



Competitive Advantage Achievement through Customer Relationship Management Dimensions*

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Abstract

Purpose: This paper aims to examine the interaction effect of customers relationship management (CRM) on the competitive advantage (CA) of small and medium-scale enterprises (SMEs) in Yemen. **Research design, data and methodology:** This study applied a quantitative approach in dealing with the interaction effect of CRM dimensions and SMEs' competitive advantage in Yemen. The research uses a sample of 247 manufacturing SMEs surveyed in Yemen. Results: The results indicate that only three dimensions of CRM, namely (TCM), (KM) and (CRMO), have a significant effect on SMEs' competitive advantage, but not that between (KCF) and SMEs' competitive advantage. Conclusions: The findings of this study offer important insights for owners and managers of SMEs, researchers and policymakers to further understand the effects of CRM on SMEs' competitive advantage. SMEs should also be encouraged to develop their CRM to improve their competitive advantage. Lastly, this study makes several contributions to the literature, the first of which is the provision of evidence concerning the major role of CRM as a dependent variable and competitive advantage as an independent variable. The second contribution pertains to its pioneering status in examining the direct relationship between CRM dimensions and the competitive advantage of SMEs in a Middle Eastern country.

Keywords : Customers Relationship Management (CRM); Competitive Advantage (CA); Manufacturing SMEs.

JEL Classification Code: N10, F11, A12.

1. Introduction

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In today's competitive business environment, CRM and competitive advantage are considered critical tools needed to compete efficiently and effectively (Thongrawd, Ramanust, Narakorn, & Seesupan, 2020; Garrido & Padilla, 2011). Taking a cue from a myriad of studies available on CRM, it is posited that organizations become more profitable and sustainable in the competitive marketplace if they retain their existing customers rather than attract new ones (Sofi, Bashir, Parry, & Dar, 2020). This can be done by way of meeting the needs of their existing customers and maintaining the long-existing relationship.

The main objective of CRM is to maximize the long-standing development and profitability of the firm via a good understanding of the customers' behavior (Alqershi et al., 2020; Soltani & Navimipour, 2016; Rajab, Shiamwama, & Otiso, 2014). It aims to offer additional effective feedback and enhance the integration to determine the return on investment in these areas. Nevertheless, several

marketing theories and practices aim to draw in potential customers rather than maintain the existing ones (Haming et al., 2019; Nguyen & Khoa, 2019; Alqershi, Abas, & Mokhtar, 2018). In the past, the focus has always been on generating sales rather than relationship building, and on pre-selling and selling rather than customer care. The fundamental aspect for customer retention is customer satisfaction and such satisfaction has to be regularly measured by firms. Highly satisfied customers will re-purchase, stay longer and spread firm reputation by word-of-mouth (Goodman, 2019). In relation to this, customer complaints and feedback can be considered as the best thing that could happen to products and services as they are improved based on them.

Simply, CRM is a high-tech way of gathering mountains of information about customers, then utilizing it to make customers glad or at least a source of more business. Therefore, concerned with comprehension and affecting customer behaviors (Chou, 2019). Nevertheless, since its introduction in the beginning of 1990s, customer relationship management (CRM) has built up a different arrangement of characters. The lack of common conceptual ground and fragmented research field has brought about an area that works at numerous levels of analysis: conceptually, practically and empirically (Zablah, Bellenger, & Johnston, 2004).

In another scenario, Yemeni manufacturing industries have been facing problems in terms of competitive advantage (AlQershi, 2020; YMIT; 2020; AlQershi, 2019), such as lack of CRM, the necessary data for understanding customers' needs and above all, absence of records on their customers' names and addresses during their purchases (Al-Nashmi & Al-Kholidy, 2016). In fact, due to lack of competitive advantage, about 500 small, medium and large manufacturing firms in Yemen were recently shut down and 60% of their employees lost their jobs (Aljazeera, 2012).

Additionally, foreign firms have managed to dominate Yemen's manufacturing market by being quick in entering the market and introducing their brands (AlQershi, 2020). These foreign firms generate most of the total revenue of the industry and they are preferred by consumers over domestic manufacturing firms. Multinational companies have laid down a firm footing while Yemeni companies have not even developed adequate practices for CRM, innovation and intellectual capital to increase their competitive advantage (World Bank, 2015; AlQershi, 2020; Sky news; 2012; Aljazeera, 2012). With the rapid development of foreign products in the Yemeni market, their strategies are being imitated by domestic firms for better performance. The domestic manufacturing firms are still having trouble in acquiring a strong competitive advantage in the marketplace (AlQershi et al., 2019).

Yemeni manufacturing enterprises face competitive pressures of globalization. Research on specific industries has been undertaken but only well-known companies were analyzed (World Bank, 2015; Alqershi, 2020). Based on the issues discussed above, this study will attempt to answer the question as to whether or not CRM influence competitive advantage in Yemeni manufacturing firms.

2. Literature Review

2.1. CRM and Competitive Advantage

CRM has become an essential part of business, especially large enterprises, and it is gaining increasing interest from smaller and mid-sized businesses (Buttle & Maklan, 2019). CRM concentrated on relationship management, lifetime marketing esteem, "marketing loyalty, and one-to-one marketing (Baran & Galka, 2016). Having seen at the three words: Customer, Relationships, and Management that made the acronym CRM, what then is CRM? CRM is new diffusion in marketing, contended to have supplanted the database marketing of the 80 percent. It is a business strategy that expects to comprehend, anticipate and manage the requirements of company's present and potential customers (Ogbadu & Usman, 2012). According to Schierholz, Sinisalo, Salo, Karjaluo, and Leppaniemi, (2007) describe that CRM as an ongoing process, which provides seamless integration of every area of business that touches the customer, for the purpose of building and maintaining a profit-maximizing portfolio of customer relationships. Also, CRM an interactive approach that achieves an optimum balance between corporate investments and the satisfaction of customer needs in order to generate maximum profits (Geib, Reichold, Kolbe, & Brenner, 2005).

According to Wang and Feng (2012), extant research of customer relationship management has revealed that many organizations do not successes to effectively deploy and manage their customer relationship management programs. For example, organizations the world over are burning lost billions of dollars on CRM, but approximately 70 percent of CRM projects did not success to accomplish expected primary concern change in business performance (Reinartz, Krafft, & Hoyer, 2004).

Furthermore, CRM is built on the foundation of incorporating people, processes, and technology in various organizational levels so as to have a better understanding of delivering on the needs of customers with value as the main concern. Consequently, the focus of CRM is to maximize customer satisfaction and retention so as to build lasting relations (Raina, 2017). In view of the above, organizations

should emphasize discovering who its best customers are and how to find new customers who will be similarly loyal and profitable (Alqershi et al., 2019).

Other insights CRM is mainly concerned with automating most of the enterprise. The further add that an effective CRM program makes it possible for customers to access needed information without hassle at any time (Almarshad, Al-Nawafah, & Tahrawi, 2020), also enables better business understanding and good knowledge of business market and its customers (Schierholz et al., 2007). Others in regard to the above positions are Buttle and Maklan (2019) who noted that CRM is made up of two important aspects of being a business strategy and a combination of software applications, hardware tools and technologies. Also, Chou (2019) noted that the benefits of CRM adoption are to encourage the repurchase ratio, increase customer brand loyalty and collecting useful customer data.

Along the same line of argument, Richey, Morgan, Lindsey, and Adams (2016) claimed that inaccurate and erroneous customer data/information is frequently cited as the reason behind failed CRM initiatives as it leads to poor data analysis and ultimately, poor decision-making. This is also supported by Mahanti (2019) who claimed that lack of sufficient and quality data prevents successful CRM initiatives. Zerbino et al. (2018) stated that successful initiatives require a significant investment in improving the quality of data and the basic infrastructure of data aligned with the required CRM initiatives.

According to Weinstein (2018) customers who are committed are long term profits to an organization. This Commitment is formed when the expectation of customer is satisfied and such customers recognize fair value from a relationship with the organization. Additionally, Becker, Greve and Albers (2009) conducted a study to examine the impact and the relationship of the CRM organization toward the customer relationship management success focusing in four different industries, which is financial services, retail, information technology and utilities from ten European countries. Many scholars and managers highlighted the failure of the CRM implementation. The result from the study shows that the companies or organizations have significant relationship toward the CRM success. Therefore, they suggested that the companies have to identify their CRM objective first whether is to acquire new customers, maintaining or retaining the existing customers. However, regardless what objective is set by the company, they still need the management support from the company. The management support consists of top management support and employees support.

Therefore, it is important for the top management to deliver the vision and CRM strategy to their employees.

Besides, the interaction between the top management and employees also important in order to ensure the CRM process can be successful and achieve the objectives and enhance organization performance. The success of CRM implementation can increase customer's satisfaction and retaining ratio, but also increase employee's satisfaction and subsequently improve company performance (AlQershi et al., 2019).

Finally, the principal aim behind customer orientation is the maximization of revenue and profit via increased customer satisfaction, customer retention and customer loyalty, market share and premium prices. Firms who take care of customers facilitate unique customer offerings and encourage employee efforts that are focused on customer value delivery (Muafi, 2020; Lestari et al., 2020; Payne, Frow, & Eggert, 2017; Grewal, Roggeveen, Sisodia, & Nordfält, 2017). In other words, firms that are customer-oriented and focused are more likely to increase customer satisfaction, facilitate customer retention and improve market share and benefits (Almarshad et al., 2020). Hence, the study intends to know the effect of CRM on competitive advantage in the Yemeni manufacturing sector. Thus, it is hypothesized:

- H1a.** There is a significant relationship between technology-based CRM and manufacturing SME competitive advantage in Yemen.
- H1b.** There is a significant relationship between key customer focus and manufacturing SME competitive advantage in Yemen.
- H1c.** There is a significant relationship between CRM organization and manufacturing SME competitive advantage in Yemen.
- H1d.** There is a significant relationship between CRM knowledge management and manufacturing SME competitive advantage in Yemen.

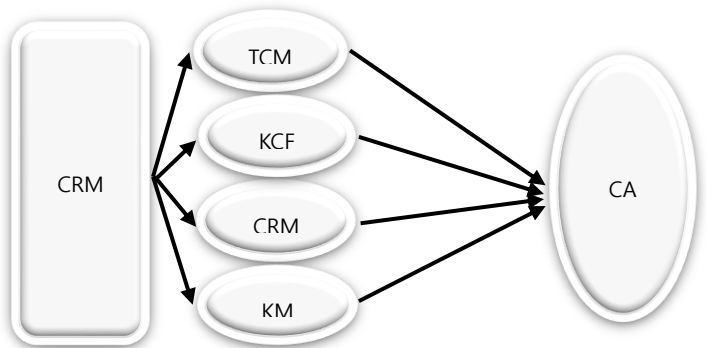


Figure 1: Research Framework

3. Research Methods and Materials

3.1. Study Population

The study’s population frame is taken from the 2019 Directory of Small and Medium Manufacturing Companies (Ministry of Trade and Industry of Yemen, 2019). In addition, the unit of analysis is the organization level, where the owners of the SMEs are representatives of their firms.

3.2. Sampling Size

From the total of 1,441 SMEs, the sample size table of Krejcie and Morgan (1970) was applied; as the population increases, the sample size increases at a diminishing rate and remains constant at 302 when the population is between 1,400 and 1,500. For this study, to ensure the minimum response number of 302 cases, and taking into account that the survey method has a poor response rate, a total of 400 questionnaires was distributed to owners. A total of 263 responses were retrieved from some 400 questionnaires distributed. Although the researcher was asked to double check completed copies of the questionnaire in case of missing data, 17 out of the 263 responses were discovered to have some problems and were not utilized for this study, leaving a total of 247 responses for analysis.

3.2. Measures

The study’s two major constructs are CRM and the competitive of advantage of SMEs. Items from previous studies were adopted to measure the constructs: 17 items for CRM from Sin et al. (2005), and competitive advantage indicators are adopted from Porter (1985) and Sharma, (2005). The study employed the 5-point Likert scale to rate the survey items, confirmed for its assessment of the participants’ perceptions and its collection of authentic and accurate information (Franklin & Foa, 2002).

4. Results

In this study, composite reliability coefficient was used to determine the internal consistency reliability of the study measures, as Cronbach’s alpha may over- or under-estimate the scale reliability, and table 1; show us loadings, composite reliability and average variance extracted. Regardless of which particular reliability coefficient is used, internal consistency exceeding 0.70 is considered as satisfactory for an adequate model. On the other hand, values lower than 0.60 are an indicator of lack of reliability. The rule of thumb provided by Hair et al., (2014) for the interpretation of the composite reliability coefficient is that

the value for a specific construct has to be 0.70 or above. The composite reliability coefficients of the study’s latent variables are presented in Table 1; it is evident that the values range from 0.738 to 0.902, indicating sufficient internal consistency reliability of the measures.

Table 1: Composite Validity and Reliability

Construct	Cronbach's Alpha
Competitive Advantage	0.805
Technology Based CRM	0.811
CRM Organization	0.738
Knowledge Management	0.816
Key Customer Focus	0.902

And In line with study hypothesis, the study investigated the relationship between CRM dimensions and CA among Yemeni SMEs. (Figure 2) presented the empirical results. Results revealed that only TCM, CRMO, KM are related to the SMEs CA, ($\beta=0.148, t=0.381, p<0.00$); ($\beta=0.184, t=0.317, p<0.04$) and ($\beta=0.208, t=2.741, p<0.03$) respectively, and interestingly, KCF did not emerge as a significant relationship of SMEs CA ($\beta=-0.472, t=7.103, p<0.738$). Creating and accumulating three four dimensions of CRM contributes to SMEs CA. TCM has the strongest direct effect on CA, and this is because technological advances currently play a major role in business. The direct relationships in the model of this study are presented in (Figure 2. And Table 2).

Table 2: The hypothesized relationships: standardized coefficients and fit statistics

Cons tructs	Std. Beta	Std. Dev	t-values	p-values	Decision
KCF -> CA	-0.472	0.048	7.103	0.738	Not Supported
CRMO -> CA	0.184	0.073	0.317	0.004	Supported
KM -> CA	0.208	0.061	2.741	0.003	Supported
TCM -> CA	0.148	0.058	0.381	0.000	Supported

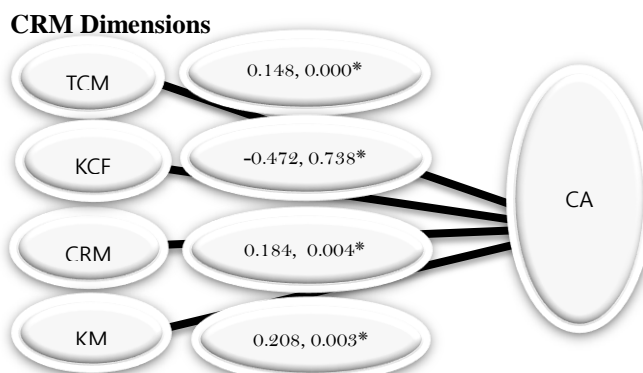


Figure 2: The empirical results

5. Discussions

The CRM process is used to explore the relationship between the organization and its customers. One tangible outcome of CRM is to increase the organization's profit by enhancing customers' purchase behavior in the future. According to prior studies, CRM facilitates employees' development. For instance, it trains and guides the employees on the ways of delivering high-quality products/services that are important to promoting good customer relationships (Plakoyiannaki, Tzokas, Dimitratos, & Saren, 2008). Employees' knowledge can be increased by training employees on how to maintain good relations with customers, which would in turn, lead to improved CRM performance. CRM is a systematic process that develops employees' knowledge, skills and attitude (Buttle & Maklan, 2019).

In line with objective one, the study investigated the relationship between TCM and competitive advantage among Yemeni SMEs, the results of this study indicate that the relationship between TCM and competitive advantage is significant in this context. The significant relationship in this study between technology-based CRM and competitive advantage motivates the organization to provide many different aspects of modern technology-based CRM. Such systems increase the process, product, marketing and administrative activities and service innovation capabilities; they can upgrade the organization's ability to maintain productive customer relationships through data integration and analysis of customer information. Through the use of technology, organizations can readily assess potential customers' needs and respond to them effectively.

Also, the current study also hypothesized the long-held belief that KCF is a critical success factor for business among SMEs competitive advantage. The results of this study indicate that the relationship between KCF and competitive advantage is not significant in this context. Although this result is surprising, because previous studies in other contexts found significant results, it may be because the population of this study consists of SMEs which need to improve their culture's belief in the benefits of KCF.

In addition, for the third dimension KM, previous research has studied the relationship between the knowledge management dimension of CRM and competitive advantage. For instance, Alipour and hallaj Mohammadi (2011) investigated the effect of knowledge management with competitive advantage and found a significant effect. Other studies have found that knowledge management has a positive and significant relationship on competitive advantage (Al Karim & Habiba, 2020; Chakravorti, 2009). These results are also consistent with the findings of this study, which show that knowledge

management has a significant relationship with competitive advantage.

In last CRM dimensions (CRMO), the current study also hypothesized that there is a significant relationship between CRMO and manufacturing competitive advantage in Yemen. The results of this study indicate that the relationship between CRMO and competitive advantage is significant in this context, this is contradictory to the general belief in the CRM organization literature (Abdullateef, Mokhtar and Yusoff, 2010; Sin et al., 2005), in that maintaining an overwhelming CRM organization on the part of the most senior levels of management is essential to the success of the CRM organization effort and its effect on a firm's performance.

Finally, this finding proves that if firms want to achieve the best remuneration, customer satisfaction and income growth, owners and managers should exploit resources and produce planned ongoing efforts to align all implicated organizational ingredients and resources toward a CRM dimensions, making manifest their commitment to customer satisfaction. Specifically, they must concentrate their efforts on those customers who are most likely to reciprocate or be responsive. And in the Yemeni context, the relationship between CRM and SMEs competitive advantage had yet to be investigated. The present study has made an important contribution to the literature by investigating this important construct in line with one of the objectives of the study. The findings from data analysis indicate that there is a significant relationship between CRM and competitive advantage in Yemen.

6. Conclusions

Concluding the above discussion of four CRM dimensions, the findings also provide support for resource based view theory (Barney, 1991), which holds that company can enhance their performance based on the internal resources, and the amalgamation between an organization's resources and capabilities enables it to create a high performance and competitive advantage. In addition, as a strategic driving, "CRM" is best conceptualized as a higher order capabilities that includes a combination of technical, human and business related activities. The reasons for this is that according to resource based view theory, resources that are not infrequent, valuable or non-imitable cannot describe variance in firm performance (Barney, 1991). Hence, a "CRM" program that contain a combination of technical, human and business related activities is probable to be more valuable and costly to imitate due to the presence of insulate mechanisms such as causal ambiguity, path dependence and interdependent skills (Coltman, 2007).

References

- Abdullateef, A. O., Mokhtar, S. S., & Yusoff, R. Z. (2010). The impact of CRM dimensions on call center performance. *International Journal of Computer Science and Network Security*, 10(12), 184-195.
- Alipour, M., & hallaj Mohammadi, M. (2011). The effect of Customer Relationship Management (CRM) on achieving competitive advantage of manufacturing tractor. *Global Journal of Management and Business Research*, 11(5).
- Aljazeera.(2012),“Retrievedfrom”[http://www.aljazeera.net\(2012\)/programs/economy and people/2012. https://www.youtube.com/watch?v=wHJp8pKq_xA](http://www.aljazeera.net/2012/2/programs/economy%20and%20people/2012.https://www.youtube.com/watch?v=wHJp8pKq_xA).
- AlKarim, R., & Habiba, W. (2020). Effects of CRM Components on Firm’s Competitive Advantage: A Case on Bangladesh Banking Industry. *Management Research*, 10(1), 1-7.
- Almarshad, M., Al-Nawafah, S., & Tahrawi, M. (2020). The role of customer relationship management success factors on enhancing the mental image of telecommunications companies in Jordan. *Management Science Letters*, 10(15), 3155-3206. DOI: 10.5267/j.msl.2020.6.043
- Al-Nashmi, M.M. and Al-Kholidy, S. (2016), “The Impact of Customer Relationship Management on Customer Satisfaction”, A Case of Pharmaceutical Companies in Yemen. *The Arab Journal*. 6 (1) 2-17.
- AlQershi, N., (2019). Innovation Capabilities as a Source of Inspiration: Towards a Sustainable Competitive Advantage in Yemeni Manufacturing Industry. *International Journal of Knowledge Management and Practices*, 7(1), 1.
- AlQershi, N., Abas, Z., & Mokhtar, S. (2020). The intervening effect of structural capital on the relationship between strategic innovation and manufacturing SMEs’ performance in Yemen. *Management Science Letters*, 11(1), 21-30. DOI: 10.5267/j.msl.2020.8.034
- AlQershi, N.A., 2020. Strategic thinking, strategic planning, strategic innovation and the performance of SMEs: The mediating role of human capital. *Management Science Letters*, 11(1), pp.1003-1012. DOI: 10.5267/j.msl.2020.9.042.
- AlQershi, N., Abas, Z. B., & Mokhtar, S. S. M. (2018). Explore the Dynamics of Customer Relationship Management on Organizational Performance. *Anwesh*, 3(1), 10.
- AlQershi, N.A, Abas, Z.B and Mokhtar, S.S.M., 2020. Investigating the Influence of Intellectual Capital Dimensions Practices on SMEs Performance. *Academy of Entrepreneurship Journal*, 26 (2) pp.1-7.
- AlQershi, N., Mokhtar, S. S. M. & Abas, Z. B., (2020). CRM dimensions and performance of SMEs in Yemen: the moderating role of human capital, *Journal Of intellectual capital*, DOI 10.1108/JIC-05-2020-0175.
- AlQershi, N., Abas, Z. B., & Mokhtar, S. S. M. (2019). Prospecting for structure capital: Proactive strategic innovation and the performance of manufacturing SMEs in Yemen. *International Journal of Entrepreneurship*.
- AlQershi, N., Abas, Z., & Mokhtar, S. S. M. (2018). Strategic innovation as driver for SME performance in Yemen. *Journal of Technology and Operations Management*, 13(1), 30-41.
- AlQershi, N., Abas, Z. B., & Mokhtar, S. S. M. (2019). The Mediating Effect of Human Capital on the Relationship between Strategic Innovation and the Performance of Manufacturing SMEs in Yemen. *Organizations and Markets in Emerging Economies*, 10(1), 57-77. DOI: <https://doi.org/10.15388/omee.2019.10.00003>
- Baran, R. J., & Galka, R. J. (2016). *Customer Relationship Management: the foundation of contemporary marketing strategy*. Taylor & Francis.
- Barney, J. (1991). Firm resources and sustained competitive advantage. *Journal of management*, 17(1),99-120. <https://doi.org/10.1177/014920639101700108>
- Becker, J. U., Greve, G., & Albers, S. (2009). The impact of technological and organizational implementation of CRM on customer acquisition, maintenance, and retention. *International Journal of Research in Marketing*, 26(3), 207-215. <https://doi.org/10.1016/j.ijresmar.2009.03.006>
- Buttle, F., & Maklan, S. (2019). *Customer relationship management: concepts and technologies*. Routledge.
- Chakravorti, S. (2009). Extending customer relationship management to value chain partners for competitive advantage. *Journal of Relationship Marketing*, 8(4), 299-312. doi.org/10.1080/15332660903344636
- Chou, C. M. (2019). Social media characteristics, customer relationship and brand equity. *American Journal of Business*, 10(1).
- Franklin, M. E., & Foa, E. B. (2002). Cognitive behavioral treatments for obsessive compulsive disorder. *A guide to treatments that work*, 2, 367-386.
- Geib, M., Reichold, A., Kolbe, L., & Brenner, W. (2005, January). Architecture for customer relationship management approaches in financial services. In *Proceedings of the 38th Annual Hawaii International Conference on System Sciences* (pp. 240b-240b). IEEE. DOI: 10.1109/HICSS.2005.101.
- Goodman, J. (2019). *Strategic customer service: Managing the customer experience to increase positive word of mouth, build loyalty, and maximize profits*. Amacom.
- Grewal, D., Roggeveen, A. L., Sisodia, R., & Nordfält, J. (2017). Enhancing customer engagement through consciousness. *Journal of Retailing*, 93(1), 55-64. doi.org/10.1016/j.jretai.2016.12.001.
- Haming, M., Murdifin, I., Syaiful, A. Z., & Putra, A. H. P. K. (2019). The application of SERVQUAL distribution in measuring customer satisfaction of retail company. *The Journal of Distribution Science*, 17(2), 25-34. <http://dx.doi.org/10.15722/jds.17.02.201902.25>
- Hair Jr, J. F., Hult, G. T. M., Ringle, C., & Sarstedt, M. (2016). *A primer on partial least squares structural equation modeling (PLS-SEM)*. Sage Publications.
- Krejcie, R. V., & Morgan, D. W. (1970). Determining sample size for research activities. *Educational and psychological measurement*, 30(3), 607-610. doi.org/10.1177/001316447003000308
- Lestari, S. D., Leon, F. M., Widyastuti, S., Brabo, N. A., & Putra, A. H. P. K. (2020). Antecedents and Consequences of Innovation and Business Strategy on Performance and Competitive Advantage of SMEs. *The Journal of Asian Finance, Economics, and Business*, 7(6), 365-378. [doi:10.13106/jafeb.2020.vol7.no6.365](https://doi.org/10.13106/jafeb.2020.vol7.no6.365)
- Mahanti, R. (2019). *Data Quality: Dimensions, Measurement, Strategy, Management, and Governance*. Quality Press.
- Ministry of Yemen (2017). Ministry of Industry and Trade.

- Retrieved from
<http://www.yemen.gov.ye/portal/Default.aspx?alias=www.yemen.gov.ye/portal/industry>.
- Muafi, M. (2020). A nexus among strategic orientation, social network, knowledge sharing, organizational innovation, and MSMEs performance. *The Journal of Asian Finance, Economics, and Business*, 7(6), 327-338. doi:10.13106/jafeb.2020.vol7.no6.327
- Nguyen, M. H., & Khoa, B. T. (2019). Customer Electronic Loyalty towards Online Business: The role of Online Trust, Perceived Mental Benefits and Hedonic Value. *Journal of Distribution Science*, 17(12), 81-93.
<http://dx.doi.org/10.15722/jds.17.12.201912.81>
- Ogbadu, E. E., & Usman, A. (2012). Imperatives of customer relationship management in Nigeria banking industry. *Kuwait chapter of Arabian journal of business and management review*, 33(849), 1-14.
- Payne, A., Frow, P., & Eggert, A. (2017). The customer value proposition: evolution, development, and application in marketing. *Journal of the Academy of Marketing Science*, 45(4), 467-489.
- Plakoyiannaki, E., Tzokas, N., Dimitratos, P., & Saren, M. (2008). How critical is employee orientation for customer relationship management? Insights from a case study. *Journal of Management Studies*, 45(2), 268-293. doi.org/10.1111/j.1467-6486.2007.00740.x
- Porter, M. E. (1985). Competitive advantage: Creating and sustaining competitive advantage.
- Raina, D. I. (2017). Impact of Customer relationship Management on customer Satisfaction and Loyalty: a study of Telecom companies in J&K. *Researchers World*, 8(4), 115-123. DOI:10.18843/rwjasc/v8i4/14
- Rajab, N. F., Shiamwama, S. M., & Otiso, K. N. (2014). Impact of customer relationship management as a strategy for competitive advantage in Kenyan public Universities: A case study of Moi University.
- Reinartz, W., Krafft, M., & Hoyer, W. D. (2004). The CRM process: Measurement and impact on performance. *Journal of Marketing Research*, 41(6), 121-132.
- Richey, R. G., Morgan, T. R., Lindsey-Hall, K., & Adams, F. G. (2016). A global exploration of big data in the supply chain. *International Journal of Physical Distribution & Logistics Management*.
- Schierholz, R., Sinisalo, J., Salo, J., Karjaluo, H., & Leppäniemi, M. (2007). Mobile customer relationship management: underlying issues and challenges. *Business Process Management Journal*. DOI 10.1108/14637150710834541
- Sharma, A. (2005). Managing human resource capability of sustainable competitive advantage. *Education+Training*, Vol. 47 Nos 8/9. doi.org/10.1108/00400910510633161
- Sin, L. Y., Tse, A. C., & Yim, F. H. (2005). CRM: conceptualization and scale development. *European Journal of marketing*, 39(11/12), 1264-1290. DOI 10.1108/03090560510623253
- SkyNews. (2012), "Retrieved from <https://www.youtube.com/watch?v=ZW7KWVEdQOY> /2012.
- Sofi, M. R., Bashir, I., Parry, M. A., & Dar, A. (2020). The effect of customer relationship management (CRM) dimensions on hotel customer's satisfaction in Kashmir. *International Journal of Tourism Cities*. DOI 10.1108/IJTC-06-2019-0075
- Soltani, Z., & Navimipour, N. J. (2016). Customer relationship management mechanisms: A systematic review of the state of the art literature and recommendations for future research. *Computers in Human Behavior*, 61, 667-688. <https://doi.org/10.1016/j.chb.2016.03.008>
- Thongrawd, C., Ramanust, S., Narakorn, P., & Seesupan, T. (2020). Exploring the Mediating Role of Supply Chain Flexibility and Supply Chain Agility between Supplier Partnership, Customer Relationship Management and Competitive Advantage. *Int. J Sup. Chain. Mgt Vol*, 9(2), 435.
- Wang, Y., & Feng, H. (2012). Customer relationship management capabilities. *Management Decision*. DOI 10.1108/00251741211194903
- Weinstein, A. (2018). *Superior customer value: Finding and keeping customers in the now economy*. Routledge.
- Zablah, A. R., Bellenger, D. N., & Johnston, W. J. (2004). An evaluation of divergent perspectives on customer relationship management: Towards a common understanding of an emerging phenomenon. *Industrial marketing management*, 33(6), 475-489. doi.org/10.1016/j.indmarman.2004.01.006
- Zerbino, P., Aloini, D., Dulmin, R., & Mininno, V. (2018). Big Data-enabled customer relationship management: A holistic approach. *Information Processing & Management*, 54(5), 818-846. doi.org/10.1016/j.ipm.2017.10.005