

DOES DIFFERENTIATION STRATEGY MODEL MATTER? DESIGNATION OF ORGANIZATIONAL PERFORMANCE USING DIFFERENTIATION STRATEGY INSTRUMENTS – AN EMPIRICAL ANALYSIS

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Abstract. Considering pursuing the differentiation strategy makes enable the organization to earn its success and to create, capture and sustain economic value. Despite this importance, it is relatively absentminded in empirical studies at the conceptual level. In response to this gap, the purpose of this paper is conceptualizing differentiation strategy model, developing the instruments of differentiation strategy, and testing the relationship between dimensions of the value chain, differentiation in the supply, competitive advantages, and organizational performance, using data from a sample of 123 manufacturing organizations. On this study, quantitative methods were applied to measure the proposed relationships, and questionnaires were used as a tool in gathering primary data. Relationships proposed in the framework were tested using structural equation modeling. The results of this study indicated that pursuing the differentiation strategy leads on increasing competitive advantage and improving organizational performance. Also, it pointed out that the manufacture organizations' success is determined by their ability to be flexible on strategic planning and on integrating internal and industrial settings factors on differentiation strategy creating. This research contributes to strategic literature clarifying a successful differentiation model helping the practitioners on increasing the ability and knowledge on pursuing the differentiation strategy.

Keywords: differentiation strategy, business model, distinctive value chain, competitive advantage, organizational performance.

JEL Classification: L1, O21, O14, M21, L22.

Introduction

Peculiarly the strategic literature lacks empirical research on the positive impact of a differentiation strategy model on organizational performance. The effect of differentiation strategy instruments such as distinctive value chain, distinctive value proposition, distinctive resources and distinctive suppliers on competitive advantage and organizational performance are less clear. Primary goal of each business is to be successful in the market. Therefore, the central question in strategy is: why organizations succeed or fail? Perspectives for organizational success can be summarized in two main approaches: (a) industrial organization view (I/O) and (b) resource-based view (RBV). In one side, proponents of industrial organization view

claim that a well analyzing of industrial factors is essential on strategy creating, which makes the organization to succeed (e.g. see, Porter, 1985, 1991; Budzinski & Kuchinke, 2018; Katz, 2019). Whereas on the other side, proponents of resource-based view claim that internal factors are more important to analyze during the strategy formulation process in order that organization to succeed in the market (e.g. see, Barney, 1991, 2001; Neffke & Henning, 2013; Donnellan & Rutledge, 2019). According to RBV, achieving a competitive advantage and organizational success is a result of well using its human, physical, and organizational resources. At present, in this cutthroat competition is not the main issue if external, industrial, or internal factors are more important to capture and sustain competitive advantage, but their integration. Effective integration

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and understanding of both external and internal factors is the key to reach and keep the competitive advantage (E. R. David & F. R. David, 2017). Consequently, the main focus of this study is on integrating both of these views in a business model, which will be explained and tested according to the differentiation strategy instruments. There are lack integrative strategy models that unite well the aspects of strategy, as resource-bases, activities, structure, products and external factors (Hedman & Kalling, 2003). In fact, strategists tend to argue what makes a company successful, whether it is organization-internal resources (Barney, 1991), successful reconfiguration of the value chain (Porter, 1985), or a well-implemented generic strategies (Porter, 1980). Moreover, Porter (1991) indicated that in order to understand competitive advantage is needed to decompose it by dividing into two basic types: lower cost than rivals (cost leadership strategy), or the ability to differentiate and command a premium price that exceeds the extra cost of doing so (differentiation strategy).

Further on this study is analyzed only the differentiation strategy through its instruments and their impact on organizational success. Pursuing differentiation strategy is considered as the most important strategy to achieve sustainable competitive advantage for an organization (Porter, 1996; Kim & Mauborgne, 2005; Banker, Mashruwala, & Tripathy, 2014), and to increase the firm's performance (Islami et al., 2020). It is worth mentioning that, despite the advantages of using differentiation strategy (Laperonne, 2017) determined its limitations. Thus, literature causes uncertainty for practitioners in pursuing a differentiation strategy. This study is an attempt to illuminate the empirical analysis in this relatively neglected area by measuring relationships between differentiation strategy instruments and organization performance by creating a conceptual model of the differentiation strategy.

The main objective of this paper is to create a differentiation strategy business model that helps the organizations' managers to achieve sustainable competitive advantage and to improve organizational performance. Also, it clarifies the misunderstandings that managers, strategists, and academics have in analyzing the relationship between the value chain, differentiation strategy, and competitive advantage.

The reason why is selected the manufacturing industry to conduct this research is that in many industrialized and transitional economies, the literature is bordered mostly by the study of manufacturing organizations (Bowen & Schneider, 1988). Additionally, both developed and developing countries have been trying to increase this industry, by providing economic stability, it can be considered as a national strategic industry. Since the middle of the eighteenth century, manufacturing has functioned as the main engine of economic growth and development (Szirmai & Verspagen, 2015; Attiah, 2019). Furthermore, in Kosovo more than 99% of organizations are small and medium businesses (Islami & Mulolli, 2016). Based on literature, surviving of small and medium manufacturing businesses

in the competitive market is closely related with strategy that organizations decide to follow in order to differentiate itself from large companies. "...large manufacturing companies can often invest in new technologies and equipment, providing world-class skills, training to their workforce and winning new markets this is hardly the case for small companies (Laforet & Tann, 2006, p. 364). Nevertheless, research shows that new small firms are continually entering the market with new ideas, products and processes (De Jong & Marsili, 2006). Thus, this study focuses on the Kosovo manufacturing industry to identify how to improve and increase the performance and competitiveness of this industry by creating and implementing differentiation strategy through its instruments.

On realizing the outline of this study, it is divided in four key parts. First, presents the previous literature as the background of a constructive business model including the whole process of differentiation strategy, building the business model proposal of this study, clarifying value chain and value proposition in the view of differentiation strategy, explaining competitive advantage and organizational performance. Second, shows research hypotheses and the methodology approach of this study. Third, presents empirical analysis using statistical tools indicating the relationship between manager's participation, distinctive value chain, differentiation strategy, competitive advantage, and organizational performance. Fourth, presents the discussions of the findings and their implications on the proposed business model, ending by contributive conclusions of the study.

1. Theoretical framework

Generic strategies suggested by Porter (1980) were focused on creating competitive advantages by organizations and on outperforming their competitors. The base of generic strategies is on the external setting more specifically on the environment of the industry. Creating organizational strategy according to Porter requires from the decision-makers to answer the questions: how the strategy will be linked with the attractiveness of the industry? And how the strategy will locate the organization in the competing industry? Therefore its strategies survive over time "since the early 1980's, Michael Porter's strategic typology has been one of the most widely accepted methods of discussing, categorizing, and selecting company strategies" (Islami et al., 2020, p. 2). Whereas, the critiques of Porter's work principle was methodological, as "many of the points that he makes do not seem to have any empirical justification" (Yamin, Gunasekaran, & Mavondo, 1999, p. 509). Recently an empirical research is done by (Islami et al., 2020), providing the answer to the question, which of three generic strategies proposed by Porter have more impact on increasing the firm performance? Results have shown that pursuing the differentiation strategy increase the firm performance more than pursuing an overall cost leadership strategy or a

focus strategy, even though three generic strategies indicated a positive and significant impact on firm performance. Thus, what means pursuing a differentiation strategy? According to Porter (1980) organizations that pursue differentiation strategy offers products or services with unique attributes in order to create competitive advantage on the market. Berman et al. (1999) indicated that differentiation is related to the degree of which a product or service are considered as unique on the consumer's perception. Rothaermel (2017) pointed out that by perceiving a product/service as unique, requires a premium price from consumers, providing greater profitability for the organization. Thus, organizations by pursuing a differentiation strategy can capture superior profit derived by the willingness of consummator to pay the premium for the unique product or service offered by the organization. Furthermore, competing with a special offer as a result of pursuing a differentiation strategy serve as an obstacle for new entrants in the industry, increasing the profitability of incumbents (Islami et al., 2019). Lapersonne (2017) was answered on the question of how pursuing a differentiation strategy hinders new entrants to get into the industry and provides convenience for the incumbent firms, indicating two kinds of barriers for new entrants. In one side, organizations by offering something unique make customers more loyal and less sensitive to price (Murray, 1988) and reduce the bargaining power of the customer as there are no other offers that enable comparison (Lapersonne, 2017). On the other side, based on the resource-based view is explained that the unique attributes of the offer that are difficult to be imitated by rivals, serves as barrier for new entrants as well (Barney & Hesterly, 2012). These two barriers for rivals of the organization that has adopted a differentiation strategy make enable easy to sustain superior margin, even if it has to manage the high cost (Lapersonne, 2017).

Differentiation strategy is achievable only if the firm can create something which is perceived by customers as unique. Creating a unique product or offering a unique service, requires by the organization to make distinctive competencies in supply chain activities. Porter (1985) indicated that applying differentiation strategy meet several unique dimensions as, product and service attributes, sales distribution, advertising intensity, brand image or other dimensions that influence a value chain activity and create something unique for the customer. Yamin et al. (1999) analyzed differentiation strategy through four dimensions: customer service, technology leadership, product differentiation, and logistic differentiation. Based on the previous strategic literature can be concluded that pursuing differentiation strategy means: creating a unique product or offering a unique service based on consummators' need (market level), by finding a unique way of doing supply chain activities (organizational level), and consequently offering a product or service in a unique way in the market (offering level – generic strategies).

1.1. The business model proposed in this study using the differentiation strategy

The proposed business model of this study is combination of Porter's business model proposed by (Porter, 1991) and components of the business model proposed by (Hedman & Kalling, 2003). The business model proposed by (Porter, 1991) aimed to create a link between the underlying choices that an organization makes in terms of its industry, positioning and configuration of activities, and market outcomes. Whereas, model proposed by Hedman and Kalling (2003), in general was like Porter's model, but it was clearer in several aspects. They proposed a generic business model including seven causality related components: (1) customers, (2) competitors (3) offering, (4) activities and organization, (5) resources, and (6) supply of factor and production inputs, as cross-sectional elements which can be studied at a given point in time. To make the model more complete was included even longitudinal process components (7), covering the dynamic of the business model over time.

The current study proposes a business model containing three dimensions: the causality effect tracking quite well the business models proposed by (Porter, 1991; Hedman & Kalling, 2003), cross-sectional framework meaning that strategy can be measured on a period of time, and longitudinal frameworks implication indicating that all process changes over time jointly with changing environmental conditions. This business model tries to explain more specifically the process of differentiation strategy beginning from the manager's decision-making to organizational performance as the final result of this process.

In Figure 1 is shown the causality relationship of ten components of the business model proposed in this study: (1) consummators' needs, (2) managerial decision and value proposition, (3) resources, (4) suppliers, (5) distinctive value chain, (6) offering – differentiation strategy, (7) competitive advantages, (8) organizational performance, (9) differentiation from competitors, as components that can be studied on a period of time (cross-sectional dimension). Making the business model adaptable over time was included (10) longitudinal dimension (changing the initial conditions where the strategy was based on and imitating the strategy by competitors, determines the need to change strategy adapting it to the new settings). The reason why the components presented in Figure 1 are linked by arrows in two directions is to show its function in two directions. On one direction it shows the causality effect (e.g. to fill the consummators' need in a unique way previously the managerial decision should be made to create a unique product/service). Whereas, on the other direction it shows the consequence effect (e.g. as a result of a managerial decision, the distinctive value is created, therefore the consummator's needs are met in a unique way). It is worth mentioning that, the proposed business model integrates two important approaches that create an organizational competitive advantage (industrial organization, and resource-based view). Therefore, these

two approaches are indivisible from the business model, removing any component of one approach restrains the proposed business model from its full functionality. Spanos and Lioukas (2001) pointed out the conceptual complementarities between RBV and I/O approaches. Bridoux (2004) showed that both approaches assume that managers are rational and that a firm’s ultimate goal is to increase its performance. Also, between these approaches exists the thematic complementarity, RBV is orientated more on a long-run perspective, while I/O is more orientated on the external environment in terms of the short-run perspective (thematic complementarities between I/O and RBV see, Foss, 1996).

On the proposed business model, the starting point of differentiation strategy formulation is identifying the consummators’ needs (I/O view), followed by the decision making, how to fill those needs in a unique way and what resources to use (RBV). Why the customers’ needs first? Failing on pursuing this rule was proved by the history that may lead the organization to failure. It is worth mentioning that, the main role in causing the great depression in the 1930s had the business orientation. Businesses were oriented only on producing products in an efficient way (how to produce with low cost), were not based on consumers’ needs or customers’ expectations (how to produce something new/different that satisfies the customer needs).

A definition of the business model which integrates the main elements of the proposed business model in this study was done by (Johnson et al., 2008), consisting of four interlocking elements as: customer value proposition

(CVP), profit formula, key resources, and key processes, which taken together create and delivers value.

What is the importance of this proposed business model for the differentiation strategy? For a better understand its importance was used two levels of economic priorities, the winning priorities, and qualifying priorities. The winning priorities mean the added value of products that help firms to achieve the competitive advantage in the market. Whereas, qualifying priorities mean the standard value of products/services that are operating in the market. Thus, if a firm tries to enter into the existing market, it should create its products/services at the same level value with existing products/services. According to these two economic concepts, by pursuing a differentiation strategy firms create the winning priorities making it dominate in the competitive market. In the long-time period, competitors aiming to compete in the competitive market should copy the incumbent firms’ strategy to create the products/services at the same value. Thus, in the long-time period, the winning priorities will be transformed into qualifying priorities (Islami et al., 2020).

1.1.1. Managers’ participation and distinctive value chain to competitive advantage

Managers should be closely involved in decision making of business strategy creating. Vonderembse et al. (1997) and Tracey, Vonderembse, and Lim (1999) suggested that involving managers on creating strategy help organization to improve its competitive abilities and enhance the chance to win competitive advantages. Managers’ participation in

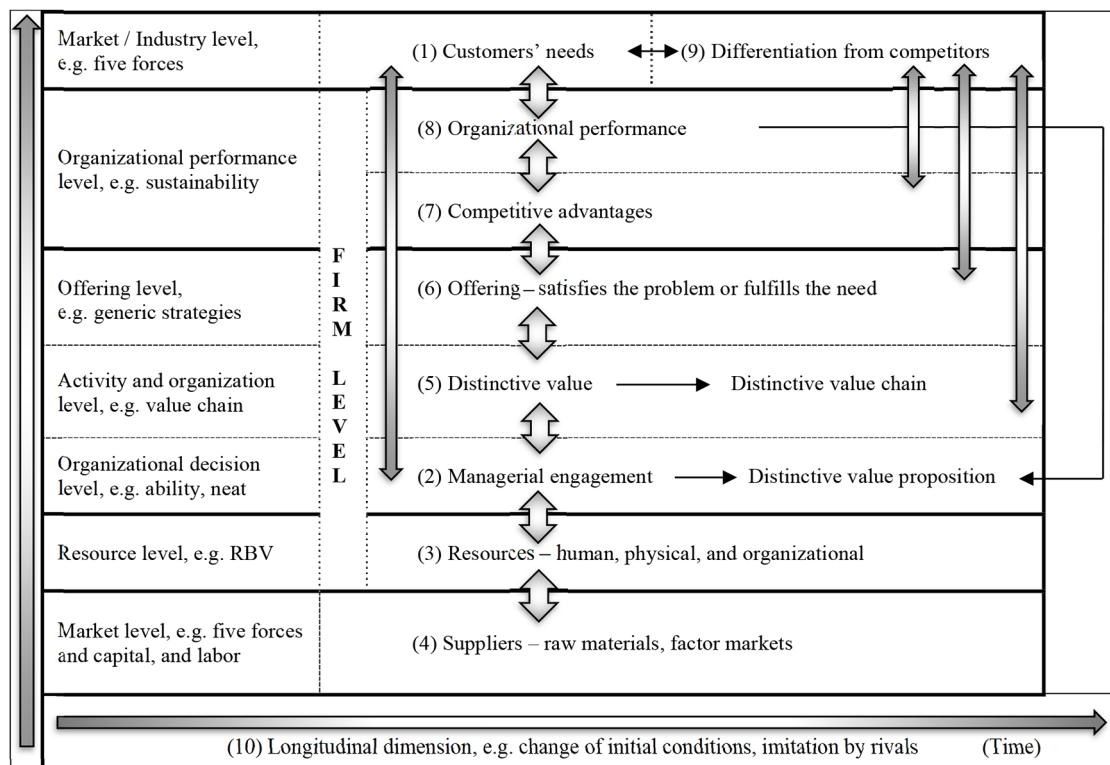


Figure 1. The components of differentiation business model proposal (source: authors)

strategic decision-making may help to shape how an organization uses its organizational systems to gain competitive advantage (Porter, 1996), occurring by co-alignment of organization system design and organization's strategy (Tracey et al., 1999). Furthermore, distinctive value chain derives directly from managers' decisions to offer a unique product or service. Porter (1992) defined value chain as the sequence of activities that the company design, produce, sell, deliver, and support its products. This part of the strategic analysis by him was called as managerial relevant sources of competitive advantage, including the things that managers can control. Activities of the value chain are essential to achieve a competitive advantage, wholesalers and retailers have integrated their logistic functions to enhance competitive advantage (Choon Tan, Lyman, & Wisner, 2002; Magretta, 2011).

1.1.1.1. Using resources as a part of the distinctive value chain

To create a distinctive value chain the focus of analysis must be in two aspects: a) on the internal settings like organizational resources and b) on the external settings like suppliers. The resource approach on strategy formulation means the relationship between resources, capabilities, competitive advantages and profitability – particularly an understanding of the mechanism through which competitive advantage can be sustained over time (Grant, 1991). Using these resources in a unique way make the organization enable to achieve competitive advantages. Barney (1991) indicated that on providing a sustainable differentiation the firm's resource must contain four attributes as: valuable, rare, imperfectly imitable, and not equivalent substitutes. Newbert (2008) by analyzing these resource attributes found three important relationships as: value and rareness are related to competitive advantage, competitive advantage is related to performance, and competitive advantage mediates the rareness-performance relationship. Lioukas, Reuer, and Zollo (2016) recognized that the RBV perspective and I/O tools complement each other in explaining the sources of firm performance. Capabilities and internal resources determine strategic choices made by firms competing in the external business environment (Madhani, 2010) indicating that the firm's abilities allow organizations to improve the customer value chain, developing new products or expanding in the new market. Key resources required to deliver the customer value proposition profitably according to (Johnson et al., 2008) might include: people, technology, products, equipment, information, channels, partnerships, alliances, and brand.

1.1.1.2. Suppliers as external environment part

To achieve competitive advantages using distinctive value chain, firstly suppliers as external environment part should be analyzed. Organizations as an economic actor and a legal entity are a customer for inputs from suppliers, and otherwise a supplier of products or services to its customers (Bowman & Ambrosini, 2007). Since suppliers are

one of the stakeholders in this game, the buyer-supplier relationship is one arena in which the struggle for control is carried out (Ramsay, 2001). Achieving competitive advantage requires human, organizational, and physical resources that have to be acquired on factor markets and from suppliers of production inputs (Hedman & Kalling, 2003). If capable suppliers are selected, a company can use its supply chain for competitive advantage (Krause et al., 2000). Integrating with suppliers' distinctive value chain is a form to differentiate firms from competitors. In response to these concerns, buying firms increasingly use supplier development strategies to raise the performance of their suppliers (Watts & Hahn, 1993). Furthermore, Krause et al. (2000) examined the impact of supplier development strategies on performance, using resource-based theory, internalization theory, and structural equation modeling. Found that direct involvement activity, where the buying firm internalizes a significant amount of the supplier development effort, plays a critical role in performance improvement.

1.1.2. Value proposition using differentiation strategy

The value proposition of organizations is a result of the managers' decision-making. Value proposition is the element of strategy that looks outward at customers, the demand side of the business (Magretta, 2011). Accordingly, a value proposition reflects choices for the particular kind of value that the company will offer, whether those choices have been made consciously or not. In the current study, was analyzed the value proposition used by Porter which presents it as the answer to three fundamental questions: first, which customers are your organization going to serve? in terms of, what end users? and what channels? Second, which needs are you going to meet? in terms of, which products? which features? and, which services? Third, what relative price? in terms of, premium, parity, and discount? Answering on these three basic questions makes enable to create a distinctive value proposition, and as a result, company and buyers will achieve (win-win game). Kim and Mauborgne (2005) showed that value proposition of the blue ocean strategy makes buyers win. Attending principles of this strategy approach create conditions for a firm to differentiate its product or service with low-cost. The managers and strategists should pay special attention to creating value proposition because of, if they choice the same consummator, serve the same needs and at the same price, they cannot differentiate their company from competitors. Actually, by doing that, they are not competing by strategy but are competing on: who can do the same thing better? leading to operational effectiveness (benchmarking).

1.1.3. Can be achieved organizational competitive advantages using this differentiation model? Yes

Sustain competitive advantages achieved pursuing differentiation strategy derive from distinctive activities on the

value chain. F. R. David and F. R. David (2017) described all process from identified activities on value chain to creating sustain competitive advantage. After the managerial decision is made, what to do (what product or service to offer), what resource to use, and what suppliers to contract, needs to identify and evaluate value chain activities. Over time, several business activities that are done well, enable the organization to achieve core competencies. Business strategies always should be focused on its forces (strengths). Thus, some core competencies evolve into distinctive competencies which mean a major competitive advantage. Finally, some distinctive competencies yield sustained competitive advantages of the organization. In today's changing environment it is difficult for companies to maintain a competitive advantage for a long time. This difficulty is due to the frequently transitory nature of firm-level differentiation and the easiness on which competitors gain access to each other's business strategies via industry sources and various regulatory mandates for information disclosure (Collins et al., 2010). Under this pressure, how can a company find a unique position that will not be easily duplicated by the competition? Facing complex external environments and high levels of uncertainty, organizations must rely on well-developed internal capabilities as the basis on which their business runs. Firms possessing resources as: capabilities, processes, and/or knowledge, are in a good position to differentiate their product/service value for customers compared to rivals, achieving a competitive advantage and superior performance (Sirmon et al., 2007).

The emphasis of this paper is achieving superior quality and image throughout the distinctive value chain. Yamin et al. (1999) suggested that adoption of a differentiation strategy would require promoting higher product quality and involve bearing higher costs across a number of functional areas in order to support the differentiation strategy. Li et al. (2006) described competitive advantage by five dimensions: competitive pricing, premium pricing, value-to-customer quality, dependable delivery, and production innovation. Their decision to choose these dimensions is based on earlier researches on this area (see, Tracey et al., 1999; Vickery, nee, Calantone, & Droge, 1999; Rondeau, Vonderembse, & Ragu-Nathan, 2000). Based on this discussion the dimensions of the competitive advantage construct used in this study are: quality, delivery dependability, product innovation, and time to market. Relationship between competitive advantage and organizational performance is analyzed and tested by (Li et al., 2006) who have found that a higher level of competitive advantage increases the level of organizational performance.

1.1.4. Differentiation strategy model and organizational performance

Performance is viewed as profit in excess of the cost of capital, it depends upon the attractiveness of the industry in which the firm operates (industry-effect on

performance) and on the firm's competitive advantage (Bridoux, 2004). Having a competitive advantage does not lead automatically to higher performance by comparison with the break-even competitor in the industry.

Several studies have measured organizational performance using financial and market criteria, including return on investment (ROI), market share, profit margin on sales, the growth of ROI, the growth of sales, the growth of market share, and overall competitive position (Vickery et al., 1999; Stock, Greis, & Kasarda, 2000; Li et al., 2006). This paper tracks the same direction of choosing organizational performance dimensions.

1.2. Research hypothesis

The literature that is analyzed in this paper reveals that despite theoretical support regarding the model of differentiation strategy linking the instruments as: managers' decision, distinctive value chain, distinctive value proposition, differentiation offer, between them and to competitive advantage and organizational performance. Empirical analysis has been lacking. Testing the proposed business model which is supported on the conceptual level, the hypotheses were created. Consequently, in Figure 2, is presented the research hypotheses framework, on the figure some relationships are implied but for further analysis are build four hypotheses. By these hypotheses are addressed the scarcity in the literature by considering these four direct relationships, and other implied linkages. Research hypothesis:

H₁: Managerial engagement on strategy creating leads the organization to improve its competitive abilities by providing a distinctive value chain.

H₂: The distinctive value chain of organization provides high level of competitive advantage.

H₃: Organization with high level of pursuing differentiation strategy has a positive relationship to high level of organizational performance.

H₄: The high level of competitive advantage has a positive relationship to the high level of organizational performance.

It is worth clarifying that, as is shown in Figure 2, even though the relationships are explained in the literature review, is the essential clarifying that instrument as: distinctive resource and supplier, for further analyzing are included as a part of the distinctive value chain. Thus, by testing distinctive value chain means and testing these two instruments inside it. Also, the distinctive value proposition by the organization derives directly from pursuing the differentiation strategy, testing the differentiation strategy is equal to the distinctive value proposition. Consequently, these three instruments were not tested directly by particular hypothesis but the results are understandable by testing the origin variables.

2. Research methodology

This research used the quantitative methods applying positivist approach. The research design was

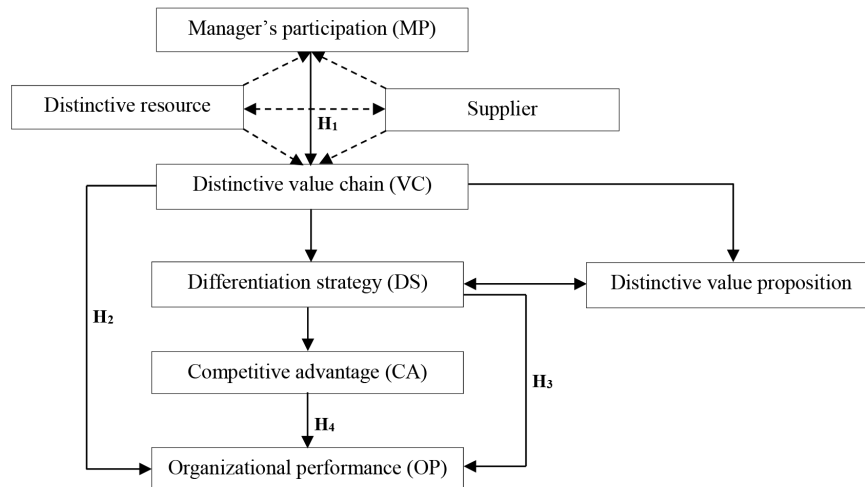


Figure 2. Research hypothesis framework (source: authors)

cross-sectional. Cross-sectional studies are often associated with large-scale surveys using questionnaires. According to Matthews and Ross (2010) “a cross-sectional research design: includes more than one case; collects data at one particular time; includes within its research participants groups of people or cases that can be compared...”. Also, this study used evaluation strategy – to assess the value of something in terms of the impact that it has on a situation. Significant improvements in pursuing a differentiation strategy using econometric analysis were indicated by (Banker et al., 2014), whereas the method of measuring constructs was adopted by (Li et al., 2006). Applying this method enables in a specific way measuring the relationship between key factors in the model, including the relationship between items and dimensions, the relationship between dimensions and latent variables, and the relationship between latent variables to each other, providing enough evidence to confirm or not the constructed model.

To realize this, a combination of primary and secondary data has been used. The background of the business model and research hypothesis has been prepared using the analysis of secondary data by the literature reviewed including scientific publications and articles that were published by credible publishers, such as, Academy of Management, Elsevier, Springer, Taylor & Francis, Emerald, etc. As the starting point for literature searching were titles and abstracts of documents that are evidenced on Scopus databases, using this variety of keywords: (“Differentiation Strategy” OR “Value Chain” OR “Value Proposition” OR “Management Engagement” OR “Supplier” OR “Resources”) AND “Performance” AND “Competitive Advantage” AND (“Model” OR “Distinctive” OR “Instruments” OR “Dimension” OR “Method” OR “Concept”). Thus, the actual study evaluates hypotheses that are largely driven by theory, consequently, elements on the business model were structured on the basis of theory, and therefore on determining whether

there is empirical support for the proposed theoretical model constructed were used confirmatory factor analysis. Whereas, primary data were gathered from self-administered questionnaires that were distributed in a sample group of firms that operates in the Republic of Kosovo. Questionnaires were designed in that way containing only items of differentiation strategy instruments. Consequently, managers by filling questionnaires evaluated only differentiation strategy aspects and their impact on creating competitive advantages and organizational performance. The data regarding the existence of manufacturing firms were taken from the Kosovo Agency of Statistics. The participants were randomly chosen by the manufacturing firms that were evidenced in that list. The questionnaires were filled and collected in June 2019.

For statistical analysis of variables IBM SPSS v. 25 programs and AMOS 22 have been used, helping on empirical testing of the relationship between differentiation strategy instruments, applying rigorous statistical tests including convergent validity test, reliability test, discrimination validity test, correlation matrix, the first and second-order validity test, regression analysis, and t-test.

The process of preparing this study passed through 7 phases: (1) analyzing the previous literature regarding the differentiation strategy, (2) finding and analyzing the existing literature for business models and integrating them on a new model customized for applying differentiation strategy that includes instruments as: distinctive value chain, distinctive value proposition, competitive advantage, and organizational performance, (3) searching for elements that have to include each testable variable, (4) questionnaire preparing, (5) pre-pilot study, (6) pilot study, and (7) large-scale data analysis.

2.1. Data collection and response rate

Data for the study are derived from a survey of manufacturing firms. From 146 questionnaires that in total were

distributed in 146 organizations, are obtained only 130 valid questionnaires (the scale of responses was 89%). Even though 130 filled questionnaires were returned, 7 of them that lacked in important data cannot be included for further analysis; therefore only 123 questionnaires with full data were analyzed. The questionnaires were designed to take the evaluation of the organization's managers regarding the application of instruments of differentiation strategy in their organizations, and its relationship with competitive advantages and organizational performance. The five-point Likert type scales have been used: 1 – strongly disagree, 2 – disagree, 3 – neutral, 4 – agree, 5 – strongly agree.

2.2. Structure of questionnaires and getting the needed data

In order to obtain the necessary data for this study, primary sources of information were mainly used, the questionnaire as the data collection tool was used, aimed the managers or responsibilities for creating organization strategies in the manufacturing organizations to participate in this research. The research questionnaires involve six sections: (1) general information, (2) managerial participation on strategy formulation, (3) distinctive value chain, (4) differentiation strategy, (5) competitive advantage, and (6) organizational performance.

The basic requirement for a good measurement is content validity, which means that the measurement items in a dimension or instrument cover the major content of a construct (Churchill Jr, 1979). Content validity is usually achieved through a comprehensive literature review and interviews with practitioners and academicians (Li et al., 2006).

On this research questionnaire the value chain was presented by 5 dimensions and 29 items, most of them are adopted from (Li et al., 2006) some other items that were important to explain more specifically this issue were added by the authors of this study; differentiation strategy was presented by 4 dimensions and 23 items which have been leaked from (Yamin et al., 1999; Tracey et al., 1999; Islami et al., 2020); competitive advantage was presented by 4 dimensions and 20 items which have been leaked from various studies (Kessler & Chakrabarti, 1996; Li et al., 2006), and organizational performance was presented by 8 items that were adopted from the integration of items that were used to measure this construct by (Yamin et al., 1999; Zhang, 2001; Li et al., 2006).

To make the questionnaire more simple and understandable for managers, firstly the questionnaire was distributed to three managers of manufacture organizations and two university professors of strategic management, after that their comments were incorporated, its final version was written (see Appendix A).

2.3. Background of the finding instruments that were used in this study

In Appendix A, are presented the items that contain each dimension for each instrument of the differentiation strategy. Using the multi-item scales intended to capture the underlying theoretical dimensions was done operational constructs in this research. Items that include each dimension to measure differentiation strategy, and organizational performance, were adopted by (Yamin et al., 1999; Zhang, 2001; Li et al., 2006). Items that include dimensions of distinctive value chain were generated based on previous supply chain management literature (Forker, Ruch, & Hershauer, 1999; Lee & Kim, 1999; Vonderembse & Tracey, 1999; Shin, Collier, & Wilson, 2000), dimensions that measure supply chain management practices were adopted by (Li et al., 2002, 2006). Dimensions that measure competitive advantage were adopted by (Zhang, 2001; Li et al., 2006). Items that measure the organizational performance were adopted by (Stock et al., 2000; Li et al., 2006).

2.4. Demographic data of respondent firms

Finally, 123 questionnaires were duly completed, presenting the data of respondents including demographic data such as: the size, age, the position of the participant in the firm and their activity in the enterprise (see Appendix B). The questionnaires are filled by owners, directors (CEO) or managers, of respondent organizations.

3. Findings of this paper

The data gathered by questionnaires were analyzed in a three-part process in order to get the final results and providing optimal conditions to test the research hypotheses. Firstly, was done the validity test of constructs (respectively dimensions) in order to see which items can be included on variables (validation of first-order constructs and validation of second-order constructs). Secondly, was done the correlation analysis between testable variables to find the possible multicollinearity among variables. Thirdly, after the two of previous conditions were filled, inner model assessment and the regression analysis were used to test the relationship between variables (that in this paper are presented as instruments of differentiation strategy).

3.1. Validation of constructs

On this research were used variables that include more than one item (question) in self, therefore is inevitable to measure the reliability of variables. The "Cronbach's alpha" test was used to evaluate the reliability of the measures as was suggested by (Nunnally, 1978; Bontis et al., 2000). Cronbach's alpha can be considered an adequate index of the inter-item consistency reliability of independent and dependent variables (Bontis et al., 2000). According to Hair et al., (2010) the value of factor loading for each item should be more than 0.4, composite reliability should be more than 0.7 and average variance extracted (AVE) should not be less than 0.5.

In Table 1 is showed the relationships between items that are measured, deliberately to see which items can be represented by the variables.

3.1.1. Convergent and discriminant validity

The composite reliability for each of the five instruments was adequate since the Cronbach alpha values were significantly greater than the prescribed 0.7 threshold. To make available which factors were included within each variable, was done Cronbach's alpha test for reliability (see Table 1) reliability analysis using Cronbach's alpha for principal components factor analysis matrix of (a) manager's participation, (b) distinctive value chain, (c) differentiation strategy, (d) competitive advantage and (e) organizational performance. For simplicity, only loadings above 0.4 are displayed on Table 1, (whereas were eliminated items that had the value under 0.4 in order to have a better estimate of the model and to provide a closer fit).

To measure the manager's participation (MP) factor analysis was conducted using the 3 items that were measured. All items loaded on their respective factor with most loads above 0.7 as shown in (Table 1a).

The distinctive value chain (VC) construct initially was

represented by 5 dimensions and 29 items. After validation of first-order constructs the items VC/CR₁, VC/CR₇, and VC/CR₈ loaded their factors under 0.4, so these three items were removed for further analysis. After removing these three items, the validation of second-order constructs results are shown in (Table 1b). The cumulative variance explained by the five dimensions is 77.394%.

The differentiation strategy (DS) construct initially was represented by 4 dimensions and 23 items. After validation of first-order constructs the items DS/TL3 and DS/PD5 loaded their factor under 0.4, so these two items were removed for further analysis. After removing these two items, the validation of second-order constructs results are shown in (Table 1c). The cumulative variance explained by the five dimensions is 70.656%.

The competitive advantage (CA) construct initially was represented by 4 dimensions and 20 items. After first analysis the item CA/DD₇ load its factor under 0.4, so this item was removed for further analysis. After removing this item, the remaining items were analyzed by validation of second-order constructs and the results are shown in (Table 1d). The cumulative variance explained by the five dimensions is 73.067%.

Table 1. Reliability analysis for principal components, composite reliability, and average variance extracted (source: authors)

Item	F ₁ -MP					CR	AVE
1	2	3	4	5	6	7	8
Manager's participation (MP)	(0.8314)					0.9000	0.7500
MP ₁	0.7752						
MP ₂	0.7634						
MP ₃	0.7600						
Eigenvalue	2.3632						
Percentage of variance	59.0635						
Cumulative % of variance	59.0635						
Item	F ₁ -SP	F ₂ -CR	F ₃ -IS	F ₄ -IQ	F ₅ -PO	CR	AVE
Distinctive value chain (VC)							
VC/SP ₁	0.8691					0.9292	0.6895
VC/SP ₂	0.8783						
VC/SP ₃	0.8862						
VC/SP ₄	0.8905						
VC/SP ₅	0.8888						
VC/SP ₆	0.8916						
VC/CR ₂		0.7756				0.7424	0.5123
VC/CR ₃		0.8013					
VC/CR ₄		0.8445					
VC/CR ₅		0.7787					
VC/CR ₆		0.8166					
VC/CR ₉		0.8354					
VC/IS ₁			0.7323			0.8651	0.5189

Continued Table 1

1	2	3	4	5	6	7	8
VC/IS ₂			0.7156				
VC/IS ₃			0.7513				
VC/IS ₄			0.7012				
VC/IS ₅			0.7641				
VC/IS ₆			0.7867				
VC/IQ ₁				0.7600		0.8822	0.6034
VC/IQ ₂				0.7862			
VC/IQ ₃				0.8312			
VC/IQ ₄				0.7825			
VC/IQ ₅				0.7914			
VC/PO ₁					0.7600	0.8864	0.7222
VC/PO ₂					0.7412		
VC/PO ₃					0.6955		
Eigenvalue	3.5982	2.0024	1.8898	1.2105	1.0052		
Percentage of variance	45.2517	10.5373	9.9445	6.3704	5.2911		
Cumulative % of variance	45.2517	55.7890	65.7335	72.1039	77.3950		
Item	F ₁ -CS	F ₂ -TL	F ₃ -PD	F ₄ -LD		CR	AVE
Differentiation strategy (DS)							
DS/CS ₁	0.7235					0.8854	0.5131
DS/CS ₂	0.7517						
DS/CS ₃	0.6996						
DS/CS ₄	0.7480						
DS/CS ₅	0.7682						
DS/CS ₆	0.7276						
DS/CS ₇	0.7362						
DS/CS ₈	0.7973						
DS/TL ₁		0.6071				0.7402	0.5397
DS/TL ₂		0.5345					
DS/TL ₄		0.7554					
DS/TL ₅		0.5892					
DS/PD ₁			0.7889			0.8185	0.5188
DS/PD ₂			0.8284				
DS/PD ₃			0.7394				
DS/PD ₄			0.7942				
DS/PD ₆			0.8131				
DS/PD ₇			0.7801				
DS/LD ₁				0.7135		0.9204	0.7946
DS/LD ₂				0.7698			
DS/LD ₃				0.9298			
Eigenvalue	2.3844	1.5911	1.3452	1.0393			
Percentage of variance	26.4927	17.6822	14.9391	11.5434			
Cumulative % of variance	26.4927	44.1749	59.1140	70.6574			
Item	F ₁ -Q	F ₂ -DD	F ₃ -PI	F ₄ -TM		CR	AVE
(d) Competitive advantage (CA)							
CA/Q ₁	0.9254					0.8939	0.6582

End of Table 1

1	2	3	4	5	6	7	8
CA/Q ₂	0.7652						
CA/Q ₃	0.7541						
CA/Q ₄	0.7561						
CA/Q ₅	0.7450						
CA/DD ₁		0.8143				0.8201	0.5296
CA/DD ₂		0.8065					
CA/DD ₃		0.8118					
CA/DD ₄		0.8027					
CA/DD ₅		0.8256					
CA/DD ₆		0.8661					
CA/PI ₁			0.8684			0.9243	0.7528
CA/PI ₂			0.8492				
CA/PI ₃			0.8588				
CA/PI ₄			0.8606				
CA/TM ₁				0.7752		0.8717	0.6294
CA/TM ₂				0.7378			
CA/TM ₃				0.7397			
CA/TM ₄				0.7523			
Eigenvalue	3.6852	2.8757	1.1919	1.0364			
Percentage of variance	30.7073	23.8061	9.9242	8.6302			
Cumulative % of variance	30.7073	54.5134	64.4376	73.0678			
Item	F ₁ -OP					CR	AVE
(e) Organizational performance (OP)	(0.8803)					0.8568	0.5493
OP ₁	0.8482						
OP ₂	0.8528						
OP ₃	0.8565						
OP ₄	0.8587						
OP ₅	0.8559						
OP ₆	0.8683						
OP ₇	0.8951						
Eigenvalue	2.5756						
Percentage of variance	52.3712						
Cumulative % of variance	52.3712						

*CR – Composite Reliability; AVE – Average Variance Extracted.

The organizational performance (OP) construct initially was represented by 8 items. After first analysis the item OP8 load its factor under 0.4, so this item was removed for further analysis. After removing this item, the results of validation of second-order constructs are shown in (Table 1e).

3.2. Correlation analysis

On Table 2 are shown, the mean, standard deviations, correlations, and reliability of (a) distinctive value chain, (b) differentiation strategy and (c) competitive advantage.

Whereas, for variables “manager’s participation” and “organizational performance” were not done this analysis as they did not have other dimensions inside to be represented by these two variables, ergo the reliability test provides enough information for further analysis to measure the relationship by regression analysis.

The Pearson correlation analysis was done for the independent variables that are taken as a prediction in finding predict/dependent variable, in order to measure the scale of the relationships between independent variables in this testing. If the correlation value between variables is

within the limits (-0.7 to 0.7) does not seem a strong relationship between variables that hinder a rigorous further analysis to get the required results. Based on general rules of correlation matrix, if the value exceeds these limits the measured variables exists a strong connection between them, and as a consequence will be produced incorrect results. Multicollinearity occurs when exist high correlation between independent variables (Lind, Marchal, & Mason, 2002; Hair et al., 2010; Islami, Mulolli, & Mustafa, 2018).

According to results provided on the Table 2 is shown that, relationships between independent variable are inside the allowed borders. These results allow proceeding to test the regression analysis after that the relationship between variables is within values (+,- 0.7).

3.3. Results of the study

Measuring the impact of independent variables on dependent variables enable to test the proposed business model, the multiple regression analysis has been used. Results for the structural model were generated using inner model assessment and regression analyses (see Figure 3 and Table 3). The λ coefficients were significant at $p < 0.01$. Chi-square of the model was 207.349.

Firstly H_1 , independent variable “MP” is positively linked with dependent variable “VC” by predicting it for 22.3% ($b = 0.223$ & $p = 0.001$), which means that for each 1% change in application of the managers engagement on strategy formulation the value chain activity will change by 22.3%. By increase using of “MP” per 1 standard deviation, the “VC” will be increased per 0.229 standard deviations ($\beta = 0.229$). These results indicate that higher levels of manager’s participation in strategy formulation will

have an impact on improving the organization competitive abilities and provide distinctive value chain activities, thus confirm Hypothesis 1 ($H_1 \uparrow$).

Secondly H_2 , independent variable “VC” is positively related with dependent variable “CA” by predicting it for 36.5% ($b = 0.365$ & $p = 0.000$), for each 1% change in value chain the organizational competitive advantage will change by 36.5%. By increase using of “VC” per 1 standard deviation, the “CA” will increase per 0.345 standard deviations ($\beta = 0.345$).

The postponement has the lowest (γ -value) $\gamma = 0.44$, compared to other four dimensions of the distinctive value chain. Previous research by (Li et al., 2006) provided an explanation of why this result can be true, the implementation of postponement is dependent on a firm’s market characteristics and the type of the products and as a result may not be applicable in all the situations.

The implementation of various activities on distinctive value chain, such as strategic supplier partnership, customer relationship building, level of information sharing, level of information quality, and postponement, will provide the organization to create competitive advantage on quality, delivery dependability, product innovation, and time to market dimensions. Results indicated that higher levels of applying distinctive value chain will lead to organizational competitive advantage, thus confirming Hypothesis 2 ($H_2 \uparrow$).

Thirdly H_3 , independent variable “DF” is positively related with dependent variable “OP” by predicting it for 46.5% ($b = 0.465$ & $p = 0.000$), changing by 1% in pursuing of the differentiation strategy the organization’s performance will change by 46.5%. By increase using of “DF”

Table 2. Mean, standard deviations, correlations matrix and reliability ($n = 123$) (source: authors)

Variables	Mean	SD	1	2	3	4	5	Reliability
Distinctive value chain								
1. Strategic supplier partnership	3.90	.863	–					0.9013
2. Customer relationship	3.98	.896	.369**	–				0.8363
3. Level of information sharing	3.85	.924	.310**	.443**	–			0.7785
4. Level of information quality	3.87	.665	.606**	.409**	.608**	–		0.8257
5. Postponement	4.28	.721	.035	-.034	-.041	-.024	–	0.8056
Differentiation strategy								
Customer Service	4.52	.843	–					0.7712
Technology Leadership	4.01	1.170	.295**	–				0.7025
Product Differentiation	4.26	1.200	.578**	.372**	–			0.8218
Logistic Differentiation	3.61	1.269	.571**	.167	.698**	–		0.8626
Competitive advantage								
Quality	3.41	.572	–					0.8371
Delivery dependability	3.10	1.176	.439**	–				0.8484
Product innovation	3.58	1.337	.199*	.381**	–			0.8907
Time to market	3.88	.795	.292**	-.092	.136	–		0.8013

** . Correlation is significant at the 0.01 level (2-tailed).

* . Correlation is significant at the 0.05 level (2-tailed).

per 1 standard deviation, the “OP” will increase per 0.431 standard deviations ($\beta = 0.431$). The implementation of various dimensions of differentiation strategy, such as customer services, technology leadership, product differentiation, and logistic differentiation, will lead the organization to increase its performance. Pursuing differentiation strategy will lead to higher organizational performance, thus confirming Hypothesis 3 ($H_3 \uparrow$).

Fourthly H_4 , independent variable “CA” is positively connected with dependent variable “OP” by predicting it for 44.8% ($b = 0.448$ & $p = 0.000$), which means that for each 1% change in competitive advantage the organization’s performance will change by 44.8%. By increase using of “CA” per 1 standard deviation, the “OP” will increase per 0.407 standard deviations ($\beta = 0.407$). The implementation of dimensions on competitive advantages, such as quality, delivery dependability, product innovation, and time to market will provide increasing of the organizational performance. The higher level of competitive advantage will lead to higher organizational performance, thus confirming Hypothesis 4 ($H_4 \uparrow$).

As is showed in (Figure 3), are provided and two addition measurements beyond research hypotheses presented in third section. First, is measured the direct impact of the

distinctive value chain in differentiation strategy, results have indicated the value of standardized coefficient 0.34 ($\beta = 0.34$), in $p < 0.01$, and ($t = 3.98$), pointing out the positive relationship between them. Second, is provided the direct impact of differentiation strategy on competitive advantage, value of standardized coefficient 0.90 ($\beta = .90$), in $p < 0.05$, and ($t = 6.80$), that provide a positive relationship between these variables. By these results are provided important information founding that value chain has directly a positive impact in creating competitive advantage as is shown in the second hypothesis. Also, the value chain has a positive effect on competitive advantage mediated by differentiation strategy.

On Table 3, were presented the multiple regression results and hypotheses confirmations result.

4. Discussions and implications of the differentiation strategy model

In substance, the actual research provides five significant findings. First, it brings together conceptual proofs linking differentiation strategy instruments, competitive advantage, and organizational performance, in a conceptual model supporting it by empirical analysis. Second, creating

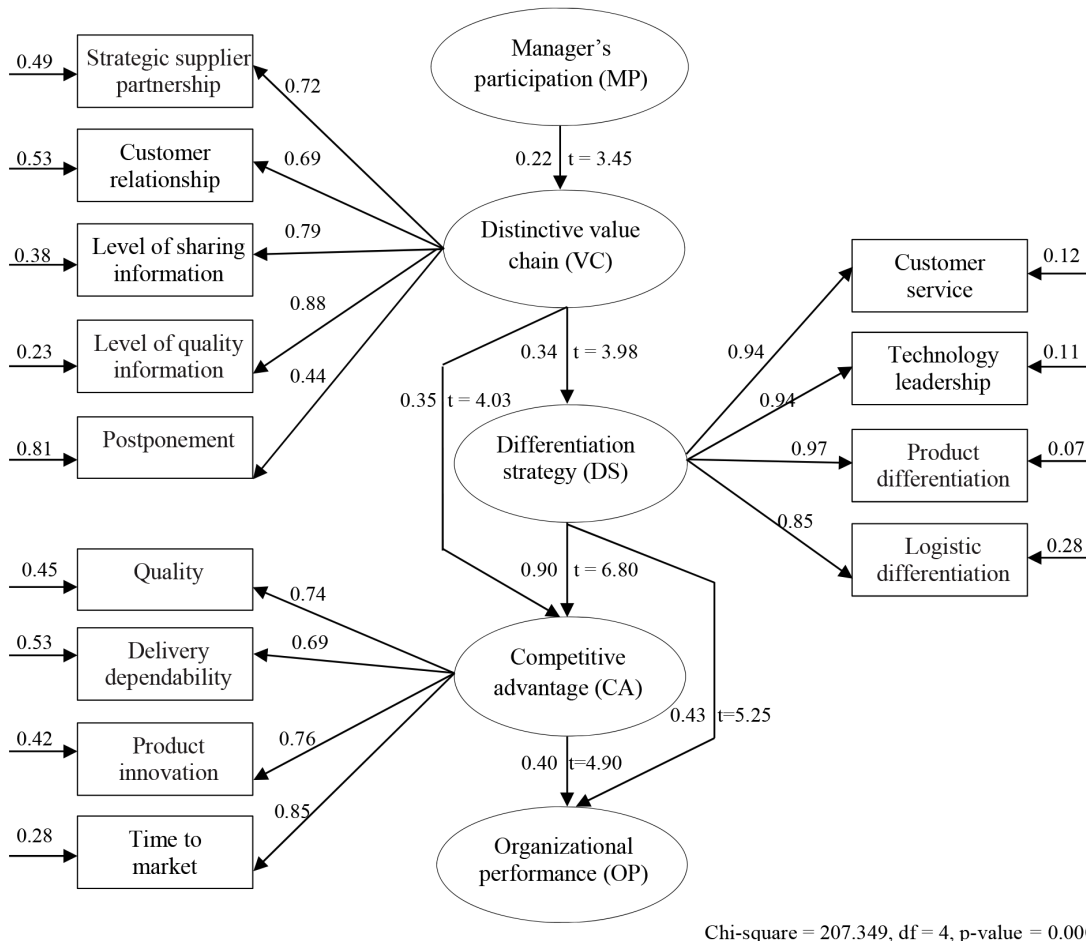


Figure 3. Inner model assessment (source: authors)

Table 3. Results for proposed structural equation model (n = 123) (source: authors)

Hypotheses	Relationship	ΔR^2	b	β	S.E	F	t	p	Hypothesis
H ₁	(constant)		3.266		0.268	11.896	12.188	0.000	<i>Supported</i>
	MP → VC	0.082	0.223	0.229	0.065		3.449	0.001	
H ₂	(constant)		2.698		0.384	16.303	7.020	0.000	<i>Supported</i>
	VC → CA	0.111	0.365	0.345	0.090		4.038	0.000	
H ₃	(constant)		2.203		0.382	27.583	5.765	0.000	<i>Supported</i>
	DS → OP	0.179	0.465	0.431	0.089		5.252	0.000	
H ₄	(constant)		2.268		0.396	24.009	5.734	0.000	<i>Supported</i>
	CA → OP	0.159	0.448	0.407	0.091		4.900	0.000	

Note: b = Un-standardized Coefficients, S.E = standard error of variables, β = standardized coefficients, t = t-statistic, p = significance level, ΔR^2 = adjusted R square, F = Fisher value.

a model fit for every kind of organization in the manufacturing industry and helps them to create a sustainable differentiation strategy, by offering the opportunity to create a unique way of doing business. Third, it finds the direct positive link between managers' participation and distinctive value chain. Fourth, it finds the direct positive link between the distinctive value chain and competitive advantage. Fifth, it finds the direct positive relationship between differentiation strategy and competitive advantage to organizational performance. Instruments validity of the business model constructed is discussed in terms of its integration or logical coherence, relative explanatory power and connection, like (Glaser, 1978) has proposed to discuss a business model constructed.

Even though several organizations have validated the importance of implementing a number of instruments of the differentiation strategy, but due to a lack of understanding which components must contain a comprehensive model of the differentiation strategy, managers often have not clear what exactly to create and implement in their organization. Therefore is crucial for organizations that managers to be engaged in planning and formulating organizational strategy. One of the biggest mistakes that lots of organizations make is that they put some other people in strategy creating and some other people on implementing that strategy. Thus, the doer people have not clear enough, what they are doing and why they are doing it in that way. Consequently, is considered that internal integration is the most important factor that determines organizational performance. What means internal integration? It happens when in the organization teams have mutual trust and respect during the strategy creation and implementation. Mutual trust and respect was trumpeted by Adizes model as the key factor that predicts the organization success (Adizes, 2004). Therefore, manager commitment on the planning of the distinctive value chain activities is crucial and helps the organization to create competitive advantages and to increase its performance. By results of this research is suggested for managers to be an integral part on the strategy formation process and to be involved in the decision making in order to have

clear how the strategy is created and how to implement it. Whereas, by looking the business model constructed in (Figure 1), research hypotheses framework in (Figure 2), and results derived by inner assessment model and regression analysis in (Figure 3 and Table 3), can be provided that the manager's participation mediated by the value chain has a positive relationship with the differentiation strategy, competitive advantages, and organizational performance.

On creating and implementing a strategy the value chain is the heart of all this process. Value chain serves as a fundament for creating distinctive competencies, as a consequence and for achieving a competitive advantage. The positive relationship is proclaimed by several authors on different time and places, which were mentioned in the literature review section, also in this study is confirmed and explained more this positive relationship between distinctive value chain and competitive advantage. Results have supported this relationship by statistically significant value ($p = 0.000$). Organizations who aspire to pursue the differentiation strategy should have strategic partnerships and is needed to cooperate with their suppliers, customers, and trading partners by involving them on their strategic policies. Also, the levels of information sharing and quality of information are crucial for organizations to achieve competitive advantage. Indicated by this research, distinctive value chain has positive relationship with organizational performance mediated by differentiation strategy and competitive advantage (this relationship is schematically illustrated, see Figure 3).

In the current study, the main focus was to explore differentiation strategy, which on one side, is presented as a factor that derives from distinctive value chain, whereas on the other side, is presented as equal to the distinctive value proposition, and finally, as a predictor of organizational performance. Results derived by testing the direct relationship between differentiation strategy and organizational performance were statistically significant in p-value ($p = 0.000$) and have indicated a positive relationship among them. Despite this direct relationship, the differentiation strategy has shown a positive effect on

organizational performance even when is mediated by competitive advantage (these results were shown in Figure 3). One segment of this positive relationship between these two variables was explained by (Porter, 1980), if organizations offer their products/services in a unique way that are valued by the customer, they will be able to pay a premium price or they could offer superior product/service utility at equivalent prices to competitors, and hence to increase their market share. Finally, the positive relationship between competitive advantage and organizational performance were confirmed by statistically significant results on this paper ($p = 0.000$), like were approved this positive relationship by (Li et al., 2006).

Conclusions

The results of this study lead to the consideration of a series of implications for the manufacture organizations. It is recommended for strategy makers and management of manufacture companies to encourage the adoption of proper and well-articulated differentiation strategy. By proposing, developing, and validating a multi-dimensional, operational measure of the construct of differentiation strategy instruments, and by demonstrating its efficacy in enhancing competitive advantage and organizational performance, the present study provides strategic managers with a useful tool for evaluating the comprehensiveness of their current differentiation strategy instruments. In addition to this, it makes several major contributions to the academic literature and provides significant guidelines for strategic decision practitioners.

First, this study is the first attempt to develop and validate measurement scales of differentiation strategy. Accordingly, in this article is presented a business model construct for pursuing the differentiation strategy by analyzing the relationship between the most important instruments and dimensions on creating that strategy. The business model developed and tested in current study is analyzed and is applicable at two perspectives: cross-sectional and longitudinal. Also, were explained by synthesizing two most important strategic views included in this business model analysis (a) industrial organization (I/O) view and (b) resource-based view (RBV). Consequently, this paper contributes to the strategic management literature by providing new windows for future empirical research on differentiation strategy.

Second, it presents the attempts of studying systematically, where all processes on creating a differentiation business model are analyzed starting by consummator's need, manager's participation, creating a distinctive value chain, applying differentiation strategy, the ability of creating competitive advantage, and ending by increasing the organizational performance.

Third, conceptualizes and tests empirically the relationships between differentiation strategy instruments, competitive advantage, and organizational performance. This study provides empirical justification for a framework

that identifies relationship among all these dimensions using rigorous statistical tests including convergent validity, reliability, discrimination validity, correlation, the first and second order validity, regression, and t-test. The statistical results provided evidence to support four research hypotheses proposed on this study ($H_{1\uparrow}$; $H_{2\uparrow}$; $H_{3\uparrow}$; $H_{4\uparrow}$). Consequently, the functionality of business model constructed in this study was approved. The importance of manager's participation on creating differentiation strategy is discussed and confirmed by significant results. Empirically was supported that distinctive value chain serves as fundament on creating differentiation strategy and competitive advantage. Is confirmed that pursuing differentiation strategy help organization on increasing organizational performance. Finally, is supported that creating competitive advantages by using differentiation strategy dimensions induces increasing organizational performance. The findings of this paper have a significant effect on creating differentiation strategy, serving as a guideline for managers in answering of the questions: where is the starting point to initiate the analysis in order to achieve organizational success? what steps to pursue? and what will be the results of applying this constructed model? Furthermore, it contributes on enriching the literature for students, academics, commentary, and it serves as a good stage for further researchers in this area.

Nowadays, it is not easy anymore to be successful because you are present in the market or you have a history, you need to earn your success, and in order to earn your success you need a strategy, the needs for strategy is greater today than ever before. Differentiation form competitors help to increase organizational performance. When organizational performance is increased firms are made wealthier and have more capacity to invest on resources and on suppliers – can make a vertical integration to buy a supplier which help more to create other strategies on its favor. The findings of this paper enhance our understanding of the differentiation strategy and its instruments used by firms in manufacturing organizations in the Republic of Kosovo, region and beyond.

Disclosure statement

We confirm that this work is original and has not been published elsewhere nor it is currently under consideration for publication elsewhere. We wish to confirm that there are no known conflicts of interest associated with this publication and there has been no significant financial support for this work that could have influenced its outcome.

We confirm that we have given due consideration to the protection of intellectual property associated with this work and that there are no impediments to publication, including the timing of publication, with respect to intellectual property. In so doing we confirm that we have followed the regulations of our institutions concerning intellectual property.

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References

- Adizes, I. (2004). *The ideal executive: why you cannot be one and what to do about it: a new paradigm for management*. The Adizes Institute Publishing. Kindle Edition.
- Attiah, E. (2019). The role of manufacturing and service sectors in economic growth: an empirical study of developing countries. *European Research Studies Journal*, 22(1), 112–127. <https://doi.org/10.35808/ersj/1411>
- Banker, D. R., Mashruwala, R., & Tripathy, A. (2014). Does a differentiation strategy lead to more sustainable financial performance than a cost leadership strategy? *Management Decision*, 52(5), 872–896. <https://doi.org/10.1108/MD-05-2013-0282>
- Barney, J. (1991). Firm resources and sustained competitive advantage. *Journal of Management*, 17(1), 99–120. <https://doi.org/10.1177/014920639101700108>
- Barney, J. B. (2001). Is the resource-based “view” a useful perspective for strategic management research? Yes. *The Academy of Management Review*, 26(1), 41–56. <https://doi.org/10.2307/259393>
- Barney, J. B., & Hesterly, W. S. (2012). *Strategic management and competitive advantage* (4th ed.). Upper Saddle River, NJ: Pearson Education Inc.
- Berman, S. L., Wicks, A. C., Kotha, S., & Jones, T. M. (1999). Does stakeholder orientation matter? The relationship between stakeholder management models and firm financial performance. *Academy of Management Journal*, 42(5), 488–506. <https://doi.org/10.5465/256972>
- Bontis, N., Chua Chong Keow, W., & Richardson, S. (2000). Intellectual capital and business performance in Malaysian industries. *Journal of Intellectual Capital*, 1(1), 85–100. <https://doi.org/10.1108/14691930010324188>
- Bowen, D. E., & Schneider, B. (1988). Services marketing and management-implications for organizational-behavior. *Research in organizational behavior*, 10, 43–80. Greenwich, CT: JAI Press.
- Bowman, C., & Ambrosini, V. (2007). Firm value creation and levels of strategy. *Management Decision*, 45(3), 360–371. <https://doi.org/10.1108/00251740710745007>
- Bridoux, F. (2004). A resource-based approach to performance and competition: an overview of the connections between resources and competition. *Louvain, Belgium Institut et de Gestion, Universite Catholique de Louvain*, 2(1), 1–21.
- Budzinski, O., & Kuchinke, B. A. (2018). The modern industrial organization theory of media markets and competition policy implications. *Ilmenau Economics Discussion Papers*, (115), 1–37.
- Choon Tan, K., Lyman, S. B., & Wisner, J. D. (2002). Supply chain management: a strategic perspective. *International Journal of Operations & Production Management*, 22(6), 614–631. <https://doi.org/10.1108/01443570210427659>
- Churchill, G. A. (1979). A paradigm for developing better measures of marketing constructs. *Journal of Marketing Research*, 16(1), 64–73. <https://doi.org/10.2307/3150876>
- Collins, J. D., Worthington, W. J., Reyes, P. M., & Romero, M. (2010). Knowledge management, supply chain technologies, and firm performance. *Management Research Review*, 33(10), 947–960. <https://doi.org/10.1108/01409171011083969>
- David, F. R., & David, F. R. (2017). *Strategic management: concepts and cases: A competitive advantage approach*. Pearson education Limited. Edinburgh gate, Harlow, England.
- De Jong, J. P. J., & Marsili, O. (2006). The fruit flies of innovations: A taxonomy of innovative small firms. *Research Policy*, 35(2), 213–229. <https://doi.org/10.1016/j.respol.2005.09.007>
- Donnellan, J., & Rutledge, W. L. (2019). A case for resource-based view and competitive advantage in banking. *Managerial and Decision Economics*, 40(6), 728–737. <https://doi.org/10.1002/mde.3041>
- Forker, L. B., Ruch, W. A., & Hershauer, J. C. (1999). Examining supplier improvement efforts from both sides. *The Journal of Supply Chain Management*, 35(2), 40–50. <https://doi.org/10.1111/j.1745-493X.1999.tb00061.x>
- Foss, N. J. (1996). Research in strategy, economics, and Michael Porter. *Journal of Management Studies*, 33(1), 1–24. <https://doi.org/10.1111/j.1467-6486.1996.tb00796.x>
- Glaser, B. (1978). *Theoretical sensitivity: advances in the methodology of grounded theory*. Sociology Press, California.
- Grant, R. M. (1991). The resource-based theory of competitive advantage: implications for strategy formulation. *California Management Review*, 33(3), 114–135. <https://doi.org/10.2307/41166664>
- Hair, J. F., Anderson, R. E., Babin, B. J., & Black, W. C. (2010). *Multivariate data analysis: A global perspective* (Vol. 7). Pearson Upper Saddle River.
- Hedman, J., & Kalling, T. (2003). The business model concept: theoretical underpinnings and empirical illustrations. *European Journal of Information Systems*, 12(1), 49–59. <https://doi.org/10.1057/palgrave.ejis.3000446>
- Islami, X., Islami, V., Topuzovska Latkovikj, M., & Mulloli, E. (2019). Barriers hindering the entry of new firms to the competitive market and profitability of incumbents. *Management – Journal of Contemporary Management Issues*, 24(2), 121–143. <https://doi.org/10.30924/mjcmi.24.2.9>
- Islami, X., Mulloli, E., & Mustafa, N. (2018). Using management by objectives as a performance appraisal tool for employee satisfaction. *Future Business Journal*, 4(1), 94–108. <https://doi.org/10.1016/j.fbj.2018.01.001>
- Islami, X., Mustafa, N., & Topuzovska Latkovikj, M. (2020). Linking Porter’s generic strategies to firm performance. *Future Business Journal*, 6(1), 3. <https://doi.org/10.1186/s43093-020-0009-1>
- Islami, Xh., & Mulloli, E. (2016). Drejtimi i politikave qeveritare në mbështetjen e NVM-ve në Kosovë. *Reforma*, 3, 163–170.
- Johnson, M. W., Christensen, C. M., & Kagermann, H. (2008). Reinventing your business model. *Harvard Business Review*, 86(12), 57–68.
- Katz, M. L. (2019). Multisided platforms, big data, and a little antitrust policy. *Review of Industrial Organization*, 54(4), 695–716. <https://doi.org/10.1007/s11151-019-09683-9>
- Kessler, E. H., & Chakrabarti, A. K. (1996). Innovation speed: a conceptual model of context, antecedents, and outcomes. *Academy of Management Review*, 21(4), 1143–1191. <https://doi.org/10.5465/amr.1996.9704071866>
- Kim, W. C., & Mauborgne, R. (2005). Blue ocean strategy: from theory to practice. *California Management Review*, 47(3), 105–121. <https://doi.org/10.2307/41166308>
- Krause, D. R., Scannell, T. V., & Calantone, R. J. (2000). A structural analysis of the effectiveness of buying firms’ strategies

- to improve supplier performance. *Decision Sciences*, 31(1), 33–55. <https://doi.org/10.1111/j.1540-5915.2000.tb00923.x>
- Laforet, S., & Tann, J. (2006). Innovative characteristics of small manufacturing firms. *Journal of Small Business and Enterprise Development*, 13(3), 363–380. <https://doi.org/10.1108/14626000610680253>
- Lapersonne, A. H. (2017). *The hybrid competitive strategy framework: a managerial theory for combining differentiation and low-cost strategic approaches based on a case study of a European textile manufacturer* (Doctoral dissertation). The University of Manchester, United Kingdom.
- Lee, J. N., & Kim, Y. G. (1999). Effect of partnership quality on IS outsourcing success: conceptual framework and empirical validation. *Journal of Management Information Systems*, 15(4), 29–61. <https://doi.org/10.1080/07421222.1999.11518221>
- Li, S., Rao, S., Ragu-Nathan, T. S., Ragu-Nathan, B. (2002, November 23–26). An empirical investigation of supply chain management practices. *Proceedings of the 33rd annual meeting of the decision science institute*. San Diego, CA.
- Li, S., Ragu-Nathan, B., Ragu-Nathan, T. S., & Subba Rao, S. (2006). The impact of supply chain management practices on competitive advantage and organizational performance. *Omega*, 34(2), 107–124. <https://doi.org/10.1016/j.omega.2004.08.002>
- Lind, D. A., Marchal, W. G., & Mason, R. D. (2002). *Statistical techniques in business & economics* (11th ed.). McGraw-Hill Irwin.
- Lioukas, C. S., Reuer, J. J., & Zollo, M. (2016). Effects of information technology capabilities on strategic alliances: implications for the resource-based view. *Journal of Management Studies*, 53(2), 161–183. <https://doi.org/10.1111/joms.12179>
- Madhani, P. M. (2010). Resource based view (RBV) of competitive advantage: an overview. *Resource Based View: Concepts And Practices* (pp. 3–22). SSRN.
- Magretta, J. (2011). *Understanding Michael Porter: The essential guide to competition and strategy*. Harvard business press. US.
- Matthews, B., & Ross, L. (2010). *Research methods: A practical guide for the social sciences*. Pearson Education Limited, England.
- Murray, A. I. (1988). A contingency view of Porter's "generic strategies". *Academy of Management Review*, 13(3), 390–400. <https://doi.org/10.5465/amr.1988.4306951>
- Neffke, F., & Henning, M. (2013). Skill relatedness and firm diversification. *Strategic Management Journal*, 34(3), 297–316. <https://doi.org/10.1002/smj.2014>
- Newbert, S. L. (2008). Value, rareness, competitive advantage, and performance: a conceptual-level empirical investigation of the resource-based view of the firm. *Strategic Management Journal*, 29(7), 745–768. <https://doi.org/10.1002/smj.686>
- Nunnally, J. C. (1978). *Psychometric theory* (2nd ed.). New York: McGraw-Hill, US.
- Porter, M. E. (1980). *Competitive strategy-techniques for analysis industries and competitors*. New York: Free Press.
- Porter, M. E. (1985). *Competitive advantage creating and sustaining superior performance*. Free Press, New York.
- Porter, M. E. (1991). Towards a dynamic theory of strategy. *Strategic Management Journal*, 12(S2), 95–117. <https://doi.org/10.1002/smj.4250121008>
- Porter, M. E. (1992). Capital disadvantage: America's failing capital investment system. *Harvard Business Review*, 70(5), 65–82.
- Porter, M. E. (1996). What is strategy? *Harvard Business Review*. Published November – December, US.
- Ramsay, J. (2001). The resource based perspective, rents, and purchasing's contribution to sustainable competitive advantage. *Journal of Supply Chain Management*, 37(2), 38–47. <https://doi.org/10.1111/j.1745-493X.2001.tb00104.x>
- Rondeau, P. J., Vonderembse, M. A., & Ragu-Nathan, T. (2000). Exploring work system practices for time-based manufacturers: their impact on competitive capabilities. *Journal of Operations Management*, 18(5), 509–529. [https://doi.org/10.1016/S0272-6963\(00\)00037-1](https://doi.org/10.1016/S0272-6963(00)00037-1)
- Rothaermel, F. T. (2017). *Strategic management*. New York, NY: McGraw-Hill Education.
- Shin, H., Collier, D. A., & Wilson, D. D. (2000). Supply management orientation and supplier/buyer performance. *Journal of Operations Management*, 18(3), 317–333. [https://doi.org/10.1016/S0272-6963\(99\)00031-5](https://doi.org/10.1016/S0272-6963(99)00031-5)
- Sirmon, D. G., Hitt, M. A., & Ireland, R. D. (2007). Managing firm resources in dynamic environments to create value: Looking inside the black box. *Academy of Management Review*, 32(1), 273–292. <https://doi.org/10.5465/amr.2007.23466005>
- Spanos, Y. E., & Lioukas, S. (2001). An examination into the causal logic of rent generation: contrasting Porter's competitive strategy framework and the resource-based perspective. *Strategic Management Journal*, 22(10), 907–934. <https://doi.org/10.1002/smj.174>
- Stock, G. N., Greis, N. P., & Kasarda, J. D. (2000). Enterprise logistics and supply chain structure: the role of fit. *Journal of Operations Management*, 18(5), 531–547. [https://doi.org/10.1016/S0272-6963\(00\)00035-8](https://doi.org/10.1016/S0272-6963(00)00035-8)
- Szirmai, A., & Verspagen, B. (2015). Manufacturing and economic growth in developing countries, 1950–2005. *Structural Change and Economic Dynamics*, 34, 46–59. <https://doi.org/10.1016/j.strueco.2015.06.002>
- Tracey, M., Vonderembse, M. A., & Lim, J.-S. (1999). Manufacturing technology and strategy formulation: keys to enhancing competitiveness and improving performance. *Journal of Operations Management*, 17(4), 411–428. [https://doi.org/10.1016/S0272-6963\(98\)00045-X](https://doi.org/10.1016/S0272-6963(98)00045-X)
- Vickery, S. nee, Calantone, R., & Droge, C. (1999). Supply chain flexibility: an empirical study. *The Journal of Supply Chain Management*, 35(3), 16–24. <https://doi.org/10.1111/j.1745-493X.1999.tb00058.x>
- Vonderembse, M. A., & Tracey, M. (1999). The impact of supplier selection criteria and supplier involvement on manufacturing performance. *The Journal of Supply Chain Management*, 35(3), 33–39. <https://doi.org/10.1111/j.1745-493X.1999.tb00060.x>
- Vonderembse, M. A., Raghunathan, T. S., & Subba Rao, S. (1997). A post-industrial paradigm: To integrate and automate manufacturing. *International Journal of Production Research*, 35(9), 2579–2600. <https://doi.org/10.1080/002075497194679>
- Ward, P. T., & Duray, R. (2000). Manufacturing strategy in context: environment, competitive strategy and manufacturing strategy. *Journal of Operations Management*, 18(2), 123–138. [https://doi.org/10.1016/S0272-6963\(99\)00021-2](https://doi.org/10.1016/S0272-6963(99)00021-2)
- Watts, C. A., & Hahn, C. K. (1993). Supplier development programs: an empirical analysis. *International Journal of Purchasing and Materials Management*, 29(1), 10–17. <https://doi.org/10.1111/j.1745-493X.1993.tb00002.x>
- Yamin, S., Gunasekaran, A., & Mavondo, F. T. (1999). Relationship between generic strategies, competitive advantage and organizational performance: an empirical analysis. *Technovation*, 19(8), 507–518. [https://doi.org/10.1016/S0166-4972\(99\)00024-3](https://doi.org/10.1016/S0166-4972(99)00024-3)
- Zhang, Q. Y. (2001). *Technology infusion enabled value chain flexibility: a learning and capability-based perspective* (Doctoral dissertation). University of Toledo, Toledo, OH.

APPENDIX A

Items used for differentiation strategy developing scales

“With regard to manager’s participation, distinctive value chain, differentiation strategy, and competitive advantage of your organization, please circle the appropriate number to indicate the extent to which you agree or disagree with each statement.”

The item scales are five-point Likert type scales with 1 – strongly disagree, 2 – disagree, 3 – neutral, 4 – agree, 5 – strongly agree.

Note: Items marked by an asterisk (*) were removed in the final instruments. The quotation marks (“ ”) are used to show exactly the same questions that were used in questionnaires.

<i>1. Manager’s participation in strategy formulation</i>	
MP ₁	“Managers are an integral part of the strategy formation process.”
MP ₂	“Managers are involved in decisions related to strategies for company growth.”
MP ₃	“Managers have a good under-standing as to how company divisional strategy is formed.”
<i>2. Value Chain of differentiation strategy</i>	
<i>Strategic supplier partnership</i>	
VC/SP ₁	“We consider quality as our number one criterion in selecting suppliers.”
VC/SP ₂	“We regularly solve problems jointly with our suppliers.”
VC/SP ₃	“We have helped our suppliers to improve their product quality.”
VC/SP ₄	“We have continuous improvement programs that include our key suppliers.”
VC/SP ₅	“We include our key suppliers in our planning and goal setting activities.”
VC/SP ₆	“We actively involve our key suppliers in new product development processes.”
<i>Customer relationship</i>	
VC/CR ₁ *	“We frequently interact with customers to set reliability, responsiveness, and other standards for us.”
VC/CR ₂	“We frequently measure and evaluate customer satisfaction.”
VC/CR ₃	“We frequently determine future customer expectations.”
VC/CR ₄	“We facilitate customers’ ability to seek assistance from us.”
VC/CR ₅	“We periodically evaluate the importance of our relationship with our customers.”
VC/CR ₆	“We supply customers with accurate information regarding product availability.”
VC/CR ₇ *	“We respond with accurate information to a customer inquiry concerning an order.”
VC/CR ₈ *	“We offer customers a reliable order processing time.”
VC/CR ₉	“We work with each customer to develop a delivery schedule that is acceptable.”
<i>Level of information sharing</i>	
VC/IS ₁	“We inform trading partners in advance of changing needs.”
VC/IS ₂	“Our trading partners share proprietary information with us.”
VC/IS ₃	“Our trading partners keep us fully informed about issues that affect our business.”
VC/IS ₄	“Our trading partners share business knowledge of core business processes with us.”
VC/IS ₅	“We and our trading partners exchange information that helps establishment of business planning.”
VC/IS ₆	“We and our trading partners keep each other informed about events or changes that may affect the other partners.”
<i>Level of information quality</i>	
VC/IQ ₁	“Information exchange between our trading partners and us is timely.”
VC/IQ ₂	“Information exchange between our trading partners and us is accurate.”
VC/IQ ₃	“Information exchange between our trading partners and us is complete.”
VC/IQ ₄	“Information exchange between our trading partners and us is adequate.”
VC/IQ ₅	“Information exchange between our trading partners and us is reliable.”
<i>Postponement</i>	
VC/PO ₁	“Our products are designed for modular assembly.”
VC/PO ₂	“We delay final product assembly activities until customer orders have actually been received.”
VC/PO ₃	“We delay final product assembly activities until the last possible position (or nearest to customers) in the supply chain.”

<i>3. Differentiation Strategy</i>	
<i>Customer Service</i>	
DS/CS ₁	"We have increased speed and effectiveness of decision-making systems."
DS/CS ₂	"We have increased the customers service."
DS/CS ₃	"The quality of product and services is increased."
DS/CS ₄	"We have increase the training and development of human resource."
DS/CS ₅	"Dependability of delivery in our organization is increased."
DS/CS ₆	"We have higher price for our higher value products."
DS/CS ₇	"We respond well to changing customer preferences regarding products or accompanying services."
DS/CS ₈	"Producing products/services for high price market segments."
<i>Technology Leadership</i>	
DS/TL ₁	"We have achieved differentiation using unique technology."
DS/TL ₂	"We have achieved innovation in marketing technology and methods."
DS/TL ₃ *	"We have unique assets that make us different from others."
DS/TL ₄	"Our product is unique."
DS/TL ₅	"Employees in our organization have unique skills."
<i>Product Differentiation</i>	
DS/PD ₁	"Concentrating on developing new products/services or adapting existing products to better serve customers."
DS/PD ₂	"The degree of dumping of new products/services in the market makes us different from competitors."
DS/PD ₃	"Set emphasis on creating and identifying by name and good image helps us to make difference."
DS/PD ₄	"Differentiation through shortening the project time or completion within the project deadline."
DS/PD ₅ *	"Innovation in marketing techniques."
DS/PD ₆	"Increase the intensity of advertising and marketing."
DS/PD ₇	"Developing a broad range of new products/services."
<i>Logistic Differentiation</i>	
DS/LD ₁	"Flexibility in volume mix."
DS/LD ₂	"Flexibility in product mix."
DS/LD ₃	"Provide unique products with regard to function or design."
<i>4. Competitive advantage</i>	
<i>Quality</i>	
CA/Q ₁	"We are able to compete, based on quality."
CA/Q ₂	"We offer products that are highly reliable."
CA/Q ₃	"We offer products that are very durable."
CA/Q ₄	"We offer high quality products to our customer."
CA/Q ₅	"We offer products that function according to customer needs."
<i>Delivery dependability</i>	
CA/DD ₁	"We deliver the kind of products needed."
CA/DD ₂	"We deliver customer order on time."
CA/DD ₃	"We provide dependable delivery."
CA/DD ₄	"Our customers are pleased with the frequency of our delivery."
CA/DD ₅	"We are flexible in developing delivery schedules."
CA/DD ₆	"Our frequency of customer backorders is low."
CA/DD ₇ *	"Our customers are satisfied with our level of completeness for routine shipments."
<i>Product innovation</i>	
CA/PI ₁	"We provide customized products."
CA/PI ₂	"We alter our product offerings to meet client needs."
CA/PI ₃	"We respond well to customer demand for "new" features."
CA/PI ₄	"We offer the products and services our customers want."
<i>Time to market</i>	
CA/TM ₁	"We deliver product to market quickly."

CA/TM ₂	“We are first in the market in introducing new products.”
CA/TM ₃	“We have time-to-market lower than industry average.”
CA/TM ₄	“We have fast product development.”

“How do you evaluate the performance of your firm after pursuing the differentiation strategy, regarding on the following indicators. The item scales are five-point Likert scales with 1 = significant decrease, 2 = decrease, 3 = same as before, 4 = increase, 5 = significant increase.”

<i>5. Organizational Performance</i>	
OP ₁	“Market share.”
OP ₂	“Return on investment (ROI).”
OP ₃	“The growth of market share.”
OP ₄	“The growth of sales.”
OP ₅	“Increasing value of business due to regular good performance.”
OP ₆	“Satisfaction of shareholders with company’s performance.”
OP ₇	“Good profit margin on sales.”
OP ₈ *	“Overall competitive position.”

APPENDIX B

Demographic data for the respondent firms (sample size 123) (source: authors)

Demographic variable	Count (percentage)		Demographic variable	Count (percentage)	
<i>Firm size</i>			<i>Position of the participant on the firms respondent</i>		
Up to 49 employees	42	(34.14%)	Owner	27	(21.95%)
From 49–250 employees	81	(65.86%)	Director (CEO)	42	(34.15%)
<i>Firm age</i>			Manager	54	(43.90%)
1–10 years	47	(38.21%)			
11–20 years	51	(41.46%)			
21–30 years	7	(5.70%)			
31–40 years	13	(10.57%)			
Over 40	5	(4.06%)			