

THE IMPACT OF PRICE-ENDINGS ON THE CUSTOMERS' PERCEPTION AND THEIR BUYING BEHAVIOR: A STUDY

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ABSTRACT

The business market of today is highly competitive. It is very challenging for the business organizations to sustain and grow in such a stiff and competitive business world. As blood is mandatory for the sustainable growth of our body, in the similar way capital is mandatory for the organizations to remain sustainable and growing. The term 'price' is one of the marketing mixes, which is the only pillar that makes the business organizations financially strong by generating revenues while the others like product, place, and promotion are expenses for them. Therefore, it is vitally crucial for the organizations to exercise a pricing strategy that can keep them sustainable and progressive with leveraged sales and profit. The price-ending or psychological pricing is the pricing strategy which has been keeping the organizations sustainable with augmented sales and profitability for more than a century, especially in the retail sector. The price-ending strategy is used to price products and services and implies psychological impacts on the attitude and the buying behavior of the customers. This strategy plays a vital role in influencing the perception and the psyche of the customers' buying behavior. This study bestows the ways, used by the customers when they perceive the price-endings or psychological prices in their decision making process, which could have practical implications for large scale retailers, pricing managers, researchers and our understanding of how the customers make inferences from the given price information.

Keywords: Price-endings, Customers' behavior, Attitude, Perception, Psychological pricing, Organization

Introduction

It is vital to recognize consumers' price perception to grow and stay sustainable in this highly competitive and cutthroat global retail world. Price endings are crucial pricing techniques or marketing strategies that have been practiced by retailers over the years. The trend appears to be effective considering how customers respond especially to products and services with odd price endings. Several business organizations practice price endings tactics, also called odd prices, magic prices, charm prices, psychological prices, irrational prices, intuitive prices or rule of thumb prices as cited in (Asamoah and Chovancova, 2011). The price ending or psychological pricing is the pricing strategy based on the assumptions that certain price endings have psychological impacts on the consumers' perception and their buying behavior (Pride and Ferrell, 1997). Pricing products or services is more than just about digits in the prices, which is a play on consumers' perception. To a broad extent, it

is the customers' perception of price that makes them purchase the products and services not the actual money price. In several situations, the psychology of pricing and price perception are more crucial than the actual price of the products and services. The retail organizations which understand the role of psychology in their pricing strategies can augment their sales and profit. Price is multi-faceted, so after producing a product, pricing that product becomes very crucial. The strategy which should be used to price the product can not only be decided by the producer, however also by wholesalers and the most importantly the retailers. It is so because the customers respond differently if the price of the products and services is broken into parts, or the products or services are bundled with the other items. The customers process digits in the price differently, and they may never know what is in their minds when they perceive prices and, how this influences their buying behavior. Customary economic thinking considers that marketers are always efficient whereas

the customers are always rational. However, customers behave differently, sometimes even irrationally when they are presented with a variety of options. While setting prices, it is crucial to note that customers' perception plays a decisive role in their buying behavior. If the right pricing strategy is used to price products and services and such a strategy is supported with robust promotional and distribution programs, then the organizations can augment their sales and increase profit with the business growth (Stivings, 1996). However, a wrong pricing strategy can give its reverse result as well. There are several pricing strategies which are practiced by the organizations. However, one of the most commonly practiced pricing strategies which has been broadly used for consumers' products and services across different products and services categories in the retail outlets and in the newspaper advertisements is the price ending (odd-even) pricing strategy. The odd-even psychological pricing strategy is a common practice in the retail sector, which uses certain odd and even digits in price endings. That is, `0.99 in `5.99 and `0.00 in `3.00 have the potential to influence the customers' price perception and their buying behavior (Nagel and Holden, 1995). Though the actual origin of the odd-even pricing strategy is not clear (Dalrymple and Thompson 1969; Friedman, 1967). However, the practice of odd pricing has been assumed for more than 100 years (Schindler and Wiman, 1989). The basic assumption of odd-pricing is that the prices of the products and services set just below the nearest encircled figures generate higher than the expected demand for the products and services at that level. This shows that the buying probability of just below priced products and services is positioned well to the right of the estimated demand curve, and generates a kink in the demand curve at that point. The odd pricing strategy is not rooted in the strict mathematical calculations or long standing economic theory (Kreul, 1982).

Customers' Price Perception

According to Lindsay and Norman (1997), perception is a procedure by which people interpret and organize sensation to produce a meaningful experience of the world. The perception is differentiated from the sensation because sensation involves relatively an unprocessed outcome of stimulation of sensory receptors, i.e., eyes, ears, nose, tongue, and skin; whereas perception moves further to describe a person's experience of external stimulus in the environment and processes input from the senses. But, practically sensation and perception are not possible to separate from each other. It is because they both complement each other and establish a part of a continuous procedure. For example, the way a person perceives and responds to prices and advertising information in general, broadly relies on how he or she perceives them through the senses and how they are interpreted through the mind. A crucial issue upon which psychologists are divided is the extent on which the perception depends directly is the information present in the stimulus. Some of the psychologists argue that perceptual procedures are not direct, however, rely on the perceivers' expectation and previous knowledge as well as the information available in the stimulus itself. Connecting perceptual procedure to pricing in this study, customers' sensory experiences of the price of products and services involve the both the recognition and the effect they have upon them, and their willingness to purchase the products and the services. The customers' expectations rely broadly upon their previous experiences and the present perception of the prices. Therefore, it can be said that the perceptual procedure is a sequence of steps which starts with the environment and leads to the perception of a stimulus and an action in response to the stimulus. By the perceptual procedure, a customer gets information about the

properties and the elements of the environment.

The perception of the customers does not only create their' experience of the world. However, it allows them to act within their environment. The customers obtain information from the external world through the sense organs such as tongue, ears, nose, eyes and skin and such a piece of information received is integrated and analyzed to make decisions. The decision is a result of mental procedure (cognitive procedure) leading to the selection of a course of action amongst several alternatives. When a customer gets into a retail outlet, he or she perceives the price tags of the products and determines what action should be taken and how to relate it to the perception. The price sensitive customer would either perceive it as cheap or expensive and that subjective perception and interpretation would determine whether he/she would purchase the product or not. The customers' price perception is also a cause of impulse buying. Human behavior is such that the people strive to maximize the value while to minimize the cost. When a customer perceives that the utility derived from a product would exceed the cost of the product, then there is a high probability that the customer would purchase that product even if it were not in his or her plan.

The economists who study customers' behavior are of the view that customers are price takers and accept prices at their face value or as given by the producers. Marketers often acknowledge that customers assess price information vigorously. They decode prices according to their previous buying experiences, formal communication (advertising and sales promotions), informal communication (friends, colleagues and family members), and point-of-purchase or the online resources (Kotler and Keller, 2005). The theories of the consumers' behavior suggest that consumers' understanding of the right hand digits of the prices influences the

demand curves and this is what prompting the retail organizations to practice price ending or psychological pricing strategy for pricing their products and services. The consumers' behavior explains the supremacy of the odd prices or the psychological prices and divides them into two parts

The Level Effects: The level effects are also called underestimation effects which highlight the behaviors and fundamental procedures which take the buyers to twist their perception of the prices. For example, one frequent hypothesis concerning the level effects is that customers are inclined to encircling the prices down to left digit. That is the customers consider `20.99 near to `20.00 instead of `21.00.

The Image Effects: This effect explains the customers' perception of the products, store or competition because of the right hand digits of the prices. For example, a customer may think that a product with a price that ends in 99 is on sale. Each of the suggested level effects is the depiction of the way; the buyer processes the information regarding the digits of the prices of the products and the services. That is his or her mental processing is totally unrelated to the organizations' behavior. Alternatively, the image effects focus on customers' perception of organizations' behavior. The shoppers may deliberately try to discover organizations' intentions when perceiving certain prices, or they may, over time, subconsciously realize the correlation between price endings and quality of the products or may assume the products as discounted products.

Materials and Methods

This study is qualitative in nature. The data for this study have been taken from the secondary sources. A great number of journals, publications, working papers, books, and unpublished articles have been reviewed for the purpose. Internet has been used to download the articles and to study

the online resources for finding the evidences for the impact of price-endings or odd-ending prices on the customers' perception and their buying behavior.

Objective of the study

The objective of this study is to find the evidences regarding the impact of price endings on the customers' perception and their buying behavior.

Literature Review

Marketing researchers have examined that price ending or odd-even psychological pricing strategies have been used in the market place for a century (Rudolph 1954; Friedman, 1967; Kreul, 1982; Schindler and Kirby, 1997; Stiving and Winer, 1997; Stiving, 2000). Cecil Adams (1992) states that, the psychological pricing strategy came into use in the USA in the late 19th century. This strategy was first used in a newspaper pricing competition by Melville E. Stone, who started the Chicago Daily Newspaper in 1875. In 1876, Stone observed that Chicago required one cent Newspaper to compete with the Nickel Papers of the day. Therefore, he decided to price his newspaper at one cent. Those days, as most of the goods and the services were priced at even-dollar figure. The current competition provoked Stone to think of a strategy. He tried to understand the consumers' psyche and persuaded many Chicagoan merchants, who used to advertise their products and services in his newspaper. He told them to drop the price of products and services my one cent. He explained that impulse buyers would more readily purchase a \$5.00 item if it cost only \$4.99. The merchants who used this strategy found that it really worked. This strategy increased the sales of the newspaper and at the same time merchants who had advertised for their products found their sales increased by 60%. However, there was a problem that there were not sufficient pennies in the general circulation, therefore, Stone imported barrel of pennies from the Philadelphia to meet the shortage.

The cost of importing the pennies was less than the profit made on sales of the newspaper.

There is another evidence for the use of odd-even psychological pricing strategy. Burns (1995) and Hower (1943) suggest that price ending or odd-ending pricing strategy was brought into use for operational reasons with the introduction of cash registers in 1879. The reason behind this was thought to be that outlet runners wanted to make sure that tills were opened for each transaction to stop dishonest cashiers from pocketing cash. But, opposing operational considerations have also been presented suggesting that a number of retailers have adopted round ending prices to prevent the need to give change, thus increasing transaction speeded and reduced the store queues (Stiving and Winer, 1997). There is evidence regarding the practice of price ending strategy or odd ending pricing strategy in the retail sector. According to Asamoah and Chovancova (2011) Thomas Bata began to use this practice in 1920. This pricing system used by Tomas Bata gave the ending price of goods always be number 9. Actually the practice of odd pricing in retailing is so extensive that its effectiveness is generally taken for guaranteed (Holdershaw et al., 1997). The term odd pricing is used in various ways. It can refer to the practice of ending prices in odd number (1,3,5,7,9); that of ending prices in a number other than zero; or that of pricing just below a zero (for example, \$2.99,\$4.99 or \$19.95). The latter is the exercise most commonly referred to when the term is used (Gendall, 1998). One use of psychological pricing is in the price-ending numbers. The customers believe that prices ending in uneven, rather than even numbers such as, (\$9.99, &\$299,999, etc..) are a better deal or better prices than even numbers (e.g., \$10 and \$300,000 etc..). It is important for retailers to choose the right strategy for pricing specific product or service (Blinder et al., 1998). The pervasive use of odd-even pricing suggests that such

price-endings are crucial in the development of marketing strategies, especially for retailers of fast moving consumers' goods. Earlier the retailers have had a perception that pricing a product just below an encircled figure is beneficial (Holdershaw et al., 1997). Though some of the researchers have doubts on the success of such a practice, however, its practice has not been cashed (Bray and Harris, 2006; Georgoff, 1972). A good number of researchers have examined the impact of odd-even psychological pricing on consumers' buying behavior (Schindler and Kibarian, 1996; Schindler and Warren, 1989; Georgoff, 1972). The results explained that this pricing strategy would affect some of the consumers' perception of price of products and services and store quality and value of the products and the services. However, some previous studies have explained conflicting results, i.e., some products and services were supporting prices with encircled figures while some products and services priced with odd prices generated augmented sales. A study by Suri et al., (2004) states that prices ending with number 9 were less common and less accepted as a fair price in retail shops in Poland compared to country like the USA. Out of 3025 retail advertisements in the newspapers 64% of the prices ended in odd digits Rudolph (1954). A study by Twedt (1965) has made clear that retail food prices ending in digit 9 were the most popular, while prices ending in the digit in 5 was the second in terms of the popularity. Friedman (1967) observed that about 80% of the retail prices ended with digit 9s and 5s. Additionally, another extensive study of scanner data from a supermarket showed that more than 80% of the prices in the outlets ended with the digit 9 (Blattberg and Wisniewski, 1983). A study by Harris and Bray (2007) revealed that 64% of prices in the UK ended with a digit 9 while another study with interest based shops also showed an odd ending price (Bergen et al., 2004). The same trends were found in other

researches in the retail shops in the western economies (Schindler, 2001; Gueguen and Legoherel, 2004). The evidence of the psychological illusion seems to be all too transparent (Basu, 1997). Wedel and Leeflang (1998) state that the importance of psychological pricing or odd price ending may be overestimated in the pricing decisions in the marketplace. According to Gedenk and Sattler (1999) the retailers practice odd-price endings to price their products and services very frequently. A study by Hoffman et al., (2002) revealed that odd-price ending strategies are used in the retail services. The practice of psychological pricing strategies is also revealed in a study by Folkertsma (2002). According to a study by Holdershaw et al., (1997) about 60% of prices in advertising materials ended in the digit 9, 30% prices ended in the digit 5, 7% of the prices ended in the digit 0 and the remaining seven digits altogether accounted for only a little above 3% of prices evaluated.

Table1: End digit preferences: Marketing Bulletin, 1997

Digit ending	Proportion in the 1997 Marketing Bulletin study	
0	7.5%	
1	0.3%	
2	0.3%	
3	0.8%	
4	0.3%	
5	28.6%	
6	0.3%	
7	0.4%	
8	1.0%	
9	60.7%	

According to Thomas and Morwitz (2005) 9-ending prices may sometimes, however not always be perceived to be lower than a price one cent higher. This also explains that the left digit effects manifest in the domain on quality ratings and in the domain of the unspecified general numbers. Thus, there seems to be a domain invariant cognitive phenomenon behind the

popularity of odd ending prices of the products and the services. Schindler (2006) provides evidence that the rightmost digits or price endings of retail prices communicate meaning to the consumers. Also, the study suggests that retailers as well as regulators and consumers, should give explicit consideration to the meaning that can be transmitted by the rightmost digits of the product prices and price advertising. Baumgartner and Steiner (2007) state that some consumers strongly prefer 9-ending prices, whereas other consumers favor 0-ending prices. The results showed that an increase in the choice of the target pizza by the customers was observed when the price of this item was a nine-ending price and the prices of the other items ended with zero. And no difference in the choice of the target pizza was observed when all the items were presented with the same type of ending (9 or 0) Gueguen et al., (2009). Ngobo et al., (2010) explains that using a 99-ended price could be an effective means for the retailers to augment their sales. Kleinsasser and Wagner (2011) say that consumers of higher priced goods might be influenced by price endings, just as consumers of low priced goods are. The personal involvement and price interest have a moderating effect on the perceptions of such price endings and odd prices also make sense for sellers of higher-priced products and services. A study by Grewal et al., (2011) stated that innovations in the retail pricing and promotions can augment the sales and the profit of the organizations. Sashse and Grewal (2011) make clear that temporal framing of prices is beneficial for the organizations. A study by Carver and Padgett (2012) states that odd price ending is a memory based strategy and so it does lay impact on the consumers' price perception and their buying behavior. A study by Mace (2012) makes clear that the impacts of 9-endings can lead to sales losses (e.g., premium brands); however, a nine ending price is more effective for increasing sales of small brands (e.g., low market

share, low price and new items) which belong to weaker categories (e.g., low price, low budget share). The effect erodes as the store's nine ending pricing practices intensify. Lynn et al., (2013) gives evidence for the preferences of price endings in the retail sector. According to Murthy and Rao (2012) price makes consumers aware and so they act as a check against firms promoting without accompanying price cuts. A study by Olavarrieta et al., (2012) explains that variations of in-store price knowledge are antecedents by segment. Hackl et al., (2014) state that 99 cents is pervasive in e-commerce and helps the retailers in augmenting their sales and profitability. According to Ahmetoglu et al., (2014) price endings do lay impact on the consumers' price perception and their buying behavior. Mulky et al., (2014) states that price endings and consumers' price perceptions of Indian consumers, 9-ending price indicates higher value and also that the product is on sale and the consumers remember the price ending with the digit 9. A study by Hinterhuber and Liozu (2015) showed the practice of price endings in business to business marketing.

Observations

The price endings or odd-ending prices also called Psychological pricing strategies have a greater influence on the customers' price perception and their buying behavior. The results indicate that, the customers who are more price conscious are more likely to choose 9-ending prices. That is the customers who have low involvement (specially the customers with a low hedonic and symbolic involvement profile). It is clear that the low income, low educated and younger shoppers get attracted towards the products and the services priced using psychological pricing or odd-ending pricing technique. It has been observed that the women are more prone to purchase the products and avail the services which are priced with odd-prices (Kumar & Pandey, 2015). It is also found that the magnitude of

this 9-ending price effect depends upon the price level of the products and the positioning of the brands. Overall, like Bamgartner and Steiner (2007), argue that customers are heterogeneous in their preferences for odd-ending prices. On extending this idea, results show that involvement and the hedonic and symbolic profile of the customers, have direct and indirect effects on 9-ending preferences. The 9-ending prices or psychological pricing effects are mostly due to a conscious process of price, which means that consumers are more likely to choose the 9-ending price option because they consider that it makes them save money. The 9-ending price effects are stronger for the intermediate priced product category and lesser for higher brands. The present study is based on the studies mostly done in the western countries. Further the study uses only secondary data solely based on the

researches available on the topic. There may be some instances where important papers could have been missed out. The further research can be conducted on the same topic to prove it empirically in India.

Implications

It can be suggested that the psychological pricing strategy or odd-ending pricing is an augmentative strategy that companies can adopt to leverage their sales and profits in the potential markets. This study enlarges the conceptual, conjectural, and useful aspects of the psychological price or odd-ending price perception of the customers. It provides ways about how psychology is applied by marketers in the pricing of goods and services. Psychological pricing or 9-ending price influences perceptions of the customers on different categories of goods such as FMCG & Home Appliances and determines their purchasing habits.

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