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<input checked="" type="checkbox"/>	Master's thesis
<input type="checkbox"/>	Licentiate's thesis
<input type="checkbox"/>	Doctoral dissertation

Subject	International Business	Date	11.10.2022
Author(s)	Jessica Jamile Mallma Ayala	Number of pages	86
Title	A comparison of customer equity drivers between distributors and end-users A case study of a high technology firm.		
Supervisor(s)	D.Sc. Valtteri Kaartemo, D.Sc. Birgitta Sandberg		

Abstract

In order to attract and satisfy customers, firms have switched their businesses from transactions to relationships models and the concept of product-oriented has been replaced by the customer-focused concept. This last concept considers customers as important assets for the firms and provides a basis to develop and implement effective strategies with a strong customer focus.

Under this model, customer equity is seen as a valid measure established by the total customer lifetime value from the firm's current and potential customers and base its concept on their relationship and the impact of three main equity drivers: value equity, brand equity and relationship equity.

The objective of this thesis is to determine the similarities and differences of customer equity drivers between distributors and end-users. For this reason, this research was conducted using a qualitative content analysis on a case study, where distributors, end-users and company's representatives from a high technology firm have been interviewed.

The findings support the literature review that advocates the high importance of value equity drivers for distributors and end-users and the different level of importance of brand and relationship equity for distributors and end-users in the high technology sector. Therefore, this research provides theoretical and practical contributions to the field of international business by providing a clear differentiation of customer equity drivers in a distribution chain, that will facilitate a better allocation of a firm's resources, develop more effective marketing strategies and achieve a stronger customer advantage in the high technology sector.

Key words	Customer equity, customer equity drivers, distributors, end-users, high technology
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A comparison of customer equity drivers between distributors and end-users

A case study of a high technology firm

International Business
Master's thesis
Global Innovation Management

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11.10.2022
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The originality of this thesis has been checked in accordance with the University of Turku quality assurance system using the Turnitin Originality Check service.

ACKNOWLEDGEMENTS

The completion of this study could have been possible without the participation of all the interviewees and the case study firm. I would like to thank my supervisors D. Sc. Birgitta Sandberg and D. Sc. Valtteri for their guidance and to the firm's case business developer for his support and contribution in this paper.

A debt of gratitude is also owned to my lovely friends and family for their ongoing love and support, in special to Jossephyn Mallma, Jussi Vainio, my mother Felicita Ayala; and last but not least, to my father Emiliano Mallma who could not see this thesis completed.

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1 Introduction and objectives

1.1 Background of the research

Over the last decade there has been a dramatic evolution around new marketing models (Hansotia 2004, 9). In order to attract and satisfy customers (Aravindakshan et al. 2004, 408), firms have switched their business focus from transactions to relationships (Rust et al. 2005, 4) and the concept of product-oriented has been replaced by the customer-focused concept (Hogan et al. 2002, 4) whose main purpose is to maximise customer strategy (Rust et al. 2005, 22) by considering customers as important assets for firms. (Hansotia 2004, 9).

These changes experienced in this new global economy brought new challenges to different industries which now they needed to satisfy the customer needs (Aravindakshan et al. 2004, 408), and nowadays, manager's daily challenges include how to increased product's performance (Vogel et al. 2008, 98), find effective ways to develop and implement strategies (Hogan et al. 2002, 5) with a strong customer focus (Rust et al. 2005, 4), understand the factors that motivates the customers tie in with firms (Zeithaml et al. 2001, 53) and learn how to allocate their resources in order to produce results in a long term (Romero & Yagüe 2015, 642). Due to these new challenges, "firms have introduced customer relationship marketing programs to optimise customer interactions" (Leone et al. 2006, 127), improve customer targeting (Richards & Jones 2008, 126) and value the firm by its most important component: customer equity (Aravindakshan et al. 2004, 405).

Customer equity distinguishes the customers as the heart of the business (Zeithaml et al. 2001, 58) and provides an opportunity to make marketing strategies financially accountable (Aravindakshan et al. 2004, 405). By using this framework, customers become market-based assets (Vogel et al. 2008, 98) and are viewed not just as a current profitability, but as a total customer value for the firm (Zeithaml et al. 2001, 4), which is a key marketing goal of today's business organisations (Ramaseshan et al. 2013, 335).

"Customer equity identifies the strategic initiatives that will have the greatest impact on the long-term profitability of its customer base" (Zeithaml et al. 2001, 9) and sets it as a fast evolving (Hogan et al. 2002, 6) key asset (Vogel et al. 2008, 98) that helps to develop effective marketing strategies (Hogan et al. 2002, 5), resulting in competitive advantage to firms (Aravindakshan et al. 2004, 406) by focusing their strategies in an effective direction (Zeithaml et al. 2001, 9) and providing an integrated approach to marketing (Hogan et al. 2002, 5).

Therefore, questions have been raised about the presence of customer equity in firms. How can we build customer equity inside a firm? (Zeithaml et al. 2001, 7), what data should a company capture (Hogan et al. 2002, 7) or where should the firm focus its efforts to achieve the highest customer equity level? (Zeithaml et al. 2001, 8).

A considerable amount of literature has been published on answering these questions and propose three drivers of importance to achieve a highest customer equity (Leone et al. 2006, 128): value equity, brand equity and relationship equity (Ramaseshan et al. 2013, 337). “These drivers are key propellers for a firm’s growth and they can work independently or collectively to increase customer equity and value of the firm” (Ramaseshan et al. 2013, 337) and supports identifying the customer equity driver that has the greatest impact (Zeithaml et al. 2001) by taking advantage of the dynamic component or components of customer equity (Zeithaml et al. 2001, 60).

In addition, these three components vary in importance by company, industry and type of customer (Leone et al. 2006, 128) and just one driver equity may not be enough to hold all the customers (Ho & Chung 2020, 16). For example, previous studies reported that brand equity will matter more with low-involvement purchases, value equity in business-to-business settings (Leone et al. 2006, 128) and relationship equity in industries that require continual relationships and repeat purchases (Holehonnur et al. 2009, 166).

Since companies have limited resources, they should focus on the most relevant drivers in their own industries (Holehonnur et al. 2009, 166) and act accordingly to those drivers in order to achieve a high quality level in customer experience through interactions and transactions (Cambra-Fierro et al. 2019, 9). However, there is no previous literature that has explored these drivers in different industries, especially in the high-technology sector (Tellis et al. 2009, 136) or even been judged by the different customers in a distribution channel, considering distributors or the people who buy the products from them (called end-users) (Anonymous 1995, 17).

Since it is essential for manufacturing companies to consider the distributor and the end-user as customers (Anonymous 1995, 17) and sometimes combine services with the distributors to provide a good offering to the final customer and gain market share (Vorreuter 1997, 122), firms need to understand the various perceptions of customer equity drivers that exist among distributors and end-users especially in the high technology industry due the clear impact that

this industry has in today's economy and how user's behaviours tend to change due the rapidly evolving technology (S. Lee et al. 2011, 1195).

Consequently, this study seeks to remedy these problems by identifying the value of customer equity drivers in distributors and end-users in a high technology firm. The aim of this research is to compare the similarities and differences between all these drivers in the seek to discover what driver creates more customer equity by examining distributors and end-users references from different locations, including European and American customers due its excellent reputation for outstanding scientific research and attractive market for European and overseas-based high-technology firms (Ukropcov & Sturdik 2011, 73). In this way, the findings of this research should make an important contribution to the field of marketing and international business; and provide practical contributions to high-technology firms which are looking to develop effective marketing strategies aspiring to achieve a stronger customer equity from their distributors and end-users and, therefore, grant more customer advantage.

1.2 Research questions

The main objective of this study is to discover the differences and similarities between customer equity drivers for distributors and end-users in high-technology firms, and in order to find out what drivers are more valuable for these two types of customers. For this research, I consider drivers as "the types of customer evaluative domains influencing corporate customer equity and consist of perceived value, brand equity and relationship equity" (Kim 2012, 235).

Since, this study is based on a customer-orientation concept and considers the distributor and end-users as customers. Both customers represent value for the manufacturer in the high-technology industry and their opinions, behaviours and experiences signify a vital input in this analysis.

Based on the previous information, the central research question in this study is:

How customer equity drivers differ between distributors and end-users in high-technology firms?

The research question is followed by three sub questions that provides fundamental concepts and details on how the main research question will be answered:

What are the important customer equity drivers for distributors in high-technology firms?

What are the important customer equity drivers for end-users in high-technology firms?**What are the differences and similarities of customer equity drivers between distributors and end-users?**

The theoretical and empirical information provide a straight contribution to the main and sub questions. The main question examines how customer equity drivers are different or similar for distributors and end-users.

The first sub question is answered by the analysis of the customer equity drivers based on the perspective of distributors and the second sub question considers the same information but from the point of view of end-users. In both sub questions, each customer equity driver will provide a specific answer based on the importance of the different values from the distributors and end-user's opinion. Finally, the third question addresses the comparison between the customer equity drivers for distributors and end-users; it must be noted that this question comes at last since it is vital for the research to determine what the similarities or differences of customer equity drivers for these two types of customers are.

The frame of this research will be covered mainly on the practical analysis around one specific product from our case study "Company X" rather than the analysis coming from the firm's products portfolio which gives us a limited and demarcated focus on the element of analysis.

2 Literature review

2.1 Customer equity

A considerable amount of literature has been published on customer equity, and some researchers have analysed customer equity under just two different and separated perspectives: information economics or cognitive psychology (Hao & Chon 2021, 115); defining customer equity as “the sum of the discounted stream of cash flows generated from a company’s pool of customers or as a customer-oriented assessment of the value of a product or service, brand and customer relationship” (Hao & Chon 2021, 115).

However, other studies have considered a more complex definition of customer equity, positioning it as an essential marketing tool to secure customers, increase future profits (C. H. Lee et al. 2014, 2155), link customers and businesses (Ho & Chung 2020, 14) and determine a firm’s survival (Ho & Chung 2020, 14). By this concept, customer equity is seen as a value that rises around the relationships between firms and customers which is based on the concept of time where the current value is the customer’s lifetime value (Wang et al. 2016, 3828). This view is supported by Holehonnur who writes that customer equity is a combination of value between current and potential customer assets (Holehonnur et al. 2009, 167) where a new equity will be defined by a new customer (Hansotia 2004, 9); in other terms, customer equity is defined and calculated as the sum of lifetime values of all customers (CLV) (Leone et al. 2006, 127).

In addition, in recent years, there has been an increasing amount of literature on customer lifetime value (CLV) due its reputation as a practical tool to measure marketing performance, business development and customer equity (Ho & Chung 2020, 14) and it has been defined as a net current value of one customer’s value and customer equity (Richards & Jones 2008, 122).

Altogether these studies provide important insights into the concept of customer equity where this research is based. Consequently, as matter of this research, the concept that will guide this study is:

Customer equity is a valid measure (Rust et al. 2005) consolidated by the total customer lifetime value (CLV) from the firm’s current and potential customers (Hogan et al. 2002, 7) that gives theoretical groundwork for firms to have a customer-centred position (Vogel et al. 2008, 104) and financially measurable marketing programs (Ramaseshan et al. 2013, 335) to maintain

customer relationships (Richards & Jones 2008, 122) based on the relationship between the firm and the customer, and the impact of three main equity drivers (Vogel et al. 2008, 98).

It is important to add that customer equity is a powerful tool to get the highest return from marketing investments because it let firms to optimise the allocation of marketing resources (Hao & Chon 2021, 115) and measure marketing productivity by placing the customers at the centre of the firm (Holehonnur et al. 2009, 165) identifying the value of the customers to the selling firms (Richards & Jones 2008, 122); therefore, “the effective management of customer equity entails an understanding of the factors, and the interactions among them, that contribute to customer equity” (Dong et al. 2007, 1243) which their identification is very important for many organisations because it can affect its performance by reducing costs and increasing profits (Shadiardehaei et al. 2021, 1584). In the same vein, “managing customer equity implicitly requires companies to track key customer performance metrics to determine how well it is achieving its objective of increasing the total value of its customer base” (Hansotia 2004, 10) resulting from their motivational drivers (value, brand and relationship) (Ho & Chung 2020, 15).

Next, the different drivers of customer equity are introduced followed by their main concepts, characteristics and different drivers.

2.2 Customer equity drivers

A number of studies in customer relationships have found that customers’ selection of brands and firms are based on three indicators: value equity, brand equity and relationship equity (C. H. Lee et al. 2014, 2156).

“Each of these drivers of customer equity consists of actions, that may change over time due to its dynamism (Aravindakshan et al. 2004, 409) and what a firm may take to fortify the value of its customers” (Aravindakshan et al. 2004, 408), provides resources to respond rapidly to the changes from the customer’s needs (Zeithaml et al. 2001) and volatile marketplaces (Rust et al. 2005) and have an influence in customer’s loyalty which helps to predict future sales (Vogel et al. 2008, 104).

According to previous studies, these drives are objective and subjective views that customers have towards a brand and/or firm. Value equity is an objective assessment of the firm’s offering, brand equity is a more subjective view of the firm or brand and relationship equity is a subjective view of their relationship with the firm (Zeithaml et al. 2001).

These drivers can work independently and together to magnify a firm's customer equity and their relationship is illustrated in Figure 1, that shows the harmony and alliance that these drivers have between each other which enables them to consider various aspects of experience evaluations with the firms (Cambra-Fierro et al. 2019, 5).

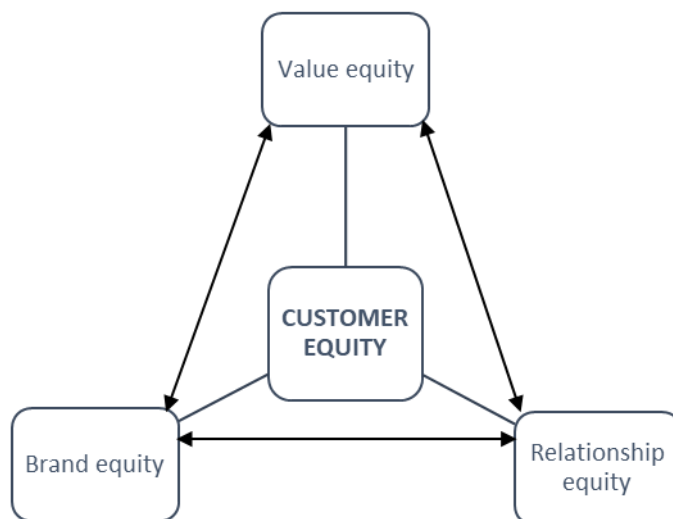


Figure 1 Relationships of customer equity drivers (Aravindakshan et al., 2004, 408)

Hence, the three customer drivers are types of customer evaluative domains influencing corporate value (Kim 2012, 235) and they play an important role to form customer relationships (C. H. Lee et al. 2014, 2156) because they explain what aspect of customer assessment has a better impact in organisational performances (Kim 2012, 237).

2.2.1 Value equity

There is a large volume of published studies describing the role of value equity as a driver of customer equity; for example, Rust (2005) defines value equity as the pile of the relationship between the customer and the firm (Rust et al. 2005) since it is the customer's evaluation based on the brand's utility that determines the aspect of equity (Richards & Jones 2008, 122).

In other words, this is a cognitive and rational evaluation of a service or product (Zeithaml et al. 2001) based on perceptions of what is given up for what is received (Cambra-Fierro et al. 2019, 2) reflecting the relative opinions of the customers (Wang et al. 2016, 3828). Then, value equity is defined as the customer's objective assessment of the brand (Rust et al. 2005) including the recognition of price, quality and convenience (Ho & Chung 2020, 14) as drivers

that can influence customer's perceptions around value equity (Zeithaml et al. 2001). Figure 2 illustrates the relationship between the sub-drivers and value equity.

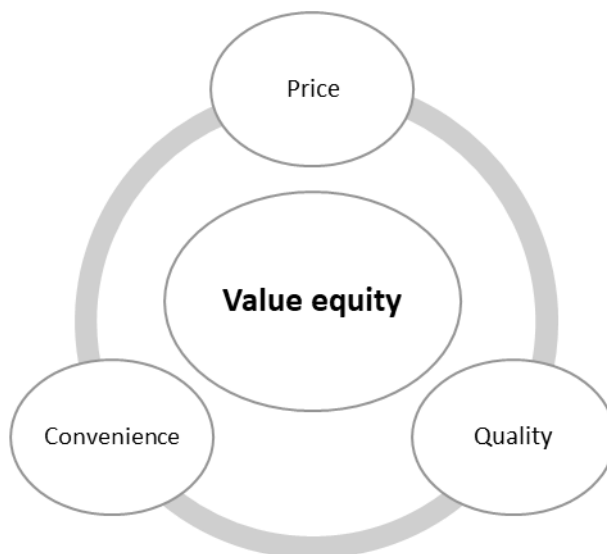


Figure 2 Relationship between value equity and its drivers (price, quality and convenience) (Zeithaml et al., 2001)

In this equity, value is the key point between the customer and the firm (Wang et al., 2016), and it is fundamental to establish long-term relationships because without it, there will not be any motivation for the customers to pursue future purchases (Richards & Jones 2008, 122). Zeithaml (2001) found that value can be more valuable in specific situations; for example, when there are similar products in the market, in business to business purchase or when the purchases are made after complex decision processes (Zeithaml et al. 2001).

When the goods and service consumption meet or exceed the customer's expectations, value equity increases; on the other hand, if the product disappoints over time, the risk to lose value increases (Aravindakshan et al. 2004, 409). Parallely, if the firm does not possess any value to the customer, even a strong brand strategy and relationship will not be enough to satisfy or achieve customer's acceptance (Wang et al. 2016, 3828).

Mainly, customer's expectations are based on different experiences with other firms and, regularly these expectations are different between markets; that is why, it is important for the future of the firm, to comprehend what expectations from leads and customers have towards their brand or firm (Rust et al. 2005).

2.2.1.1 Quality

Quality views the physical and nonphysical attributes that firms offer (Rust et al. 2005) and it is perceived, by the customer's judgement, the superiority or excellence of a product (Holehonnur et al. 2009, 170). Quality has a deep influence on customer equity and it represents an important factor that can make customers feel satisfied and repurchase a product (Wang et al. 2016, 3833), a guide to a product's success in the market (Tellis et al. 2009, 135).

Some researchers assure that to gain customer's loyalty and equity, firms should develop a customer relationship quality (Zhang et al. 2016, 3825) and increase their investments in quality service, looking to provide a better quality service experience (He & Li 2010, 78) due its important value in market position (Tellis et al. 2009, 136). Moreover, it has been described that quality becomes essential for customers in high technology products (He & Li 2010, 81), becoming one of the most significant values perceived by customers (Munnukka & Järvi 2012, 301).

In addition, quality can be perceived from different perceptions and behaviours (He & Li 2010, 81) and it has been indicated that various drivers have a positive impact on quality, including physical product, service product, service delivery and service environment (Rust et al. 2005), as Figure 3 illustrates.



Figure 3 Relationship between quality and its sub-drivers (Rust et al., 2005)

In relation to Figure 3, physical product has been indicated as a tangible asset that firms offer to their customers (Rust et al. 2005) and the product quality expectations can vary from

customer's view and it can include reliability, speed, ease of use, etc (Tellis et al. 2009, 139). Moreover, in high technology industries, there is a constant upgrading of the product due its complexity (Tong et al. 2004, 433).

Service product is described as an intangible asset that provides a great beneficial effect to the firm (Wang et al. 2016, 3827), and it can easily become a customer advantage (Zeithaml et al. 2001) due its difficulty to be imitated (He & Li 2010, 81).

Service delivery is defined as the transportation service that can improve value quality if the customer does not get a deprived service and the product arrives without any problems or delays (Rust et al. 2005).

Service environment is described as the environment where the service takes place and it is essential that this place brings a trustful perception to the customer (Rust et al. 2005) since it can also be a platform to reinforce the interaction between the customers and providers (Zhang et al. 2016, 3824).

Overall, the integration of these sub-drivers is important in the creation of quality (Rust et al. 2005) and it is essential that all these factors are provided at a least suitable level (Rust et al. 2005). Hence, quality relationships between the firm and the customers generates a great source of profitability (Dong et al. 2007, 1243).

2.2.1.2 Price

Price is identified as a central value equity because it represents the customer's perceptions relating to what they are getting from what they give (money) (Richards & Jones 2008); plus, it is important in marketing tactics that is why it is essential to determine long-term pricing approaches (Rust et al., 2005).

Price values represent a challenge for managers because if they settle a price that goes beyond the product's value perception, it can endanger the long-term relationships with the customers (Rusetski et al. 2014, 452). On the other hand, in high technology markets, price can have an effect on how customer's perceive quality value (Munnukka & Järvi 2012, 293).

Therefore, previous studies have indicated that there are four different sub-drivers that can create an impact in price value: everyday low pricing, price discounts, complex pricing and situation-based pricing (Rust et al. 2005). In order to acquire better perceptions around price,

firms need to realise which factor attracts positively to the customer. Figure 4 illustrates the relationship between price and its sub-drivers.

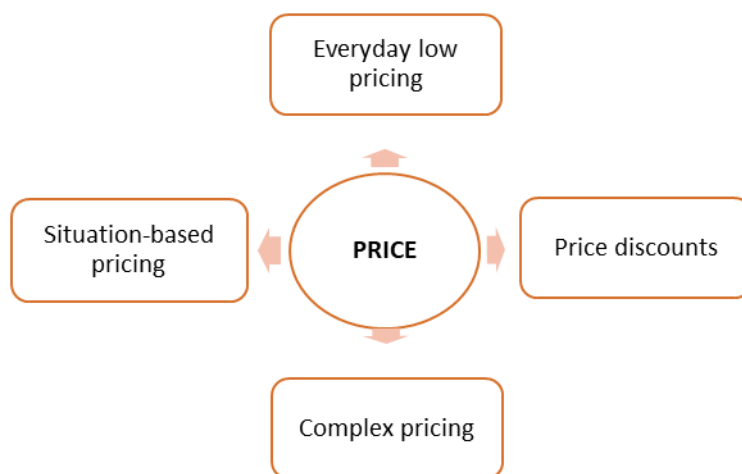


Figure 4 Relationship between price and its sub-drivers (Rust et al., 2005)

Everyday low pricing is explained as daily low prices to the customer instead of providing price discounts (Zeithaml et al. 2001). Some previous studies demonstrated that the use of low everyday price can be a disadvantage if it is not used wisely and it can generate negative effects in the customer's perceptions over quality (Rust et al. 2005); that is why, usually, this sub-driver is used in firms that have low-cost structure in comparison to their competitors (Zeithaml et al. 2001).

Price discounts are marked as reductions of the price by short-term promotions (Rust et al. 2005) in order to attract customers and lead them into instant purchases (Eun Lee & Stoel 2014, 401). Nevertheless, it has been demonstrated that a high use of price discounts results in damage of value equity (Rust et al. 2005) and risks, depending on product's categories (Eun Lee & Stoel 2014, 408).

Complex pricing is noted as pricing plans that may consist in flexible deals related to payment time or price paid (Rust et al. 2005); by this driver, the customer is able to select which plan is more suitable for them which will affect the firm's perception (Rust et al. 2005).

Situation-based pricing is defined as offering different prices according to the customer's context and amount of product purchased (Rust et al. 2005).

In addition, it is imperative to recall that there seems to be some evidence to indicate that in different industries price affects the customer's quality expectations and consequently customer value (Munnukka & Järvi 2012, 293).

2.2.1.3 Convenience

Rust (2005) defines convenience as the actions that firms make to ensure that the customer's costs and efforts decrease (Rust et al. 2005), and a potential resource of competitive advantage (Roy et al. 2016, 239) that is used during the purchase and service processes (Kaura et al. 2015, 406), especially between similar offering products.

Convenience refers to the actions that firms make in order to reduce customer's costs and efforts in acquiring a product (Rust et al. 2005). Offering integrated access to products will produce positive reactions regarding the customer's perceptions of convenience (Richards & Jones 2008, 126) that can be reflected on the value that customers give to the product during the pre-consumption, consumption and post-consumption stages of their purchase (Roy et al. 2020, 202).

Firms require a clear understanding of which factors impact on the customer's perception of convenience (Roy et al. 2016, 240). Therefore, Rust et al. (2015) identifies three drivers that enhance and build convenience: location, availability and ease of use that it is illustrated in Figure 5.

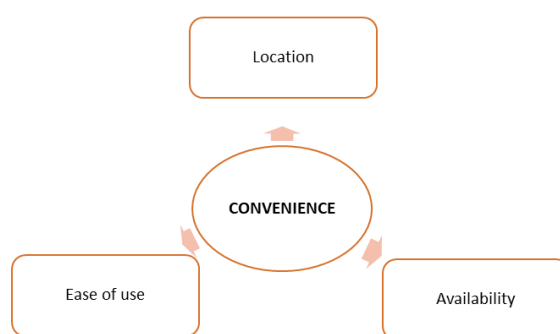


Figure 5 Relationship between convenience and its sub-drivers (Rust et al., 2005)

Location is named as the physical or virtual space where the purchase is done (Rust et al. 2005). This driver can include the perception around operating hours, parking availability, remote contact or a convenience of a store's location (Berry et al. 2002, 7).

“Ease of use is defined as the improvements to increase the efficient or effective actions to the customers” (Rust et al. 2005).

Availability is explained as the accessibility that the firm offers to its customers which includes hours of operation and immediate contact (Zeithaml et al. 2001) and it takes in consideration the perception of the customer’s time and effort at the moment to start a service and the firm’s flexibility to respond (Berry et al. 2002, 7).

Availability can also be related to product availability which ensures that the customer will obtain the product on the time frame of its needs (Su & Zhang 2009, 713).

2.2.2 Brand equity

Brand equity is a concept developed in the last twenty years and is considered as a central business concept for many organizations (Leone et al. 2006, 126). Many studies defined brand equity as a subjective appraisal of the brand (Ho & Chung 2020, 14) where customers estimate the brand in an intangible and irrational matter (Zeithaml et al. 2001).

Hence, brand equity is an intangible monetary equity (C. H. Lee et al. 2014, 2156), related to the image and the irrational evaluation of value (Richards & Jones 2008, 122) by the customers towards the firms (Cambra-Fierro et al. 2019, 4). Brand equity is key to attract consumers and let them evaluate the brand through brand perception or recognition which helps the consumers to continue making purchases and connect them emotionally to the firm (Wang et al. 2016, 3828).

This perception towards the brand is created through the experience and feeling over time (Leone et al. 2006, 126). It can be moulded by the firm’s marketing strategies and tactics (Aravindakshan et al. 2004, 410) in order to create an emotional relationship between the firm and customers (Rust et al. 2005) and provide a positive effect on customer perception and buying behaviours (Shadiardehaei et al. 2021, 1585). Nonetheless, the function of brand equity is subjected to the level of customer involvement, experience and evaluation of the product or service (Wang et al. 2016, 3829).

Other studies have considered the significance of brand equity when there are low involvement purchases with simple decision processes (Zeithaml et al. 2001), when experiences associated with the product can be circulated (Aravindakshan et al. 2004, 410) or when it is not possible to value the quality prior purchase (Zeithaml et al. 2001).

In view of all that has been mentioned, this subjective evaluation (brand value) can be influenced by marketing strategies, creating customer experiences and associations with the brand (Holehonnur et al. 2009, 168) and evaluating market segmentation decisions and marketing mix actions (Romero & Yagüe 2015, 634).

Previous studies have considered the relationship of brand equity and its three sub-drivers (customer brand awareness, customer attitude towards the brand and customer perception of brand ethics), as it is illustrated in the figure 6.

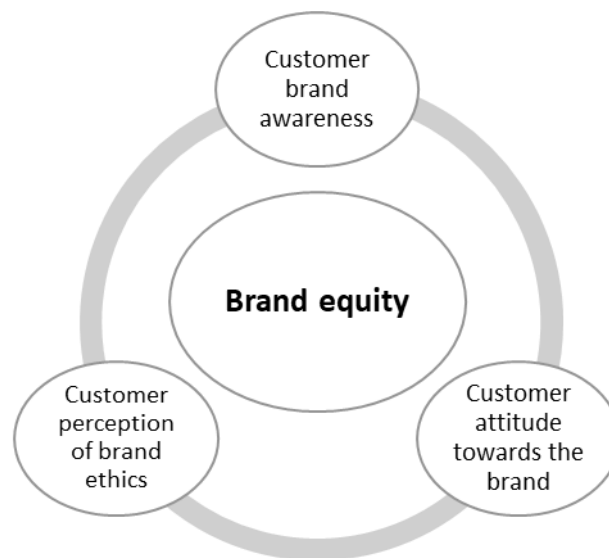


Figure 6 Relationship between brand equity and its drivers (Zeithaml et al., 2001)

Improving these drivers can positively affect customer's choice (Rust et al. 2005) and consequently build brand and customer equity (Leone et al. 2006, 136). Thus, brand equity can lead to customer loyalty, the possibility of extending the brand to other products (Dlacic & Kezman 2014, 124) and bringing an extra cash flow to the organization (Romero & Yagüe 2015, 633).

2.2.2.1 Customer brand awareness

“Brand awareness is defined as the extent to which the customer exhibits knowledge and recall of a particular brand” (Rust et al. 2005), is related to the power of the brand to leave a mark in the customer's memory and enable him to recognize the brand under several circumstances (Leone et al. 2006, 126) and including the brand into the group of brands that are considered at the pre-purchase moment (Dlacic & Kezman 2014, 123).

Brand awareness encourages the customer's decision-making towards a product and it appears to be an important reason in customer buying interest (ILYAS et al. 2020, 430).

The customer becomes aware of a brand as a consequence of integrated marketing communication strategies (Rust et al. 2005) enabling a communication that reaches each customer with a unified message (Zeithaml et al. 2001). That is why a firm invests in resources to build brand equity through product design, product quality and advertising (Leone et al. 2006, 131). Knowing what drivers customer brand awareness is vital to locate those resources satisfactorily, which are: media advertising, direct to customer, customer to firm, word-of-mouth campaigns and sales promotions and public relations (Rust et al. 2005), these drivers are shown in figure 7.

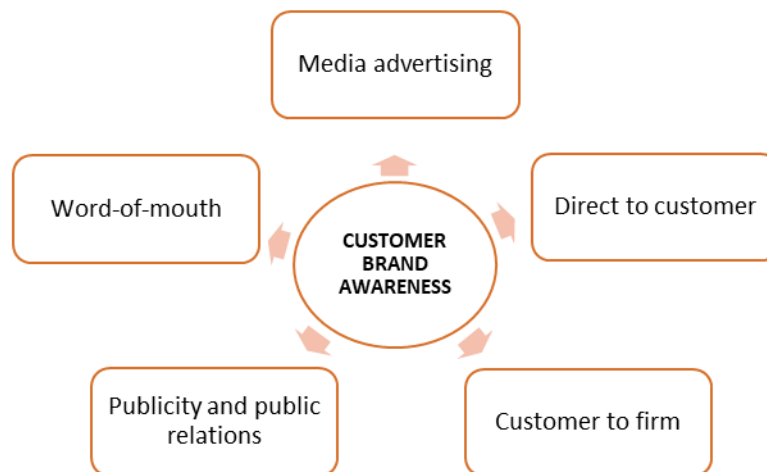


Figure 7 Relationship between customer brand awareness and its sub-drivers (Rust et al., 2005)

Media advertising are interactions and communications between the brand and a group of customers, some media could be tv, radio, mobile applications (Rust et al., 2005), magazines and social media (Omoruyi & Chinomona 2019, 4), which has turned into a useful tool to acquire and retain customers (Ho & Chung 2020, 16).

The effect of social media marketing practices is significant on brand awareness due the ability to exchange information about the product and service and up-to-date information to target markets (Shadiardehai et al. 2021, 1596). The rapid growth of mobile application usage enables the use of diverse social media sales channels to interact with customers (Ho & Chung 2020, 13), connect and create emotional ties to the firm (Ho & Chung 2020, 15). Subsequently,

social media has converted into the most focal channel for business and communication with customers (Shadiardehaei et al. 2021, 1584).

Direct to customer is the customized and straight communication via mail and e-mail (Rust et al. 2005), these one-on-one marketing messages lead to create brand awareness and improve attitudes towards the brand (Richards & Jones 2008, 128). E-mail communication channel is widely used in business to business marketing due the high response rate and cost-effectiveness (Ahmed et al. 2017, 1118).

Customer to firm is the chance that the firm generates by looking for a closer connection with the customer; for example, firm's webpage, customer service, e-mail communications (Rust et al. 2005). Websites offer a controlled, direct and dynamic communication channel between the firm and different stakeholders (Ibrahim, 2016, 718).

Publicity and public relations are the promotions, advertisements and communications to the customer that the firm does not reimburse (Rust et al. 2005).

Word-of-mouth campaigns are actions that the firm does to encourage customers to talk about the brand (Rust et al. 2005) and improve customer information across different channels (Richards & Jones 2008, 126). This informal communication is among customers that share a common social network where they can share personal opinions about the firm and their views on its products and services (Cambra-Fierro et al. 2019, 2019) embracing brand equity through different channels (Ahmed et al. 2017, 1120).

2.2.2.2 Customer attitude towards the brand

This driver illustrates how brand equity can be built by influencing the customer's emotional connections towards the brand (Zeithaml et al. 2001). Brand attitude involves positive and negative evaluations, emotions, feelings and attitudes (Esmaeilpour & Aram 2016, 472) that boost the probability of repeating purchase (Bhaduri 2017, 76) or a negative effect producing an unfeasible brand equity (Rust et al. 2005).

These attitudes are enduring permanently except if some external factors are altered (Bresciani et al. 2017, 375). Five drivers can enhance customer's attitude towards the brand: media creative strategy, media placement, brand name and brand partners, packing and merchandising and site location and distribution strategy (Rust et al. 2005). Figure 8 illustrates the relationship between customer attitude towards the brand and its drivers.

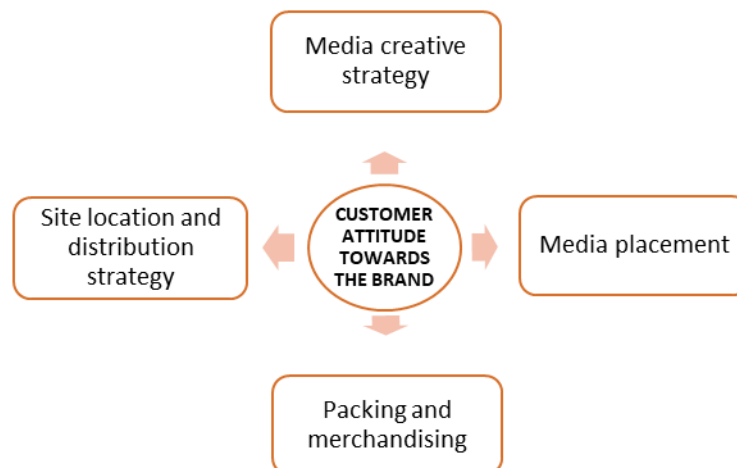


Figure 8 Relationship between customer attitude towards the brand and its sub-drivers (Zeithaml et al., 2001)

Media creative strategy includes the thoughtful process to include key messages to be delivered to the customers (Rust et al. 2005), these messages are a way that the firm creates emotional communication with the customer and incite consumers through emotions or feelings (Esmailpour & Aram 2016, 471) and delivery channels can include social media since it has an important participation in marketing activities (Shadiardehaei et al. 2021, 1595).

Media placement is an accurate placement and targeting decisions that has an effect on brand position (Rust et al. 2005), it benefits unknown brands by generating brand awareness and higher engagement (Iyer et al. 2021, 33).

Packing and merchandising include the package design and product exhibition (Rust et al. 2005).

2.2.2.3 Customer perception of brand ethics

This customer equity driver involves all the measures that the firm does to influence the customer's perceptions about the firm (Rust et al. 2005). In order to achieve this equity, firms need to know what factors, values (Rust et al. 2005), ethics and beliefs (Zeithaml et al. 2001) are important for their customers in order to determine the best strategy (Rust et al. 2005).

In an analysis of customer perception of brand ethics, Rust et al., (2005) found that community event sponsorship, development and maintenance of privacy policy, clean environmental record and ethical hiring are drivers that can help to improve customer perception, as figure 9 shows.

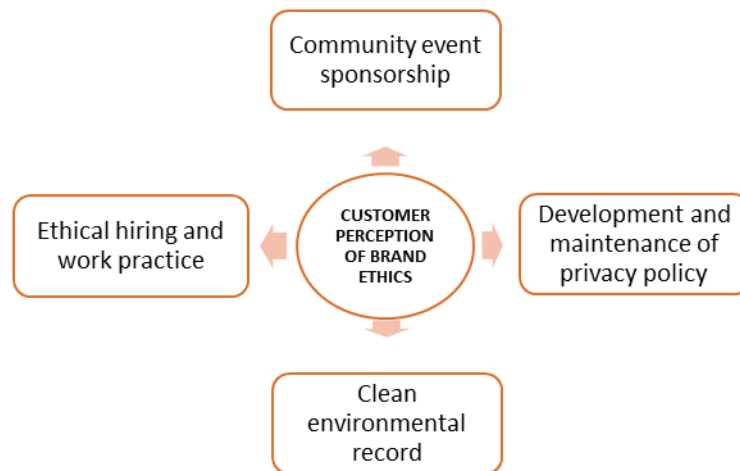


Figure 9 Relationship between customer perception of brand ethics and its sub-drivers (Rust et al., 2005)

Community event sponsorship is described as investments in causes that are aligned with the firm's ideas and objectives which increase brand awareness (Dean 2002, 78).

Development and maintenance of privacy policy is defined as the perception that the customer has about the management of their private information (Rust et al. 2005). A negligent use of this information can lead to a customer's concerns that will not only decrease brand equity but can limit the use of customer's databases (Wu et al. 2012, 890). Overall, businesses should develop privacy policies to build-up the customer's level of trust and consequently, customer equity (Wu et al. 2012, 896).

Clean environmental record is described as a positive brand equity driver if the firm is engaged with green practices (Rust et al. 2005). Green products are classified as safe and environmentally friendly merchandise that do not pollute or harm natural resources and contain minimal toxic chemical substances (Górska-Warsewicz et al. 2021, 2). Nowadays, not having a clean environmental record can affect the brand negatively (Zeithaml et al. 2001).

Ethical hiring involves the effects related to the employees' treatment (Zeithaml et al. 2001).

2.2.3 Relationship equity

A considerable amount of literature has been published on relationship equity. These studies defined it as the customer's faculty to stick with the firm above and beyond brand and value perceptions (Wang et al. 2016, 3829). It explores the methods to strengthen the relationship between customer and firm (Hao & Chon 2021, 16) looking for a bigger value retribution from the customers compared to the actual cash value of the benefits they obtain from the firm and the benefits they provide to it (Ho & Chung 2020, 17).

Hence, relationship equity is the customer's assessment (Cambra-Fierro et al. 2019, 4) and perception of the firm or brand and it can be enhanced by customer-contact methods like quality face-to-face relationships (Wang et al. 2016, 3829) and tailor services that stimulate emotional attachment (C. H. Lee et al. 2014, 2156).

“Relationship equity represents the impact on the customer from the company's attempts to build relationships and operate retention programs” (Richards & Jones 2008, 122) that construct long-term and high-quality relationships with customers, and maximize revenue (Zeithaml et al. 2001). There are central strategic drivers like loyalty programs, affinity programs, community-programs and knowledge-building programs (Rust et al. 2005), as it is illustrated in figure 10. Some of those drivers can provide additional benefits that will result in costly for the customers to leave a relationship with the firm, reward them, build emotional ties (Zeithaml et al. 2001), create customer stickiness (Zeithaml et al. 2001) or make them believe that they are well treated (Vogel et al. 2008, 100).

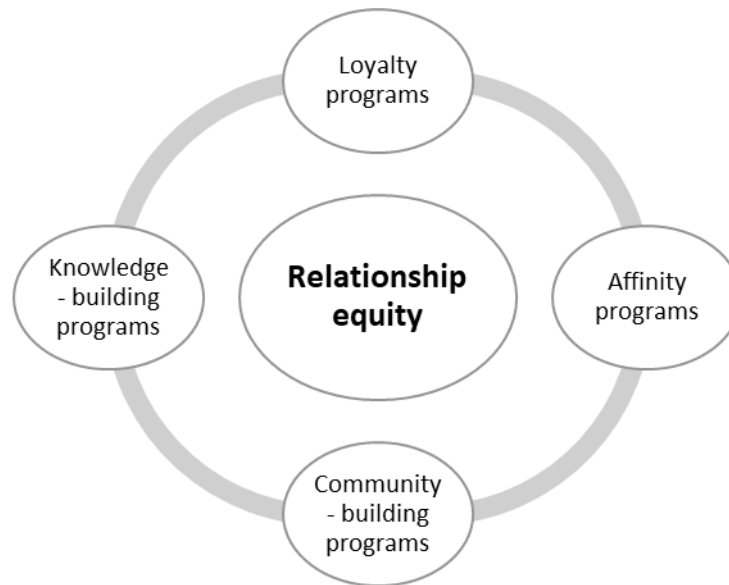


Figure 10 Relationship between relationship equity and its drivers (Zeithaml et al., 2001)

In a competitive economy, relationship equity is fundamental (Ramaseshan et al. 2013, 137), it causes a great opportunity to create a solid incentive for future purchases (Ramaseshan et al. 2013, 138) and produce learning relationships (Ho & Chung 2020, 16). If this equity is high, customers will think that they are well treated (Ramaseshan et al. 2013, 337); therefore, it will maximize future purchases opportunities (Aravindakshan et al. 2004, 410).

Generally, it contemplates questions regarding customer benefit, firm benefit, purchase and repurchase time and customer's bereaved of the discontinued relationship (Zeithaml et al. 2001).

2.2.3.1 Loyalty programs

“Loyalty programs reward customers for specific behaviours with tangible benefits” (Wang et al. 2016, 3829) and sometimes with intangible benefits (Rust et al. 2005). Relationship equity is acquired when the customer thinks that the benefits he gets from the firm are actually higher compared to what he receives (Aravindakshan et al. 2004, 410).

The main purpose of this program, when it was launched, was getting customer data but has changed into a strategy to reward customers by the use of earning points (Zeithaml et al. 2001). Nowadays, loyalty programs are an integrated system of marketing activities that allows free rewards by continually purchasing (Kang et al. 2015, 465) and looks to maintain valued customers by enhancing behavioural and attitudinal loyalty, looking for long-term financial

results (Gorlier & Michel 2020, 589) and deep relationship towards the company (Kang et al. 2015, 467).

2.2.3.2 Affinity programs

Affinity programs build deep emotional connections between the firm and the customers linking this relationship to other features of the customer's life (Wang et al. 2016, 3829). Affinity and loyalty programs offer incentives to the customers for repurchasing; however, loyalty rewards directly the customer and the affinity programs rewards an affinity partner (Bakhtiari et al. 2013, 85).

In order to be successful with this program, the firm needs to recognize the customer's interest and convert the product as a central part of the customer's life, driving the customer to know more about the product and increase its cost in case he wants to choose a product from the competition (Zeithaml et al. 2001).

2.2.3.3 Community-building programs

These programs create a customer-firm relationship that connects the customer to a bigger community (Wang et al. 2016, 3829) or network of similar customers (Rust et al. 2005) whose purpose of these programs is to support and raise positive connections among the customers (Weil 1996, 482).

The positive impact of community-building programs is subject to the nature of the firm's products and the ability of the firm to persuade the customer to stay connected with other customers, setting the firm's brand as the group's hub (Zeithaml et al. 2001).

2.2.3.4 Knowledge-building programs

Knowledge-building programs establish resilient structural bonds with the customer that makes them unwilling to begin a new relationship with the competition (Wang et al. 2016, 3829). These bonds are created by acquiring data from the customers through interaction and using this information to make effective and efficient transactions that will turn into a strong bond that will require money and time to get it from the competition (Zeithaml et al. 2001).

2.3 Customer equity drivers through distribution chain

Typically, manufacturing firms are not directly involved in the process of selling the goods or have direct contact with end-users. For that reason, these firms cooperate with other organizations that play the role of intermediators between them and the end-users (Kivijärvi & Virta 2021, 23). In this matter, fully customer oriented firms extend their customer targets through all the supply chain by setting activities forward customer satisfactions and the creation of customer value (Tokman & Beitelspacher 2011, 720).

For that reason, distributors and end-users play an important role in the supply chain and they are recognized as customers for the manufacturers (Kivijärvi & Virta 2021, 23); while end users will purchase a product for consumption, distributors will purchase it for instant resale (Hinterhuber & Hinterhuber 2012, 257).

2.3.1 Distributors' equity drivers in a distribution chain

Distributors are intermediaries selling organizations and they purchase goods from the manufacturers and re-selling them to other customers (Hinterhuber & Hinterhuber 2012, 255). In this type of business relationship (between manufacturers and distributors), there is usually a big amount of money involved, the buying process is complex and the perception of trust from the customers is elemental for future transactions (Ramaseshan et al. 2013, 337).

The relationships in business-to-business markets are portrayed as closer and deeper interfaces whose profitability is impacted by customer loyalty (Ramaseshan et al. 2013, 335); and distributors will act like partners in value creation providing support and other resources (Hinterhuber & Hinterhuber 2012, 275).

Previous research has indicated that the physical product or profit have been the values that distributors are mostly interested in (Hinterhuber & Hinterhuber 2012, 253), expecting to obtain quality and reliable products over time (Nguyen & Nguyen 2011, 319). Since the distributors will deal with the end-users' complaints about the products, they consider that product quality is a key characteristic to consider before purchase (Nguyen & Nguyen 2011, 319).

Distributors also perceive value in product quality (Hinterhuber & Hinterhuber 2012, 260), especially during their personal interaction during support and delivery performances (Nguyen & Nguyen 2011, 318). By this, manufacturers can increase value by satisfying delivery

schedules demands, meeting delivery schedules and being accurate in the deliveries (Nguyen & Nguyen 2011, 320).

However, other factors, like relationship and trust seem to be also important for the distributors (Ramaseshan et al. 2013, 337). Especially, by improving personal interaction, manufacturers can communicate and understand the relationship they have with the distributors and improve their performance by delivering what the customer really wants and needs e.g. quality standards and information delivery (Nguyen & Nguyen 2011, 320).

Ramaseshan et al. (2013) also includes some other elements like quality of supply, efficient communication and flexible customization as enhancing value factors in business to business relationships (Ramaseshan et al. 2013, 341).

2.3.2 End-users' equity drivers in a distribution chain

In order to examine what drives customer equity from the end-user perspective, it is important to understand the different values that may have an impact in the end-user's decision-making process (Holehonnur et al. 2009, 168). In business to customer context, the drivers of customer equity fluctuate across several industries (Ramaseshan et al. 2013, 336); nevertheless, previous researches have explored and tested a general end-user perspective of customer equity (Holehonnur et al. 2009, 167).

For end users or end customers, the products they purchase become part of their production process while for the distributors, the purchase of any product is for instant resale (Hinterhuber & Hinterhuber 2012, 257). The main purpose of purchase is different, and the value and qualities that they look for, are different as well; in the case of end-users, they tend to look for product safety, performance, convenience, ease of use, brand reliability, price in their value evaluation and perception (Hinterhuber & Hinterhuber 2012, 262).

Certainty, price acts as a significant value for an end-user due its play as an indicator of perception of quality or sacrifice (Holehonnur et al. 2009, 169). This means that the end-user will perceive quality as the assessment of the product satisfaction comparing to other alternatives; and the perception of sacrifice as the resource that the end-user needs to compromise to obtain that product; in most of the cases is only related to money but it can also include effort, time u other resources (Holehonnur et al. 2009, 170).

Brands are also seen as another crucial player in the end-user's value perception (Hinterhuber & Hinterhuber 2012, 262). Since "The manufacturer is responsible for the quality, reliability and usefulness of products that appeal to the end user" (Vorreuter 1997, 122), brands behind this responsibility have an impact on the end-user and ultimately create value towards them (Hinterhuber & Hinterhuber 2012, 256).

Besides, networking and relationships between the end-users and manufacturers seemed to provide positive perceptions of value in use which in turn resulted in good results of value co-creation, loyalty, brand promotion and constructive word of mouth (Tokman & Beitelspacher 2011, 718).

3 Research design

3.1 Research approach

Qualitative methods offer an effective way of getting the perspectives of all the research observers by considering subjective meaning (Fossey et al. 2002, 723), experience features of the research unit and its social environment (Fossey et al. 2002, 730). Doz names this approach as “opening the black box” of organizational processes since actions get revealed over time in context (Doz 2011, 583) by adopting an understanding of human’s experience without using any statistical or numeric procedure (Fossey et al. 2002, 717). The qualitative approach has a number of attractive qualities: generates a diversity of theoretical lenses about the phenomenon (Doz 2011, 584), rouses deeper thoughts (Doz 2011, 584), obtains contextual data and builds a strong comprehension of the issues that may arise during the studies (Fossey et al. 2002, 718). The reason of the selection of a qualitative method is based with the objective of this research since this approach will let me analyse the different experiences, environments, thoughts and opinions that distributors and end-users have in their daily routines with a supplier firm, and eventually reveal which factors are most relevant for them.

However, there are certain drawbacks associated with the use of qualitative research. For this matter, “it is imperative to vigilantly maintain an awareness of one’s pre-understanding so that this does not influence the analysis and/or results” (Erlingsson & Brysiewicz 2017, 95) to avoid a non-bias tendency during the analysis (Erlingsson & Brysiewicz 2017, 97).

Besides, due to the fact that qualitative studies include particular and private descriptions of the study participants, confidentiality is a main factor to consider during this research (Kaiser 2009, 1632). According to Kaiser, there are two ways to address confidentiality problems: collecting data in an anonymous way or reporting without revealing identities (Kaiser 2009, 1634); for this reason, names, professions, cities, characteristics and other private information from the case study participants are hidden in this research and separated in protected files.

3.2 Case study

A research design is a methodical way to decide how the research is going to be performed (Tan 2017, 5) and “it may consist of a survey, case study, experiment, regression or comparison” (Tan 2017, 5). Case study research is one of the most current research methods, especially in industrial marketing researchers because the principal units of analysis are organizations and

relationships (Easton 2010, 118) and “it may be a person, team, project, organization, province, country, process, activity, or situation” (Tan 2017, 33).

Case studies have been long established in research design to present detailed analysis of a particular case in order to determine something new (Tan 2017, 33) in its natural real-life context (Crowe et al. 2011, 1), explaining and describing a phenomena in the context when it occurs (Crowe et al. 2011, 4). Therefore, for the purpose of this study, case study will be used where distributors, end-users and company’s representatives have been examined in order to understand and discover the customer equity drivers for distributors and end-users, related to a high technological product and a company case: “Company X”

This research design has been selected due its possibility to deeply investigate one case looking to discover something new or to track the development of a system over time (Tan 2017, 7). Thus, this design can be interpretative, giving the option to understand the context and the actor’s point of view (Tan 2017, 7) and exploring the phenomenon in its normal and regular context without manipulating the interviewer’s performance (Martinsuo & Huemann, 2021, p. 417).

By the use of a case study, I intend to achieve a detail analysis of a specific case understanding the context of the phenomena and the development of it over time.

3.3 Data collection method

Data collection has been identified as one of the first phases of a qualitative analysis (Duriau et al. 2007, 17) which is used to recollect data from a compilation of questionnaires, observations, interviews, past records (Tan, 2017, p. 5) or participant observations in a qualitative data gathering (Fossey et al. 2002, 726). In a qualitative data collection, the amount of participants can be small whereas the amount of data getting from them can be substantial including a considerable amount of interview hours, observation-based field or even written records (Fossey et al. 2002, 726). The data collection method for this research was chosen to be interviews since there are suitable for finding a considerable amount of data from the different agents in this case study, looking to discover what customer equity drivers are relevant for distributors and end-users towards a high technology firm and for the purpose to deeply explore these drivers, it is essential to collect the data in a way that allows all the interviewers to communicate their perspectives and experiences entirely.

Deciding the interviewees includes an evaluation around the probability to not be able to work with all the population; due this, it is needed to choose the source of information based on the methodological approach and accessibility of the information (Duriiau et al. 2007); therefore, the selection of the participants is key for obtaining accurate and extent contents (Graneheim et al. 2017, 33). The subjects were selected on the basis of a degree of homogeneity of their relationship towards the case study and data were gathered at various time points during two months in which participants were recruited from the different distributors and end-users of the case company, and they were invited for a small interview of around 30 minutes each. In addition, three main company's representatives have been selected considering their close relationship and communication with the customers that ensures their understanding of what distributors and end-users' value more.

As mentioned, three groups of subjects were interviewed, namely distributors, end-users and firm's representatives. The first group consisted of a total of 5 meetings, as Table 1 shows, following a semi-structured interview which questions can be found in the "Appendix 1 Distributors' Interviews Guideline".

Table 1 Distributor's interview details

Interview no	Roles	Country	Date	Duration
1	Product Manager	Denmark	09.05.2022	42 minutes
2	Product Manager	United States	20.05.2022	34 minutes
3	General Manager	The Netherlands	26.05.2022	41 minutes
4	Sales Manager	Switzerland	03.06.2022	35 minutes
5	Sales Manager	United Kingdom	09.06.2022	26 minutes

The second group, end-users, includes a total of 9 meetings, as Table 2 indicates. These meetings were also conducted following a semi-structured interview questions that can be found in the "Appendix 2 End-users' Interview Guideline".

Table 2 End user's interview details

Interview no	Roles	Country	Date	Duration
1	Senior researcher	Finland	31.05.2022	23 minutes
2	Senior lecturer	Finland	31.05.2022	33 minutes
3	Researcher	Finland	01.06.2022	24 minutes
4	PhD candidate	Finland	01.06.2022	20 minutes
5	Education leader	Finland	02.06.2022	29 minutes
6	Senior researcher	Norway	02.06.2022	30 minutes
7	Researcher	Sweden	13.06.2022	39 minutes
8	Research technician	The Netherlands	15.06.2022	23 minutes
9	Research instructor	United States	15.06.2022	20 minutes

Since this research includes the participation of case firm's representatives, three main participants were interviewed in two different sessions as tables 3 and 4 show. Both sessions were conducted with semi-instructed questions regarding distributors and end-users, questions can be found in "Appendix 4 Interview questions for Company's representatives about distributors" and "Appendix 5 Interview questions for Company's representatives about end-users", respectively.

Table 3 Company's representative's interview details about distributors

Interview no	Roles	Date	Duration
1	Service Engineer	04.05.2022	40 minutes
2	Application Manager	10.05.2022	38 minutes
3	Business developer	13.05.2022	43 minutes

Table 4 Company's representative's interview details about end-users

Interview no	Roles	Date	Duration
1	Service Engineer	11.05.2022	39 minutes
2	Application Manager	17.05.2022	45 minutes
3	Business developer	13.07.2022	36 minutes

A semi-structured approach was chosen for the interviews because it provides sincere, absolute, and transparent information about their own experiences and opinions and looks to extract the

participant's picture of their stories that will bring us information about their feelings and experiences (Fossey et al. 2002, 727) and a questionnaire guide were designed to drive an organised interview and explore all the experiences (Erlingsson & Brysiewicz 2017, 93) to get an objective data collection.

3.4 Data analysis

A qualitative content analysis is a reflective process (Erlingsson & Brysiewicz 2017, 95) that analyses written, verbal or visual communication messages (Elo & Kyngäs 2008, 107) and "can be applicable whether knowledge is believed to be innate, acquired, or socially constructed" (Graneheim et al. 2017, 29). One advantage of the content analysis is that it acquires information from the participants without commanding (Hsieh & Shannon 2005, 1279), providing an access to different structures like values, attitude and cognitions (Duriau et al. 2007, 6) and the possibility to make valid inferences from data to their context (Elo & Kyngäs 2008, 108).

This study will adopt a qualitative content analysis due its ability to determine the presence of different concepts in verbal communication messages without imposing or redirecting any answer looking to achieve the discovering of the differences and similarities between customer equity drivers for distributors and end-users in high-technology firms. Besides, using qualitative content analysis, this study will consider language features with special attention to the content or meaning of text by examining language intensely for the aim of classifying text into well-organised categories that symbolise parallel meanings (Hsieh & Shannon 2005, 1278).

In this research, the subjects were asked via email to participate in individual interviews, this approach was chosen in order to gain all their opinions in a confidential and comfortable scheme. From the interviews, six were conducted face to face and fourteen via online platforms during May-July 2022. The reason for running most of the interviews virtually is due the different locations of the interviews and the global Covid-19 pandemic; nevertheless, this communication channel did not affect the quality of the interviews. The research topic and interview themes were said beforehand via email and they were described at the beginning of each interview; at this stage, it was also informed the estimation of the interview's duration and highlighted that for matter of this study any answer is qualified as right or wrong. All the interviews were recorded on a digital audio and transcribed using a software tool; simultaneously, keywords and key ideas were written down in case of recording failure. However, clear recordings were obtained from all the interviews.

Since this research looks to catch on the different customer equity drivers for distributors and end-users in high technology firms, it was considered to elaborate a procedure that can apprehend all customer's assessment of these drivers (Holehonnur et al. 2009, 171). For the purpose of this analysis, the qualitative content analysis of this research was prepared according to the procedure described by Elo & Kyngäs (2008), elaborating a complete and step-by-step method of data analysis (Elo & Kyngäs 2008, 109) which were divided in three main phases: preparation, organisation, and reporting as Figure 11 shows.

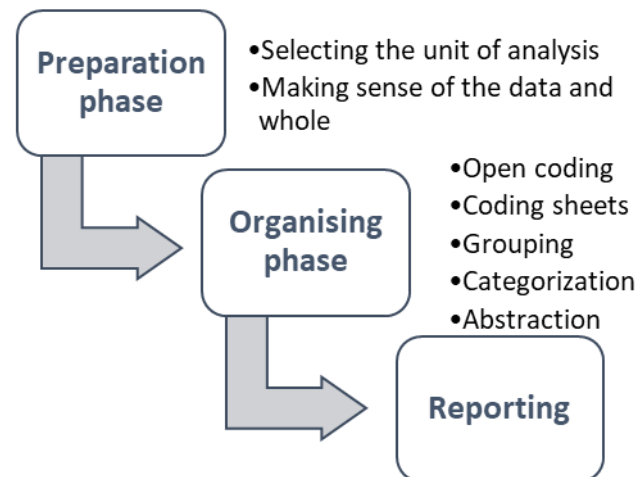


Figure 11 Phases in the content analysis (Elo & Kyngäs 2008, 110)

The preparation phase begins with the selection of the unit of analysis (Elo & Kyngäs 2008, 109). This unit is based on the decision of what the research is going to analyse and what details are going to be considered and it should not be too narrow or too vague because it can lead into fragmentation or into a difficult process (Elo & Kyngäs 2008, 109). “Depending on the research question, the unit of analysis can also be a letter, word, sentence, portion of pages or words, the number of participants in discussion or the time used for discussion” (Elo & Kyngäs 2008, 109). Since the purpose of this research is to understand the differences and similarities of customer equity drivers between end-users and distributors, the three main customer equity drivers (value, brand and relationship) are considered as the unit of analysis that are studied in the light of different opinions, appreciations and happenings from distributors, end-users, and company's representatives.

Once the unit of analysis had been decided, the next step was to familiarise with the data, understand it and make sense out of it (Elo & Kyngäs 2008, 109). By this point, all the interviews were recorded and transcribed in a total of 81 pages in text, these transcriptions were

written in a Word program, transferred to a software program for data analysis (NVivo) and read carefully to acquire an overall picture of all the data collected.

Since this research is using a content analysis, the next stage is to organise the qualitative data, for this we will involve open coding, categorization and abstraction (Elo & Kyngäs 2008, 109). “Open coding means that notes and headings are written in the text while reading it” (Elo & Kyngäs 2008, 111), and coding will be the act of labelling segments of that data in order to recognize themes or processes and unite similar labelled data for future analysis (Fossey et al. 2002, 729). These headings and labels describe all the features of the content and are compiled into coding sheets, organised and generated in categories (Elo & Kyngäs 2008, 111).

All the data analysis in this research required a level of abstraction, which denotes the formulation of a broad description of the research topic by the use of the previously defined categories (Elo & Kyngäs 2008, 111). Erlingsson & Brysiewicz (2017) provides a good example of analysis heading to higher levels of abstraction, as it is shown in figure 12.

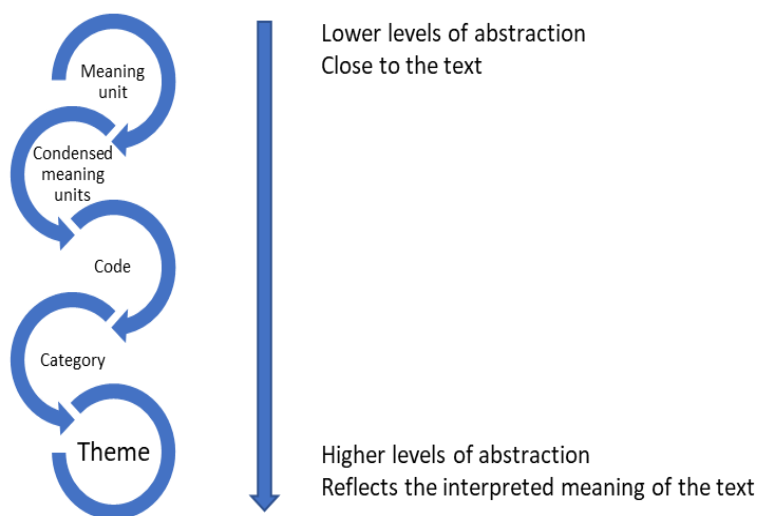


Figure 12 Analysis heading to higher levels of abstraction (Erlingsson & Brysiewicz, 2017, 94)

The codes are used to recognize the characteristics of the data that are relevant for the analysis, which later on are organized and combined producing potential themes. Figure 12 represents the type of analysis that this research is going to apply. Certainly, a qualitative content analysis engages other factors than just simply coding; it requires the discovering of meaning, patterns or connection between all the data (Fossey et al. 2002, 729), and other observations involving the researcher’s capacity to make decisions, through interpretation (Elo & Kyngäs 2008, 111), important factors that were applied in this study.

Coded themes and categorization of codes regarding customer equity drivers and their characteristics for end-users and distributors as perceived by the interviewees are shown in tables 5 & 6.

Table 5 Coded themes regarding customer equity drivers perceived by distributors

Customer equity drivers	Characteristics
Value equity	Quality device Performance Technical attributors and features Upgrade possibility Shipping and logistics Remote reparations Remote installations Trust User friendly Accessibility and immediate contact Technical support
Brand equity	Social media Web advertising Supplier's webpage information Referrals Conferences and exhibitions Ethical values
Relationship equity	Information sharing Commitment Community interaction

Table 6 Coded themes regarding customer equity drivers perceived by end-users.

Customer equity drivers	Characteristics
Value equity	Technical attributors and features Accessibility and immediate contact Technical support Quality device Price User friendly
Brand equity	Web advertising Supplier's webpage information Demo & installation shows Word of mouth References Conferences and exhibitions Unfamiliarly Supplier's location Supplier's ethics
Relationship equity	Community interaction Uninterest

Table 7 Operationalisation Model

Research problem	Sub problems	Themes	Concepts in literature	Interview questions
How customer equity drivers differ between distributors and end-users in high-technology firms?	What are the important customer equity drivers for distributors in the high-technology sector?	Value equity	2.2.1, 2.3.1	1, 2, 3, 4, 5, 8, 11, 24, 25, 30, 32
		Brand equity	2.2.2, 2.3.1	3, 4, 6, 7, 8, 11, 12, 26, 27, 28, 29, 30, 32
		Relationship equity	2.2.3, 2.3.1	3, 4, 8, 9, 10, 11, 30, 31, 32
	What are the important customer equity drivers for end-users in the high-technology sector?	Value equity	2.2.1, 2.3.2	13, 14, 15, 16, 19, 22, 23, 33, 34, 39, 41
		Brand equity	2.2.2, 2.3.2	14, 15, 17, 18, 19, 22, 23, 35, 36, 37, 38, 39, 41
		Relationship equity	2.2.2, 2.3.2	14, 15, 19, 20, 21, 22, 23, 39, 40, 41
	What are the differences and similarities in the customer equity drivers between distributors and end-users?	Value equity	2.2.1, 2.3.1, 2.3.2	1-41
		Brand equity	2.2.2, 2.3.1, 2.3.2	1-41
		Relationship equity	2.2.3, 2.3.1, 2.3.2	1-41

An operationalisation table is displayed with the concepts and interview questions related to each research questions.

3.5 Evaluation of the study

In view of the fact that this research study comes across different customer equity drivers from a consumer perspective and tends to provide a viable method for companies to better comprehend customers' objective and subjective assessment and the findings may grant companies with an additional information on how to optimise their marketing resources and develop marketing strategies and investments (Holehonnur et al. 2009, 167), an evaluation of the research quality is needed in order to assure that the findings can be trusted (Fossey et al. 2002, 718) and can be utilised in practice (Noble & Smith 2015, 34). The evaluation of this research is conducted based on the concept of trustworthiness, that "refers in a comprehensive sense to the entire study" (Graneheim et al. 2017, 33) and it is assessed by three different criteria: credibility, dependability, and confirmability (Lincoln & Guba, 1985, p. 300).

Credibility evaluates the researcher's capability to deliver outcomes that are according to the reality (Lincoln & Guba 1985, 296), count with participants who have experiences of the phenomenon under study and contain enough data to cover significant variations (Graneheim et al. 2017, 33). The phenomena and essential concepts that are analysed in this research have been widely studied and have come from different contemporary sources, which aims to generate reliable theoretical data. Concerning the empirical data, this research contains a proper amount of data that has been carefully chosen and analysed by the researcher; it is important to highlight that the interviewees were chosen based on their relationship, knowledge and long experience of the phenomenon.

Dependability denotes the ability to provide a reliable picture of the phenomenon that has been studied (Lincoln & Guba 1985, 299) which includes a logical and documented method on how the research was done. In order to strengthen this research's trustworthiness, all the research process has been already described and interview questions are displayed in Appendixes 1,2,3 and 4.

Confirmability relates the veracity of the results and proving that has not come from the researcher's imagination, but from the collection of empirical and theoretical data (Lincoln & Guba 1985, 300). In order to confirm the confirmability of this research, theoretical sources have been identified and all data gathered from the interviewees were recorded in audio and video and transcript in a full document material.

In addition to the evaluation of trustworthiness, confidentiality has also been addressed in this study. Different efforts have been made in order to remove personal identifiers such as names, address or company's names; and has been considered whether a specific quotation can lead to any interviewees' identification.

4 Findings

This section examines the empirical part of the study whose objective is to determine differences and similarities of the three customer equity drivers for distributors and end-users in the high-technology firms. Three sub-questions guide the study to find an in-depth answer: (1) what are the important customer equity drivers for distributors in the high-technology sector? (2) what are the important customer equity drivers for end-users in the high-technology sector?, and (3) what are the differences and similarities in the customer equity drivers between distributors and end-users?. For instance, this section reviews the results of the study by introducing the three customer equity drivers from the distributors and end-users' point of view and finalising with their comparison.

4.1 Customer equity drivers for distributors

4.1.1 Value equity for distributors

The first theme, value equity for distributors, addressed the objective assessment of the brand or firms based on the recognition of price, quality and convenience by getting an understanding of the significance of this equity only for distributors in the high-technology sector. A common opinion amongst interviewees was that the factors of technology, quality, price and service were extremely relevant whenever they are thinking to start and/or to maintain a business relationship with a supplier, highlighting that quality and convenience are factors that a high technology product must have, as one interviewee said:

“I prefer to work with a product that has a good quality and good performance”
(Product manager)

As mentioned in the literature review, value equity is supported by three factors and this study set out the assessment of the importance of quality, convenience and price in the distributor's perspective. As can be seen from the graph below (Figure 13), quality was labelled as the most valuable factor for distributors; leaving price and convenience as influential drivers but with a less level of impact.



Figure 13 Value equity drivers' preference for distributors

Figure 13 graphics the deep influence that quality has on distributors, especially in the high technology sector. For them, whenever they are thinking of a product's supplier, it comes to their mind mainly the product itself, this means that they require a good device that does the job what they expected, like one interviewed commented:

“What comes to my mind when I think about a supplier? The feeling that it has a great product” (Product Manager)

A variety of perspectives and characteristics were expressed around quality; for example, the physical product, service delivery, service environment and service product. Some participants disclose how technical specifications, product's dimensions, performance, quality certifications, the possibility to do upgrades or adding new features were factors that they were looking for in a high-technology product; while for some distributors, especially the ones that were not located in the European Union, the transportation service of the products was an extra factor that it is always considered, because it proves a feeling of trust that the product will not have any delays or issues during transportation. Thus, having the option to do installations and reparations remotely was very important for distributors because it will not necessarily require them to visit the end-user any time, they need help or support.

One unanticipated finding was that when there is an improvement in the quality, distributors tend to easily notice and give a higher value about the supplier which, according to most of them, increase their willingness to continue working with the same supplier. Plus, they highlighted the importance of having a QC/QA process that works hand by hand with the service team to support and provide a fast and precise service.

Overall, the further analysis showed that providing a good quality product increases the distributor's trust towards the supplier and providing a product that fits into the distributor's

specifications and quality expectations, gives to the distributors the tools to have sales, as one sales manager expressed:

“The most important is quality, the instrument has to work well, it has to performed, otherwise you are not going to sell any” (Sales manager)

Convenience was another valuable factor for many distributors that were interviewed, they mentioned that the product should be user friendly and easy to take care of; in other words, the device needs to be accessible to everybody. Besides, they considered that the firm’s accessibility and immediate contact were key aspects that any supplier needs to have; in particular, one distributor emphasised how important the communication with the supplier is, whenever there are technical difficulties:

“Convenience is a good factor, in terms to get to reach people when it is needed” (General manager)

Other responses related to convenience where towards the availability of the firm to provide answers and new information when it is needed; for example, one application manager said:

“Distributors want to easily connect with us and get answers and information about the product” (Application Manager)

Overall, all agreed that even if the supplier has a great product, the value will get lost if the distributor is not able to reach any supplier’s representative when they need support, which will result in affecting the conception of the supplier and the feelings to continue working together.

On the other hand, opinions related to price were not particularly prominent in the interview data, most of the interviewees mainly mentioned that price needs to reflect what you get and needs to be competitive in the market.

“We always look for the product (technology) and the price” (Sales manager)

Mainly according to them, a high technology supplier must to have the capability to offer a good quality product with a product and transportation price that is competitive in the market due high competition in the sector.

4.1.2 Brand equity for distributors

Second theme, brand equity for distributors, focused on the subjective judgement of an emotional relationship with the customers which is created through the experience and firm’s marketing. The present study was designed to determine which of the brand equity drivers

(customer's brand awareness, customer's attitude towards the brand and customer's ethics) was most relevant for distributors, the distributors who responded to this item felt that the factor which more relevance for them was brand awareness, as it is represented in Figure 14.



Figure 14 Brand equity drivers' preference for distributors

A common view amongst interviewees was the significant value recognition of brand awareness competing with the other two drivers (attitude towards the brand and brand ethics); however, in most of the cases it was needed to differ their opinion of what they believe is valuable for the end-users from what it is valuable only for them. What was interesting in this data is that even though distributors are supplier's customers, they tend to describe and think about themselves as supplier's partners. Nevertheless, this factor did not have an impact on the results because the questions were asked again explaining that the answers needed to reflect their own wishes, opinions or needs.

First of all, different drivers were discussed with the interviewees related to customer's brand awareness: media advertising, direct to customer, direct to firm, word of mouth and publicity and public relations. Some participants expressed their belief that a good way that the brand can communicate with the distributors was by the use of the web and social media. For them, some of the most frequent channels to know about new suppliers were Google Search, LinkedIn, online news and forum discussions, as one interviewee shared his experienced finding one supplier through LinkedIn:

“I actually came across with that company from LinkedIn and we approached that company and it turned out that they were looking for a distributor” (Sales manager)

A minority of participants indicated that one to one marketing messages were a good channel to get to know new suppliers, in particular by email. Sometimes distributors get reached by email and what they do is first read the message and before answering, they visit the supplier's webpage and look for more information about their products. In addition, for all interviewees,

the firm's webpage was a very essential channel to get to know suppliers, their different products and even getting connected to them by having the chance to ask quotations or other inquiries through it.

Also, some interviewees reported that a reliable way to discover a distributor is by asking referrals, knowing the suppliers from their networking or contacting with many people in the industry and asked them know about the firm's reputation and work style, as one interviewee said:

“I think the best way to discover a supplier is by asking recommendations from other distributors, attending exhibitions is a little bit like a lottery” (Product manager)

On the other hand, others who were interviewed indicated that conferences, exhibitions and trade shows were the most usual way to discover new suppliers and new products, in special the interviewees highlighted the importance of the first approach during those relations and how those events especially the ones that are physically, gives to them a possibility to discuss and see new devices and discuss with the people behind it.

Moreover, when the participants were asked about their attitude towards the brand, the majority commented the significance of having a close connection with the supplier, sharing the same business model, culture and competences, as one interviewed said:

“I feel more committed to the product when I feel closer to the company and the people behind the company” (Product Manager)

Therefore, to enhance distributor's attitude towards the brand is important to deliver key messages about the relationship with the supplier, the supplier's willingness to take feedback and their work co-operation based on a similar business idea.

Customer perception of brand ethics was another topic discussed which revealed, by the majority of the interviewees, the need to know that the distributors have the same ethics values as them. Most of those ethics' values were related with the collaboration and business trust, the description of what they believe a “serious company” is and emphasise of the ethical roles of supplier's key representatives. When the participants were asked, how does the supplier's ethics matter for you? The majority commented that it mainly does not matter and whenever they find an ethical problem with the supplier, they will just simply stop working with that company, but as a factor to consider at the beginning of the relationship, is for them difficult to discover and particularly not relevant.

Overall, in contrast to earlier findings, this study was unable to detect distributor's opinions regarding packing and merchandising, site location and distribution strategy, media placement, or any ethical topics preferences which are previously described in the literature section.

4.1.3 Relationship equity for distributors

The third theme, relationship equity for distributors, attempted to create long-term and high-quality relationships with customers by the use of some retention programs, the overall response and comments regarding this topic were very positive:

“I value highly the support and relationship with the supplier because if we have a company that does not support us, it makes selling their product far less attractive”
(Sales manager)

“What comes to my mind when I think about a supplier? The feeling to have a good connection and relationship with them” (Product Manager)

Interviewees were asked to indicate whether any of the programs described in the literature section (knowledge-building, community-building, affinity and loyalty) were most preferred for them and why they believed some of those programs were valuable and why the others not. Interestingly, knowledge-building and community-building were the most recognized and preferred, as Figure 15 shows.

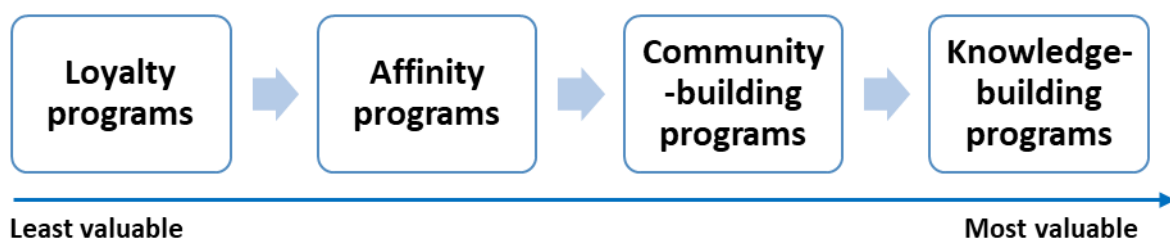


Figure 15 Relationship equity drivers' preference for distributors

Most of the participants said that knowledge-building and community-building programs were the two main programs that can create a strong bond with the supplier. Some participants stated that knowledge-building programs are bonds that can maintain and enhance their relationship, especially when they often get to communicate with the supplier and exchange information in an easy and flexible manner. The information that the interviews tend to consider relevant were concerning about future projects, investments, market development and marketing agreements,

which according to most of them, creates a solid connection that it is difficult to replicate with any other supplier, like one individual stated:

“With the knowledge building, we have some assured that the supplier is not just selling the product but they are putting a lot of resources to maintain the relationship between us and the product” (Product Manager)

Some interviewees also considered that getting regular visits from supplier’s representatives are valuable because it can demonstrate the commitment that the supplier has towards each of its distributors:

“It is very important to travel and visit the distributors, that shows commitment from our side” (Business Developer)

As already mentioned, community-building programs were very widely described as meetings that got them connected with a bigger community or network. Most of the participants recalled how positive, effective and helpful these meeting is, and how having the possibility to share ideas and experiences with other colleagues helps them create a stronger bond with the supplier’s network, as one distributor commented:

“Community building programs has been very helpful for me, to be able to meet and discuss with the colleagues in other countries and see what they are doing in their market” (General manager)

Other responses included the characteristics that these meetings need to have; for example, the duration of these meetings should be shorter in order to increase the attendance, preferentially it should enhance the personal contact by the creation of social activities and live meetings, as it was indicated from some interviewees:

“We are offering all kind of social activities creating personal relationships between us and the distributors” (Business Developer)

“During COVID times, we had web sessions and courses, but social part was missing” (Business Developer)

On the other hand, the overall response around loyalty programs and the use of strategy rewards were not very positive, in most of their answers, they have mentioned that these kinds of programs are not interesting for them because it requires to sell many instruments which they did not have the capacity to do; besides, they were not pleased to have a relationship based on price, as a product manager said:

“Loyalty rewards are not good from my point of view because they are related to price and I believe only price is something on what you don’t build a long-term relation” (Product Manager)

In general, the preferences of knowledge-building and community-building compared with the other programs were enormous and other programs, like loyalty rewards, were perceived negatively decreasing the supplier’s relationship equity.

4.2 Customer equity drivers for end-users

4.2.1 Value equity for end-users

The fourth theme, value equity for end-users, addressed the end-user’s objective assessment of the brand which is characterised by three main drivers: quality, convenience and price. The results of this study indicate that there is a strong preference on all of these three features, as they have been mentioned in almost all of the interviews; however, it was a slight hierarchy of preference, collocating quality as the most valuable aspect for the end-users, as Figure 16 represents.



Figure 16 Value equity drivers' preference for end-users

As can be seen from the figure above, quality has been qualified as the most valuable driver by the majority of the interviewees, they indicated how important and how much they care about the technical attributes that a high-technology product should have. Some of the features were capacity, accuracy, flexibility, reliability, ability to get software updates and size. An overall response related to this driver was the imperative need that the product needs to fit perfectly with their technical requirements, as a senior lecturer said:

“I will check if the device or instrument meet the criteria I am interested in” (Senior lecturer)

Some interviewees highlighted the importance of the product's functionality and what it means for them, as recalled:

“I am mainly concerned that the device does what I needed to do” (PhD candidate)

“It is a tool for me to do my lab work” (PhD candidate)

“It is important for me that the instrument covers what we are going to use it for” (Senior researcher)

Most of the interviewees also reported that the quality of the product is not enough, they also mentioned the important role that service is for them, as said:

“The technical data or technical facts will be the first to consider, then it will be the support and service” (Senior lecturer)

End-users has recalled many times during the interviews that technical support is valuable and it can enhance their long-term relationship with the brand. The service expectations were related to service time and service delivery, in case the device is needed to come back to the supplier for a deep check-out, as said:

“I think for the lab finding instruments that are well designed and function while it lasts a long time is very important, also to have a good customer service options if things can go wrong” (Research instructor)

“The technical support is something that I normally look into to see how quick we can get help from a supplier” (Researcher)

Interestingly, quality and price were stronger features under the point of view of the end-users. Almost all of them required to have a good product with a good price as, as one interviewed disclosed:

“End-users expect to get a good quality product at a good price” (Service engineer)

In contrast, comments related to preference price method were not particularly prominent in the interview data. End-users just emphasised the significance that price has in their decision making, as one interviewee said that the two qualities, he usually checks is quality and price:

“Whenever I am trying to find a device, I see what is good in the market and what opportunities they are regarding quality and price” (Researcher)

Some interviewees also explained why price is a factor to deeply consider, especially when the end-users belong to the academia market and their purchases are regulated under a certain budget, as said:

“The price honestly becomes the one of the bigger factors, probably the biggest factor simply because labs are so constrained these days, the price really needs to be at a certain range, it doesn’t necessarily need to be the lowest price but at least be in a certain range where we can kind of justify it over other products” (Research instructor)

“I think price is number one (factor that end-users consider) because they have a certain amount of money that they can expend on devices” (Application manager)

A clear opinion related to convenience by most interviewees was how they underlined that the product needs to be easy to use, explaining that this factor can reduce the amount of time supervisors need to take to explain the functionality of each device. Also, that supplier’s accessibility and immediate contact is needed whenever occurs a problem with the device, as said:

“I hope that the supplier is reliable and helpful if there are any problems needed, in order words to be ease to reach in case of problems” (PhD candidate)

Other opinions related to accessibility and contact were:

“When you make an investment and there is no connection or there is no easy way to ask and discuss problems or whatever, then it is a huge minus thing” (Educational leader)

“I think it is absolutely important to have a good communication and relationship especially with a new dealer, so you can get the right information about the instrument and so it really feels safe when I put that amount of money to buy it” (Researcher)

This showed one unanticipated finding about the extreme value that end-users have towards the connection, communication and availability that they expect from the suppliers, saying that whenever they make a big investment; end-users expect to be able to discuss the issues that they may have with the instrument after purchase, but also, they want to have all the information needed before purchasing it.

4.2.2 Brand equity for end-users

The fourth theme, brand equity for end-users, focused on the subjective judgement that end-users have towards the brand, which creates an emotional relationship through relationships,

experiences and marketing strategies. By the end of the data analysis, the results show how customer's brand awareness was the driver with most influence on end-users, it was surprisingly to notice that this driver has more repercussions on the end-user's subjective judgement than the other two factors, at the end, the strong relevance goes to customer's brand awareness, followed by customer's attitude towards the brand and customer's perception of brand ethics, as Figure 17 shows:



Figure 17 Brand equity drivers' preference for end-users

A common view amongst interviewees was that customer's brand awareness is important, especially when they are looking for a new supplier. During the interviewees, they recalled how searching in google for a supplier is their first step whenever they are looking to purchase a high-tech product, as it was said:

“I am going to start (supplier research) with google, of course” (Senior lecturer)

The stress on their answers about using google as a research channel was predominant in most of the interviewees and most of them brought to light how usually their process starts by looking for some information on google and then visiting the supplier's webpage. Once an interesting supplier is found on the web, end-users seem to value more if the webpage contains useful and updated information about their products and even more, if the webpage allows them to communicate straight to the supplier or distributors.

In response to the question: how did you discover Company X? a range of responses were classified into different awareness channels; being the internet the most used channel, as one interviewee said:

“I think I found (the supplier) on the internet and then I found a contact person and he came to place his presentation and showed all the things that you can do with the machine” (Research technician)

This interviewee mentioned a factor that was very recurrent in other interviewees, which is having the option to see the device in action. This factor seemed to be also very important for many end-users, especially when they do not know or they have not any experience beforehand with the brand. Some of the users, who belong to big corporations, get to attend demo shows in their workplaces or visit the lab every time a new device is installed, by this, end-users get to know new devices and get to see how a device really works.

“I think it’s happening quite often that they come here and put up an instrument and then me and others could be invited to have a look at the same time. So, we are trying to give people a possibility to come here sometimes and have a demonstration demo on site” (Researcher)

Responses also included the power of word of mouth has in the high technology sector, by this they explained that every time they have the need to purchase a high-tech product, they will for references and advices from the people in their own laboratory, like it is mentioned:

“At first, I would make some calls and discussions with my colleagues. So, I’d like to have good references” (Educational leader)

Other replies also included visiting different laboratories in their local area and reaching out for other investigators or teachers who have used this type of product. Unexpectedly, having a bad reference in this industry can mean a very low customer equity towards one brand, as cited:

“If I find a cheap product, I will look for references, and check if it covers what we are going to do and of course if I do not get good references, I will definitely not buy it” (Senior researcher)

Others give their preference on the communication that they have with the different distributors, they cited how valuable it is for them to talk with different sellers and get all the information from them, particularly during Covid times when all the conferences and trade shows were not available, as one interviewee said:

“I think it is very important to keep up the contact with the sales people because they can tell you what instruments are popping up, especially during COVID when you don’t have access” (Researcher)

Another important finding was the role of conferences, trade shows or any public relations in this industry. Some interviewees tend to trust and look for publications and reports about certain applications where the device has been mentioned:

“I will look for publications that includes the device name, but the best advice will come from the people because they understand what I will really need” (PhD candidate)

Conferences and congresses are channels that some of the interviewees attend in order to discuss and discover new products and brands in the market; nonetheless, most end-users rely on the firm's website and word of mouth.

In addition, a very few interviewees mentioned the role of one-to-one marketing messages via email; while some of them found it distracting, bothering and not relevant to use this method, a minority expressed their curiosity that these messages produced on them and how after watching it, they tend to visit their website for most accurate information.

A variety of perspectives were expressed around end-users' familiarity with the product studied; in addition, the most surprising aspect of the data is the unfamiliarity that end-users have before they purchase the product. Almost all of the interviewees stated that only when they have the need to acquire a new device, they will try to see and search what it is in the market, as some interviewees said:

“I am not familiar (with the different suppliers), I haven't looked at it in quite some time” (Research instructor)

“I have not been looking or using any other ones for a while” (PhD candidate)

These statements showed that the need to increase customer's brand awareness has to be done in the exact moment of the purchase need. This need, as the majority of the interviewees indicated, usually comes whenever they need a new one or their previous devices break, get old or grow the dissatisfaction towards the current provider, as mentioned:

“When I was looking to get a device, then I was familiar with the other supplier on the market, but after that, I hadn't been following what is happening in the market because now we have already one and I have been very satisfied with it” (Senior researcher)

Another theme recurred throughout the dataset was how media creative strategy can boost customer's attitude towards the brand, key messages around technical support, reliability, end-user experience, precision, quality and performance can increase the positive subjective idea that end-users have towards a brand or product. The “end-user experience” message was found to be a key factor to create equity; however, like many interviewees said, this message needs to be consistent and close to reality, as it was mentioned:

“We are trying to give a consistent message and appearance” (Business developer)

Other key message that was mentioned in many interviewees was the need to see high technology firms as a co-operator that brings good products and services for end-users' daily

life and a firm that always reacts to new technologies and constantly implements new features, as it was said:

“(Convenience and quality service) is often underrated, but it creates a closer relationship by helping them in their daily life” (Business developer)

“We always listen customer’s needs and trends” (Business developer)

Another important finding was the influence that site location has on end-users and how most of them prefer to acquire local products, like one interviewee said:

“We want to support local companies and that was one of the most important things when we decided to buy that product” (Educational leader)

The current study also found that site location did not only influence customer’s attitude towards the brand but also their perception of brand ethics, since end-users tend correlate the brand’s location with ethics behaviours, as said:

“I don’t think of those things (supplier’s ethics) when we use it or buy it so much. Since it is a Finnish company, I think it is quite reliable in that sense also” (Senior researcher)

Some participants expressed the trust they have towards Finnish companies while others they mentioned that brand’s ethics is not a factor of deep consideration whenever they purchase a high-tech products, like these interviewees stated:

“I do not think we are talking that (brand’s ethics) into consideration at least in the last five years” (Senior researcher)

“I would say it’s something that could be a factor (brand’s ethics) but I don’t really want to rank it with sort of other factors” (Research technician)

Surprisingly while most of the interviewees expressed their uninterest towards the supplier’s ethics, others found it as a matter of interested, especially towards the topics of: environment, ethics and pricing ethics:

“I think ethics are very important, from all the aspects, not only serving customers but respect for environmental ethics and the way of doing business, pricing ethics and so, commitments” (Business developer)

“I would not want to support a company that acts very unethically” (PhD candidate)

In addition, interviewees highlighted that they will stop supporting companies that act unethically.

4.2.3 Relationship equity for end-users

The fifth theme, relationship equity for end-users addressed the customer's perception of the firm that it is enhanced by customer-contact methods that stimulate emotional attachment. Contrary to expectations, this study did not find any significant preference from end-users in any of the relationship drivers: knowledge-building, community-building, affinity or loyalty programs. The majority of the interviewees stated their wish to have any kind of relationship with the supplier besides what is necessary if any issues happen with technical issues with their product that the distributor cannot handle, as the following interviewees mentioned:

“I do not think how necessary it is (relationship programs). I could not be part of it” (Senior researcher)

“I didn't consider other factors because I am not interest about the connection with other customers” (Senior lecturer)

“I only look at the technical part, so I want to measure and that is it, having a relationship with the supplier is not interested for me” (Research technician)

“Having a relationship with the distributor is fine but either with the distributor or the supplier is ok with me” (Research technician)

“You know, unless it's having issues with the device, there is really not much more that I would benefit I think from having a closer relationship with the supplier” (Research technician)

Only a minority of participants indicated their interest and value only towards knowledge-building programs and community-building programs, as Figure 18 shows.

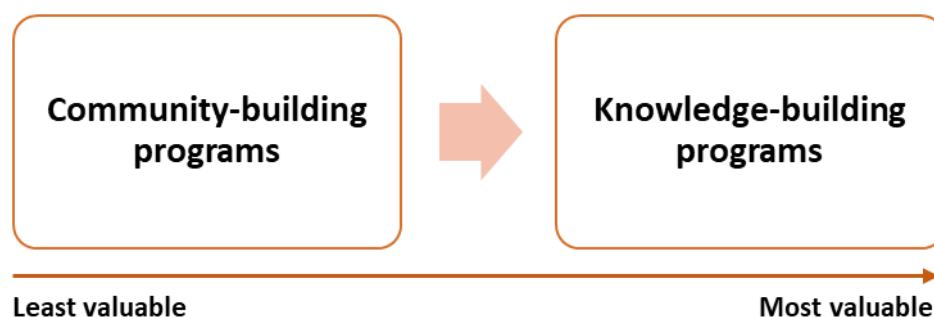


Figure 18 Relationship equity drivers' preference for end-users

Overall, these results indicate that the minority of the interviewees have a preference on knowledge-building since they believed that this is the best way to get in contact with the supplier, as it was stated:

“I think knowledge building would be the best way to get in contact with the supplier. In my eyes, having the knowledge on how to use the product is the most important” (Researcher)

Besides, while some interviewees found knowledge building programs are valuable because in that way high technology firms can create bonds with them through interaction, others gave more significance to community buildings and their ability to connect with a bigger community of customers or network, as these interviewees said:

“Community building program is the most important for me, would be great to share our ideas and results” (Educational leader)

“We could be interested in the community building program. People in our area can get together and discuss if they are having any problems or have any solutions or something like that, or have some new ideas on how to find new ways to do any analysis” (Senior researcher)

“Community building programs are a good way to create a healthy contact with customers and give more to their daily work and that is what really helps them” (Business developer)

At last, one striking result emerged from the data was the negative impact that affinity and loyalty will have on the end-users. Instead of driving the customers to know more about the product or enhance behavioural loyalty; affinity and loyalty programs produce, to most of the interviewees, a negative feeling towards the brand. Besides, some of the interviewees explained the reasons why they cannot even follow any of those programs, as they mentioned:

“Our faculty will not be able to participate in a loyalty program because we will buy one or maximum two devices during ten years, for example” (Senior lecturer)

“Loyalty program is somehow useless because we have this official protocol on how to make investments so it’s like impossible to make some kind of marks or something there, so that’s not important for us” (Educational leader)

With these comments some end-users clarified that from all the relationship drivers, loyalty programs cannot work for them due the small number of devices acquired and the protocols they need to follow whenever they purchase any equipment.

4.3 Comparison of customer equity drivers between distributors and end-users

The initial objective of this project was to identify how customer equity drivers differ from distributors and end-users in the high technology sector; therefore, this last section will contain

the main similarities and differences of the different customer equity drivers between these two customers from the same distribution chain.

4.3.1 Value equity for distributors and end-users

Three different value equity drivers were analysed in this research: price, convenience and quality, as mentioned in the literature review, and a common view amongst all interviewees was that distributors and end-users share the opinion towards these factors. In this matter, the current study found that quality is the most valuable driver for distributors and end-users, followed by convenience and price, as it is presented in Figure 19.

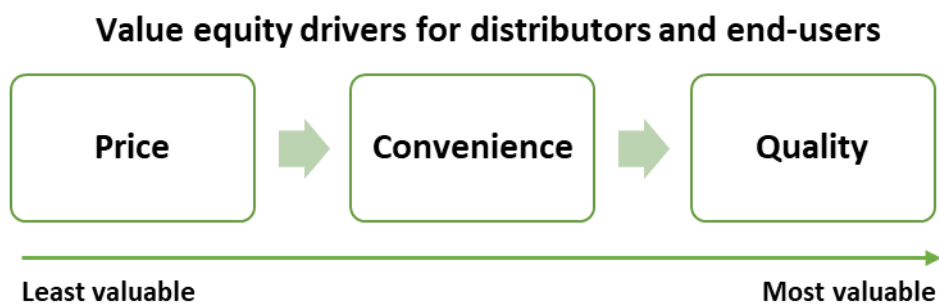


Figure 19 Value equity drivers for distributors and end-users

This finding corroborates the ideas of Wang (2016), who suggested that quality has a deep influence on customer's satisfaction and customer equity. Both, distributors and end-users, identified some similar factors that they consider valuable, like: technical attributes, product's specifications, service product and service delivery. Highlighting the vast value that service quality represents for end-users and distributors and how distributors can detect faster and easier if quality increases or decreases through time. In terms of convenience, this research identifies that distributors also value supplier's availability for any inquiries or happenings while end-users appreciate this driver when they only have problems or issues with the product.

The results obtained from the analysis of value equity drivers are summarised in Table 8.

Table 8 Value equity drivers' differences and similitudes between distributors and end-users

	DISTRIBUTORS	END-USERS
QUALITY	<ul style="list-style-type: none"> -Very valuable driver -Interest about the product's technical attributes and specifications -Size -Software updates -Product's functionality and good performance -Fast support and quality service -Service transportation with no delays or issues -Quality certifications -Remote installation or reparation -QC/QA process -Quality impact 	<ul style="list-style-type: none"> -Very valuable driver -Interest about the product's technical attributes and specifications -Size -Software updates -Product's functionality and good performance -Fast support and quality service -Service transportation with no delays or issues -Accuracy -Flexibility -Reliability
CONVENIENCE	<ul style="list-style-type: none"> -Very valuable factor -User friendly -Supplier's accessibility -Immediate contact for service -Supplier's availability to discuss about problems or device's information -Availability to provide answers and new information about new products -Ease to reach is extremely valuable 	<ul style="list-style-type: none"> -Very valuable factor -User friendly -Supplier's accessibility -Immediate contact for service -Supplier's availability to discuss about problems or device's information
PRICE	<ul style="list-style-type: none"> -Good quality product at a good price -Price needs to reflect the product's value -Products and transportation price needs to be competitive 	<ul style="list-style-type: none"> -Good quality product at a good price -Extremely big factor -Price needs to be competitive and between a certain range

Lastly, this study has been unable to demonstrate what price method is more valuable for both customers; however, it has been found that both customers agree that price needs to be competitive and only end-users tend to care more about the price since most of them need to follow budget's limitations.

4.3.2 Brand equity for distributors and end-users

As mentioned in the literature review, three main drivers have some influence on brand equity: customer's perception of brand ethics, customer's attitude towards the brand and customer's brand awareness. A strong relationship between these drivers and brand equity has been reported in the literature, relating the image and irrational evaluation of value from the

Table 9 Brand equity drivers' differences and similitudes between distributors and end-users

	DISTRIBUTORS	END-USERS
CUSTOMER'S BRAND AWARENESS	<ul style="list-style-type: none"> -Use of google search and forum discussions -Conferences, exhibitions, trade shows, congresses -Visit of supplier's website for quotation or questions -Word of mouth (referrals), networking -One to one marketing messages (email), is used for quotation or questions -Social media (LinkedIn) 	<ul style="list-style-type: none"> -Extremely use of google search -Conferences, exhibitions, trade shows, congresses -Visit of supplier's website (needs to contain relevant information) -Word of mouth (references and advices) from people in the laboratory or local area -One to one message (email) produces mostly a negative impact, for only the minority produces curiosity -The use of demo units or installation's visit -Discussions with distributors or sellers -If supplier's have a bad reference, end-user will not proceed with purchase -Brand awareness is most important whenever users are looking to purchase a device
CUSTOMER'S ATTITUDE TOWARDS THE BRAND	<ul style="list-style-type: none"> -Key messages around close relationship between distributors and suppliers -Other messages: share of the same business model /culture -Cooperation and able to take feedbacks 	<ul style="list-style-type: none"> -Key messages around support, reliability, end-user experience, precision, quality and performance -Other messages: good products and customer service -Site location: end users tend to prefer local products -Site location and brand ethics
CUSTOMER'S PERCEPTION OF BRAND ETHICS	<ul style="list-style-type: none"> -Mainly not interested -Others prefer to share same ethics (collaboration and business trust) -Stop working with the supplier in case they find out some unethical actions -Special attention to key employees 	<ul style="list-style-type: none"> -Mainly not interested -Others prefers supplier's ethics on environment and pricing -Stop working with the supplier in case they find out some unethical actions. -Relating brand ethics with the brand's nationality

Furthermore, these findings further support the idea of Rust (2005), and Esmailpour and Aram (2016) who suggest the inclusion of key messages to customers in order to create emotional communication with them and incite consumers through emotions or feelings. This research found some key messages for customers, for distributors: close relationship, while for end-users: support, reliability, end-user experience, precision, quality and performance.

Contrary to expectations, this study did not find a significant difference in value perception of brand ethics from distributors or end-users, the majority expressed their lack of interest on these

topics, while the minority discussed their preference on business trust (distributors) and environmental and price trust (end-users). Yet, distributors and end-users re-call the end of their relationship with the supplier if any unethical news comes out.

4.3.3 Relationship equity for distributors and end-users

The present study was designed to determine the different or similar effects that some relationship equity drivers have for distributors and end-users, the main drivers discussed by the literature review were: loyalty programs, affinity programs, community-building programs and knowledge-building programs.

This study found how distributors and end-users have different appreciations towards these relationship's equity drivers. For distributors, it is very important to have a close relationship with the supplier via knowledge and community programs because they can strengthen their bond with the supplier by regular visits and exchange of important information, plus they find it positive and helpful to also meet with other distributors to discuss the product, share ideas and comments.

On the other hand, the results show that end-users do not tend to show any interested on having any kind of relationship with the supplier unless there is a need to contact them due some technical problems, with some exceptions from few interviewees that showed a little bit their interested in knowledge-building or community-building programs, as Figure 21 shows.

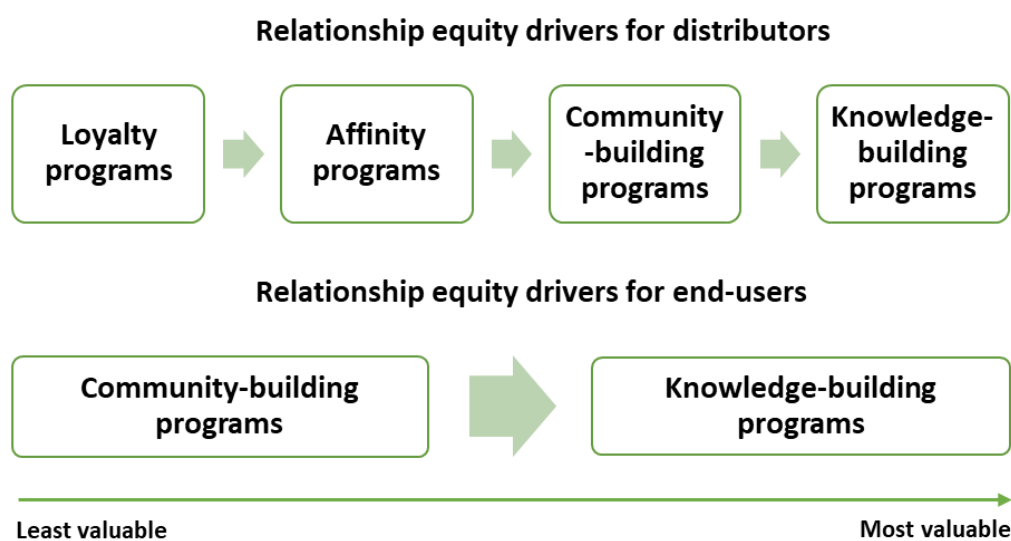


Figure 21 Brand equity drivers for distributors and end-users

Lastly, one unexpected finding was the negative impact loyalty programs can produce on distributors and end-users who explained their aversion to starting a relationship based on price (distributors) or their incapacity to realise big purchases (end-users).

Table 10 Relationship equity drivers' differences and similitudes between distributors and end-users

RELATIONSHIP EQUITY DRIVERS	DISTRIBUTORS	END-USERS
<u>KNOWLEDGE-BUILDING PROGRAMS</u>	<ul style="list-style-type: none"> -A good approach to strength the bond with the supplier -Related to exchange information about projects, investments, market development or marketing agreements -Regular visits from the supplier shows commitment 	<ul style="list-style-type: none"> -Mainly not interested -A good approach to strength the bond with the supplier
<u>COMMUNITY-BUILDING PROGRAMS</u>	<ul style="list-style-type: none"> -Positive, effective and helpful method to share experiences, ideas with other distributors -Meeting should be short and organised with anticipation -Personal contact, social activities are needed -Meeting online is acceptable but not preferred 	<ul style="list-style-type: none"> -Mainly not interested -A good approach to strength the bond with other end-users and share ideas and results -Interest on meeting with other local customers
<u>AFFINITY PROGRAMS</u>	Mainly not interested	Mainly not interested
<u>LOYALTY PROGRAMS</u>	<ul style="list-style-type: none"> -Mainly not interested -No capacity to sell/buy many instruments -No pleased to base a relationship based on price -Produces a negative feeling 	<ul style="list-style-type: none"> -Mainly not interested -No capacity to buy many instruments due limited budgets -Produces a negative feeling

The results obtained from the analysis of brand equity drivers are summarised in Table 10.

4.3.4 Comparison of customer equity drivers in distributors and end-users

The current study compares three customer equity drivers for distributors and end-users (value equity, brand equity and relationship equity), and shows their similarity in value equity, categorising it as the most relevant driver in order to acquire equity, as it can be found in Figure 22. This finding is in agreement with Zeithaml (2001), Wang (2016) and Richards & Jones

(2008) who indicated that value is the main factor to motivate customers to make future purchases and is the key point to establish long-term relationships between the customer and the firm, as it was specified by all interviewees. In contrast, it shows a difference between the second and third equity; while for distributors relationship is the second important driver, end-users fall on brand equity, as Figure 22 shows.

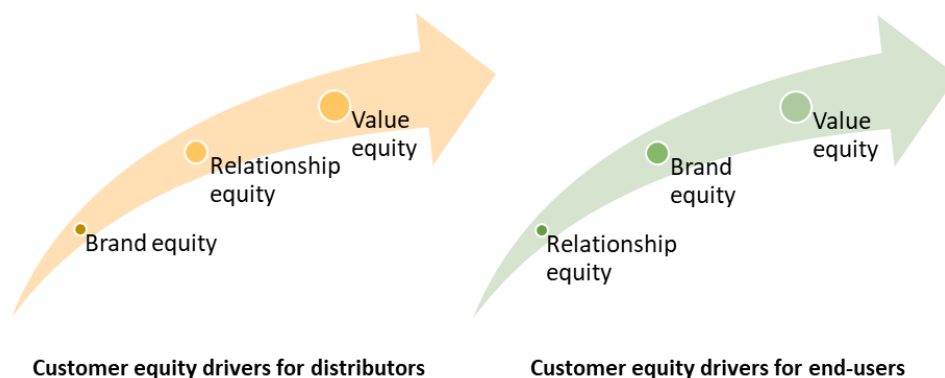


Figure 22 Differences customer equity drives between distributors and end-users

Based on these results, it can be concluded that distributors and end-users' customer equity are guided by drivers under different levels of intensity in the high technology sector. Therefore, firms need to consider these similarities and differences every time they are making strategies to increase equity in their firms, and understand that their business approaches should not be the same for all their customers in their distribution channel because while some drivers are more valuable for distributors, other values are considered by the end-users.

5 Conclusions

5.1 Theoretical contributions

This study has investigated the different drives that guide an increase or decrease of customer equity in firms, and which different factors have an impact on those drivers. Basically, three drivers were discussed in the literature section: value equity, brand equity and relationship equity, plus their different drivers. This study has also considered the role of customer equity drivers on customers that belong to the same distribution chain (distributors and end-users) of a high technology firm. Moreover, practical implications were found by the interaction and interview from several individuals in this industry, who contribute with their opinions and assessments of the main three equity drivers (value equity, brand equity and relationship equity), by their participation in small interviews.

The findings from this study make several contributions to the current literature. First, discovers the differences and similarities of customer equity drivers for distributors and end-users in the high-technology sector and analyses data from different distributors and end-users who are located in different countries, re calling that until the date of this printed material, there has not been any previous research based on the comparison of customer equity drivers on firm's distribution chain in the high technology sector.

Second, this study has confirmed the findings of Wang et al. (2016) which found that value equity is the strongest and most valuable driver. Wang et. al. (2016) states that if the firm does not possess it, any other value will not be enough to satisfy customer's recognition (Wang et al., 2016, 3828). This proved to be a clear statement for both customers (distributors and end-users) who also identified quality as the most important driver, indicating as relevant factors: product's specifications, service product and service delivery. Convenience and price were also identified as valuable factors, highlighting the importance and indispensable role of convenience. Overall, this study has shown that the factors that can enhance value equity are similar for distributors and end-users and are based on quality and convenience expectations.

Third, this study corroborates the ideas of Holehonnur et al. (2009), who suggested that brand is a fundamental factor in the end-users' value perception (Hinterhuber & Hinterhuber 2012, 262). This statement was proven after the analysis of the data shows brand equity as the second most valuable equity, after value equity, only for end-users. In particular, this study contributes with the theoretical affirmation that brand awareness has more impact on end-users than on

distributors, and the factors with most relevance are: web search, word of mouth, supplier's website and exhibitions.

Fourth, the study findings related to relationship equity drivers in distributors are consistent with those of Ramaseshan et al. (2013) who indicated the importance of relationship and trust between distributors and suppliers (Ramaseshan et al. 2013, 337) and with Nguyen & Nguyen (2011) with their affirmation on how personal interactions can produce a positive impact on these relationships (Nguyen & Nguyen 2011, 320). Surprisingly, relationship equity was found to be very important for distributors, who described how knowledge-building and community-building programs are good methods to strengthen their bonds with the suppliers and with other distributors; in the contrary of end-users who were not interested in maintain any relationship with either the supplier or other end-users.

In general, this study's empirical findings support this research's theoretical framework described in section two, and supports plenty of new theoretical contributions around customer equity drivers in high technology firms.

5.2 Practical contributions

The shift from transactions to relationships business focus is happening more and more during the last decades and this brings a good opportunity for companies to base their strategies according to these changes, having a more customer-focused approach. By considering the customer as the core of the business, firms consider customer equity as an instrument to develop effective marketing strategies.

These findings have important implications for developing effective managerial strategies with a strong customer focus. Therefore, customer-centred strategy has become increasingly important in decision making, as customer's opinions are considered more important in today's competitive advantage. This study has shown that the concept of customer equity and its drivers have different impacts for two customers from the same distribution chain (distributors and end-users), and this result provides a new background for the creation of managerial strategies.

Although the current study is based on a small sample of participants, the findings provide new information related to the importance level of each customer driver and the different factors that distributors and end-users consider relevant towards the study case. Besides, basing the findings on the analysis of real and active participants in the high technology industry, offers more realistic and skilled opinions and conclusions that can function as a guideline for firms;

thus, the methods and conclusions can be applied to other firms from the same industry elsewhere in the world.

Finally, this research will practically contribute to high technology firms responding rapidly to customer's needs, influencing customer's loyalty and predicting future sales based on the customer's objective and subjective assessments.

5.3 Limitations and future research

This research presents theoretical and managerial implications; nevertheless, it contains some limitations. First, this was conducted as a case study, basing on interviews with the study case firm's representatives, distributors and end-users of one particular brand in the high technology sector, although the firm case operates globally, the responses belong from a small number of countries in Europe and America and are based on one particular market, which gives a limited amount of data and opinions based on a limited market reality, and which results may differ if the database would have come from more different countries. Second, all interviewees compared drives and factors towards one particular high technology product, so if comments were directed towards another product or a set of products, the result would have fluctuated. Finally, this current study was unable to deeply analyse the impact of several price, ethics and affinity methods on distributors and end-users, which can open one possible topic for further research.

Further investigation and experimentation into customer equity drives is strongly recommended. Based on this study, it would be interesting to continue the study of the different customer equity drivers on firms from different industries or carry out a further study comparing a wider number of distributors and end-users operating in other countries. Likewise, a more detailed study of each customer equity driver is recommendable and a further study of the long-term effects of the practical contributions discussed in this research.

6 Summary

Customer equity is a consolidated sum of the total customer lifetime value from the firm's current and potential customers (Hogan et al. 2002, 7) which provides a theoretical foundation for firms in order to have a customer-centred position (Vogel et al. 2008, 104). Eventually, the knowledge of the customer equity basis will provide information on how to maintain customer relationships (Richards & Jones 2008, 122), allocate in an optimized way marketing resources (Hao & Chon 2021, 115) and measure marketing productivity by positioning the customers at the centre of the firm (Holehonnur et al. 2009, 165).

The effective management of customer equity involves the comprehension of different factors (Dong et al. 2007, 1243) based on the relationship between the customer and the firm (Vogel et al. 2008, 98). The identification of these factors or drivers and the understanding of the interaction among them (Dong et al. 2007, 1243) will positively affect the firm's performance by reducing costs and increasing profits (Shadiardehaei et al. 2021, 1584).

In this matter, a number of studies in customer equity have discovered that the customer's selection of brands and/or firms are based on three main drivers: value equity, brand equity and relationship equity (C. H. Lee et al. 2014, 2156); defining them as customer's objectives and subjective perceptions (Zeithaml et al. 2001). Value equity has been defined as the objective assessment towards the firm's offering, brand equity as the subjective view of the firm and relationship equity as a subjective view towards the relationship between the customer and the firm (Zeithaml et al. 2001).

These drivers are able to operate independently and together to amplify the firm's customer equity (Cambra-Fierro et al. 2019, 5) and change over time due its dynamism (Aravindakshan et al. 2004, 409) providing resources to act in response to changes from the customer's needs (Zeithaml et al. 2001) and volatile marketplaces (Rust et al. 2005).

Based on the literature background, research questions were proposed looking to analyse customer equity drivers based on the perspective of distributors and end-users from a high-technology firm, looking to discover the main differences and similarities of customer equity drivers between these two types of customers.

The research approach used in this study was a qualitative content analysis since it provides the analysis of verbal communication messages (Elo & Kyngäs 2008, 107) and gives the possibility to make valid inferences from the data (Elo & Kyngäs 2008, 108) where participants were

selected due their innate or acquired knowledge of the case study (Graneheim et al. 2017, 29). In total this study counts with the participation of 5 distributors and 9 end-users of a high technology product, plus the contribution of three main representatives of the case study.

The main findings in this research included the main analysis of three customer equity drivers: value equity, brand equity and relationship equity from the distributors and end-users' perspectives.

Relating to value equity, this research concludes that distributors and end-users consider quality as the most important driver, following convenience and price, respectively.

Relating to brand equity, this research concludes that distributors and end-users consider customer's brand awareness as the most important driver, following customer's attitude towards the brand and customer's perception of brand ethics, respectively.

Relating to relationship equity, this research concludes that distributors and end-users have a different opinion towards the drivers. While for distributors, it is very important to have a close relationship with the supplier via knowledge and community programs; end-users tend to show uninterested in having any kind of relationship with the supplier unless there is a need to contact them due to some technical problems.

Overall, the research study indicates a similarity on the categorization of the main drivers, allocating value equity as the most important driver that motivates customers to make future purchases and a basis to establish long-term relationships. In contrast, as a second important driver, distributors considered relationship equity whereas end-users, brand equity. Based on these results, distributors and end-users from a high technology sector have a slightly different reaction towards the customer equity drivers; hence, considering these similarities and differences will provide an effective guide in decision making.

Finally, this research presents theoretical contributions by discovering the differences and similarities of customer equity drivers for distributors and end-users in the high-technology sector, defining value equity as the most important customer equity drivers and highlighting the importance of relationship equity on distributors and brand equity on end-users. It presents practical contributions by providing a new background for the creation of managerial strategies by providing findings based on the analysis of real and active participants in the high technology industry. Plus, it also opens new opportunities to future researchers to conduct upcoming studies on customer equity drivers' other industry sectors and locations.

References

- Ahmed, R. R., Vveinhardt, J., & Streimikiene, D. (2017). Interactive digital media and impact of customer attitude and technology on brand awareness: Evidence from the South Asian countries. *Journal of Business Economics and Management*, 18(6), 1115–1134. <https://doi.org/10.3846/16111699.2017.1400460>
- Anonymous. (1995). Selling to end users and distributors. *Agency Sales*, 25(11), 17.
- Aravindakshan, A., Rust, R. T., Lemon, K. N., & Zeithaml, V. A. (2004). Customer equity: Making marketing strategy financially accountable. *Journal of Systems Science and Systems Engineering*, 13(4), 405–422. <https://doi.org/10.1007/s11518-006-0173-z>
- Bakhtiari, A., Murthi, B. P. S., & Steffes, E. (2013). Evaluating the Effect of Affinity Card Programs on Customer Profitability Using Propensity Score Matching. *Journal of Interactive Marketing*, 27(2), 83–97. <https://doi.org/10.1016/j.intmar.2012.10.003>
- Berry, L. L., Seiders, K., & Grewal, D. (2002). Understanding service convenience. *Journal of Marketing*, 66(3), 1–17. <http://dx.doi.org.ezproxy.utu.fi/10.1509/jmkg.66.3.1.18505>
- Bhaduri, G. (2017). Influence of consumers' brand expectations on apparel brands' US-based sourcing strategy. *Journal of Consumer Marketing*, 34(1), 74–83. <https://doi.org/10.1108/JCM-11-2015-1620>
- Bresciani, S., nueva, E. a sitio externo E. enlace se abrirá en una ventana, & Ponte, P. D. (2017). New brand logo design: Customers' preference for brand name and icon. *Journal of Brand Management*, 24(5), 375–390. <http://dx.doi.org.ezproxy.utu.fi/10.1057/s41262-017-0046-4>
- Cambra-Fierro, J., Xuehui Gao, L., Melero-Polo, I., & Javier Sese, F. (2019). What drives consumers' active participation in the online channel? Customer equity, experience quality, and relationship proneness. *Electronic Commerce Research and Applications*, 35, 100855. <https://doi.org/10.1016/j.elerap.2019.100855>

- Crowe, S., Cresswell, K., Robertson, A., Huby, G., Avery, A., & Sheikh, A. (2011). The case study approach. *BMC Medical Research Methodology*, *11*(1), 100. <https://doi.org/10.1186/1471-2288-11-100>
- Dean, D. H. (2002). Associating the cooperation with a charitable event through sponsorship: Measuring the effects on corporate community relations. *Journal of Advertising*, *31*(4), 77–87.
- Dlacic, J., & Kezman, E. (2014). Exploring Relationship Between Brand Equity and Customer Loyalty on Pharmaceutical Market. *Economic and Business Review for Central and South - Eastern Europe*, *16*(2), 121-131,217.
- Dong, W., Swain, S. D., & Berger, P. D. (2007). The role of channel quality in customer equity management. *Journal of Business Research*, *60*(12), 1243–1252. <https://doi.org/10.1016/j.jbusres.2007.05.005>
- Doz, Y. (2011). Qualitative research for international business. *Journal of International Business Studies*, *42*(5), 582–590.
- Duriau, V. J., Reger, R. K., & Pfarrer, M. D. (2007). A Content Analysis of the Content Analysis Literature in Organization Studies: Research Themes, Data Sources, and Methodological Refinements. *Organizational Research Methods*, *10*(1), 5–34. <https://doi.org/10.1177/1094428106289252>
- Easton, G. (2010). Critical realism in case study research. *Industrial Marketing Management*, *39*(1), 118–128. <https://doi.org/10.1016/j.indmarman.2008.06.004>
- Elo, S., & Kyngäs, H. (2008). The qualitative content analysis process. *Journal of Advanced Nursing*, *62*(1), 107–115. <https://doi.org/10.1111/j.1365-2648.2007.04569.x>
- Erlingsson, C., & Brysiewicz, P. (2017). A hands-on guide to doing content analysis. *African Journal of Emergency Medicine*, *7*(3), 93–99. <https://doi.org/10.1016/j.afjem.2017.08.001>

- Esmailpour, M., & Aram, F. (2016). Investigating the impact of viral message appeal and message credibility on consumer attitude toward the brand. *Management & Marketing*, *11*(2), 470–483. <http://dx.doi.org.ezproxy.utu.fi/10.1515/mmcks-2016-0010>
- Eun Lee, J., & Stoel, L. (2014). High versus low online price discounts: Effects on customers' perception of risks. *The Journal of Product and Brand Management*, *23*(6), 401–412. <http://dx.doi.org.ezproxy.utu.fi/10.1108/JPBM-06-2014-0633>
- Fossey, E., Harvey, C., Mcdermott, F., & Davidson, L. (2002). Understanding and Evaluating Qualitative Research. *Australian & New Zealand Journal of Psychiatry*, *36*(6), 717–732. <https://doi.org/10.1046/j.1440-1614.2002.01100.x>
- Gorlier, T., & Michel, G. (2020). How special rewards in loyalty programs enrich consumer–brand relationships: The role of self-expansion. *Psychology & Marketing*, *37*(4), 588–603. <https://doi.org/10.1002/mar.21328>
- Górska-Warsewicz, H., nueva, E. a sitio externo E. enlace se abrirá en una ventana, Dębski, M., Fabuš, M., nueva, E. a sitio externo E. enlace se abrirá en una ventana, & Kováč, M. (2021). Green Brand Equity—Empirical Experience from a Systematic Literature Review. *Sustainability*, *13*(20). <http://dx.doi.org.ezproxy.utu.fi/10.3390/su132011130>
- Graneheim, U. H., Lindgren, B.-M., & Lundman, B. (2017a). Methodological challenges in qualitative content analysis: A discussion paper. *Nurse Education Today*, *56*, 29–34. <https://doi.org/10.1016/j.nedt.2017.06.002>
- Graneheim, U. H., Lindgren, B.-M., & Lundman, B. (2017b). Methodological challenges in qualitative content analysis: A discussion paper. *Nurse Education Today*, *56*, 29–34. <https://doi.org/10.1016/j.nedt.2017.06.002>
- Hansotia, B. (2004). Customer metrics and organisational alignment for maximising customer equity. *Journal of Database Marketing & Customer Strategy Management*, *12*(1), 9–20. <https://doi.org/10.1057/palgrave.dbm.3240239>

- Hao, F., & Chon, K. K.-S. (2021). Contactless service in hospitality: Bridging customer equity, experience, delight, satisfaction, and trust. *International Journal of Contemporary Hospitality Management*, 34(1), 113–134. <https://doi.org/10.1108/IJCHM-05-2021-0559>
- He, H., & Li, Y. (2010). Key service drivers for high-tech service brand equity: The mediating role of overall service quality and perceived value. *Journal of Marketing Management*, 27(1–2), 77–99. <https://doi.org/10.1080/0267257X.2010.495276>
- Hinterhuber, A., & Hinterhuber, G. (2012). An empirical analysis of the role of industrial brands for industrial distributors. *Journal of Strategy and Management*, 5(3), 252–265. <https://doi.org/10.1108/17554251211247562>
- Ho, M. H.-W., & Chung, H. F. L. (2020). Customer engagement, customer equity and repurchase intention in mobile apps. *Journal of Business Research*, 121, 13–21. <https://doi.org/10.1016/j.jbusres.2020.07.046>
- Hogan, J. E., Lemon, K. N., & Rust, R. T. (2002). Customer Equity Management: Charting New Directions for the Future of Marketing. *Journal of Service Research*, 5(1), 4–12. <https://doi.org/10.1177/1094670502005001002>
- Holehonnur, A., Raymond, M. A., Hopkins, C. D., & Fine, A. C. (2009). Examining the customer equity framework from a consumer perspective. *Journal of Brand Management*, 17(3), 165–180. <https://doi.org/10.1057/bm.2009.21>
- Hsieh, H.-F., & Shannon, S. E. (2005). Three Approaches to Qualitative Content Analysis. *Qualitative Health Research*, 15(9), 1277–1288. <https://doi.org/10.1177/1049732305276687>
- Ibrahim, M. (2016). Evaluating hotel websites as a marketing communication channel: A dialogic perspective. *Information Development*, 32(3), 718–727. <https://doi.org/10.1177/0266666915570506>

- ILYAS, G. B., RAHMI, S., TAMSAH, H., MUNIR, A. R., & PUTRA, A. H. P. K. (2020). Reflective Model of Brand Awareness on Repurchase Intention and Customer Satisfaction. *The Journal of Asian Finance, Economics and Business*, 7(9), 427–438. <https://doi.org/10.13106/JAFEB.2020.VOL7.NO9.427>
- Iyer, K. V., nueva, E. a sitio externo E. enlace se abrirá en una ventana, & Siddhartha, A. (2021). Brand placement in Web Series: Assessing consumer attitudes in India. *Innovative Marketing*, 17(2), 33–44. [http://dx.doi.org.ezproxy.utu.fi/10.21511/im.17\(2\).2021.04](http://dx.doi.org.ezproxy.utu.fi/10.21511/im.17(2).2021.04)
- Kaiser, K. (2009). Protecting Respondent Confidentiality in Qualitative Research. *Qualitative Health Research*, 19(11), 1632–1641. <https://doi.org/10.1177/1049732309350879>
- Kang, J., Alejandro, T. B., & Groza, M. D. (2015). Customer–company identification and the effectiveness of loyalty programs. *Journal of Business Research*, 68(2), 464–471. <https://doi.org/10.1016/j.jbusres.2014.06.002>
- Kaura, V., Durga, P. Ch. S., & Sharma, S. (2015). Service quality, service convenience, price and fairness, customer loyalty, and the mediating role of customer satisfaction. *International Journal of Bank Marketing*, 33(4), 404–422. <https://doi.org/10.1108/IJBM-04-2014-0048>
- Kim, H. (2012). How CRM strategy impacts organizational performance: Perspective of customer equity drivers. *Journal of Database Marketing & Customer Strategy Management*, 19(4), 233–244. <http://dx.doi.org/10.1057/dbm.2012.21>
- Kivijärvi, H., & Virta, A. (2021). Evaluating Service Quality and Service Value in Manufacturer-Distributor Settings: A Systems Approach. *Journal of Business-to-Business Marketing*, 28(1), 21–46. <https://doi.org/10.1080/1051712X.2021.1893032>
- Lee, C. H., Ko, E., Tikkanen, H., Phan, M. C. T., Aiello, G., Donvito, R., & Raithel, S. (2014). Marketing mix and customer equity of SPA brands: Cross-cultural perspectives. *Journal*

- of Business Research*, 67(10), 2155–2163.
<https://doi.org/10.1016/j.jbusres.2014.04.025>
- Lee, S., Ha, S., & Widdows, R. (2011). Consumer responses to high-technology products: Product attributes, cognition, and emotions. *Journal of Business Research*, 64(11), 1195–1200. <https://doi.org/10.1016/j.jbusres.2011.06.022>
- Leone, R. P., Rao, V. R., Keller, K. L., Luo, A. M., McAlister, L., & Srivastava, R. (2006). Linking Brand Equity to Customer Equity. *Journal of Service Research*, 9(2), 125–138.
<https://doi.org/10.1177/1094670506293563>
- Lincoln, Y. S., & Guba, E. G. (1985). *Naturalistic Inquiry*. SAGE Publications.
- Martinsuo, M., & Huemann, M. (2021). Designing case study research. *International Journal of Project Management*, 39(5), 417–421.
<https://doi.org/10.1016/j.ijproman.2021.06.007>
- Munnukka, J., & Järvi, P. (2012). The price-category effect and the formation of customer value of high-tech products. *Journal of Consumer Marketing*, 29(4), 293–301.
<https://doi.org/10.1108/07363761211237362>
- Nguyen, T. D., & Nguyen, T. T. M. (2011). Enhancing relationship value between manufacturers and distributors through personal interaction. *The Journal of Management Development*, 30(4), 316–328.
<http://dx.doi.org/10.1108/02621711111126800>
- Noble, H., & Smith, J. (2015). Issues of validity and reliability in qualitative research. *Evidence - Based Nursing*, 18(2). <http://dx.doi.org.ezproxy.utu.fi/10.1136/eb-2015-102054>
- Omoruyi, O., & Chinomona, E. (2019). Evaluating the effects of brand advertising, brand element and brand awareness on purchasing intention. *Journal of Contemporary Management*, 16(1), 422–449. <https://doi.org/10.35683/jcm19012.0021>

- Ramaseshan, B., Rabbanee, F. K., & Tan Hsin Hui, L. (2013). Effects of customer equity drivers on customer loyalty in B2B context. *Journal of Business & Industrial Marketing*, 28(4), 335–346. <https://doi.org/10.1108/08858621311313929>
- Richards, K. A., & Jones, E. (2008). Customer relationship management: Finding value drivers. *Industrial Marketing Management*, 37(2), 120–130. <https://doi.org/10.1016/j.indmarman.2006.08.005>
- Romero, J., & Yagüe, M. J. (2015). Relating brand equity and customer equity. *International Journal of Market Research*, 57(4), 631–651. <https://doi.org/10.2501/IJMR-2015-050>
- Roy, S. K., Lassar, W. M., & Shekhar, V. (2016). Convenience and satisfaction: Mediation of fairness and quality. *The Service Industries Journal*, 36(5–6), 239–260. <https://doi.org/10.1080/02642069.2016.1186657>
- Roy, S. K., nueva, E. a sitio externo E. enlace se abrirá en una ventana, Shekhar, V., Quazi, A., & Quaddus, M. (2020). Consumer engagement behaviors: Do service convenience and organizational characteristics matter? *Journal of Service Theory and Practice*, 30(2), 195–232. <http://dx.doi.org.ezproxy.utu.fi/10.1108/JSTP-03-2018-0049>
- Rusetski, A., Andrews, J., & Smith, D. C. (2014). Unjustified prices: Environmental drivers of managers' propensity to overprice. *Journal of the Academy of Marketing Science*, 42(4), 452–469. <http://dx.doi.org.ezproxy.utu.fi/10.1007/s11747-013-0356-3>
- Rust, R. T., Lemon, K. N., & Narayandas, D. (2005). *Customer Equity Management*. Pearson/Prentice Hall.
- Shadiardehaei, E., Hesari, A. E., & Shahrabi, B. (2021). Relationship Between Social Media Marketing Practices and Customer Response with Mediating Role of Brand Equity Dimensions: An Empirical Investigation. *Independent Journal of Management & Production*, 12(5), 1583–1599. <http://dx.doi.org/10.14807/ijmp.v12i5.1425>

- Su, X., & Zhang, F. (2009). On the Value of Commitment and Availability Guarantees When Selling to Strategic Consumers. *Management Science*, 55(5), 713–726.
- Tan, W. C. K. (2017). *Research Methods: A Practical Guide For Students And Researchers*. World Scientific Publishing Company.
<http://ebookcentral.proquest.com/lib/kutu/detail.action?docID=5227241>
- Tellis, G. J., Yin, E., & Niraj, R. (2009). Does Quality Win? Network Effects versus Quality in High-Tech Markets. *Journal of Marketing Research*, 46(2), 135–149.
<https://doi.org/10.1509/jmkr.46.2.135>
- Tokman, M., & Beitelbacher, L. S. (2011). Supply chain networks and service-dominant logic: Suggestions for future research. *International Journal of Physical Distribution & Logistics Management*, 41(7), 717–726. <https://doi.org/10.1108/09600031111154152>
- Tong, L.-I., Wang, C.-H., Chen, C.-C., & Chen, C.-T. (2004). Dynamic multiple responses by ideal solution analysis. *European Journal of Operational Research*, 156(2), 433–444.
[https://doi.org/10.1016/S0377-2217\(03\)00017-1](https://doi.org/10.1016/S0377-2217(03)00017-1)
- Ukropcov, D., & Sturdik, E. (2011). Biotechnology commercialization: A case study from Central and Eastern Europe. *Journal of Commercial Biotechnology*, 17(1), 73–83.
<https://doi.org/10.1057/jcb.2010.23>
- Vogel, V., Evanschitzky, H., & Ramaseshan, B. (2008). Customer Equity Drivers and Future Sales. *Journal of Marketing*, 72(6), 98–108. <https://doi.org/10.1509/jmkg.72.6.098>
- Vorreuter, K. (1997). Who owns the customer? *Industrial Distribution*, 86(10), 122.
- Wang, H., Kim, K. H., Ko, E., & Liu, H. (2016). Relationship between service quality and customer equity in traditional markets. *Journal of Business Research*, 69(9), 3827–3834. <https://doi.org/10.1016/j.jbusres.2016.04.007>
- Weil, M. O. (1996). Community building: Building community practice. *Social Work*, 41(5), 481.

- Wu, K.-W., Huang, S. Y., Yen, D. C., & Popova, I. (2012). The effect of online privacy policy on consumer privacy concern and trust. *Computers in Human Behavior*, 28(3), 889–897. <https://doi.org/10.1016/j.chb.2011.12.008>
- Zeithaml, V. A., Lemon, K. N., & Rust, R. T. (2001). *Driving Customer Equity: How Customer Lifetime Value Is Reshaping Corporate Strategy*. Simon and Schuster.
- Zhang, R., Li, G., Wang, Z., & Wang, H. (2016). Relationship value based on customer equity influences on online group-buying customer loyalty. *Journal of Business Research*, 69(9), 3820–3826. <https://doi.org/10.1016/j.jbusres.2015.12.074>

Appendices

Appendix 1. Interview questions for Company X's employees about distributors

1. Can you introduce yourself and what is your role in Company X?
2. How often do you interact with the distributors? What are the main reasons?
3. From your interaction with the distributors. Can you describe which product features do you think they consider valuable?
4. From your interaction with the distributors. Which of the following factors are relevant for them when they are thinking of purchasing a Microplate Reader? Please organize it from most to least important and justify your answer.
 - Technology, quality, price, service
 - Identification with company X
 - Connection with company X
5. From your interaction with the distributors. How well Product Q is able to meet the distributors expectations in terms of quality, price and convenience? Why?
6. Have you been involved in some brand-building activities that focus on distributors?
7. Can you describe your experience and results from these brand-building activities?
8. From your interaction with the distributors. How do you think Company X can improve distributor's overall experience?
9. Do you think the distributors will feel more connected to Company X if they are part of some relationship programs? (e.g., rewarding or community-building programs) why?
10. From you interaction with the distributors. Can you describe which relationship program do you think they might consider valuable?
 - Loyalty program
 - Affinity program
 - Community-building program

-Knowledge-building program

11. From the following factors, can you identify only four factors that you believe have a positive impact for the distributors when they are looking for a Microplate Reader? Please explain your answer.

Quality / Price / Convenience / Familiarity with other Company X products / Identification with the brand / Brand ethics / Loyalty rewards / Connection with other customers / Closer connection with Company X / Special services provided by Company X and an external partner

12. What makes you happy about working in Company X?

Appendix 2. Interview questions for Company's employees about end-users

13. How often do you interact with the end-users? What are the main reasons?

14. From your interaction with the end-users. Can you describe which product features do you think they consider the valuable?

15. From your interaction with the end-users. Which of the following factors are relevant them when they are thinking of purchasing a Microplate Reader? Please organize it from most to least important and justify your answer.

- Technology, quality, price, service

- Identification with company X

- Connection with company X

16. From your interaction with the end-users. Do you think Company X is able to meet the end-user expectations in terms of quality, price and convenience? Why?

17. Have you been involved in some brand-building activities that focus on end-users? Can you describe your experience?

18. Can you describe the results from these brand-building activities?

19. From your interaction with the end-users. How do you think Company X can improve the end-users overall experience?

20. Do you think the end-users will feel more connected to Company X if they are part of some relationship programs? (Like rewarding or community-building programs)? Why? / Why not?

21. From you interaction with the distributors. Can you describe which relationship program do you think they will consider valuable?

- Loyalty program

- Affinity program

- Community-building program

- Knowledge-building program

22. From the following factors, can you identify only four factors that you believe have a positive impact for the distributors when they are looking for a Microplate Reader? Please explain your answer.

Quality / Price / Convenience / Familiarity with other Company X products / Identification with the brand / Brand ethics / Loyalty rewards / Connection with other customers / Closer connection with Company X / Special services provided by Company X and an external partner

23. If you could change one thing about company X, what would it be and why?

Appendix 3. Interview Guideline for distributors

24. Can you introduce yourself? For how long have you been Company X's distributor?

25. How is Company X able to meet your expectations in terms of quality, price and convenience?

26. Are you familiar with the different Microplate Readers suppliers in the market? How?

27. How did you discover Company X?

28. When you think of selecting a Microplate Reader supplier, what comes to your mind?

29. How much does the company's ethics matter to you in deciding a Microplate Reader supplier?

30. How do you think Company X can improve your overall experience?

31. In your opinion, what could be the value in the some of these programs? (Loyalty, affinity, community-building or knowledge-building programs)

32. From the following factors, can you identify only four factors that you believe have a positive impact for you, as a distributor, when you are looking for a Microplate Reader supplier? Please explain your answer.

Quality / Price / Convenience / Familiarity with other Company X products / Identification with the brand / Brand ethics / Loyalty rewards / Connection with other customers / Closer connection with Company X / Special services provided by Company X and an external partner

Appendix 4. Interview Guideline for end-users

33. Can you introduce yourself? For how long have you been using Product Q?
34. How is Company X able to meet your expectations in terms of quality, price and convenience?
35. Are you familiar with the different Microplate Readers suppliers in the market? How?
36. How did you discover Company X?
37. When you think of a Microplate Reader supplier, what comes to your mind?
38. How much does the company's ethics matter to you when you are purchasing a Microplate Reader?
39. How Company X can improve your overall experience?
40. In your opinion, what could be the value in the some of these programs? (Loyalty, affinity, community-building or knowledge-building programs)
41. From the following factors, can you identify only four factors that you believe have a positive impact for you when you are looking for a Microplate Reader? Please explain your answer.

Quality / Price / Convenience / Familiarity with other Company X products / Identification with the brand / Brand ethics / Loyalty rewards / Connection with other customers / Closer connection with Company X / Special services provided by Company X and an external partner