Research Article: Citation date: 2018/03/04

Volume Discount Sensitivity Analysis for Optimal Pricing Strategies in B2B Firms

Aidar Vafin

Kazan Federal University, Volga Region

ORCID

How to cite:

Vafin, A. (2018) 'Volume Discount Sensitivity Analysis for Optimal Pricing Strategies in B2B Firms', *Empirical Quests for Management Essences*, 2(4), pp. 15–28.

Article history:

Received: 2018/01/20
Available online: 2018/03/04

Abstract

Volume discounts are particularly prone to misinterpretation in the B2B sector. This is because corporate clients are more inclined to purchase things in large quantities. This research argues that when considering a volume discount, the first line of examination should be volume discount sensitivity analysis. We define volume sensitivity as how much a product's volume discount influences a customer's desire or readiness to purchase. It indicates the relative relevance of volume discount to other product features or buying factors for purchasers. We discussed how techniques such as the Ladder method, Van Westendorp method, and Gabor-Granger approach can assist the firms in devising optimal volume discount strategies. This research also discusses the volume hurdle analysis in the context of volume discounting. If a firm anticipates meeting the volume hurdle, a volume discount may be necessary. If the volume hurdle exceeds the predicted change in sales, the volume discount cannot be supported, and the company should adopt other options.

Keyword: *B2B, Sensitivity analysis, Volume hurdle, volume discount.*

Introduction

Volume discounting is one of the popular strategies in the B2B context (Reeder, 2014). Volume discounting is a decrease in the base price provided to customers who purchase a certain number of items (Siguaw, Kimes and Gassenheimer, 2003). For several reasons, volume discounts are available. Volume discounts are provided in B2B enterprises to express gratitude and commitment to consumers (Akella, Araman and Kleinknecht, 2002). Discount providers are likely to profit from a greater sale if they reward the buyers who purchase more with a lower price per unit of product or service. It might be difficult to resist if the buyers sense more benefit in purchasing in bigger numbers.

There are some advantages of incorporating volume discounts into a pricing plan. First, it aids in market competition. With the ever-changing demands of customers and competitors, businesses operate dynamically. It is critical to have a well pricing strategy that is both appealing and helpful to clients to grow and compete in the market (Rowley, 1997). Providing bulk discounts to clients on occasion assists in giving value to the business while also increasing market share (Tom, Balto and Averitt, 1999). Providing volume discounts when necessary to keep them interested in the product can assist the enterprise to raise the product's perceived worth in their eyes. Second, it attracts a large number of customers. Volume discounting is an important element in pricing models and promotions (Banerjee, 2009). Taking advantage of it and providing volume discounts as well as a suitable package plan that meets their demands will help to build affinity for the product and brand (Banerjee, 2009) (Mohammed *et al.*, 2004). Third, it encourages the buyers to make more purchases When a business gives volume discounts, it encourages its clients to purchase more of its goods. They may pick plans that they will need in the future since they are inexpensive and will be beneficial as they grow. As a result, the business becomes able to produce additional cash flow.

On the other hand, when firms provide huge discounts, they diminish their perceived worth, damaging their image (Sinha and Verma, 2020) (Parguel *et al.*, 2007). These are some of the most typical issues that companies experience while providing bulk discounts. When a business cuts its pricing to please a consumer, the lower price of its product becomes the new industry norm. If a business needs to raise its pricing in the future to meet changing company demands, the relationship with its clients becomes complicated (Sadrian and Yoon, 1992) (Marn and Rosiello, 1992).

By routinely giving volume discounts, a business is at risk of putting itself at a loss. To keep its profits from plummeting, the business needs to sell a large percent more of the products for every decrease in price. When the firm provides discounts, it lowers the perceived worth of its goods. They may believe that the reductions are being provided because the product's quality is inadequate, lowering its brand's worth in their view (Iranmanesh, Jayaraman and Ismail, 2014). It is critical that its buyer links its product or brand with quality. With volume discounts, the perceived productivity diminishes.

Volume discounts can cause price wars. Monitoring the product innovations and price of competitors is a smart pricing strategy for a brand. While list prices are more obvious, net prices after discounts are frequently harder to discern for competitors (Krämer, Jung and Burgartz, 2016). As a result, businesses depend on relatively little bits of ad-hoc data to determine their discounting approach. If a rival notices that a firm is providing a significant discount to one customer, they may worry that it is doing it to all of its customers, and hence boost their discounts to compete and stay relevant. As a result, the firm is compelled to lower its pricing even lower or run the risk of losing a client (Auricchio, 2007) (Durkin, 2016). Volume discounts can also increase expectations. The seller firm may find itself repeatedly bargaining with consumers who haggle over costs if it provides a discount to them once. By providing discounts, it has established the foundation that the firm's pricing is not fair and fixed and encouraging them to continue negotiating lower costs for goods in the future.

Customers prefer reasonable rates more than cheap costs. If a firm is giving discounts, the only way a client can be confident they are getting a fair price is to haggle hard, as they imagine all of the firm's other clients are doing (Keiser, 1988) (Cason, Friedman and Milam, 2003). The buyers would want a lower price in such circumstances, except the client who had the lowest price, of course. A firm may be exposed to needless revenue and reputation risk by allowing uncontrolled and unnecessary volume discounts.

There are many forms of pricing reduction strategies. A non-cumulative volume discount is applied to each transaction in a B2B setting and is meant to encourage customers to make large orders (Deepak and Jeyakumar, 2019) (Lekmat, 2002). This implies that the buyer will keep the extra item until it is sold, potentially lowering the seller's inventory costs and prohibiting the buyer from transferring to a rival at least until the inventory is depleted. A progressive volume discount is applied to the entire amount purchased over time (Widrick, 1985). With each successive purchase, the buyer increases the possible discount. A policy like this encourages customers to buy from the firm again and again (Kawakatsu, 2011). Seasonal discounts are decreases in the price of out-of-season items, such as snowmobiles during the summer (Khan *et al.*, 2020). The goal of such discounts is to stretch demand out across the year, allowing for more efficient use of manufacturing facilities and greater cash flow. Cash discounts are price reductions provided to clients who pay cash or within a certain time frame (Bockhorn and Harris, 1989). The goal is to improve the organization's cash flow and lower transaction costs in general. In most B2B transactions, cash discounts are provided while the buyer is considering a variety of price parameters, including payment periods.

Price reductions offered to intermediaries (e.g., wholesalers, industrial distributors, retailers) to persuade them to stock and treat an organization's goods preferentially are known as trade discounts

(Das and Tyagi, 1994) (Celnicker and Seaman, 1989). Personal allowances are comparable middleman-targeting tactics. Their goal is to get intermediaries to market the company's goods aggressively Some producers or wholesalers provide merchants "spiffs," which may be passed on to sales clerks as an incentive for aggressively selling particular goods (Gibbs *et al.*, 2009). Spiffs are often utilized with new goods, slow-moving commodities, or high-margin (Merchant *et al.*, 2011). A product's or service's basic price is also reduced by trade-in allowances. These are frequently used to assist a seller in negotiating the greatest possible price with a buyer (Kwon *et al.*, 2015). The trade-in may be valuable if it can be sold again. Accepting trade-ins is required in the marketing of many items (Salazar, 2018) (Salazar, 2017c). Bundling prices is a common pricing tactic. The marketer bundles things that are comparable or complementary and charges a cheaper overall price than if they were offered individually (Stremersch and Tellis, 2002). This pricing strategy is based on the notion that increasing sales would more than cover for a smaller profit margin (Long, 1984).

Measuring volume discount sensitivity

We define volume sensitivity as how much a product's volume discount influences a customer's desire or readiness to purchase. It indicates the relative relevance of volume discount to other product features or buying factors for purchasers. This might include the product's quality or the brand under which it is offered. A high volume-discount sensitivity refers to a strong link between volume discount and customer demand. Sales will increase if the volume discount is raised significantly. If the sensitivity is too low, however, volume discounts may have no impact on sales.

Understanding volume discount sensitivity is critical for B2B businesses. They should be incorporated in their pricing plans in order to maintain strong demand for their goods. Buyers often put a high value on money, to the point that when the total price of items rises as a result of volume discounts, most buyers are hesitant to pay additional money. Although price is not the only factor to consider when making a purchase, it is the most important (Zhang, Netzer and Ansari, 2014). Consumer volume discount sensitivity has an impact on product and service sales, as well as the B2B business' overall success. It should also be mentioned that volume discount sensitivity may differ from one customer to the next.

The laddering technique can be used to measure volume discount sensitivity. With this method, prospective buyers will be asked about their willingness to buy a certain product at a specific price, which is generally scored on a scale of 1 to 10 (Price, 2002). If the respondent's desire to buy falls below a certain threshold (typically 8), the volume discount should be increased, and the respondent is questioned again about their willingness to purchase (Lázár, Research and 2009, no date). This

procedure might potentially continue, but to minimize undue response bias, respondents are usually questioned about the highest of three-volume discount plans. After that, the data is evaluated to see what proportion of the market would buy at any particular price. The benefit of the Laddering method is that it eliminates the requirement for survey respondents to suggest any specific volume discount. Instead, users must merely match their purpose to a scale, making the survey easy to complete (Lázár, BUSINESS and 2010, no date).

While respondents are questioned about their buying intents at increasingly bigger volume discounts, the ease of the laddering method might be its disadvantage. It becomes simple for them to approach the survey as a bargaining chip, which can make the results sub-optimal (Grize, 2015). Because some respondents may decline to buy at any of the discount points the surveyors give, using laddering implies that not all respondents will contribute to pricing research efforts (Dobbs, 2015). To summarize, these disadvantages mean that an efficient and statistically meaningful laddering strategy often needs a big number of survey participants, which is a huge hurdle for many B2B businesses without a large client base.

Another way to measure the sensitivity of volume discount is the Van Westendorp method. This method can handle the challenge of determining volume discount sensitivity by polling individuals about their desire to pay in different ranges (Lipovetsky, 2006). Generally, four questions are asked to each survey respondent: a) At what volume discount would you regard the item to be too pricey to contemplate purchasing it? b) At what point of volume discount would you consider a product's pricing to be so cheap that you believe the quality must be poor? c) At what point of volume discount would you regard the product to be beginning to become pricey, such that purchasing it is no longer out of the question but you would have to think about it? (On the pricey/high end) d) At which point of volume discount do you think the product is a good deal—a good value for the money? (Affordable /Affordable/Affordable /Affordable/ Affordable (Lieberman, 2015) (Ceylana, Koseb and Aydin, 2014) . The first two inquiries require respondents to settle on a volume discount range that they can live with, while the latter two questions assist to narrow down the best price range. Business managers may graph the replies and derive an ideal volume discount range and a more particular optimal volume discount point after a statistically meaningful number of individuals reply to these questions.

When it comes to establishing volume discount sensitivity for comparatively recent items, Van Westendorp has a novelty in terms of efficiency. Each Van Westendorp survey respondent will give further insight into the product's volume discount sensitivity, allowing the business to gather data faster by minimizing the number of survey participants necessary (Lipovetsky, Magnan and Zanetti-Polzi, 2011). Van Westendorp's conclusions are much more comprehensive than those produced using the

laddering method (Bakken, 2013) (Weiner, 2001). The disadvantage of Van Westendorp is that it might be difficult for businesses to manage and assess.

The Gabor-Granger approach can be a straightforward and effective research method for determining an acceptable volume discount for a particular product or service among respondents (Sowter, Gabor and Granger, 1971) (Wedel and Leeflang, 1998) (Lipovetsky, Magnan and Zanetti-Polzi, 2011). Following the introduction of the product, participants are subjected to a randomly selected volume discount from a predefined volume discount list. The responder is asked whether they are prepared to pay with the provided volume discount for the goods or service. If the responder says yes, the product is presented again, however this time with a lower volume discount from the predefined volume discount list.

For previously established items, the Gabor-Granger is most commonly utilized. This model calculates the readiness to pay for service or product in a directionally accurate manner. It can give researchers the revenue-optimal volume discount point, quantity demanded, and price elasticity to assist them to price a product correctly. This strategy is only beneficial if the business wishes to look at products without taking the competition into account.

The Van Westendorp is most commonly used in the case of new products. When the firm is not certain what volume discount points will be suitable, it can use Van Westendorp. This methodology operates throughout the whole cost range. It can provide the buyers with a range that they can afford. It will assist in determining how respondents feel about a good or service. If the responder is unwilling to purchase the item at the first version of the volume discount, the item is displayed again at a higher volume discount from a predefined level. This practice is repeated until the minimum volume discount point that a responder is prepared to buy is established.

The Gabor-Granger approach requires a relatively modest amount of survey work and is simple to build and implement. This strategy gives essential information regarding a client's ability to buy a product as well as the perceived worth of the product to responders. As a result, it can play a role in discounting analysis (Chhabra, 2015).

One clear disadvantage of the Gabor-Granger method is that competitive goods are disregarded throughout the investigation phase. This implies that if a rival delivers a comparable product at a cheaper price, the firm's study's optimal volume discount level is invalidated (Eassie, 1979). Because of the aforementioned limitation, research is rendered ineffective because they lack context about market realities.

Discount led hurdle analysis

A volume hurdle analysis can assist in determining the optimal volume discounts. The needed demand growth to justify a price decrease and the acceptable demand loss to justify a price rise are defined by the volume hurdle. Volume hurdles allow executives to quantify the needed selling objectives and compare them to their estimations of future demand when making strategic choices to target a particular market at a new pricing point. Volume hurdles are a common practice in tactical pricing choices, such as establishing sales objectives for price promotions and discount activities, as well as analyzing the profitability of price reductions at the conclusion of the campaign. The following equations present the basic framework for discount-led hurdle analysis.

$$Profit = Qunatity.(Price - Variable\ cost) - Fixed\ cost$$

$$Profit_{old} = Qunatity_{old}.(Price_{old} - Variable\ cost) - Fixed\ cost$$

$$Profit_{new} = Qunatity_{new}.(Price_{new} - Variable\ cost) - Fixed\ cost$$

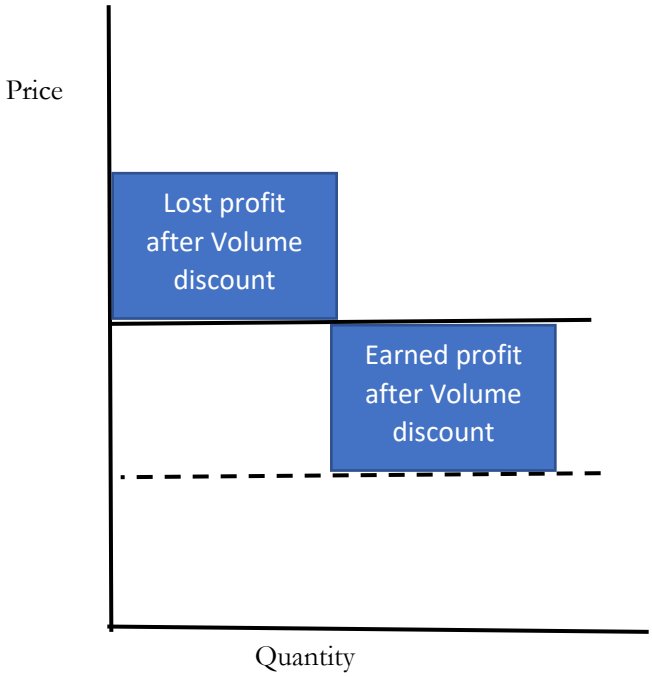
The necessity for price adjustments to leave the company better off, if not equally well off, following the price change results in volume hurdles. We may express the necessity for price adjustments to boost profits as follows, based on the firm's profit motive:

$$Profit_{new} \geq Profit_{old}$$

The goal of every pricing modification, according to the company's profit motivation, is to simply increase profitability. If the company anticipates meeting the volume hurdle, a price adjustment may be necessary. If the volume hurdle exceeds the predicted change in sales, the higher price cannot be supported, and the company should examine other options (Smith, 2011).

We can see from the graph that the volume hurdle arises from the need that profit contributions gained from the increased volume at a lower price be larger than those lost due to the price drop. The size of the rectangle formed by the volume change multiplied by the new contribution margin is called profitnew. Profitold, the size of the rectangle formed by the shift price multiplied by the old volume, is the profit contribution lost. A price adjustment should only be implemented if the new price boosts

profitability. If $Profit_{new}$ represents the profit contribution obtained from the increased volume at a decreased price and $Profit_{old}$ represents the profit contribution lost from the price drop, the profit motivation of the company demands that gains exceed losses (Smith, 2011).



The volume hurdle is proportional to the magnitude of the price change under consideration. Bigger price adjustments need greater volume obstacles, while smaller price changes require fewer volume hurdles. The volume hurdle is also dependent on the contribution margin size, and therefore indirectly on variable expenses. In this situation, higher contribution margins translate into lower volume barriers. Reduced contribution margins result in increased volume obstacles.

Fixed expenses of a firm have no impact on determining the volume hurdle. While many executives may be surprised, fixed costs have little bearing on marginal price change choices. While businesses must pay fixed expenses in order to be viable, fixed costs have no effect on the ideal pricing. Fixed costs are a concern because they influence the investment choice to join, remain in, or quit a firm, but they will have no effect on price. If a corporation concludes that the ideal price does not cover fixed expenses, executives may choose to exit the industry, seek ways to lower fixed costs or take other efforts to increase consumers' willingness to pay. However, increasing prices to cover fixed expenses is unjustifiable from a profit maximization standpoint.

The volume hurdle is a required but not sufficient condition for price measures to increase the firm's profitability. When considering a price modification, the first line of examination should be volume

hurdles. If the volume hurdle is improbable to be met, no price action should be done (Smith, 2011) (Emerson, 2019). However, management may choose not to take a price move if they believe the volume hurdle will be surmounted. That is, even if executives anticipate that a pricing move would result in more volume than necessary by the volume hurdle, it could be in their best interests to postpone the price adjustment owing to other strategic considerations. Volume thresholds serve as a crucial first check on price choices, but they are not the ultimate word.

Discount management in B2B

There are few methods to manage discounts in B2B distribution is available. The first method is to create more relevant discounted groups by using micro-segmentation (Sukumar and Aline, 2013) (Sikarwar and Verma, 2012). The need for exceptions is reduced when discounts are linked with a willingness to purchase. All product and customer characteristics that are important to transactions should be included in a good segmentation model. The goal is to develop a structure that is simple to maintain while also giving enough information. AI-assisted algorithms provide segmentation and allow regular validation of important data that promotes pricing differentiation in today's market (Chiu et al., 2009) (Bloom, 2005). A firm should consider developing a solid framework for article groupings as a starting point. Unharmonized product hierarchy or even selling goods from outside their product catalog is a problem for some distributors. Inheriting and possibly harmonizing supplier product hierarchies is deemed to be an easy approach to categorizing unmanaged items (Nicolau and Más, 2006). Customer type and size categories, in addition to product groupings, are critical to achieving accuracy and consistency in pricing (Funk, 2002).

The second method is to provide a discount range. Allowing the opportunity to negotiate within a cost framework can empower the firm's employees. Salespeople can be allowed to collect deal-specific information outside of the discounting structure. For instance, a rival may be running a special, and the business needs to lower its pricing to gain the business. Within each segment, percentile-based price ranges guarantee that data-driven advice incorporates best practice peer pricing for comparable transactions (Lambrecht et al., 2012). Approval levels also aid in the management of exceptions. Setting validity dates for commercial agreements should be obligatory for distributors with often changing cost prices, and any modification outside of the norm should be subject to approval (Bussler, 2013) (Lambrecht et al., 2012).

The third approach is to prioritize trade-offs above long-term exceptions. When it comes to pricing negotiations, it is customary to discover more about the deal's context, such as if the customer demands an immediate supply of a certain product or whether they want to purchase further quantities of a

particular product in the future. A corporation may begin communicating trade-offs to customers as part of any discounting plan (Fatima, Wooldridge and Jennings, 2006). An additional discount is a contingent upon other commercial or service requirements being met. The seller may disclose the reciprocal value concessions in order to avoid recording the unique reduction as a set net price. Trade-offs are also an optimal way to phase in the new discounting system gradually (Harrison et al., 2002). For example, discussing transaction context in conjunction with matching customer service levels may facilitate the transition to new pricing (Holden, 2012). Firms might take advantage of the chance to discuss customers' commercial preferences when proposing new discounts in order to get a better understanding of their bargaining preferences.

The fourth approach is to collaborate with sales to establish a bottom-up plan (Le Meunier-FitzHugh and Piercy, 2007). Business plans are prepared by competent companies with the support of their commercial teams. To find areas of margin improvement, the business might ask sales to offer bottom-up objectives and contrast them to top-down pricing expectations (Biemans, Brenčič and Malshe, 2010). The aggregated output may be deconstructed into a price-volume-mix effect, which offers managers greater assurance. Distributors need additional tools to cope with the intricacies of sales pricing (Le Meunier-FitzHugh and Piercy, 2010). When analysts anticipate discounts in the future, they should be prepared to describe how salespeople arrived at their pricing judgments.

Conclusion

Discounting is an important strategy that marketers may use to seal a purchase. Giving clients the sensation that they have received a good deal might help them overcome some purchase barriers. Justified discounts based on volume, number of items bought, and years of loyalty may promote consumer behaviors that lead to improved revenues. A firm can build brand loyalty by rewarding its buyers in an organized method, but it may also allow its sales force greater leeway to discount within certain boundaries, without frequent approvals for 'exceptional' circumstances. Discounting should be seen as a marketing expenditure to complete sales, and if a business can manage and optimize that investment, it may generate big returns (Salazar, 2017b); (Salazar, 2017a) . When more quantities of an item are purchased, the price of the item is reduced via volume discounting. When used seldom, the volume discounting method is favorable. However, if supplied often enough, it might detract from the brand's and product's value. As a result, before providing discount rates, a firm should thoroughly assess its discounting strategies and product selections. Volume discounting may benefit a business and help it avoid competition if it is correctly planned and performed.

A high volume-discount sensitivity refers to a strong link between volume discount and customer demand. Sales will increase if the volume discount is raised significantly. If the sensitivity is too low,

however, volume discounts may have no impact on sales. Creating defined criteria and a methodology for rating and accepting discount demands based on a thorough knowledge of client lifetime value, rather than periodic quotas or expectations of strategically significant transactions, makes disciplined discounting simpler for businesses. Understanding volume discount sensitivity is critical for B2B businesses. They should be incorporated in their pricing plans in order to maintain strong demand for their goods.

References

Akella, R., Araman, V. F. and Kleinknecht, J. (2002) 'B2B Markets: Procuremen and supplier risk management in E-Business', in *Supply chain management: Models, applications, and research directions*. Springer, pp. 33–66.

Auricchio, V. (2007) 'Discount Policies in US and EU Antitrust Enforcement Models: Protecting Competition, Competitors or Consumer Welfare?', *European Competition Journal*, 3(2), pp. 373–409.

Bakken, D. G. (2013) 'Are you sure the price is right?(pricing and business strategy)', *Strategic Direction*.

Banerjee, S. (2009) 'Effect of product category on promotional choice: comparative study of discounts and freebies', *Management Research News*.

Biemans, W. G., Brenčič, M. M. and Malshe, A. (2010) 'Marketing–sales interface configurations in B2B firms', *Industrial Marketing Management*, 39(2), pp. 183–194.

Bloom, J. Z. (2005) 'Market segmentation: A neural network application', *Annals of Tourism Research*, 32(1), pp. 93–111.

Bockhorn, M. and Harris, K. (1989) 'Are cash discounts in the farm supply industry profitable?', *Agribusiness*, 5(2), pp. 87–94.

Bussler, C. (2013) *B2B Integration: Concepts and Architecture*. Springer Berlin Heidelberg. Available at: https://books.google.com/books?id=r-qpCAAAQBAJ.

Cason, T. N., Friedman, D. and Milam, G. H. (2003) 'Bargaining versus posted price competition in customer markets', *International Journal of Industrial Organization*, 21(2), pp. 223–251.

Celnicker, A. and Seaman, B. (1989) 'Functional Discounts, Trade Discounts, Economic Price Discrimination and the Robinson-Patman Act', *Utah L. Rev.*, p. 813.

Ceylana, H. H., Koseb, B. and Aydin, M. (2014) 'Value based pricing: A research on service sector using Van Westendorp Price Sensitivity Scale', *Procedia-Social and Behavioral Sciences*, 148, pp. 1–6.

Chhabra, S. (2015) 'Determining the optimal price point: using Van Westendorp's price sensitivity meter', in *Managing in recovering markets*. Springer, pp. 257–270.

Chiu, C.-Y. *et al.* (2009) 'An intelligent market segmentation system using k-means and particle

swarm optimization', *Expert systems with applications*, 36(3), pp. 4558–4565.

Das, C. and Tyagi, R. (1994) 'Wholesaler: a decision support system for wholesale procurement and distribution', *International Journal of Physical Distribution & Logistics Management*.

Deepak, R. K. A. and Jeyakumar, S. (2019) *Marketing management*. Educreation Publishing.

Dobbs, I. M. (2015) 'Ladder Pricing – A New Form of Wholesale Price Discrimination', *https://doi.org/10.1080/13571516.2014.991558*, 22(1), pp. 1–21. doi: 10.1080/13571516.2014.991558.

Durkin, S. (2016) 'The competitive effects of loyalty discounts in a model of competition implied by the discount attribution test', *Antitrust LJ*, 81, p. 475.

Eassie, R. W. F. (1979) 'Buy-response Analysis: A Practical Tool of Market Research', *European Journal of Marketing*.

Emerson, P. M. (2019) *Intermediate Microeconomics*. Oregon State Open Educational Resources (Open textbook library). Available at: https://books.google.com.bd/books?id=F-dCzgEACAAJ.

Fatima, S. S., Wooldridge, M. J. and Jennings, N. R. (2006) 'Multi-issue negotiation with deadlines', *Journal of Artificial Intelligence Research*, 27, pp. 381–417.

Funk, D. C. (2002) 'Consumer-based marketing: The use of micro-segmentation strategies for understanding sport consumption', *International Journal of Sports Marketing and Sponsorship*.

Gibbs, M. J. *et al.* (2009) 'Performance measure properties and incentive system design', *Industrial relations: a journal of economy and society*, 48(2), pp. 237–264.

Grize, Y. L. (2015) 'Applications of statistics in the field of general insurance: An overview', *International Statistical Review*, 83(1), pp. 135–159. doi: 10.1111/INSR.12066.

Harrison, D. A. *et al.* (2002) 'Time, teams, and task performance: Changing effects of surface-and deep-level diversity on group functioning', *Academy of management journal*, 45(5), pp. 1029–1045.

Holden, R. K. (2012) *Negotiating with Backbone: Eight Sales Strategies to Defend Your Price and Value*. Pearson Education. Available at: https://books.google.com/books?id=8Y33SeZ-MUMC.

Iranmanesh, M., Jayaraman, K. and Ismail, I. (2014) 'Intention to purchase products under volume discount scheme: a conceptual model and research propositions', *Business: Theory and Practice*, 15(4), pp. 371–380.

Kawakatsu, H. (2011) 'A Wholesaler's Optimal Ordering and Quantity Discount Policies for Deteriorating Items.', *Engineering Letters*, 19(4).

Keiser, T. C. (1988) *Negotiating with a customer you can't afford to lose*. Harvard Business School.

Khan, M. A. *et al.* (2020) 'The effect of advance payment with discount facility on supply decisions of deteriorating products whose demand is both price and stock dependent', *International Transactions in Operational Research*, 27(3), pp. 1343–1367.

Krämer, A., Jung, M. and Burgartz, T. (2016) 'A small step from price competition to price war: understanding causes, effects and possible countermeasures', *International Business Research*,

9(3), pp. 1–13.

Kwon, O. *et al.* (2015) 'The Informational Role of Product Trade-Ins for Pricing Durable Goods', *The Journal of Industrial Economics*, 63(4), pp. 736–762.

Lambrecht, A. *et al.* (2012) 'Price discrimination in service industries', *Marketing Letters*, 23(2), pp. 423–438.

Lázár, E., BUSINESS, E. L.-J. O. E. A. and 2010, undefined (no date) 'Microeconometric models in market research price optimization', *researchgate.net*. Available at: https://www.researchgate.net/profile/Dragos-Simandan/publication/288861853_Energy_space_and_society_A_reassessment_of_the_changing_landscape_of_energy_production_distribution_and_use/links/579d1d6408ae5d5e1e14c18f/Energy-space-and-society-A-reassessment-of-the-changing-landscape-of-energy-production-distribution-and-use.pdf#page=47

Lázár, E., Research, E. L.-J. of E. and B. and 2009, undefined (no date) 'New methods in demand based price optimization', *academia.edu*. Available at: https://www.academia.edu/download/30863963/JEBR_2009_2.pdf#page=43

Lekmat, L. (2002) 'E-commerce technology for online Chai-ya Salty Egg'.

Lieberman, M. (2015) 'Pricing research: A new take on the Van Westendorp model', *Quirk's Marketing Research Review*, 2, pp. 1–5.

Lipovetsky, S. (2006) 'Van Westendorp price sensitivity in statistical modeling', *International Journal of Operations and Quantitative Management*, 12(2), p. 141.

Lipovetsky, S., Magnan, S. and Zanetti-Polzi, A. (2011) 'Pricing models in marketing research'.

Long, J. B. (1984) 'Comments on" Gaussian Demand and Commodity Bundling"', *The Journal of Business*, 57(1), pp. S235–S246.

Marn, M. V and Rosiello, R. L. (1992) 'Managing price, gaining profit', *McKinsey Quarterly*, p. 18.

Merchant, K. A. *et al.* (2011) 'Performance measurement and incentive compensation: an empirical analysis and comparison of Chinese and Western firms' practices', *European accounting review*, 20(4), pp. 639–667.

Le Meunier-FitzHugh, K. and Piercy, N. F. (2007) 'Exploring collaboration between sales and marketing', *European Journal of Marketing*.

Le Meunier-FitzHugh, K. and Piercy, N. F. (2010) 'Improving the relationship between sales and marketing', *European Business Review*.

Mohammed, R. *et al.* (2004) 'Internet marketing', *Auflage, New York*.

Nicolau, J. L. and Más, F. J. (2006) 'Micro segmentation by individual tastes on attributes of tourist destinations', *Tourism Management: New Research New York*. Nova Science Publishers: New York, NY.

Parguel, B. *et al.* (2007) 'Format effects in volume discounts to consumers', *Journal of Product & Brand Management*.

Price, B. (2002) 'Laddered questions and qualitative data research interviews', *Journal of*

advanced nursing, 37(3), pp. 273–281.

Reeder, J. (2014) 'Nonlinear price incentives and dynamic brand choice: B2B purchasing decisions with quantity discounts'.

Rowley, J. (1997) 'Principles of price and pricing policy for the information marketplace', *Library Review*.

Sadrian, A. A. and Yoon, Y. S. (1992) 'Business volume discount: A new perspective on discount pricing strategy', *International Journal of Purchasing and Materials Management*, 28(2), pp. 43–46.

Salazar, J. M. R. (2017a) 'Inverted u-shaped impact of social media posting frequency on engagement and sentiment ratio', *Empirical Quests for Management Essences*, 1(1), pp. 1–15.

Salazar, J. M. R. (2017b) 'Social media sites and teenage purchase intention in online shopping: an experimental study', *International Journal of Contemporary Financial Issues*, 2(1), pp. 39–54.

Salazar, J. M. R. (2017c) 'The Influence of Digital Marketing and social media On the Purchase Intentions of Small Business Food Products', *Journal of Modern Issues in Business Research*, 5(2), pp. 50–57.

Salazar, J. M. R. (2018) 'A Comparison of The Effectiveness of Various Social Media Platforms in Promoting Restaurants', *Empirical Quests for Management Essences*, 2(4), pp. 1–14.

Siguaw, J. A., Kimes, S. E. and Gassenheimer, J. B. (2003) 'B2B sales force productivity: applications of revenue management strategies to sales management', *Industrial Marketing Management*, 32(7), pp. 539–551.

Sikarwar, N. S. and Verma, D. (2012) 'Micro segmentation: today's success formulae', *International Journal of Operations Management and Services*, 2(1), pp. 1–6.

Sinha, S. K. and Verma, P. (2020) 'Impact of sales promotion's benefits on perceived value: does product category moderate the results?', *Journal of Retailing and Consumer Services*, 52, p. 101887.

Smith, T. (2011) *Pricing strategy: Setting price levels, managing price discounts and establishing price structures*. Cengage Learning.

Sowter, A. P., Gabor, A. and Granger, C. W. J. (1971) 'The effect of price on choice: a theoretical and empirical investigation', *Applied Economics*, 3(3), pp. 167–181.

Stremersch, S. and Tellis, G. J. (2002) 'Strategic bundling of products and prices: A new synthesis for marketing', *Journal of marketing*, 66(1), pp. 55–72.

Sukumar, S. R. and Aline, F. (2013) 'Application of micro-segmentation algorithms to the healthcare market: A case study', in *2013 Biomedical Sciences and Engineering Conference (BSEC)*. IEEE, pp. 1–4.

Tom, W. K., Balto, D. A. and Averitt, N. W. (1999) 'Anticompetitive aspects of market-share discounts and other incentives to exclusive dealing', *Antitrust LJ*, 67, p. 615.

Wedel, M. and Leeflang, P. S. H. (1998) 'A model for the effects of psychological pricing in Gabor–Granger price studies', *Journal of Economic Psychology*, 19(2), pp. 237–260.

Weiner, J. L. (2001) ‘Applied Pricing Research’, in *Sawtooth Software Conference*. Citeseer, p. 111.

Widrick, S. M. (1985) ‘Quantity surcharge—quantity discount: pricing as it relates to quantity purchased’, *Business & Society*, 24(1), pp. 1–7.

Zhang, J. Z., Netzer, O. and Ansari, A. (2014) ‘Dynamic targeted pricing in B2B relationships’, *Marketing Science*, 33(3), pp. 317–337.