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Customer portfolio management (CPM) for improved customer relationship management (CRM): Are your customers platinum, gold, silver, or bronze?

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ABSTRACT

This article uses the customer portfolio management (CPM) approach to examine how a company can define the value of customers and segment these customers into portfolios. By segmenting customers into portfolios, an organization can better understand the relative importance of each customer to the company's total profit. Such an understanding will help companies retain valuable customers create additional value with these customers through relationship development.

The purpose of this article is to contribute to the body of customer relationship management (CRM) literature by introducing a conceptual framework of the customer portfolio management (CPM) matrix, which focuses on two issues: (1) cost to serve and (2) value of the customer to the company. From this framework, a firm can segment its customer base into four portfolios, platinum, gold, silver, and bronze, and deliver services accordingly.

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1. Introduction

“Creating the right mix of investments for effective use of limited resources while providing the maximum business benefit is the ultimate challenge for business organizations” (Gabas-Varini, 2003).

To attain a sustainable competitive advantage, companies require insight about their customers. By understanding customer needs and value, enterprises can increase the value of each customer relationship. Understanding the value of each customer relationship enables companies to segment customers into “portfolios of relationships” that would increase a company's return on relationships (Johnson & Selnes, 2004; Kumar, 2010).

By segmenting customers into portfolios, an organization can better understand the relative importance each customer represents relative to total sales and profits. Such an understanding will assist companies not only in retaining valuable customers but also in creating additional value with these customers through relationship development. Consequently, the organization can methodically allocate resources and apply marketing strategies toward the retention and development of its most

valued customers, better known as *customer portfolio management* (CPM). CPM analysis reveals the small number of strategically important customers that contribute to the current and future value of the company and should receive the company's resources (Terho, 2008).

CPM assists companies in determining their priorities when selecting and developing their customer base (Brennan, Canning, & McDowell, 2010). This novel strategic technique adds value to the overall customer relationship management (CRM) process and emphasizes the firm's knowledge of each customer, their strategic planning, and the most appropriate execution of resource deployment according to the strategic plan. In addition, CPM assists in the segmentation of the customers into portfolios and positions the company's customer base as a portfolio of exchange relationships that create value over a period of time.

Based on each customer's position within the portfolio, CPM facilitates CRM decision making by suggesting portfolios of customers to develop, retain, and nurture and of customers to eliminate from the database. The firm can thus better build and nurture its closest, most important business relationships among its most valued customers with greater confidence (Friend & Johnson, 2014).

Creating a strong relationship between the company and customers is critical for the success of an organization. Studies suggest a company should adjust its relationship management activities according to the value of the customer (Friend & Johnson, 2014; Johnson & Selnes, 2005). Thus, an understanding of customer value will enable the relative management of customer relationships and help companies understand

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the important interdependencies between relationships (Olsen & Ellram, 1997).

As the competitive landscape becomes more extensive and the resources of companies become more constrained, it is not rational to address all relationships in the same manner. As a result, companies now focus more on the development and management of customer relationships. Companies also understand some customers are not beneficial as they are difficult and demanding. Therefore, it is preferable to differentiate the allocation of resources according to the value of the relationship (Terho, 2008). Instead of managing only an individual relationship, a company should manage its portfolio of relationships over a period of time to ensure the company's long term effectiveness.

Although customer portfolio analysis is a valuable corporate tool (Zolkiewshi & Turnbell, 2002) and portfolio models have received a great deal of attention in strategic planning and financial investment (Markowitz, 1952), there has been scarce application of these models in marketing (Cui, 2013). When used effectively, the portfolio management model provides guidance for effective resource allocation. Based on existing models, Roseira, Brito, and Henneberg (2010) suggest the use of a portfolio management model in understanding the relationship between companies' suppliers. Wind, Mahajan, and Swire (1983) and Lei, Dawar, and Lemmink (2008) explore customer relationship management practices in terms of the portfolios of business units and brands. In addition, Day's (1977) study on portfolio models addresses product and product line portfolios. Robinson, Hichens, and Wade's (1978) study discusses the corporate and industry level portfolio, whereas Wind and Saaty's (1980) study addresses general portfolio models. Although there are diverse portfolio models, these models concentrate on broad problems of resource allocation. In accordance with various theoretical portfolio models in marketing, the question of customer portfolio management performance remains unresolved (Homburg, Steiner, & Totzek, 2009).

As mentioned above, there are several empirical and conceptual studies in the literature that address the concept and benefits of CPM (e.g., Roseira et al., 2010, Terho & Halinen, 2007). However, the knowledge of the relationship between the different portfolios of customers (e.g., platinum, gold, silver, and bronze) and the company's strategy has not been meticulously examined from a marketing perspective. This study addresses this literature gap.

Moreover, the majority of CPM models address value in a strict financial sense instead of defining customer value more broadly. Such a myopic pursuit of relationships with customers often fails. For example, Johnson and Selnes (2005) discuss a US based catalog retailer that "embarked on a campaign to build closer relationships with its loyal and most profitable customers realized that it was not bringing enough new customers into its portfolio to grow the business overtime" (p. 1). Furthermore, past studies (e.g., Pepper & Rogers, 2005) even suggest that firms should go beyond the traditional mindset of building closer relationships with only their most loyal customers. Instead, firms should utilize the information they learn about their current and potential customers in order to properly segment them into specific groups and to treat them based on their projected profitability over time to produce effective and efficient results for their businesses. This customer-driven approach allows companies to become more attentive to individual customers, which will ultimately increase the companies' profits. A crucial component of a customer-driven marketing approach is the assessment of profitability based on the customer's input as such an assessment would generate more profitable marketing strategies. For instance, firms like FedEx, Wachovia Corporation, Hallmark, and GE capital embody the customer-driven approach through the use of multiple service levels that rank their customers according to the customers' contributions to the profitability of their companies.

In this instance, it is highly important to emphasize the benefit of understanding the relationship between the value of a customer to a firm and the segmenting of customers into groups to create opportunities for more operative marketing strategies. Therefore, the present

study answers the following research questions: (1) Can companies segment their customers according to their value to the firm? (2) Would companies treat customer segments differently if they could quantify their current and potential value? In addition, this paper also describes how companies can effectively cultivate customer relationships and develop customer portfolios that increase revenues and profit through targeted marketing activities directed toward developing, maintaining, and enhancing successful company customer relationships.

This article attempts to enhance the understanding of a more efficient customer relationship management via the CPM matrix (refer to Fig. 1) in terms of the value the firm derives from customers (e.g., relative value of each customer to the company) and delivers to customers (e.g., relative cost to serve each customer). These strategic and operationally important factors are addressed by segmenting customers into platinum, gold, silver, and bronze categories. For this study, platinum and gold customers are defined as high value customers. Platinum customers are very loyal, highly profitable, and less demanding, whereas gold customers are loyal and profitable but more demanding than platinum customers because they require higher costs. On the other hand, silver and bronze customers are defined as low value customers. Bronze customers are least profitable and highly demanding in nature. By differentiating each customer within the portfolio matrix and allocating company resources accordingly, the operational strategy that the company should adopt for each category is suggested.

The paper is organized as follows. We first provide a brief conceptual background for the development of the CPM concept. We then develop the portfolio parameters based on the relevant literature and link the relationships between cost, value, and overall strategy to the portfolio. We conclude with the discussion, implications, direction for future research, and conclusion.

2. Background for the development of customer portfolio management concept.

The first research on portfolio management is credited to Markowitz (1952). His portfolio theory focuses on the management of equity investments in the area of finance. Later in the 1970s, portfolio models are widely introduced in the area of corporate strategy (Wind & Mahajan, 1981). Early research in marketing strategy (e.g., Day, 1977)

Value to the Company	High	Superior Service (Platinum Customer)	Best Service (Gold Customer)
	Low	Good Service (Silver Customer)	Better Service (Bronze Customer)
		Low	High
Cost to serve: Relative service level for optimal resource deployment			

Fig. 1. Customer Portfolio Management (CPM) matrix.

focuses on the importance of developing a product portfolio to optimize resource allocation toward maximizing profits and minimizing costs. With the strength of the US economy being based on the production of goods at the time, the portfolio approach to product management becomes an important contribution and strategically made sense for US firms. As the US economy has developed over the past several decades through turbulent environments of technological change and rapid turnover, market restructuring, and global scope (Wagner & Johnson, 2004) and as it has eventually shifted in focus from a production to a service economic base (Gronroos, 2011; Vargo & Lusch, 2004), the adaptation of the portfolio method has taken on significantly different dimensions.

With technology becoming an increasingly important corporate asset in the late 1980s, the concept of portfolio management expands from a focus exclusively on products to a focus on technology (Capon & Glazer, 1987). Just as resource allocation should be central to managing a product portfolio, it also should be central to managing a firm's technology portfolio. Therefore, the technology portfolio extends the product portfolio by providing a tool for evaluating the particular mix of technologies in its asset base and by analyzing how well they complement each other. In developing the portfolio parameters, relative technology position and relative market position are posited as requisite considerations for both pre-market and post-market phases of technology exploitation.

In the past decade, portfolio management application approaches have been developed and applied to diverse firm assets including information technology projects (De Reyck et al., 2005), new product portfolio management (NPPM) (Grewel, Chakravarty, Ding, & Liechty, 2008; McNally, Durmusoglu, Calatone, & Harmancioglu, 2009), strategic alliance portfolios (Heimeriks, 2010; Hoffmann, 2005), and strategic supplier portfolios (Wagner & Johnson, 2004). More recently, in the interest of building a more efficient and effective customer relationship management (CRM), the portfolio approach has been adapted by some researchers to focus on the firm's most important asset its customers (Hansen, Beitelspacher, & Deitz, 2013; Homburg et al., 2009; Krasnikov, Jayachandran, & Kumar, 2009). The findings of all of these studies can be related to a service context where firms appear to profit more from closer relationships.

Successful firms use a portfolio approach to manage customer relationships and to establish closer relationships with their customers. As businesses shift their focus to customers, managers are discovering a portfolio approach can help companies understand and anticipate the needs of current and potential customers, thereby attracting customers based on their value.

CPM approach can also be used to segment customers. The segmentation of customers enables companies to provide a multidimensional view of the customer. It also helps companies effectively leverage this information to create customer value (Wayland & Cole, 1994), increase profit, reduce operational cost, and enhance customer service. This approach also helps companies track costs to serve and revenue from different groups of customers, thereby enabling companies to determine the optimal allocation of scarce resources to maximize profit. For example, Bank One Corporation used this approach of segmentation to improve the effectiveness of all of its operations.

Thus, the portfolio approach of managing customer relationships not only will assist companies in segmenting customers but also will help companies provide better customer service as well as help engender the trust and loyalty needed to develop long-term relationships. By doing so, the company can protect and sustain existing economic values of key relationships. Appendix 1 summarizes the emergence of the portfolio literature from product, technology, and service.

3. Development of portfolio parameters

Grounded on two parameters, (a) the optimal level of service that should be given to a customer based on relative costs to serve and

(b) customers' relative value to the company, a customer portfolio management (CPM) matrix is proposed. Fig. 1 provides a CPM matrix directed toward improved CRM for the firm's most important assets, customers. The overall goal of the CPM is to assist the firm in achieving increased profits and decreased costs relative to total resource deployment required in servicing the firm's customer base. A four-cell matrix builds upon the original (e.g., Boston Consulting Group) four-cell growth/share product portfolio matrix (the entries are now customers rather than products). Customers are divided into four segments: platinum, gold, silver, and bronze. Similar to business models employed by corporations within the credit card industry (e.g., Citibank, Capital One, MBNA, etc.), the segmentation of a customer is based on their degree of value to the firm and corresponding costs to the firm in providing service to each customer within the matrix. For example, platinum customers (the upper left cell of the CPM) should receive the highest level of service (i.e. Superior), whereas customers rated as bronze, representing the lowest value to the firm and positioned in the lower right cell of the CPM, should receive the lowest level of service relative to the firm's total resource allocation in CRM.

Thus, one can say the CPM matrix focuses on two issues: customer treatment based on how much it costs to serve customers and the value of the customers to the company.

3.1. Linking cost and value to the portfolio: approaches

The CPM matrix helps an organization in the classification/segmentation of customer's according to the value they generate for the firm. The notion of CPM suggests that (a) the customer should be treated as an asset and (b) companies should consider the value they strive to create for the customers and balance the value the customers create for the company. This matrix focuses on *allocating resources to those customers who are deemed to offer more value* to the company. More specifically, allocating resources refers to the service level that should be provided to customers. Important and high potential customers who are less costly to serve and more valuable to the company should be given a higher level of service than low-value customers. According to this matrix, customers are segmented into four categories based on their lifetime value, and more marketing resources are targeted toward customers of greater value.

For example, there are some customers (e.g., bronze customers) who are relatively low in value to the company because they demand a proportionately high level of service relative to their profit contribution. Therefore, one can conclude that some customers (e.g., bronze customers) are not valuable, difficult to satisfy, too demanding, and/or will not pay a "fair" economic price (Rajagopal & Sanchez, 2005). Hence, a vital question the firm should ask is, Should the firm invest its resources in managing its bronze customers? Previous studies show many similar relationships are not profitable as they cost more to maintain than the revenue they generate. Therefore, a firm should continuously evaluate its customer portfolio and maintain or consider terminating relationships accordingly (Lovell, 1996).

Additionally, there are some customers (e.g., silver customers) whose value to the company may not be substantial enough for special treatment but do not demand a high level of service or attention from the firm. Because a large group of the company's customers belong to this category, a company should try to move this customer group to gold or platinum because they are high potential customers and may become valuable in the future. To do so, the company should try to identify the important factors that drive silver customers' satisfaction and behavior. On the other hand, gold customers are more demanding but valuable to the company, although not as valuable as platinum customers. These customers are profitable and loyal customers but less profitable and loyal than platinum customers. Platinum customers are highly valuable to the company and cost less to serve. Gaining an understanding of this portfolio approach of managing customers

would direct the firm's CRM activities toward value creating customers, as shown in the CPM matrix (Fig. 1).

3.2. Linking strategy to the portfolio: approaches

From a CRM perspective, segmenting the customers into a portfolio helps managers develop improved operational strategies to minimize the risk of placing more emphasis on customers who are less beneficial (Ryals, 2002). This approach of segmenting customers into a portfolio is widely used in the capital asset pricing model (CAPM), which analyzes risks and returns on common stocks (Brealey, 1983). However, the model is extensively critiqued for its shortcomings, particularly on how the model can be applied properly and on defining the power of this model by explaining actual portfolio performance (Ryals, 2002). Despite its shortcomings, the CAPM is considered as a widely used model because of its simplicity and comprehensiveness.

Keeping the CAPM as the basis for the model, we develop the CPM model with cost and value as the two axes and within these axes fall the four quadrants. These four cells represent the four types of customers (platinum, gold, silver, and bronze). Keeping the four levels of customers in mind, the company should use different strategies to retain, develop, and eliminate customers. Proper application of retention, development, and elimination strategies will enable the firm's effective usage of CPM and increase the marketing efficiency, thus enhancing the market value for both of the parties involved (Plakoyiannaki & Tzokas, 2002). For this study the above three types of strategies are defined below.

A retention strategy is a process through which a business ensures customers re-enter the sales funnel and become repeat customers. The main aim of this strategy is to maintain a customer base and to prevent customers from seeking a product or service elsewhere.

A development strategy is the process of growing, progressing, developing, or encouraging customers to advance, and ultimately to become platinum customers. Wayland and Cole (1994) suggest the most attractive development candidates are (1) customers who display a relatively high degree of preference for certain products and are likely to be profitable to serve and (2) customers with the greatest potential to increase their level of purchases or to shift their buying to higher margin products. On the other hand, when relating to the bottom customers who cost more than they are worth, a filtering or elimination strategy is applied. The main objective of this strategy is to identify the bottom quartile of the company's customers and not to waste marketing dollars on them as they cost more than their value. Development resources would be more effectively redeployed from poor prospects and highly developed customers to these higher potential customers (Wayland & Cole, 1994).

Fig. 2 provides the suggested corresponding strategy linked to each of the four CPM cells. The vertical axis is the customer value (low or high) for firms positioned within each cell of the matrix. The horizontal axis, Strategy, corresponds to the level of strategy (low or high) for resource allocation the firm should apply to customers within the portfolio matrix. For example, platinum represents the customers valued most for the firm's long-term profits and sustainability. A retention strategy is suggested for platinum customers because their contribution toward total firm business is the most valuable as they are loyal customers of the firm. Based on their relatively low levels of total firm sales and profit contributions, bronze customers represent the customers the firm values least. The corresponding strategic direction and resource allocation directed toward bronze customers should therefore include a filtering strategy or eventual elimination because these customers cost more than their value to the company.

Firms have a limited amount of resources so all relationships should not be addressed the same (Johnson & Selnes, 2004). Therefore, it is preferable to apply a different strategy to different portfolios of customers based on the value of the relationship. For example, if an existing bronze customer remains unprofitable over several time intervals, simultaneously costing the firm more to serve, then the company should apply a filtering strategy and eventually an elimination strategy. If the company envisions a silver customer will become more valuable over time as the environment shifts, the provision of an increased service level to the silver customer could lead to eventually converting to a gold customer or platinum customer. Similarly, a firm should apply a developmental strategy to gold customers and attempt to advance them to platinum customers.

3.3. Linking the external environment to the strategic CPM process

Figs. 1 and 2 pertain to internal operational decisions such as rating individual customer quality within the portfolio (Fig. 1) and correspondingly deploying company resources and strategy according to customer quality designation (Fig. 2), whereas Fig. 3 relates the external market conditions to the strategic CPM process.

To remain in business, a healthy and balanced portfolio of customers is crucial. Maintaining a healthy customer portfolio involves a thorough understanding of the firm's objectives and its intended customers. For a firm to be successful, a business must analyze its portfolio of customers and align its strategic decisions and services accordingly determining which portfolio of customers should receive more, less, or no attention

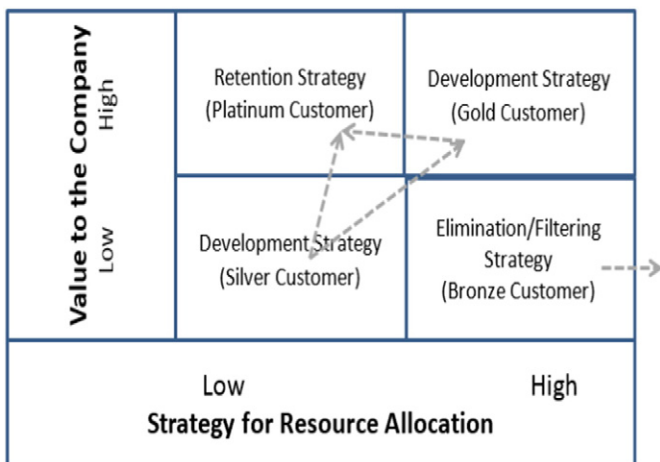


Fig. 2. Strategic resource Allocation based on Customer Value to the Company.

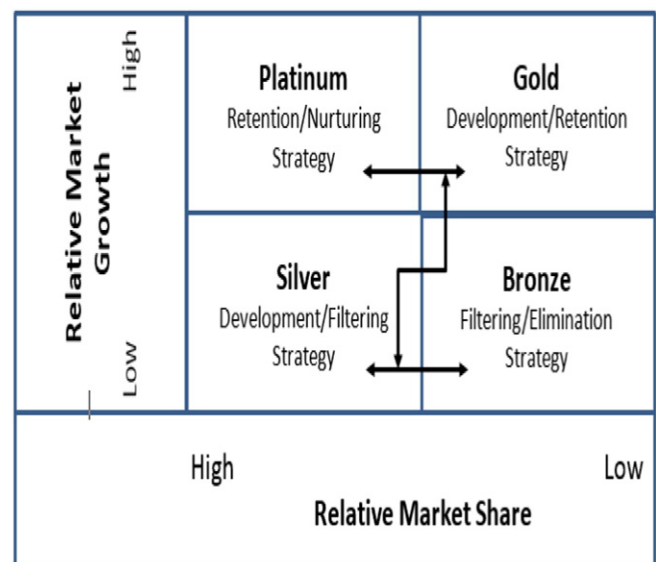


Fig. 3. CPM and the External Environment.

and resources from the company. For the CPM to be successful, Boston Growth and Share Matrix are applied in this study. This matrix will assist in evaluating the make-up of the quality of customer portfolios that compose the company and the attention they should receive; managers will want to place more emphasis on its more profitable customers and less emphasis on weaker customers.

One of the dimensions used to evaluate customer portfolio is *relative market share*. Firms with a higher quality of customers produce a higher profit because a firm with more high-quality customers (e.g., platinum and gold) benefits from their higher level of loyalty, resulting in a higher profit for the firm. Another dimension used in the BCG matrix is the *market growth rate*, defined in terms of investments/resources from the company required to maintain or grow the relationship with the portfolio of customers.

In this study, customers are divided into four portfolios based on the BCG market share and growth matrix. *Bronze customers* are least/not profitable to the company and not investment worthy because they generate a low or negative profit. Maintaining and growing long-lasting relationships with this portfolio of customers is challenging for firms because they are unstable customers who are willing to switch to competitors' products. *Silver customers* are a larger group of less profitable customers; establishing and maintaining a long-lasting relationship with this portfolio of customers requires more attention from the company. As most of the company's customers fall into this category, the company should attempt to move this customer group to gold or platinum because these customers may become valuable over time.

Platinum and gold customers are the most profitable customers of the company. Although both of these portfolios of customers are profitable and very loyal to the company, the profitability and loyalty level of platinum customers toward the company is the higher, stronger, and longer lasting of the two portfolios of customers. Maintaining and growing long lasting relationships with these portfolios of customers are expensive for the firm, but these customers are perceived as stable customers (not willing to switch to the competitors' products).

Fig. 3 represents the CPM applied to the strategic planning process, taking into account the environmental constraints of relative market growth and the relative market share each customer holds within the portfolio. Arrows are explicated to be dual-directional between the matrix cells depending on environmental market conditions, thus suggesting the manager's decision to move customers from one level of operational service to another. Fig. 3 therefore allows for strategic flexibility given turbulent environmental factors, such as change and rapid turnover in technological turnover, market restructuring, and changes in global scope (Wagner & Johnson, 2004). In this aspect, the CPM is a dynamic tool proven useful in real world scenarios over time.

Given the turbulent global financial markets of the past decade, many firms who previously planned to retain/nurture an investment strategy with customers in the real estate sector to manage their portfolios for growth realize that environmental factors are forcing them to shift their initial strategy. As interest rates drop and the real estate market becomes increasingly less profitable, investors are shifting their strategic focus to other business customers. By providing two-way directions in each portfolio cell, the CPM becomes a dynamic strategic tool viewed as helpful in multiple business scenarios.

Thus, the CPM is an inherently dynamic strategic tool resulting in many possible scenarios for strategic marketing decisions and views customers as the firm's most important asset with potential for substantial returns. In addition, the CPM is a coherent approach toward improving overall firm performance; it considers how the quality of customers within the CPM matches and affects ongoing strategic and operational decisions. The CPM also enables managers to evaluate a wide range of options for servicing existing customers as well as providing direction for which customers to eliminate and/or the type of customers to acquire for future corporate portfolio balance and growth. The CPM is suggested as an organizing strategic

tool that can assist the manager in evaluating and planning optimal allocation of resources for future customer.

Previous studies show that strategy and allocation of resources for different levels of customers are intimately connected (Persson & Ryals, 2014). Furthermore, strategy becomes evident when the company begins allocating its resources for different levels of customers.

In using a portfolio model, a company can allocate its scant resources prudently by identifying the group of customers that deserve greater attention than others (Olsen & Ellram, 1997). By identifying and/or segmenting the customers as such, the company would be able to apply different strategies in order to retain, develop, and filter the customers depending on how profitable the customers are to the company.

4. Discussion

Customer portfolio and relationship management have been of high interest to academics and practitioners (Rajagopal & Sanchez, 2005). There are several studies in marketing, management, and strategy literatures that have indicated having "strong" customer or supplier relationships is a necessary "good" (Morgan & Chadha, 1993).

Based on this study, a firm should adjust its relationship management activities according to the value of its customers. Because some customers are not beneficial, they become too demanding and less valuable to the company. This study proposes a customer portfolio management (CPM) matrix that can be used by managers to determine an optimal mix of customer segments within a customer portfolio. The CPM matrix proposed in this study entails two main activities: (a) value of the customer to the company and (b) cost to serve the customer. Such an understanding would enable the company to segment their portfolio of customers into different groups: (a) bronze customers, (b) silver customers, (c) gold customers, and (d) platinum customers. As a result, the company would be able to make sound investment decisions as it builds relationships with the group of customers who are profitable to the company.

This study provides a CPM matrix, being that organizations should have different portfolios of customers based on the value of the customers and should treat customers differently. For example, credit card companies such as Capital One and MBNA divide their customers into four levels (bronze, silver, gold, and platinum) based on how valuable and profitable the customer is to the organization, and they provide different types of services and/or treatments (better, good, best, and superior) and build relationships with these portfolios of customers accordingly.

Previous studies indicate that building and maintaining relationships is key for the ultimate success of an organization (Gronroos, 1997; Morgan & Hunt, 1994). However, other studies also suggest that a firm should adjust its relationship management activities according to the value of the customer from transactions to strategic partnerships (Friend & Johnson, 2014; Johnson & Selnes, 2004; Terho, 2008) so that companies can use their resources effectively and efficiently.

A study by Turnbull (1990) indicates that it is not wise for companies to treat and develop all customer relationships similarly. This study also suggests that it is preferable for companies to differentiate and treat customers based on the value of the customer to the company. The study further suggests, aside from differentiating and treating different portfolios of customers differently (Reinartz, Krafft, & Hoyer, 2004), companies should also apply different strategies (e.g., elimination, development, and retention) to different groups in order to ensure the company's long-term effectiveness.

Because a firm's portfolio contains a combination of platinum, gold, silver, and bronze customers that are constantly changing, relevant decisions are required as to when to invest in relationships based on their attractiveness over time. For example, if an existing bronze customer remains unprofitable over a specific time interval, then the company should apply an elimination strategy and remove them from their data base. If the company envisions the silver customer will

become more valuable over time as the environment shifts, then the company could apply a developmental strategy to eventually convert them to a gold or platinum customer. A firm also should apply a developmental strategy to their gold customers to move them from gold to platinum customers. Hence, the new portfolio management of the 21st century requires competencies tactics and strategies (Mello, Mackey, Lasser, & Tait, 2006).

The achievement of such CPM is challenging for companies that do not apply a customer-centric customer portfolio management approach. In the book *Value Innovation Portfolio Management: Achieving Double Digit through Customer Value*, Mello et al. (2006) indicate “portfolio management will build greater competitive advantage and generate larger economic value if it is tied to customer value” (p. 4). Therefore, companies that are successful in identifying their portfolio of customers will be successful in building a greater competitive advantage and eventually will generate a profit if they can integrate their strategies with the different levels of customers (as shown in Fig. 2).

5. Research implications

This study provides important theoretical and managerial contributions. These contributions provide valuable information and new insights for both scholars and managers and are discussed in detail below.

5.1. Theoretical implications

This study contributes to the growing body of literature on relationship marketing, but, more particularly, it sheds much needed light on customer relationship management literature by introducing a conceptual framework of CPM matrix in terms of the value a firm derives from customers and delivers to them. Using this framework, a firm can segment its customer base into four portfolios, platinum, gold, silver, and bronze and deliver services accordingly. From a theoretical perspective, this study also attempts to answer the following key questions for scholars and managers: (a) Which relationships should be developed? (b) Which relationships should be maintained? (c) Are there any relationships that should be severed or discarded?

Second, the present study contributes a better theoretical understanding of customers positioning within the portfolio matrix and the strategies that can be applied to these portfolios in order to enhance the market value of both parties (buyer and supplier) involved in this process. We also extend the literature by suggesting strategies for adjusting company resource allocation to match the different values of customers.

Third, this study extends the Boston Consulting Group four-cell growth/share product portfolio matrix. The BCG matrix was originally applied to products; however, in this case, the BCG concept is applied to customers.

5.2. Managerial implications

This study presents important implications for managers. First, as companies' points of focus have transitioned over time from an emphasis on market share to an emphasis on customer share (Johnson & Selnes, 2004), managers should focus more on identifying, developing, and nurturing valuable customers in order to grow their customer share, rather than growing market share. All firms desire profitable customers and valuable relationships as the bottom 20 % of customers can generate losses equal to more than 100% of the company's total profit, whereas the top 20 % of customer's account for more than 150% of a company's profit (Selden & Colvin, 2003).

Second, to survive and attain growth in this competitive age, companies should shift their focus from financial metrics (e.g., payback period, return on investment, net present value, etc.) to customer value (e.g., cost to serve, buying trends, strategic value, customer life time

value, etc.). Therefore, companies could consider placing more weight on the customer behavioral data when making their customer portfolio decisions. In doing so, companies can improve financial performance by identifying the groups of customers who are valuable to the company. Such an identification of customer value would enable companies to provide different treatments to different groups of customers with the potential to delight the group of customers who are more profitable to companies. From a managerial perspective a company's managers first should think about identifying their portfolio management then align their customer portfolio management with the firm's business strategy.

Third, practitioners should realize if they focus only on the turnover and potential of customers for relatively strong relationships (like platinum customers), this approach may not be enough to guarantee the selection of appropriate customers for business development or company performance. Hence, a firm should have the ability to convert customers to higher level relationships. For example, customers should move from silver customers to gold and platinum customers. Another key implication is that practitioners should be aware of how firms are equipped to deal with the high dynamic and volatility of the industry due to high competition and a changing external environment.

Last, because CPM is a company internal practice with a company external focus, the firm should have an informed understanding of its key customers as an addition or loss of such customers can have dramatic effects on the profitability of the company (Terho, 2008). Understanding the firms' key customers and its competitors would aid managers in responding to the changing environment and the restructuring of the organizational strategy accordingly. It would also enable managers to formulate and change the strategic approach toward the portfolio of customers that fits the objective of the organization.

6. Direction for future research

In this study, a CPM matrix was developed but not empirically tested. We did not empirically test the relationships between cost to serve the customer vs customer's value to the company and the strategy required for allocation of resources vs customer's value to the company. Hence, future research should be performed to empirically test the CPM matrix. Future studies also should be carried out to determine how CPM enables customer satisfaction by segmenting the portfolio of the company's customers in customer management.

In this era of intense competition, previous studies have indicated that great companies are highly clever in selecting their customers (Frei, 2008). For example, such businesses adapt their products and/or services to individual customers' requirements (Fournier & Avery, 2011). Therefore, future research should examine the factors that may enhance the value of the customer for the company and make it more profitable to serve the portfolio of customers. For instance, the personalization and individualization of products and/or services may create value in the customer's mind, which may help the company in converting customers to higher level relationships. Future research also should be performed to understand the different criteria (e.g., value to the company, level of service requested, profit, etc.) a company could use to identify their bronze customers (customers who represent a low to negative profit for the company) and apply an elimination strategy to this group before these customers waste more of the company's resources. Lastly, portfolio theory originated in the finance discipline has been widely applied in the banking industry to manage risks and rewards. However, its application in other disciplines has been limited thus far; therefore, a worthwhile avenue of research could explore if the CPM framework can be applied in other contexts or industries such as foodservice, retail, and other small companies, thus improving the generalizability of this study.

7. Conclusion

CPM is an important area in the CRM literature. It focuses on the portfolio of customer relationships from transactions to strategic partnership and their management based on the value of various customers to the company. Our intent in this paper has been to introduce a conceptual framework of the customer portfolio management (CPM) matrix that focuses on two issues: (1) the cost to serve and (2) the value of the

customer to the company. Keeping these two issues, a firm can segment its customer base into four types, platinum, gold, silver, and bronze, and provide services accordingly. The CPM matrix will help managers better understand how firms can manage the portfolio of customers and retain these customers with the objective of maximizing the profit of the firm. In all, the CPM metric addresses a vital question: How should the firm most effectively invest its scarce resources? The answer embodies what the CPM represents: resource allocation to achieve the firm's objective.

Appendix 1. Portfolio management literature review.

Authors	Year	Journal	Portfolio unit of analysis	Definition	Research question(s)	Method(s)	Findings	Future directions
Day	1977	<i>Journal of Marketing</i>	Product Portfolio Management	"...the cash quadrant or share/growth matrix developed by the <i>Boston Consulting Group</i> , where each product is classified jointly by rate of present or forecast market growth (a proxy for stage in the product life cycle) and a measure of market share dominance," (p. 29).	What is the objective of a product portfolio strategy and how can the strategies be implemented?	Theoretical Framework	The product portfolio concept provides a useful synthesis of the analyses and judgments during the preliminary steps of the planning process and is a provocative source of strategy alternatives.	Employing the product portfolio analysis "to base strategies on the perception of a company as an interdependent group of products and services, each playing a distinctive and supportive role," (p. 38)
Capon and Glazer	1987	<i>Journal of Marketing</i>	Technology Portfolio Management	"The technology portfolio extends the product portfolio by providing the firm a tool for evaluating the particular mix of technologies in its asset base and analyzing how they complement one another as part of the overall corporate strategy," (p. 9–10).	How can firms systematically incorporate technology into strategic thinking and planning?	Theoretical Framework	A conceptual framework for technology strategy is developed.	How firms should manage technology under different conditions. Explore the effect of different dynamic entry strategies on firm's ultimate performance.
McNally, Durmusoglu, Calantone, and Harmancioglu	2009	<i>Industrial Marketing Management</i>	New Product Portfolio Management (NPPM)	The dynamic decision process of evaluating, selecting, prioritizing, and allocating resources to product development projects. NPPM involves determining resource allocations to maximize the resulting program benefit given a set of alternatives that require common scarce resources.	What is the impact of managers' dispositional factors as a possible explanation for firms exhibiting substantial performance-affecting differences?	Qualitative: A case study research method examine differences in NPPM strategies and managers' revealed dispositional traits across three divisions of a single conglomerate firm operating in different business-to-business markets.	Propositions are developed relating managers' dispositions to NPPM strategy: analytic cognitive style is associated with balance, ambiguity tolerance is associated with strategic fit, and leadership style is associated with the relative weights applied to each dimension.	Investigate other manager dispositions that might potentially play a determining role in NPPM decisions.
Krasnikov, Jayachandran, and Kumar	2009	<i>Journal of Marketing</i>	Customer Portfolio Management (CPM)	"A classification of customers or customer segments according to present and future value" (Rajagopal & Sanchez, 2005; Terho & Halinen, 2007)	Is customer segment valuation static or dynamic? Should customer segment dynamics be managed offensively or defensively? What are the predictors of a customer's position in the portfolio?	Quantitative: Analysis of four firms' data sets	A model is developed suggesting steps and methods for CPM. The model is tested and evidences strong support for the importance of managing customer portfolios.	Investigate the appropriateness of a Markov approach to model the value of customer segments across additional periods of data. Compare results for different companies within a specific industry. Identify individual-level firm switching probabilities. Include reaction coefficients to specific marketing actions.

(continued on next page)

Appendix 1 (continued)

Authors	Year	Journal	Portfolio unit of analysis	Definition	Research question(s)	Method(s)	Findings	Future directions
Hansen, Beitelspacher, and Deitz	2013	<i>Journal of Business Research</i>	Customer Comparative Value Assessment	“The term comparative value denotes the fact that consumers often times weigh value propositions against one another when making decisions; hence, the focus is on the partner and a comparison level derived through perceptions of what is believed to be available elsewhere” (pp. 473–74).	What are the antecedents and consequences of consumers' comparative value assessments across the relationship life cycle?	Theoretical Framework	While the service quality is more strongly related to value in the exploration, expansion and commitment life cycle phases, the two variables are of equal importance in the dissolution phase.	Replicated studies across broader companies and industries.

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