

## THE MEDIATING ROLE OF SUSTAINABLE DEVELOPMENT IN THE RELATIONSHIP BETWEEN PRODUCER COST EXPECTATIONS AND CUSTOMER DESIRES

HAITHAM SAHIB SAEED<sup>1</sup>, SARAH ISAM HASAN<sup>2</sup>, NADA SALMAN NIKKEH<sup>3</sup> AND HAKEEM HAMMOOD FLAYYIH<sup>4,5\*</sup>

<sup>1</sup>Department of Accounting, College of Administration and Economics, Mustansiriyah University, Iraq. <sup>2</sup>Accounting Department, College of Administration and Economics, University of Kufa, Iraq. <sup>3</sup>Accounting Department, Technical Institute, Iraq. <sup>4</sup>Institut Supérieur de Gestion, University of Tunis, Tunisia. <sup>5</sup>College of Administration and Economics, University of Baghdad, Iraq.

\*Corresponding author: hakeem.hmood@coadec.uobaghdad.edu.iq

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**Abstract:** In this paper, customers' expectations are continually shifting due to the business environment's growing competition and substantial changes. As a result, organisations no longer viewed it as a static objective but as an ever-evolving aim. From this vantage point, the research has explored the accounting literature in search of novel approaches to addressing the strategic dimensions of quality, cost and time. Getting them to respond positively to the customer's requests also requires recognising their needs and controlling their impact on these dimensions. With the removal of operations that do not contribute any value to the product's value chain and a reduction in manufacturing costs through continuous improvement, the outcomes have led to an exit from sustainable competitive advantage. It has been concluded that focusing on the quality dimensions has become time-consuming and that a strategy that involves the integration of these dimensions from a strategic perspective is necessary to meet consumer expectations.

Keywords: Sustainability, producer cost, cost expectations, customer desires, gap.

### Introduction

To be successful in business, product quality, cost and delivery time must all be considered. Therefore, management and control are essential in establishing a harmonious relationship between them. Managing product quality, pricing and delivery time is no longer sufficient to ensure long-term viability and success in a volatile business environment such as severe competition and technological innovation. Because of this, companies had to find a strategy that allowed them to link the key success factors that are open to customer influence and thus, made them a more dynamic response focused on time in order to achieve their objectives of increasing customer satisfaction as a result of the increased value of their products compared to competing products (Zairi, 2012).

The development of social performance which includes the development of health and safety practices, equal opportunities for employment and decent jobs, elimination of all

harmful practices such as child forced labour, female participation at all levels of decision-making, the elimination of discriminatory policies and practices and the promotion of appropriate wage and social protection policies, adds to the challenges that are being faced. The greatest difficulty that humanity must overcome at present is enhancing its social performance which is the primary barrier to sustainable growth (Thijel *et al.*, 2018). The researchers have considered that collaboration between buyers and sellers can speed up social performance.

Recent research on the effects of controlling interfirm connections on sustainability has led researchers to conclude that improved relationship management is beneficial for developing socially sustainable performance (Awan *et al.*, 2018). Much research has sought to explain the consequences of cultural differences between partners that can create misunderstandings to obtain mutually beneficial

outcomes (Todeva & Knoke, 2005). Cultural values involve subjective cognitions of shared social or personal cultural biases related to managers' mental programming (Gelfand & Christakopoulou, 1999). In this context, there is a limited understanding of how cultural differences affect the relationship between buyers and suppliers. This study responds to the call for investigating the unique cultural values that influence individual choices for conflict handling techniques (Wuyts & Geyskens, 2005). Early breakthroughs in cultural awareness in managing the buyer-supplier linkages within the governance of supply chain context offered (Al-Taie *et al.*, 2017). Cultural intelligence (CQ) is the ability to adjust to new cultural environments; adjusting to such circumstances provides an improved grasp of rituals, procedures, perceptions and tasks inside such cultural settings. Many studies have sought to explain the effects of relational governance structure on performance but few pieces of research have integrated strategic consideration of the role of culture in managing inter-firm connections (Hamdan *et al.*, 2018). Thus, cultural intelligence may be significant for the stability of buyer-supplier relationships. Thus, fewer study investigations on the relative impact of cultural characteristics facilitate inter-firm cultural variances and lead to successful management (Awan *et al.*, 2018).

In recent years, making socially and environmentally conscious practices common in manufacturing businesses has become essential for sustainable performance. Humans' health is critical to the well-being of society but it should not be considered the most important. Environmental sustainability is mistaken for environmental sustainability. Being environmentally conscious of guaranteeing that it satisfies existing requirements without compromising future generations allows others to satisfy their own needs. Third, when looking at firm control, social sustainability supports the claim that firms should be in control of their activities (Talab *et al.*, 2019). Though manufacturing businesses have not received much-highlighted focus in the supply chain, difficulties are nonetheless being found in these organisations (Ritala *et al.*, 2009).

The modern era's business environment depends on customers' requirements and desires in its work due to the expansion of markets and technological development and the multiplicity of customers' desires. All this led to the production of a product that meets the wishes of the customer (company) but from the point of view of the customer who would accept the product or not, this acceptance or not is due to the achievement of the competition precedence achieved by the company and the precedence of competition achieved by the customer (Mohaisen *et al.*, 2021). As well diversity, a short life cycle and price volatility led to the study of these problems by reducing the dimensions of competition between the expectations of the product (company) and the wishes of customers following the sustainable strategy to ensure that the company remains in a privileged position in the markets. The importance of this study comes from achieving the company's objectives of producing a product with high-quality specifications and low cost and according to the wishes of its customers, i.e., all that is produced is sold by taking modern methods in reducing the gap in the dimensions of competition between the product and the customer following a sustainable strategy in line with modern technology. The current research is based on reducing the cost of the product and improving its quality, reducing the gap in the dimensions of competition between the product and the wishes of the customer under the framework of the strategy of sustainable competitive advantage.

### **Conceptual Framework**

The basic goal of each economic unit is to gain a sustainable competitive edge, allowing it to thrive in marketplaces with diverse goals, resources and characteristics (Sirmon *et al.*, 2011). Competitive advantage as well as a sustained competitive advantage will be understood. The economic unit or companies have increased their efforts to gain a competitive advantage by decreasing the prices of their products, increasing the quality of their products and speeding up the delivery of their services

in response to changes in the competitive environment. The organisation needs to adopt a new strategy better suited to its competitive environment to get these benefits. The most crucial factors to be covered by the study are price, quality and timeliness (Talab *et al.*, 2017). A corporation has a competitive advantage if it can generate profits in a way that its rivals cannot (Sharkie, 2003). Some have been singled out as the body of expertise that sets the firm apart from rivals. The managers have described it as the company's competitive position due to its advantages in the product market (Fahy *et al.*, 2004).

### ***Sustainable Competitiveness Strategies for the Proper Solution***

The following approaches will be provided to each strategy, with most of the research based on both approaches (leadership and cost vs. discrimination vs. focus). This method seeks to reduce manufacturing expenses without compromising output or quality (Mreza *et al.*, 2018). Also, in order to achieve the company's distinctive competitive capabilities favoured by competitors, it must harness manufacturing capabilities and equipment with global capabilities and constantly reduce costs wherever possible, be it at the level of production, expenses, advertising or after-sales services (Swink & Hegarty, 1998):

**Discrimination Strategy:** This strategy seeks to differentiate the company's outputs from its rivals by ensuring that its simple and unique method will satisfy customers' needs and desires for innovative products and high-quality introduction discrimination on existing production lines. However, the company must pay close attention to quality if it is not to fail at implementing this strategy (Alzabari *et al.*, 2019).

**Focus Approach:** This strategy is based on selecting a certain competitive sector to focus on the product or a specified number of products or on the part of the target market to make these requirements, capabilities, talents and resources available (Kaleka, 2002).

### ***The Contradiction between What is Expected of the Product and What is Wanted by Consumers***

With the hope of assisting businesses in achieving success and stability, this section will present the most significant tools and concepts for comprehending what must be done to narrow the chasm between product expectations and customer demands. This axis will discuss the different kinds of gaps and their examination (Osterwalder *et al.*, 2015).

### ***What is the Gap?***

The beginning of the eighties of the last century saw a shift toward customer value generation as companies focused more on improving internal operations while also turning their focus outward to the customer. The improvement efforts should focus on narrowing the gulf between in-house production methods and the quality, price and timeliness demands of the firm's external customers (Low *et al.*, 2016). According to his presentation, a smaller difference between customer satisfaction and product satisfaction indicates that the organisation is making an honest effort to design a strategy for strengthening its position. Customer appreciation for a product's cost, effort and craftsmanship peaks upon delivery (Jap, 2001). If customer demands shift, this analysis will need to be updated to reflect the new state of affairs regarding the desired outcome.

### ***Type of Gaps***

Customers' demands and expectations play a major role in determining the gaps that can be identified. The lack of time or accuracy in analysing market information results in a gap in management's grasp of client wants, which leads to the first problem: The knowledge gap. It is called a "standards gap" when the product's specifications do not meet the firm's or international quality standards and specifications, it occurs when this quality gap exists between what the company promises and what is delivered. Estimated expenses versus authorised costs are known as a cost gap. It is predicted that increased expenses will exceed additional resources and

this gap financing is used to cover the difference (Parasuraman *et al.*, 1991).

Increasing sales are one of the most important aims of companies to make money and this can only be achieved by determining the needs of their customers and providing products that meet those needs, so, strengthening their relationship with customers and working to reduce their gap is essential to achieving this goal (Al-khoury *et al.*, 2022). Quality, cost and time can all identify gaps in a project's competitive landscape. Identifying and treating errors that could taint a customer's perception of a product's quality, as well as conducting an analysis of the quality gap to see how well a product compares to what customers expect are critical first steps in resolving the quality gap between a company's products and those that they are selling (Wheelwright & Clark, 1992).

One of the most important gaps in customer satisfaction is the cost gap, which includes the use of the best techniques to estimate costs and any increase in melasma must be offset by an increase in the value of the product because the customer is not willing to pay a higher price unless this increase is offset by an increase in the value perceived by him (Mohaisen *et al.*, 2021). Analysis of the time gap: In the previous century, companies relied heavily on time as a success factor, along with quality and cost, but today the customer is the primary player and companies must strive to meet his expectations in terms of quality, cost and timeliness, all while reducing the time gap (Al-khoury *et al.*, 2022).

**Strategic Reduce the Gaps:** For example, a firm's strategic vision for competing dimensions depends on the extent to which it can provide a product that meets the customer's desire by improving products' quality while also reducing their costs in the shortest possible time and this can indicate the strategic dimension of both quality, cost and time (Holman *et al.*, 2013).

**Using Technology:** Using technology to disseminate quality has a significant impact on quality's strategic dimension (QFD). Today's businesses strive to meet customers' expectations by getting to know their wants and needs. The

necessity of providing a product that is up to date with changing consumer tastes brought on by changes in the business environment. An alternative approach is based on selling what is producible and producing what can be marketed (Kounetas, 2015).

**Product Cost Reduction:** Product cost reduction is a top priority for companies in order to gain customer satisfaction and the strategic dimension of cost takes its full extent by using the cost system based on activities, as it is a cost philosophy that keeps pace with developments in the modern business environment and represents one of the best tools for measuring and allocating indirect costs (Gopalakrishnan *et al.*, 2015).

**Product's Life Cycle:** If a faster response shortens a product's life cycle to the wishes of the most important guided customer in today's manufacturing environment, then companies must measure the manufacturing cycle to increase efficiency and reduce the time (Matsokis & Kiritsis, 2010). When it comes to improving a product or a process, continuous improvement is a style or philosophy that involves a long-term effort to make minor adjustments over a long period to produce significant gains in the product's cost, quality and time to satisfy the customer's needs. Efforts will be made to lower production costs in the factory sample study's practical element to meet the client's needs and desires (Flayyih, 2015).

## Methodology

A questionnaire was designed to know the opinions of customers. They were randomly selected, numbering 300 people, who were chosen through electronic communication via social networking sites in cooperation with a group of organisations that support the trend towards supporting national production. To ascertain their opinions, their desire for locally manufactured versus imported products and the extent of a product's cost expectations in light of those desires. The questionnaire results reached a complete agreement about these variables in light of several factors imposed and legally from

governance about products and included special specifications related to quality and not violating health controls. On the other hand, imported products do not apply the same controls as local production.

After obtaining positive results from the study, the aim is to verify the impact of product cost expectations on customers’ desires by mediating sustainable development, which includes four dimensions: The economic, social, technological and environmental. Several individuals working in the Iraqi Ministry of Industry and Minerals, amounting to 150 workers were selected as a community for research from technicians in the field of production and 81 forms were retrieved, equivalent to 54% of the total community.

The internal consistency and the resolution’s stability were validated using the Cronbach's Alpha coefficient. It was found that the stability coefficient of the resolution is high, reaching (0.79). The values of the coefficients for the axes and dimensions of the resolution ranged between (0.63 to 0.86). This indicates that the questionnaire in all its aspects enjoys a high and acceptable degree of reliability. Therefore, it can be adopted in conducting the analysis and adopting the results and that honesty is equal to the root of the reliability coefficient. The questionnaire validity value was (0.89), which is a good value indicating the validity of the scale. At the same time, the reliability test was

done by the split-half method, where the split-half method is used to measure the stability of the resolution.

A further method used to assess stability was to divide the paragraphs of the scale into two homogeneous halves and to calculate stability using this method. All 81 questionnaires were used in this study. The 60 paragraphs of the scale were divided into two halves. The first half includes the even items, the second includes the odd items and the correlation coefficient (Pearson) was extracted between the scores of the odd questions and the scores of the even questions, it amounted to (0.88). Using the corrective Spearman-Brown equation, the reliability coefficient was reached by this method (0.90), which is a high stability coefficient. Table 1 shows the reliability and validity of the research scale.

**Results and Discussion**

Symbolic of the community and the research sample as a whole in terms of its operational and investment strategies and financial data. The Baghdad-based electrical and electronics general firm has ties to the Ministry of Industry and Iraqi Minerals. When the company rehabilitates its assembly lines, it hopes to boost output and expand its customer base. Adding new lines to increase production efficiency and eliminate wasteful steps is only one option. It is

Table 1: The reliability and validity of the research scale

Variables	Aspects of Sustainable Development				Main Variables		
	Economical Aspect	Social Aspect	Technology Aspect	Environmental Aspect	Sustainable Development	Product Cost Forecast	Customers Wish
Stability coefficient value	0.83	0.86	0.83	0.80	0.63	0.83	0.83
The questionnaire in general	0.79						
Reliability	0.89						

equally important to maintain the distribution of targeted cost channels and keep the actual cost of the air cooler engine’s product below the ceiling of its goal cost. In the case of better production conditions in the provinces, therefore, the achievement of economic development for the country through the fulfilment of the wants of the country with its products, something new will emerge in the provinces.

The Planning Division is responsible for tallying the costs and the Cost Division is in charge of generating the cost list, which in turn depends on the buy lists created by the Department of External Procurement. Table 2 shows all of 2017’s air cooler engine product costs.

Through market research and interviews with the company’s director of marketing and commercial, the researcher learned that the price of similar products and competition for the engine cooler air is an Iranian air cooler engine (Pervap) 36,000 dinars and that demand for the product has increased in Iraqi markets, so, the price was calculated using the price of the competing product. Constantly bettering the product compared to similar pricing products on

the market is one of the strategies for reducing expenses nowadays. Through iterative tweaks and refinements, product costs can be reduced.

**Reduced-price Primary Materials**

Interviews with warehouse, planning, follow-up, quality management and engineering inspection officials confirmed to the researcher that raw material costs could be reduced by 6% annually, thus, a 6% annual reduction in raw material costs was set as a goal and the reduction was determined as follows:

**Decreasing the Working Cost**

Officials from the plan have acknowledged that if the company follows the researcher’s suggestions to reduce the number of personnel involved in the manufacturing of the air cooler engine from 70 to 30, the cost of the component work will decrease by 5% per year. The forty people who would have been laid off would not have been wasted, though they could have been moved to other industries or used in other governments. The resulting cost reductions in the workforce will conform to the breakdown in Table 3 and Table 4.

Table 2: Expenses incurred by air cooler engines in 2017

Cost Elements	Total	Total	Total
Raw materials	21,734 \$		
Direct material	1,640 \$		
Total variable costs		33,221 \$	
Fixed costs of production		346 \$	
Total fixed costs		873 \$	
Total manufacturing costs			22,135 \$
Marketing administrative costs			6,790 \$
Total Costs			32,243 \$

Table 3: Decreasing the number of raw ingredients required per product

Items	Raw Materials’ Cost	6% Decreasing Percentage	Decreasing in Raw Materials
Air conditioning	33,456 \$	2,318 \$	11,204 \$

Table 4: The products’ respective reduction values

Items	Manufacturing, Advertising and Management Expenses	6% Reducing	New Cost
Manufacturing costs	340	12	190
Advertising costs	3,453	65	1,345
Management costs	3,213	68	1,779

**Conclusion**

According to a recent study, customers’ expectations are continually shifting due to the fast-paced changes in the business environment and the resulting heightened competition. Companies began to see it as a shifting target rather than a static aim as the change had become both necessary and obligatory. With this perspective, the study has tested novel accounting literature dealing with a quality and cost strategic elements. By recognising the customer’s wants and managing their impact on these dimensions, you may make them respond positively to customers’ wishes. The following are the most significant findings: If a firm cannot meet its customers’ requirements and expectations, it will fail to develop and prosper in today’s customer-centric business climate, which requires constant attention to the wants and expectations of its customers. Only focusing on cost reduction may be misleading and insufficient, as it may result in a loss of clients if other information is ignored such as the improvement of product quality and speed of delivery. Modern production environments have made it more time-consuming for companies to relate their ideas to an overall strategy that focuses on integrating various dimensions in a way that helps customers and is more practicable than advancing toward each dimension one at a time. The formation of several gaps between the lab product and the requirements of the client, some positive as a result of superior management in this aspect and the negative as a consequence of weakness in the management of that element. The expenses of constructing the laboratory air engine have shown a high research sample, as it is estimated according to traditional methods

that do not give equity in distribution due to the adoption of distorted cost estimates. The results showed that one of the key factors in the high cost of the product laboratory sample research is the number of personnel, as the ratio of salary and wages to total expenses was 65%.

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**References**

Al-khoury, A., Hussein, S. A., Abdulwhab, M., Aljuboori, Z. M., Haddad, H., Ali, M. A., Abed, I. A., & Flayyih, H. H. (2022). Intellectual capital history and trends: A bibliometric analysis using scopus database. *Sustainability, 14*(16), 1-27.

Al-Taie, B. F. K., Flayyih, H. H., & Talab, H. R. (2017). Measurement of income smoothing and its effect on accounting conservatism: An empirical study of listed companies in the iraqi stock exchange. *International Journal of Economic Perspectives, 11*(3), 710-719.

Awan, U., Kraslawski, A., & Huiskonen, J. (2018). Governing interfirm relationships for social sustainability: The relationship between governance mechanisms, sustainable collaboration and cultural intelligence. *Sustainability, 10*(12), 4473.

Chutkaew, C. (2007). Sustainable competitive advantage of strategic corporate social responsibility in Thai companies. *Journal of Business Studies, XXXIX*(1), 177-199.

- Fahy, J., Farrelly, F., & Quester, P. (2004). Competitive advantage through sponsorship: A conceptual model and research propositions. *European Journal of Marketing*, 38(8), 1013-1030.
- Flayyih, H. H. (2015). Evaluate the financial performance of the economic entities Using the economic value added An Empirical Study in State Company. *Third Conference of the Federal Financial Control Bureau*, 1-19.
- Gelfand, M. J., & Christakopoulou, S. (1999). Culture and negotiator cognition: Judgment accuracy and negotiation processes in individualistic and collectivistic cultures. *Organizational Behavior and Human Decision Processes*, 79(3), 248-269.
- Gopalakrishnan, M., Libby, T., Samuels, J. A., & Swenson, D. (2015). The effect of cost goal specificity and new product development process on cost reduction performance. *Accounting, Organizations and Society*, 42, 1-11.
- Hamdan, K. H., Bachay, I. R., Talab, H. R., & Flayyih, H. H. (2018). Using capital budget and sensitivity analysis to predict future cash flows and evaluate investment projects: Empirical study at Iraqi company for production, marketing and meat and field crops. *Journal of Engineering and Applied Sciences*, 13(24), 10510-10516. <https://doi.org/10.3923/jeasci.2018.10510.10516>
- Holman, D. M., Fox, K. A., Glenn, J. D., Guy Jr, G. P., Watson, M., Baker, K., Cokkinides, V., Gottlieb, M., Lazovich, D., & Perna, F. M. (2013). Strategies to reduce indoor tanning: Current research gaps and future opportunities for prevention. *American Journal of Preventive Medicine*, 44(6), 672-681.
- Jap, S. D. (2001). The strategic role of the salesforce in developing customer satisfaction across the relationship lifecycle. *Journal of Personal Selling & Sales Management*, 21(2), 95-108.
- Kaleka, A. (2002). Resources and capabilities driving competitive advantage in export markets: Guidelines for industrial exporters. *Industrial Marketing Management*, 31(3), 273-283.
- Kounetas, K. (2015). Heterogeneous technologies, strategic groups and environmental efficiency technology gaps for European countries. *Energy Policy*, 83, 277-287.
- Low, M., Botes, V., De La Rue, D., & Allen, J. (2016). Accounting employers' expectations- the ideal accounting graduates. *e-Journal of Business Education and Scholarship of Teaching*, 10, 36-57.
- Matsokis, A., & Kiritsis, D. (2010). An ontology-based approach for Product Lifecycle Management. *Computers in Industry*, 61(8), 787-797.
- Mohaisen, H. A., Al-Abedi, T. K., & Saeed, H. S. (2021). The Impact of accounting disclosure according to integrated business reports on the value of the company and the cost of capital: An empirical study in Iraq Stock Exchange. *Webology*, 18(Special Issue), 328-351. <https://doi.org/10.14704/WEB/V18SI05/WEB18232>
- Osterwalder, A., Pigneur, Y., Bernarda, G., & Smith, A. (2015). *Value proposition design: How to create products and services customers want*. John Wiley & Sons. <http://www.orange.ngo/wp-content/uploads/2017/04/value-proposition-design.pdf>
- Parasuraman, A., Berry, L. L., & Zeithaml, V. A. (1991). Understanding customer expectations of service. *Sloan Management Review*, 32(3), 39-48.
- Ritala, P., Hurmelinna-Laukkanen, P., & Blomqvist, K. (2009). Tug of war in innovation-coopetitive service development. *International Journal of Services Technology and Management*, 12(3), 255-272.
- Sharkie, R. (2003). Knowledge creation and its place in the development of sustainable



- competitive advantage. *Journal of Knowledge Management*, 7(1), 20-31.
- Sirmon, D. G., Hitt, M. A., Ireland, R. D., & Gilbert, B. A. (2011). Resource orchestration to create competitive advantage: Breadth, depth and life cycle effects. *Journal of Management*, 37(5), 1390-1412.
- Swink, M., & Hegarty, W. H. (1998). Core manufacturing capabilities and their links to product differentiation. *International Journal of Operations & Production Management*, 18(4), 374-396.
- Talab, H. R., Ibrahim, A. M., Flayyih, H. H., & Mahamheed, uass N. (2019). The role of e-Government on corruption and its impact on the financial performance of the government: An empirical analysis on the Iraqi government. *Journal of Engineering and Applied Sciences*, 14(4), 1349-1356. <https://doi.org/10.3923/jeasci.2019.1349.1356>
- Thijeel, A. M., Flayyih, H. H., & Talab, H. R. (2018). The relationship between audit quality and accounting conservatism in the Iraqi banks. *Opcion*, 34(Special Issue 15), 1564-1592.
- Todeva, E., & Knoke, D. (2005). Strategic alliances and models of collaboration. *Management Decision*, 43(1), 123-148.
- Wheelwright, S. C., & Clark, K. B. (1992). *Revolutionizing product development: Quantum leaps in speed, efficiency and quality*. Simon and Schuster.
- Wuyts, S., & Geyskens, I. (2005). The formation of buyer-supplier relationships: Detailed contract drafting and close partner selection. *Journal of Marketing*, 69(4), 103-117.
- Zairi, M. (2012). *Measuring performance for business results*. Springer Science & Business Media.