Product Experience Along the Customer Journey: A New Look at Perceived Quality Through Time

Marutschke David

Abstract

While the importance of perceived product quality for business performance is well documented, its specific role within the broader context of customer experience is less understood, particularly when considered across the full span of the customer journey. This paper aims to integrate existing concepts of perceived product quality into the process-based view of customer experience, and underscores the significance, challenges, and strategic implications of positioning the product as a central element throughout the customer journey.

Keywords: perceived quality, customer experience, customer journey, product quality

1. Introduction

Research on customer experience and customer journeys has significantly advanced in recent years. The literature now covers many fields from marketing science and consumer behavior to service management, E-commerce, brand management and channel management. Customer experience captures how customers respond and react as they interact with experience partners, and the customer journey (hereafter CJ) is defined as a series of touchpoints that customers go through (Becker & Jaakkola, 2020; Lemon & Verhoef, 2016). This makes the experience a highly subjective phenomenon with different perceptions as well as cognitive, emotional and behavioral responses (Becker & Jaakkola, 2020).

The concept of "experience" in marketing literature emerged as a new evolutionary stage beyond the traditional focus on products and supporting services. Pine and Gilmore (1998) argued that as goods and services become increasingly commoditized, experiences offer a way to provide new and differentiated value, emphasizing that "commodities are fungible, goods tangible, services intangible, and experiences *memorable*" (Pine & Gilmore, 1998).

Over the years, marketing scholars and practitioners have increasingly investigated perceived *service* quality in the context of customer experience, including offline / online shopping, service encounters such as hotels and airlines, and the overall brand experience (Bitran et al., 2008; Jaakkola & Terho, 2021; Baxendale et al., 2015). However, the perceived quality of the *physical* product, especially in regard to how it may change or evolve over time, tends to play a subordinate role.

This paper seeks to integrate consumers' direct experiences with tangible products into the process model of customer experience, which traces a series of touchpoints that customers encounter before, during, and after a purchase (Kranzbühler et al., 2018; Lemon and Ver-

hoef, 2016). It follows the user-based perspective on product quality and proposes that perceived quality attributes of durable goods can be systematically organized across these purchase stages of the customer journey. Several challenges and implications for management are also elaborated.

2. Integrating perceived product quality into the customer experience

The CJ is "the process a customer goes through, across all stages and touchpoints, that makes up the customer experience" (Lemon & Verhoef, 2016, p. 71). Many scholars divide the CJ into three stages—prepurchase, purchase and postpurchase (Lemon & Verhoef, 2016; Grewal & Roggeveen, 2020). While some also propose non-linear dynamics of customer experience such as feedback loops and channel switching (Kranzbühler, 2018), this paper focuses on the three-stage process because it helps to understand how perceived product quality may evolve over time.

Traditionally, product quality is a concept from engineering and manufacturing, where products should meet certain design specifications or technical standards, or which refers to the standardization of manufacturing processes. But scholars suggested already in the 1980s that product quality comprises both objective, performance-based attributes and subjective consumer perceptions. *Perceived* quality is defined as a buyer's evaluation of a product's cumulative performance (Zeithaml, 1988; Steenkamp, 1990). Since perceived quality reflects the perspective of customers' perception, it can differ from actual or objective quality because subjective evaluating criteria depend on the customer expectations (Gale & Buzzell, 1989).

Perceived quality is regarded as the actual driver and key determinant of shopping behavior and product choice (Zeithaml, 1988; Akdeniz et al., 2014). The literature typically frames perceived quality as an antecedent to customer satisfaction, which mediates its influence on relationship outcomes such as loyalty, retention, and positive word-of-mouth (Anderson & Sullivan, 1993; Fornell et al., 1996; Szymanski & Henard, 2001). The wide use of rating systems in the real world such as Amazon star ratings demonstrate that businesses actively seek to capture and leverage both quality perceptions and satisfaction evaluations to influence customer loyalty and advocacy.

Different measurement frameworks and scales for product quality exist such as a reflective perceived quality scale by Netemeyer et al., 2004 and a formative perceived quality scale by Molina-Castillo et al., 2013. More recently, scholars have begun integrating perceived service quality with customer experience. Xie & Sun (2021) for example compare the effects of perceived service quality on customer satisfaction among the different service stages preparation, delivery and departure. They find that for search service and credence service, perceived quality has stronger effects on customer satisfaction in the preparation and departure stage, while the effects were greater in the delivery and departure stages for experience services (Xie & Sun, 2021).

The idea of linking perceived product quality and customer experience is also not entirely new. Golder et al., 2012 uses the term "quality experience" as an integral part of their quality framework. According to the authors, this term refers to an aggregated product evalu-

ation, representing the customer's summary judgement of the firm's offering (Golder et al., 2012). On this basis, Das Guru and Paulssen (2020) have developed a multidimensional Customers' Experienced Product Quality (CEPQ) scale, that measures product quality based on consumer reports across 8 dimensions: Aesthetics, Durability, Ease of use, Features, Materials, Performance, Reliability and Serviceability. The authors find that CEPQ significantly influences not only customer satisfaction but also behavioral intentions, such as repurchase intention and willingness to pay a premium (Das Guru, & Paulssen, 2020). Kumar et al. (2025) use both product- and service-related quality measurements and find that perceived quality influences re-purchase intentions through the mediating role of customer satisfaction.

While these works provide valuable insights on what the major dimensions of perceived product quality are and how to measure them, a time-based organization along the customer journey warrants greater attention for three key reasons.

First, the literature defines customer experience broadly—not only as encompassing selling processes, customer service, or social media engagement, but also as including product usage (Becker & Jaakkola, 2020). However, most customer experience research tends to focus either on specific stages of the journey—for example, Lemon and Verhoef (2016) highlight the product as a critical touchpoint in the post-purchase stage—or on the intangible service aspects of the experience (Bitran et al., 2008). Schmitt (2011) further suggests that a fundamental concept of experience marketing is that value resides not only in services, but also in products themselves, in information gathering and processing, and in the act of consumption. However, the role of the product across the *entire* customer journey across all touchpoints is not well understood.

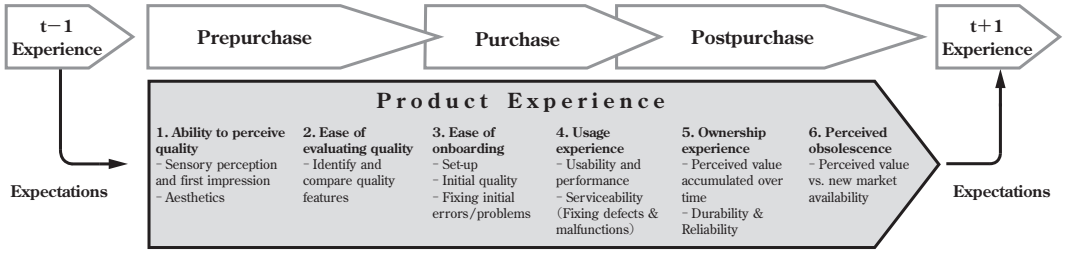
Second, product quality, much like customer experience, is not only multi-dimensional (Garvin, 1984) but also dynamic in nature, when considering how quality is perceived over time. For instance, certain attributes from the CEPQ scale such as ease of use or aesthetics are evaluated immediately upon purchase or first use, whereas others—such as durability and reliability—can only be judged after extended interaction with the product. This temporal dimension suggests that quality is not a static construct but one that evolves throughout the customer journey. As consumers continue to interact with and rely on the product over time, these touchpoints can become the primary means through which they engage with and evaluate the brand. Thus, the product itself serves not only as a functional offering but also as an ongoing experiential interface that shapes brand perception and loyalty.

Third, emerging technologies such as artificial intelligence (AI), augmented reality (AR), and the Internet of Things (IoT) are increasingly blurring the boundaries between physical products, services and experiences. This convergence calls for a deeper understanding of the role that users' product experiences play within the different stages and touchpoints of the customer journey.

This paper proposes six stages of perceived product quality, structured along the three customer journey stages as outlined by Lemon and Verhoef (2016). In the prepurchase stage, these include (1) the ability to perceive quality and (2) the ease of evaluating quality; in the purchase stage, (3) ease of onboarding and (4) usage experience; and in the postpurchase stage, (5) ownership experience and (6) perceived obsolescence. These stages are il-

lustrated in Figure 1 and are discussed in detail in the following sections. A tablet PC serves as a representative example of a durable product to illustrate these quality aspects and challenges.

Figure 1: Perceived product quality along the purchase stages (created by author)



2.1 Ability to perceive quality

The perceptual process starts with exposure, when a stimulus reaches the consumer's senses and is noticed. This is followed by attention, referring to the level of cognitive processing devoted to the stimulus, and interpretation, where meaning is assigned to it (Solomon, 2023). Buyers form initial impressions from product sensory cues such as appearance, touch, sound, and overall design (Hallikainen et al., 2025; Campeau et al., 1998). Affective reponses to sensory stimuli (e.g. color, aroma, texture) can also influence subsequent subjective product evaluations (Larry et al., 1998). If these stimuli result in need recognition, customers are more likely to initiate a new customer journey and interact with service providers (Voorhees et al., 2017).

Whether customers can sufficiently perceive quality cues largely depends on the effectiveness of touchpoints during the pre-purchase stage. If a stimulus is too weak or inaccessible to the buyer's senses, they may be unable to form an adequate initial impression. This issue might go unnoticed, as it is difficult to assess the level of exposure customers actually have to product quality cues. For example, a tablet PC on display may be covered with protective sheets to prevent scratches, or physically secured to deter theft. Such measures can limit customers' ability to adequately see, touch, feel the weight of, or even smell the product, thereby restricting their ability to fully form a first impression.

2.2 Ease of evaluating quality

Quality is relative. Hence, assessing it requires the comparison of relevant attributes across alternative options. This evaluative ability is critical in high-involvement purchases, where consumers weigh performance, materials, features, and other differentiators (Zeithaml, 1988). The effectiveness of this evaluation greatly depends on how accessible and clear the quality-related information is across the available options.

Today's customers are well-informed and can access detailed information on product specifications, test reports and customer reviews from various sources in real time, on location, via their smartphones (Verhoef et al., 2015). This poses a challenge for customer journey

managers, as they aim to avoid providing information that customers already have or consider irrelevant, while also ensuring that potential sales opportunities are not lost due to missing or unclear information. Integrating product quality into the evaluation phase means that companies need to know the type of product information customers already have gathered up to this point (e.g. through company websites, catalogues and social media), what is still required and how to present it to make the evaluation process for customers as smooth and efficient as possible.

2.3 Ease of onboarding

Ease of onboarding refers to how quickly and effortlessly a new customer can begin using a product. Products that are intuitive and easy to set up help minimize user frustration, which is especially important for tech-based or multifunctional goods (Norman, 2013). The first-time user experience is particularly critical, as it not only influences immediate satisfaction but also determines whether the customer continues to engage with the product or abandons it altogether. It effectively sets the tone for the entire customer journey (Komandla, 2019). Moreover, the rise of social media has significantly amplified the visibility and impact of initial product experiences. One example is the widespread popularity of "unboxing" videos, in which influencers demonstrate the product's packaging, setup, and initial use, often followed by follow-up reviews after a few months. If a product such as a tablet PC malfunctions or proves difficult to set up during this first interaction, it may generate negative word-of-mouth and discourage potential users from adopting it.

Therefore, it is essential to clarify the key elements of a successful onboarding process, including how to align them across relevant touchpoints and select appropriate channels, for example when delivering welcome messages or offering quick-start guides and video tutorials. Komandla (2019) further recommends interactive onboarding techniques, such as product tours and guided setup processes, which can increase the degree of control CJ managers exert during this critical stage.

2.4 Usage experience

In the usage stage, customers develop an understanding of product performance through regular interaction. Over time, product usage forms lasting judgments that can influence satisfaction (Etkin & Sela, 2016; Burns, 1994).

Usability, also known as usefulness or ease of use is an important aspect of the experience users have with products (Carroll & Mentis, 2008). The International Standards Organization (2018) defines usability as "the extent to which a product can be used by specified users to achieve specified goals with effectiveness, efficiency, and satisfaction in a specified context of use". In other words, it reveals to the customer whether they can perform the task for which they bought the product.

At this stage, customers may also encounter actual product defects or malfunctions for the first time. However, they may also misinterpret usability challenges as technical failures, particularly in complex products with multiple interacting components, such as those based on IoT technology. This presents a critical challenge for companies: to integrate customer sup-

port systems capable of accurately distinguishing between usability problems and genuine defects, and resolving both promptly and effectively. Moreover, observing how customers actually use their products in real life situations may reveal new insights into the usage practices, providing new ideas for product development (Boess & Kanis, 2008).

2.5 Ownership experience

Ownership experience refers to the perceived value of a product that accumulates over time, particularly with regard to its durability and reliability. It reflects the extent to which the product continues to fulfill the user's needs effectively based on their past usage. This long-term performance plays a major role in shaping brand trust, repurchase intentions, and word-of-mouth (Garvin, 1987; Oliver, 2010). Customers are getting used to the product and form a sense for durability. As the experience with the product progresses, certain quality dimensions may lose in importance. Aesthetics for example possibly lose relevance compared with durability or serviceability (Nelson, 1970; Srinivasan & Till, 2002). In our example, this means that even if the tablet PC creates a strong initial impression at the beginning of the customer journey, durability issues encountered later may lead to dissatisfaction and undermine the trust established up to that point.

On the other hand, Munten and Vanhamme (2022) found that communicating product repairability alread in the prepurchase stage positively influences perceived durability, corporate social responsibility (CSR) beliefs, and brand attitudes. Such communication can be carried out directly by the company or supported through long-term quality data from third-party sources, such as the repairability score by iFixit for electronic goods or the J. D. Power Vehicle Dependability Study for automobiles.

CJ managers must therefore closely monitor such shifts in customer perceptions and determine when and how to communicate product repairability as a signal of durability. In parallel, they should ensure the integration of appropriate repair and support services to reinforce this message.

2.6 Perceived Obsolescence

Perceived obsolescence occurs when consumers view their current product as outdated in comparison to newer alternatives (Cooper, 2004). There are many reasons for obsolescence, ranging from product failures to a decrease in modern design or changing customer needs (Fels et al., 2016). Cooper (2004) distinguishes between the absolute obsolescence (when the product is technically worn out) and relative obsolescence, where the consumer sets the end of use himself. The latter is driven by individual perception that is based on psychological and symbolic factors, such as design trends or feature innovations rather than by actual product failure.

Fels et al. (2016) argue that perceived obsolescence emerges from comparing a product's current condition with its original state, underscoring how customer evaluations shift between the beginning and end of the CJ. Furthermore, the authors analyzed Amazon reviews and observed that perceived obsolescence can lead customers to rate newer, substituting products more favorably. In the case of tablet PCs, this suggests that consumers compare

their current device not only with past usage experiences but also with newer models, which appear more attractive the more the existing device is perceived as slow, outdated, or worn out. However, more empirical evidence is needed to validate this effect.

Overall, it is essential for CJ managers to understand the mechanisms and dynamics of perceived obsolescence, as it creates expectations and an opportunity to connect the end of one CJ cycle with the beginning of the next. The effectiveness with which this transition is managed will significantly influence the strength and longevity of customer relationships.

3. Implications and future research

Integrating product quality into the CJ management framework has important practical implications for a company's organizational structure and managerial practices. Product development and engineering departments typically focus on ensuring the physical quality of the product prior to the start of the customer journey and rely on post-purchase feedback to make iterative improvements. This paper however shows that the experience customers have with the physical product actually matter during the entire CJ, which requires product and marketing departments to work together more closely and strategically position the product itself as a central element of the CJ. This should begin with a comprehensive assessment of the product experience, including:

- observing and monitoring how customers interact with the product and respond at critical touchpoints across all stages of the purchase process
- identifying when and how perceptions of product quality change over time, how evaluations at one point in time may influence those at another, and what implications these shifts have for the overall customer journey in terms of future expectations.

This paper has consolidated existing concepts of perceived quality and structured them in relation to the purchase stages of the customer journey. Future research should empirically validate the distinct dynamics of perceived product quality, both within a single, cohesive CJ and across multiple CJ cycles.

4. Conclusion

So far, the literature does not yet account for the dynamics with which perceived product quality may change as the consumption experience of the customer unfolds. This paper therefore makes an attempt to integrate perceived quality dimensions with the time-based process view of customer experience. It proposes that perceived product quality matters in all stages of the customer journey. More specifically, perceptions change and evolve during the prepurchase, purchase and postpurchase stage, and the product experience in one touchpoint may influence perceptions in another. Management therefore needs to holistically plan, organize and improve points of product interactions along the customer journey such as evaluation, onboarding and usage.

References

Akdeniz, M. B., Calantone, R. J., and Voorhees, C. M. (2014). Signaling quality: an examination of the effects of marketing- and nonmarketing-controlled signals on perceptions of automotive brand quality. Journal of Product Innovation Management Vol. 31(4), 728-743.

Anderson, E. W. and Sullivan, M. W. (1993). The antecedents and consequences of customer satisfaction for firms. Marketing Science, Vol. 12(2), 125-143.

Baxendale, S., Macdonald, E. K., and Wilson, H. N. (2015). The impact of different touchpoints on brand consideration. Journal of Retailing, Vol. 91(2), 235-253.

Becker, L., and Jaakkola, E. (2020). Customer experience: Fundamental premises and implications for research. Journal of the Academy of Marketing Science, Vol. 48, 630-648.

Bitran, G. R., Ferrer, J. C., and Rocha e Oliveira, P. (2008). Managing customer experiences: Perspectives on the temporal aspects of service encounters. Manufacturing & Service Operations Management, Vol. 10(1), 61-83.

Boess, S. and Kanis, H. (2008). 12 - MEANING IN PRODUCT USE: A DESIGN PERSPECTIVE, Editor(s): Hendrik N. J. Schifferstein, Paul Hekkert, Product Experience, Elsevier, 305-332.

Burns, M. J.(1994). Exploring Self (Dis)Satisfaction as an Outcome of Product Use Experiences. Journal of Consumer Satisfaction, Dissatisfaction and Complaining Behavior, Vol. 7, 252-256

Carrol, J. M., Mentis, H. M. (2008). 21－THE USEFUL INTERFACE EXPERIENCE: THE ROLE AND TRANSFORMATION OF USABILITY, Editor(s): Hendrik N. J. Schifferstein, Paul Hekkert, Product Experience, Elsevier, 2008, 499-514.

Cooper T. (2004). Inadequate Life? Evidence of Consumer Attitudes to Product Obsolescence. Journal of Consumer Policy, Vol. 27, 421-449.

Das Guru, R. R. and Paulssen, M. (2020). Customers' experienced product quality: scale development and validation. European Journal of Marketing, Vol. 54(4), 645-670.

Etkin, J., and Sela, A. (2016). How Experience Variety Shapes Postpurchase Product Evaluation. Journal of Marketing Research, Vol. 53(1), 77-90.

Fels, A., Falk, B., and Schmitt, R. (2016). Social Media Analysis of Perceived Product Obsolescence, Procedia CIRP, Vol. 50, 571-576.

Fornell, C., Johnson, M. D., Anderson, E. W., Cha, J. and Bryant, B. E. (1996). The American Customer Satisfaction Index: Nature, Purpose, and Findings. Journal of Marketing, Vol. 60(4), 7-18.

Gale, B. T. and Buzzell, R. D. (1989). Market Perceived Quality: Key Strategic Concept. Planning Review, Vol. 17(2), 6-48.

Garvin, D.(1987). Competing on the eight dimensions of quality. Harvard Business Review, 101-109.

Garvin, D. A. (1984). Product quality: An important strategic weapon. Business Horizons, Vol. 27(3), 40-43.

Golder, P. N., Mitra, D. and Moorman, C. (2012). What is quality? An integrative framework of processes and states. Journal of Marketing, Vol. 76(4), 1-23.

Grewal, D. and Roggeveen, A. (2020). Understanding retail experiences and customer journey management. Journal of Retailing, Vol. 96(1), 3-8.

Hallikainen, H., Halinen, M., Tervonen, H., Ruusunen, N. and Wang, Y. (2025). Rating with the Senses: How Sensory Encounters Are Reflected on Online Review Ratings? Psychology & Marketing, Vol. 41(1), 159-174

International Organization for Standardization (ISO) (2018). ISO 9241 11: 2018: Ergonomics of human system interaction－Part 11: Usability: Definitions and concepts. Geneva: ISO

Jaakkola, E., and Terho, H. (2021). Service journey quality: conceptualization, measurement, and customer outcomes. Journal of Service Management, Vo. 32(6), 1-27.

Komandla, V. (December 19, 2019). Effective Onboarding and Engagement of New Customers : Personalized Strategies for Success. Available at SSRN : https://ssrn.com/abstract=4983100

Kranzbühler, A., Kleijnen, M., Morgan, R., Teerling, M. (2018). The Multilevel Nature of Customer Experience Research: An Integrative Review and Research Agenda. International Journal of Management Review, Vol. 20(2), 433-456.

Kumar, R., Jain, V., Eastman, J.K. and Ambika, A. (2025). The components of perceived quality and their influence on online re-purchase intention. Journal of Consumer Marketing, Vol. 42 (1), 38-55.

Lemon, K. N., & Verhoef, P. C. (2016). Understanding customer experience throughout the customer journey. Journal of Marketing, Vol. 80(6), 69-96.

Molina-Castillo, F., Calantone, R. J., Stanko, M. A. and Munuera-Aleman, J. (2013). Product quality as a formative index: evaluating an alternative measurement approach. Journal of Product Innovation Management, Vol. 30(2), 380-398.

Munten, P., Vanhamme, J. (2023). To reduce waste, have it repaired! The quality signaling effect of product repairability. Journal of Business Research, Vol. 156, 113457.

Nelson, P. (1970). Information and consumer behavior. Journal of Political Economy, Vol. 78(2), 311-329.

Netemeyer, R. G., Krishnan, B., Pullig, C., Wang, G., Yagci, M., Dean, D., Ricks, J. and Wirth, F. (2004). Developing and validating measures of facets of customer-based brand equity. Journal of Business Research, Vol. 57(2), 209-224.

Norman, D. (2013). The Design of Everyday Things: Revised and Expanded Edition. New York: Basic Books.

Oliver, R. L. (2010). Satisfaction: A Behavioral Perspective on the Consumer. 2nd ed. New York: Routledge (M. E. Sharpe)

Pine II, B. J. and Gilmore, J. H. (1998). Welcome to the experience economy. Harvard Business Review, 97-105.

Schmitt, B. (2011). Experience Marketing: Concepts, Frameworks and Consumer Insights, Foundations and Trends in Marketing, Vol. 5(2), 55-112.

Srinivasan, S. S. and Till, B. D. (2002). Evaluation of search, experience and credence attributes: role of brand name and product trial. Journal of Product and Brand Management, Vol. 11(7), 417-431.

Steenkamp, J. B. (1990). Conceptual model of the quality perception process. J. Bus. Res. 21, 309-333.

Szymanski, D. M. and Henard, D. H. (2001). Customer satisfaction: a meta-analysis of the empirical evidence., Journal of the Academy of Marketing Science, Vol. 29(1), 16-35.

Verhoef, P. C., Kannan, P. K. and Inman, J. J. (2015). From Multi-Channel Retailing to Omni-Channel Retailing: Introduction to the Special Issue on Multi-Channel Retailing. Journal of Retailing, Vol. 91(2), 174-181.

Voorhees, C., Fombelle, P., Gregoire, Y., Bone, S., Gustafsson, A., Sousa, R., Walkowiak, T. (2017). Service encounters, experiences and the customer journey: defining the field and a call to expand our lens. Journal of Business Research, Vol. 79, 269-280.

Xie, C. and Sun, Z. (2021). Influence of perceived quality on customer satisfaction in different stages of services, Nankai Business Review International, Vol. 12(2), 258-280.

Zeithaml, V. A. (1988). Consumer perceptions of price, quality, and value: a means-end model and synthesis of evidence. Journal of Marketing, Vol. 52, 2–22.