapt the media strategy and test whether it would make sense to include an additional customer segment to attract individually.

This statement shows that anticipating anomalies in the customer journey with the intention to fully reduce and avoid anomalies is not really needed for modern businesses. Instead of focusing on reducing the negative effects that come from anomalies, it is more important to understand, consider and test the positive effects and derivatives that can come from such a behavior. As companies exist with the intention to grow, anticipating and understanding anomalies as a behavior that shows where space for growth exists, is crucial for companies. Looking back at the literature section for anomalies, such a mechanism is also highlighted by MacIvor (2021), stating that anomalies show companies which parts of the customer journey they need to dive into to improve the customer experience.

Similarly, the interviews highlighted that a company's ambition to fully reduce uncertainty within their respective customer journey models ultimately fails with the ambition to create the perfect customer journey. Precisely, as behavior cannot be generalized and the fact that external influences also always impact the customer journey of the customer, there is no such thing as the 'perfect customer journey', where a conceptual model of a customer journey fits with every customer-company interaction. Hence, there will always be deviations and anomalies from an anticipated customer and customer journey model. The real question and challenge are to tackle those anomalies by using them to the own advantage, to derive implications for the own models and to find improvements to the customer journey model.

This also supported by interviewee 3, who said:

You can always try to anticipate on the behavior, however, deviating behavior will always occur in my eyes. It is just impossible to let every customer behave in the exact same way. People are just too different in their actions. Also, I think it is not possible to manage the perfect customer journey.

In contrast with every company's ambition to create the perfect customer journey, this statement again highlights the complexity and unattainability of a perfect customer journey, hence again pointing at the appearance of anomaly as a natural thing for companies to deal with.

Nonetheless, the interviews also highlighted the importance of detailed tracking as one key concept for the anticipation of anomalies. Here, person 2 mentioned:

I do think that modern tracking tools might help with the anticipation. Even though cookies are dying, tracking tools are still helpful in identifying how customers move along the stages. We want to be proactive in stuff like that.

Proactivity in the anticipation of anomalies seems to be one of the core topics for companies to deal with such anomalies. Even though it was established above that using the appearance of anomalies to find and derive ways of improving strategies, the interviewees still mentioned that proactivity is important, because not every anomaly and deviating customer behavior results in a positive takeaway for the company. Similarly, as established in the section of anomalies in the pre-transaction stage, some anomalies in that stage can be characterized as hidden anomalies. For anomalies of that nature, proactivity is therefore incredibly important to reduce the number of anomalies appearing and to limit the consequences that come from it.

# 4.6 Synthesizing the findings

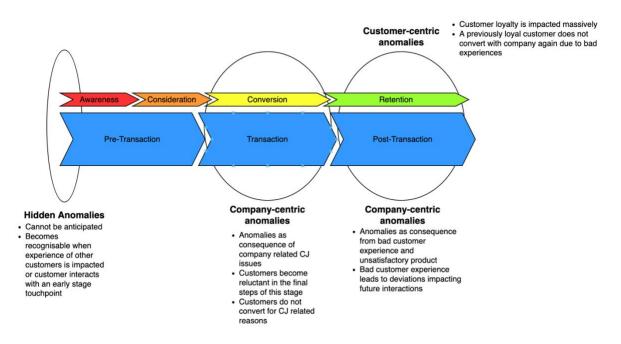


Figure 3: Findings shown in the customer journey

To summarize the findings of this research, it is helpful to visualize the identified anomalies in their respective stage of the customer journey. As can be seen on the left of the figure, "hidden anomalies" were identified as a type of anomaly that occurs in this part of the customer journey. Here, it should be noted that according to the interviews and the described hidden anomaly customer behavior, this type of anomaly can is usually to be found at the beginning stages of the pre-transaction stage, as well as before the first interaction touchpoint with a company.

Looking at the transaction stage, this research identified a type of anomaly that was referred to as company-centric anomalies, meaning anomalies that are caused by company-related issues. From the interviews, it became clear that those anomalies appear in the whole transaction stage.

Last but not least, this research showed the appearance of customer-centric anomalies and company-centric anomalies in the post-transaction stage. In this stage, anomalies can be related both to company related issues, as well as customer specific reasons.

Here, it should also be noted that every type of identified anomaly can also appear in the other stages, even though they were not identified as such in this research.

# 5. Discussion

## 5.1 Reflections

The motivation to conduct this research was to bring light into the fairly unexplored topic of anomalies within the customer journey. While previous research focusses on specific behavioral patterns and their consequences, there is pretty much no literature on the existence and importance of anomalies in the concept of the customer journey, which this research tries to resolve. Similarly, this research was conducted with the motivation to derive implications for companies and to help companies to reduce the uncertainty that comes from anomalies, while simultaneously exploring company mechanisms to anticipate such an anomalous behavior.

Using company interviews, this research identified a set of anomalies that appear in the stages of the customer journey, while simultaneously highlighting the importance of contextuality when assessing anomalies. Also, company representatives were interviewed about the companyinternal mechanisms and perceptions of anomalies with the goal of identifying how companies anticipate on such behavioral deviations. While existing literature focuses on specific behaviors and their impact on companies (Moschis, 2017; Ebrahimi et al., 2020), this research showed anomalies in the context of the customer journey, which is arguably one of the most used concepts for in-practice marketing.

To illustrate the findings, the identified anomalies are visualized within a very simple customer journey model. In this visualization, the three different types of anomalies can be seen with their touchpoints and their areas of appearance within the customer journey. For the underlying customer journey model, a linear model proposed by Lemon and Verhoef (2016) was used. Even though it should be noted that the customer journey can actually be more appropriately be seen as a more cyclical, rather than a linear process (Wolny & Charoensuksai, 2014; Shankar, 2018; Lee et al., 2018), a very linear customer journey model was used for visualization purposes. Despite the easiness when looking at visualization purposes, displaying the findings in a linear model fails to account for the actual nature of customer journey purposes.

The first identified anomaly is conceptualized as a "Hidden Anomaly" in this research. This type of anomaly appears in early stages of the pre-transaction phase and casts a light on the type of anomalous behavior that companies cannot detect due to the missing interaction with the company's touchpoints. Here, customers deviate from the anticipated customer behavior without the company's awareness of a deviation, which can have direct consequences on the experiences that other customers make with the company (Harris and Daunt, 2003). In the worst case, a company only just identify such a hidden anomaly, when they statistically realize that a lot of customers fail to move on to the second stage of the customer experience in the post-transaction phase, considering the cyclical nature of the customer journey.

The second anomaly is conceptualized as company-centric anomalies. This type of anomaly appears in the transaction and the post-transaction stage of the customer journey. Through the interviews, it appeared that this type of anomaly is rooted in company specific issues that destroy the customer experience. Focusing on company specific issues (for example length of customer journey) as one of the roots of the appearance of this anomaly pushes the company into the spotlight, which is in line with Becker and Jaakkola's (2020) assumption that the company and the way the company defines experience and manages their firm-controlled stimuli largely

influences the customer's perception of experience. While the source for this behavior can be found in the company, this anomaly is nonetheless reflected by real human behavior, where customers abandon the checkout process. Such a behavior can ultimately have severe consequences for the company, as companies need to pay for their advertising and ultimately get a limited number of conversions from it.

Also, this type of anomaly was found within the post-transaction stage. In this stage of the customer journey, a company-centric anomaly could be defined as an anomaly that results from a bad customer experience and an unsatisfactory product. Here, customers would for example write bad reviews and share negative information about the company, without first reaching out to the customer service. Such a behavior massively challenges the link between the customer and the company, as the customer's perception of his/her experience has an impact on the perceived customer experience of the customer in a future purchase situation (Becker and Jaakkola, 2020).

The final anomaly refers to consumer-centric anomalies in the post-transaction stage. Companies in this stage of the customer journey try to build a lasting relationship with their customers. If they succeed in doing so by having the customer engaged with company touchpoints over a long period of time, the customer might be less reluctant to convert with the company again, considering the previous good experience. Looking at consumer-centric anomalies in this stage, they are reflected by customers who continuously engage with the company (loyal customer), but do not convert with the company (ever) again. Such a behavior is therefore highly unusual for the company, as they would anticipate that the customer does at least convert with the company again in a foreseeable amount of time. The customer-centric reasons for such an anomaly often remain hidden and unexplanatory for the company. Here, it should also be mentioned that the above-mentioned anomalies do not only exist exclusively for the stages that they were identified in in this research. Therefore, consumer centric anomalies might for example also occur in the pre-transaction and transaction stage, even though they were not identified as such in this research.

Also, as mentioned above, this research highlighted the importance of contextuality for the identification and assessment of anomalies. While some customer behavior might be considered as an anomaly for one company, such a behavior might fall under the anticipated behavior of another company, depending on the type of product and the type of company that is looked at. While a failed purchasing transaction in the context of a house purchase, where customers need to go through all the paperwork, a general non-conversion might not be considered as an anomaly for online companies, where non-conversions are way more frequent.

Next to the identification of anomalies, this research also investigated the anticipation of anomalies within companies. Despite the claims made by Harris and Daunt (2003) and Nangpiire (2021), who mentioned that deviating customer behavior needs to be managed precisely and in great detail with full control and supervision by the company through the design of appropriate response plans, the results indicated the focus on adaptability and anomalies as a source for company growth, meaning that anomalies should not be seen as something scary and frightening, that can have a lasting impact on customer experience, but rather as an indication of where things need can be optimized for growth. This viewpoint is also highlighted by Maclvor (2021), mentioning that an anomaly shows exactly, where to focus and dive in. Due to the limited sample size of this study, such a statement should always be seen with caution. Even though the

participating companies mentioned that anomalies are to be managed with proactivity and adaptability, this certainly does not necessarily apply to all types of companies, as also the type of product, as well as the maturity and structure of the company need to be considered. Hence, more traditional methods of anomaly anticipation (e.g. Harris and Daunt, 2003; Nangpiire, 2021) also hold value for companies.

## 5.2 Theoretical contribution

Overall, this literature contributes to the existing body of customer journey literature by challenging the very positively connotated perception of the customer journey through a perspective on the hidden and dark side of the customer journey.

First, literature points at the conceptualizations of customer journeys into well-defined stages and steps, going from conceptualizations like Awareness-Consideration-Conversion-Retention (Court et al., 2009) to newer conceptualizations of a Pre-Transaction-Transaction-Post-Transaction (Lemon and Verhoef, 2016) viewpoint of the customer journey, trying to incorporate every single interaction of a customer with a company with the intention to create the perfect, smooth and consistent customer journey (Fleming, 2016; Kuehnl et al., 2019; Edelman and Singer, 2015). Even though those models are valuable for in-practice marketing, they often fail to account for the other side of the customer journey, where customer behavior deviates from a company's anticipation. In response, this research explored this part of the customer journey, identifying a set of anomalies that occur in the customer journey, while simultaneously showing companies how such a deviating can be managed and anticipated, thereby uncovering that organizations should shift their focus from stiff plans and outdated internal mechanisms, towards flexibility and adaptability when approaching anomalies.

Second, while existing literature on the dark side of customers points at different customer behavior characteristics and their impact on companies and customer experience, they miss a connection to underlying theoretical concepts that are of use for in-practice marketing. For example, Zolfagharian and Yazdanparast (2017) or Moschis (2017) highlight specific behavioral deviations, but it remains unclear how the derived implications of the study can be managed by companies and how they should be assessed within the customer journey model that the company is using. To close this gap, this research proposes a categorization of specific behaviors that can be considered as the dark side of customer behavior, while simultaneously doing so within the customer journey that is of great use for businesses and academia, thereby uncovering how deviating behavior can be categorized in the customer journey. Through this, the uncertainty related to anomalies from a business side is reduced.

Also, this paper contributes to the very small existing body of literature related to anomalies, by focusing anomalies as real human behavior, thereby extending the focus from a very data-driven perspective on anomalies towards an understanding of the real human behavior that underlies anomalies. Precisely, while Maclvor (2021) points at anomalies as a statistically significant subsequent amount of customer attributes that is significantly over or underperforming against a key business metric, this perception of anomalies lacks a perspective on the real human behavior that results in the significant over or under performance against a metric. In response, this research highlights three different types of behavioral patterns that companies are faced with, which can potentially result in the by Maclvor (2021) described phenomenon. To extend this, this research proposes a more extensive viewpoint of anomalies by extending the existing perspective

of anomalies with a perspective focused on real behavior. In this aspect, this research also touched on the potential impact of anomalies on value creation and value destruction for other customers. In line with Echeverri and Skâlén (2021), who mention that (unintended) negative experiences can result in value destruction for other customers, this research extended this viewpoint by introducting three types of anomalies that have the potential to lead to value destruction.

# 5.3 Managerial contribution

Understanding and enhancing the field of deviating customer behavior is an important contribution to the proper and appropriate management of behavioral deviations. Without good definitions and knowledge about anomalies, deviating customer behavior might still be the dark side of consumer behavior (Moschis, 2017; Zolfagharian & Yazdanparast, 2017) that companies shy away from and want to avoid at all costs. Therefore, highlighting specific behavioral patterns and showing how companies should anticipate on such behavior is of huge importance. With this research, light was shed on such customer behavior by showing three different behavioral patterns that create uncertainty and that companies are frequently faced with, while simultaneously providing granularity that is needed for customers to understand anomaly. Through this, managers are now able to categorize behavioral deviations better, ultimately reducing uncertainty, as they are not completely unfamiliar with such behavior.

Furthermore, this research indicates how companies should react to those anomalies, highlighting the company needed openness towards anomalies and showing the perspective that anomalies are a source for growth, rather than a sole experience destructor. Through this, companies can adjust their company internal mechanisms and make them more focused on flexibility and adaptability, rather than further promoting and utilizing stiff and outdated company mechanisms, that hinder companies in achieving the maximum out of their possibilities. This is especially important in times of almost full connectivity, where growth is one of the key points for companies, considering the rise of competition.

Also, results implied that companies should go away from their internal ambition to always create the perfect customer journey, as customers are way too different in their behavior to summarize them in one perfect customer journey model. This is also in line with Sahhar and Loohuis (2022), who mention that companies could create artificial interruptions in the customer experience to keep customers engaged and appreciate the offering.

# 6. Limitations and areas for future research

This research investigated anomalies in the customer journey, as well as company specific ways and mechanisms of anomaly anticipation. By the help of company interviews, this research proposed that anomalies always need to be seen in the context that they take place in, meaning that there is no anomalous behavior that is applicable to every company-customer interaction process. By doing so, the results contributed to literature by underlining the importance of contextuality when identifying and assessing anomalies.

Nonetheless, this research is largely constrained by the fact that it solely relies on interviews as the source for information. Considering the background and maturity that different companies might have when it comes to anomalous customer behavior and its anticipation, the

results and interviews differed largely from each other with only a limited amount of consensus in the interviewee's responses.

Even though the importance of contextuality was highlighted in this research, three major anomalies were identified for the three different stages of the customer journey, contributed through the company interviews and the interviewee's responses. Although three different types of anomalies were identified, this research lacks a complete picture of anomalies in the customer journey, as only a limited number of anomalies are explained. Also, even though those anomalies are highlighted, not every company might be familiar with those behavioral deviations, therefore again highlighting the importance of the context of the transaction. Consequently, the results and contributions vary massively, making a conceptualization of an anomaly in the customer journey barely possible, as there is also no consensus on what an anomaly even is. Hence, this research only points at a variety of different anomaly points for companies, without showing the full picture of the topic that was aimed for with this research.

Also, this research is limited by the number of interviews that were held. As the sample size was fairly low, with companies from different branches and perspectives, this research fails to conceptualize a coherent picture that is relevant for everyone in Marketing. Consequently, a larger sample size could have delivered deeper and more coherent insights for both research questions.

Therefore, future research could focus on one area of marketing professionals (for example only people from agencies) to derive a coherent picture of anomalies and their anticipatory possibilities for this specific set of professionals. Such research could therefore help to clarify the concept of anomalies even more by only considering input from one respective perspective on the customer journey.

Also, similar to other research that focuses on deviating customer behavior (Zolfagharian and Yazdanparast, 2017; Ebrahimi et. al., 2020), future research should focus on adopting a micro perspective on why different anomalies even occur. In other words, future research should zoom in on a specific deviating customer anomaly and assess the reasons that contribute to the appearance of such a behavior, while simultaneously giving more in-depth answers on the consequences that result from such a behavior (in one of the respective stages of the customer journey).

As this research focused on a conceptualization of anomalies in the customer journey and how organizations can anticipate such a behavior, future research should focus on exploring the latter even more by examining corporate mechanisms that are being undertaken to detect and manage deviations, while simultaneously finding improvements for such mechanisms, especially considering the developments in fields of third person data and tracking.

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