

## Market Orientation and Business Performance: The Mediating Role of Customer Satisfaction

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**Abstract:** The aim of this study is to investigate the effect of market orientation on business performance in the presence of customer satisfaction. A sample consisted of 421 employees working in small shops selling mobile devices in Riyadh, the capital city of Saudi Arabia which was randomly selected. The required data was collected using a questionnaire developed based on previous studies. The total number of questionnaires distributed by hand to subjects from Oct. 2016 to Jan. 2017 was 421 questionnaires. Out of these, 377 questionnaires were returned complete and usable for the purpose of the analysis. Market orientation was measured using seven dimensions: customer orientation, competitor orientation, interfunctional coordination, distributor orientation, intelligence dissemination, intelligence generation and responsiveness. Customer satisfaction was measured based on overall satisfaction, expectancy disconfirmation and performance score comparison to a customer ideal. Lastly, business performance was assessed using sales volume, profit and market share. The findings showed that the three conditions of the mediating role of customer satisfaction in the relationship between market orientation and business performance were met. That is, market orientation dimensions are significantly related to both customer satisfaction and business performance. However, the impact of market orientation dimensions on business performance was lessened due to the introduction of customer satisfaction into the regression model. In a word, the results accepted the hypothesis that customer satisfaction mediates the relationship between market orientation and business performance.

**Key words:** Market orientation, customer satisfaction, business performance, mediating role, profit, distributor

### INTRODUCTION

Market orientation is a critical research line in marketing studies. This construct is considered as a major part of the strategic orientations of an organization (Theodosiou *et al.*, 2012). The wide acceptance of market orientation among researchers as well as organizations lies in its implication on organizational outcomes such as performance. Many studies have supported the positive impact of market orientation on business performance (Aziz and Yassin, 2010; Hussain *et al.*, 2016; Ogbonna and Ogwo, 2013; Mohamad *et al.*, 2015; Morgan *et al.*, 2009; Salyova *et al.*, 2015; Wang *et al.*, 2012). Another vein of research highlighted the significance of market orientation to customer satisfaction (Altarifi *et al.*, 2016; Chiquan, 2002; Guo and Wang, 2015; Singh and Ranchhod, 2004). Consequently, a little wave of research came to pass the mediating role of customer satisfaction in the relationship between market orientation and business performance (Kirca *et al.*, 2005; Lin and Brown, 2010). In fact, this observation paved a new way to think over relationships among these constituents in Arabic settings. A literature review of market orientation reveals

that market orientation as a marketing coin has two related but different sides which are the behavioural and cultural stances. According to Theodosiou *et al.* (2012), the behavioural side is related to market intelligence while the cultural one is concerned with values devoted to boost these behaviours. However, much of the studies took place to tackle market orientation measured this construct using three main dimensions, following, competitive orientation, customer orientation and interfunctional coordination (Narver and Slater, 1990). A good contribution to the body of knowledge could be achieved by considering both behavioural and cultural perspectives of market orientation. Consequently, the aim of this research is to explore the impact of market orientation (behavioural and cultural perspective) on business performance. Additionally, customer satisfaction was modelled as a mediator factor in the relationship between these variables.

### Literature review

**Business performance:** Business performance was measured in the literature using numerous dimensions. In a study by Salyova *et al.* (2015), it was conceptualized in

**Table 1: Dimensions used in the literature to measure business performance**

Dimensions of business performance	References
Return on investment	Narver and Slater (1990)
Profitability	Benito and Benito (2005)
Market performance and operational performance	
Subjective assessment of firm's profitability and objective calculation of return on assets	Morgan <i>et al.</i> (2009)
Self-assessment of business performance	Aziz and Yassin (2010)
Customer performance and finance performance	Wang <i>et al.</i> (2012)
Innovation related performance: product uniqueness, markets, no. of new products and quality	
Customer related performance: retention, relationship, customer satisfaction and attraction	Ngo and O'Cass (2012)
Sales volume, profit and market share	Ogbonna and Ogwo (2013)
The balanced score card dimensions	Jabbouri and Zahari (2014)
Market share, return on investment, return on assets, return on sales, profit, sales	Salyova <i>et al.</i> (2015)

terms of market share, return on investment, return on assets, profit, sales and return on sales. Used four dimensions of the balanced score card to measure performance: financial, customer satisfaction, internal processes in addition to learning and growth. Ogbonna and Ogwo (2013) measured business performance by market share, profitability and sales volume. Morgan *et al.* (2009) in their study on relationships between marketing capabilities, market orientation and business performance, measured business performance using subjective and objective measure. That is subjective assessment of profitability and objective calculation of firm's return on assets.

Narver and Slater (1990) used return on investment to measure business performance. Benito and Benito (2005) studied the relationship between market orientation (cultural and operational) and business performance. They evaluated performance using three main dimensions: operational performance, market performance and profitability. Ngo and O'Cass (2012) divided business performance in market orientation context into two parts: customer-related performance and innovation-related. For them the former was measured using items related to product uniqueness, number of new markets, number of new products as well as quality. On the other hand, customer-related performance was measured using customer satisfaction, relationship, attraction and retention. Examples of dimensions used to measure business performance are illustrated in Table 1.

**Market orientation:** Numerous studies have been recommended to conceptualize market orientation. Lafferty *et al.* (2001) grouped perspectives of market orientation into five categories: the decision-making perspective, cultural-based behavioural perspective, market intelligence perspective, the customer perspective and the strategic perspective. Alhakimi and Baharun (2009) recognized three main streams of market orientation: culture-oriented, behaviour-driven and

system-based perspectives. According to Vasquez *et al.* (2001) and Salyova *et al.* (2015), market orientation could be conceptualized based on two perspectives: the behavioural and cultural perspectives. The cultural perspective of market orientation prescribed this construct as a part of an organization's culture. The other perspective specified market orientation with reference to particular behaviours (Armario *et al.*, 2008).

Niculescu *et al.* (2013) remarked that the most common studies conducted and cited on market orientation are Kohli and Jaworski (1990), Narver and Slater (1990). By Narver and Slater (1990), market orientation is a construct that constitute a part of the organizational culture. It consists of three dimensions: customer orientation (i.e., customer needs, customer commitment, after sales service and customer satisfaction), competitor orientation (i.e., familiarity with competitor's strategies, share of competitor information and quick response to competitor's actions) and interfunctional coordination (i.e., resource sharing among business units, information sharing among business functions, customer calls and function's contribution to customer value). By Kohli and Jaworski (1990), market orientation relates to market intelligence and comprises three main dimensions: intelligence dissemination, intelligence generation and responsiveness. Based on these perspectives, researchers use one, both or a synthesis of market orientation perspectives.

Homburg *et al.* (2004) used the same dimensions proposed by Kohli and Jaworski (1990). Lam *et al.* (2010) employed three dimensions to formalize market orientation: customer orientation, competitor orientation and product orientation. Wang *et al.* (2012) used four dimensions to measure market orientation: information dissemination, shared interpretation, information generation and organization responsiveness.

Saini and Mokolobate (2011) indicated that market orientation comprised three dimensions: competitor orientation, customer orientation and interfunctional coordination. Ogbonna and Ogwo (2013) and

Hussain *et al.* (2016) in their studies on the relationship between market orientation and business performance of insurance companies, measure market orientation using three dimensions: competitor focus, customer focus and interfunctional coordination.

Hilal (2015) examined the relationship between strategic orientation and business performance. He used five dimensions to measure market orientation as a sub-dimension of strategic orientation: interfunctional coordination, competitor orientation, customer orientation, responsiveness and profit emphasis. Morgan *et al.* (2009) adapted three dimensions to measure market orientation: intelligence dissemination, intelligence generation and responsiveness. Maydeu-Olivares and Lado (2003) evaluated market orientation using four dimensions: analysis of customers, analysis of competitors, analysis of distributors and interfunctional coordination.

According to Ellis (2006), Narver and Slater (1990) entitled MKTOR results in greater effects on performance than other scales such as MARKOR developed by Kohli and Jaworski (1993). Theodosiou *et al.* (2012) in their study on strategic orientations, marketing capabilities and firm performance used additional dimension to measure market orientation which is innovation orientation; they conceptualized this dimension as adoption of new set of technologies, skills and systems to introduce change in an organization. Studying the role of marketing capability, market orientation and innovation capability interactions, Ngo and O’Cass (2012) measured market orientation by intelligence dissemination, intelligence generation and responsiveness. Lambin and Chumpitaz (2000) define market orientation in terms of the role of the following players: customers, distributors, prescribers and competitors. Overall, Table 2 shows examples of market orientations dimensions used in the literature.

**Relationship between marketing orientation and business performance:** The effect of market orientation on business performance gained attention from numerous researchers. Many of them deduce a significant influence of the former on the later. Slater and Narver (2000) conducted a balanced replication of Narver and Slater (1990)’s study and make sure the both market orientation and business performance (profitability) are positively correlated. Matsuno *et al.* (2002) conceived that market orientation has a positive effect on three indicators of business performance, i.e., return on investment, sales of new products to total sales and market share. The results by Salyova *et al.* (2015)’s study supported the hypothesis that market orientation is positively associated to the overall business

Table 2: Dimensions of market orientation

Dimensions of market orientation	References
Competitor orientation	Narver and Slater (1990)
Customer orientation	
Interfunctional coordination	
Competitor orientation	Lambin and Chumpitaz (2000)
Customer orientation	
Distributor orientation	
Prescriber orientation	
Analysis of customer	Maydeu-Olivares and Lado (2003)
Analysis of competitor	
Analysis of distributor	
Interfunctional coordination	
Behavioral or operational market orientation	Benito and Benito (2005)
Attitudinal or cultural market orientation	
Responsiveness	Homburg <i>et al.</i> (2004), Kohli and Jaworski (1990), Morgan <i>et al.</i> (2009)
Intelligence dissemination	
Intelligence generation	
Customer orientation	Aziz and Yassin (2010)
Competitor orientation	
Interfunctional coordination and Information dissemination	
Competitor orientation	Safarnia <i>et al.</i> (2011), Saini and Mokolobate (2011), Hussain <i>et al.</i> (2016)
Customer orientation	
Interfunctional coordination	
Organization responsiveness	Wang <i>et al.</i> (2012)
Shared interpretation	
Information generation	
Information dissemination	
Customer focus	Ogbonna and Ogwo (2013)
Competitor focus	
Interfunctional coordination	
Competitor orientation	Hilal (2015)
Customer orientation	
Interfunctional coordination	
Organization responsiveness	
Profit emphasis	
Competitor orientation	
Customer orientation	Theodosiou <i>et al.</i> (2012)
Interfunctional coordination	
Innovation orientation	
Intelligence dissemination	Ngo and O’Cass (2012)
Intelligence generation	
Responsiveness	

performance. They also supported the positive relationship between marketing orientation and sales, profit, return on assets, return on investment and return on sales. Wang *et al.* (2012) found a positive influence of market orientation on business performance.

Ogbonna and Ogwo (2013) studied the relationship between market orientation and business performance and revealed a positive relationship between these two variables. Cano *et al.* (2004) investigated the relationship between market orientation and business performance and concluded a positive relationship between these variables. Aziz and Yassin (2010) examined the relationship between market orientation and business performance of organizations from manufacturing and service sector in Malaysia and supported the positive impact of interfunctional coordination, customer orientation and competitor orientation on business

Table 3: Results of previous studies on market orientation and business performance

Researchers/Relationship	Supported
<b>Market orientation × Business performance</b>	✓
Matsuno <i>et al.</i> (2002)	✓
Micheels and Gow	✓
Morgan <i>et al.</i> (2009)	✓
Aziz and Yassin (2010)	✓
Ogbonna and Ogwo (2013)	✓
Salyova <i>et al.</i> (2015)	✓
Mohamad <i>et al.</i> (2015)	✓
Hussain <i>et al.</i> (2016)	✓

performance. Avlonitis and Gounaris (1997) regarded market orientation as a pivotal contributor to business performance. Mohamad *et al.* (2015) analysed the mediating role of market orientation in the relationship between customer relationship management and business performance of food manufacturing industry. One of their findings supported the positive relationship between market orientation and business performance. Morgan *et al.* (2009) studied the effect of market orientation as well as marketing capabilities on business performance. Their results indicated that market orientation is positively correlated to business performance when the latest measured objectively in terms of return on assets but not with performance subjectively assessed.

Hussain *et al.* (2016) added that the positive influence of market orientation on business performance is moderated by entrepreneurial orientation. Based on the above findings, it was hypothesized that customer orientation is positively correlated to business performance. Table 3 shows results of previous studies supported the positive impact of market orientation on business performance. Hence, the following hypothesis was suggested:

- H<sub>1</sub>: market orientation directly and positively affects business performance

**Customer satisfaction:** Cengiz (2010) listed more than ten definitions of customer satisfaction from which one could conclude that this concept refers to a process of evaluation that begins when a customer starts either his or her purchase or consumption experience. The researcher argued that customer satisfaction is related to two main themes which are a customer objective (i.e., need) and satisfaction standards (i.e., judgement reference). Omar (2016) added that a good or service meets or exceeds a customer’s wishes would make him or her satisfied.

Giese and Cote identified three themes of customer satisfaction among researchers which are response (a customer’s emotional or cognitive

Table 4: Dimensions used in the literature to measure customer satisfaction

Dimensions of business performance	References
Customer’s experiences with products or services	Krepapa <i>et al.</i> (2000)
Ability to meet the minimum expectations of a customer	Osuagwu and Obaji (2009)
Customer’s overall satisfaction	Tournois (2013)
Expectancy disconfirmation	
Performance score comparison to a customer ideal	

responses), product (product purchase or consumption) and time (before or after product purchase or consumption). Osuagwu and Obaji (2009) defined customer satisfaction as a state determined based on the product performance ability to meet at least, the minimum expectations of a customer.

Caruana (2002) indicated that the common conceptualization of customer satisfaction includes four dimensions which are expectations, performance, disconfirmation and satisfaction. In terms of customer satisfaction dimensions, Tournois (2013) conceptualized market performance as customer satisfaction and measured it using the American Customer Satisfaction Index (ACSI) that comprised three main indicators: a customer’s overall satisfaction, expectancy disconfirmation and performance score comparison to a customer ideal. Many researchers used the ACSI Model to judge customer satisfaction in both private and public sectors (Ryzin *et al.*, 2004). Krepapa *et al.* (2000) measured customer satisfaction by a customer’s experiences with products or services (Table 4).

**Relationship between marketing orientation and customer satisfaction:** Jyoti and Sharma (2012) investigated the effect of market orientation on business performance through customer satisfaction and employee satisfaction. Their results displayed a significant direct relationship between market orientation and customer satisfaction. Singh and Ranchhod (2004) examined the relationship between market orientation, customer satisfaction and business performance and found that both market orientation and customer satisfaction have a positive effect on business performance.

Altarifi *et al.* (2016) studied the impact of market orientation on customer satisfaction using a sample consisted of 158 managers of private schools and confirmed the positive impact of market orientation (i.e., interfunctional coordination, competitor orientation and customer orientation) on customer satisfaction. Chiquan (2002) conducted an investigation to identify the relationship between market orientation and customer satisfaction. Their results indicated that competitor orientation and customer orientation were positively correlated to customer satisfaction and business performance. On the other hand, the results pointed out

that interfunctional coordination has no statistical relationship with customer satisfaction or business performance.

Lings and Greenley (2009) inquired the influence of market orientation (internal and external aspects) on business performance with regard to financial performance and customer satisfaction and found a positive effect of market orientation on customer satisfaction.

Guo and Wang (2015) examined the influence of market orientation dimensions (competitor orientation, customer orientation and interfunctional coordination) on business-to-business customer satisfaction and retention. Their findings highlighted that both competitor orientation and customer orientation have significant impact on customer satisfaction and retention while interfunctional coordination decrease the positive impact on these dependent variables. In their study on travel agencies in Taiwan, Lin and Brown (2010) revealed that customer satisfaction mediated the relationship between market orientation and business performance. Similarly, Kirca *et al.* (2005) indicated that market orientation improves customer satisfaction which in turn enhances business performance. Table 5 shows the results of previous studies supporting the positive impact of market orientation on customer satisfaction. Therefore, the following hypothesis was suggested:

- H<sub>2</sub>: market orientation directly and positively affects customer satisfaction

**Relationship between customer satisfaction and business performance:** The relationship between customer satisfaction and business performance in different sectors gained great attention from researchers. In a study conducted by, customer satisfaction was proved as a significant mediator in the relationship between corporate social responsibility and business performance. Customer satisfaction was also found to play a significant role in the relationship between service orientation and financial performance (Eren *et al.*, 2013). On the other hand, the findings by Neupane (2014) indicated that there is no statistically significant relationship between customer and business performance. For Zhang and Pan (2009), customer satisfaction is positively correlated to business performance, particularly financial performance. Table 6 shows the results of previous studies supporting the positive impact of customer satisfaction on business performance.

- H<sub>3</sub>: customer satisfaction directly and positively affects business performance

Table 5: Results of previous studies on market orientation and customer satisfaction

Researchers/Relationship	Supported
<b>Market orientation × Customer satisfaction</b>	
Chiquan (2002)	✓
Singh and Ranchhod (2004)	✓
Kirca <i>et al.</i> (2005)	✓
Lin and Brown (2010)	✓
Jyoti and Sharma (2012)	✓
Guo and Wang (2015)	✓
Altarifi <i>et al.</i> (2016)	✓

Table 6: Results on relationship between customer satisfaction and business performance

Researchers/Relationship	Supported
<b>Customer satisfaction × Business performance</b>	
Kirca <i>et al.</i> (2005)	✓
Zhang and Pan (2009)	✓
Lings and Greenley (2009)	✓
Lin and Brown (2010)	✓
Saeidi	✓
Neupane (2014)	×

## MATERIALS AND METHODS

**Research framework:** Based on the above-mentioned and suggested literature review and hypothesis, a framework for this study was developed as can be seen in Fig. 1. It composed of three variables, market orientation, customer satisfaction and business performance. Thence, three assumed relationships between these variables were displayed.

**Research sample and data collection:** According to Ngo and O’Cass (2012), the data required to a study should be collected from relevant participants. They defined those participants as the most knowledgeable persons in the organization in terms of the variables under study. Accordingly, participants of this research consist of managers of branches of companies working at selling mobile devices. Due to time constraints and cost, only branches in Riyadh, the capital city of Saudi Arabia were selected. The total number of participants was 412 managers. The same number of questionnaires were distributed by hand to participants from Oct. 2016 to Jan. 2017. Out of them, 377 questionnaires were returned complete and usable for analysis purpose with a response rate of 91.5%.

**Measures:** Market orientation was measured using a scale adopted from previous studies as shown in Table 1 (Kohli and Jaworski, 1990; Narver and Slater, 1990; Lambin and Chumpitaz, 2000; Maydeu-Olivares and Lado, 2003; Morgan *et al.*, 2009; Aziz and Yassin, 2010; Saini and Mokolobate, 2011; Ngo and O’Cass, 2012; Ogbonna and Ogwo, 2013; Hilal, 2015; Hussain *et al.*, 2016). Seven dimensions of market orientation were selected: competitor orientation, customer orientation,

Table 7: Measures of research variables

Variables/Dimensions	Researchers
<b>Market orientation</b>	Narver and Slater (1990), Lambin and Chumpitaz (2000), Aziz and Yassin (2010), Saini and Mokolobate (2011), Ngo and O’Cass (2012), Ogbonna and Ogwo (2013), Hilal (2015) and Hussain <i>et al.</i> (2016)
Competitor orientation	
Customer orientation	
Interfunctional coordination	
Distributor orientation	
Intelligence generation	
Intelligence dissemination	
Responsiveness	
<b>Customer satisfaction</b>	Toumois (2013)
Customer’s overall satisfaction	
Expectancy disconfirmation	
Performance score comparison to a customer ideal	
Delivery process	
<b>Business performance</b>	
Sales volume	Narver and Slater (1990), Al-Hawari and Ward (2006), Ogbonna and Ogwo (2013)
Profit	
Market share	
Return on investment	
Customer satisfaction improvement	
Employee satisfaction improvement	

Table 8: Results of fit indices

Values	$\chi^2/df$	RMSEA	CFI	GFI
Resulted	2.66	0.06	0.93	0.93
Standard	<5	<0.08	>0.90	>0.90

Comparative Fit Index (CFI) and the Goodness of Fit (GFI). The results of the reliability analysis showed that all variables have an acceptable level of reliability. It was 0.87 for market orientation, 0.77 for customer satisfaction and 0.81 for business performance. In terms of validity, the results showed that all values of indices were acceptable:  $\chi^2/df = 2.66$ , RMSEA = 0.06, CFI = 0.93 and GFI = 0.93. According to Tang *et al.* (2008),  $\chi^2/df$  should be <5, GFI and CFI should be higher than 0.9 and RMSEA should be <0.08. Table 8 shows the resulting standard of fit indices.

**RESULTS AND DISCUSSION**

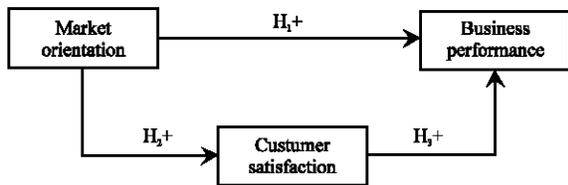


Fig. 1: Research framework

interfunctional coordination, distributor orientation, intelligence generation, intelligence dissemination and responsiveness. Each dimension was assessed by four items on a scale utilized Likert-type anchors where 1 refers to “strongly disagree” and 5 relates to “strongly agree” (Vagias, 2006). Customer satisfaction was measured based on Krepapa *et al.* (2000) and Tournois (2013) using three main dimensions with three items for each: customer’s overall satisfaction, expectancy disconfirmation and performance score comparison to a customer ideal (customer expectations or wishes). Finally, business performance was measured based on Narver and Slater (1990), Al-Hawari and Ward (2006), Ogbonna and Ogwo (2013) and who use six indicators: sales volume, return on investment, profit and market share, customer satisfaction improvement and employee satisfaction improvement. Table 7 examples dimensions adopted to measure the research variables.

**Reliability and validity:** The Cronbach’s alpha ( $\alpha$ ) coefficients was used to assess the scale’s reliability. On the other hand, construct validity was measured using the Chi square to degree of freedom ( $\chi^2/df$ ), the Root Mean Squared Error of Approximation (RMSEA), the

**Descriptive statistics and correlation:** The results of descriptive statistics and correlation coefficients of market orientation, customer satisfaction and business performance are shown in Table 9. It was concluded that all variables are positively correlated. Market orientation dimensions are significantly correlated to customer satisfaction and business performance. As noted, the largest correlation value between market orientation variables (the independent variables) was between competitor orientation and intelligence dissemination ( $r = 0.62, p < 0.05$ ), followed by the correlation between interfunctional coordination and intelligence generation ( $r = 0.60, p < 0.05$ ), then between distribution orientation and responsiveness ( $r = 0.56, p < 0.05$ ). The largest value of correlation between market orientation dimensions and customer satisfaction was for customer orientation ( $r = 0.48, p < 0.05$ ). Final responsiveness has the greatest correlation with business performance ( $r = 0.68, p < 0.05$ ).

**Hypothesis testing:** Hypothesis 1 presumed that market orientation directly and positively affects business performance. The results of regression analysis recorded in Table 10 proved that all dimensions of market orientation (i.e., interfunctional coordination, customer orientation, competitor orientation, distributor orientation, intelligence dissemination, intelligence generation and responsiveness) have significant impacts on business performance. The impact of customer orientation was the largest on business performance ( $\beta = 0.408, t = 5.81, p < 0.05$ ), succeeded by distributor orientation ( $\beta = 0.401, t = 5.57, p < 0.05$ ), competitor orientation ( $\beta = 0.399,$

Table 9: Means, standard deviations and correlation coefficients

Variables	M	SD	1	2	3	4	5	6	7	8	9
1	3.80	0.71	-								
2	3.33	0.68	0.41	-							
3	3.70	0.91	0.51	0.39	-						
4	3.65	0.74	0.37	0.47	0.37	-					
5	3.80	0.81	0.50	0.51	0.60	0.35	-				
6	3.42	0.51	0.49	0.62	0.44	0.47	0.31	-			
7	3.99	0.61	0.48	0.42	0.31	0.56	0.40	0.41	-		
8	3.66	0.63	0.48	0.43	0.29	0.61	0.46	0.39	0.43	-	
9	3.71	0.71	0.53	0.61	0.38	0.39	0.34	0.46	0.38	0.68	-

1: Customer orientation, 2: Competitor orientation, 3: Interfunctional coordination, 4: Distributor orientation, 5: Intelligence generation, 6: Intelligence dissemination, 7: Responsiveness, 8: Customer satisfaction, 9: Business performance

Table 10: Results of regression analysis

Predictors	Response	$\beta$	t-values	Sig.
Customer orientation	Customer satisfaction	0.411	6.100	0.000
Customer orientation	Business performance	0.408 ( $\beta_1$ )	5.810	0.000
Customer orientation	Business performance	0.351 ( $\beta_2$ )	4.890	0.000
Customer satisfaction		0.394	4.330	0.001
Competitor orientation	Customer satisfaction	0.422	7.130	0.000
Customer satisfaction	Business performance	0.399 ( $\beta_3$ )	5.240	0.000
Competitor orientation	Business performance	0.385 ( $\beta_4$ )	4.990	0.000
Customer satisfaction		0.412	3.680	0.000
Interfunctional coordination	Customer satisfaction	0.409	4.200	0.000
Interfunctional coordination	Business performance	0.321 ( $\beta_5$ )	5.640	0.000
Interfunctional coordination	Business performance	0.281 ( $\beta_6$ )	4.330	0.000
Customer satisfaction		3.860	6.660	0.000
Distributor orientation	Customer satisfaction	0.411	6.770	0.000
Distributor orientation	Business performance	0.401 ( $\beta_7$ )	5.570	0.000
Distributor orientation	Business performance	0.208 ( $\beta_8$ )	0.650	0.121
Customer satisfaction		0.382	7.120	0.001
Intelligence generation	Customer satisfaction	0.391	5.330	0.000
Intelligence generation	Business performance	0.255 ( $\beta_9$ )	2.410	0.000
Intelligence generation	Business performance	0.141 ( $\beta_{10}$ )	1.110	0.035
Customer satisfaction		0.384	6.190	0.002
Intelligence dissemination	Customer satisfaction	0.291	3.210	0.000
Intelligence dissemination	Business performance	0.370 ( $\beta_{11}$ )	2.890	0.000
Intelligence dissemination	Business performance	0.131 ( $\beta_{12}$ )	1.210	0.641
Customer satisfaction		3.970	8.110	0.000
Responsiveness	Customer satisfaction	0.511	8.910	0.000
Responsiveness	Business performance	0.180 ( $\beta_{13}$ )	2.470	0.000
Responsiveness	Business performance	0.135 ( $\beta_{14}$ )	1.010	0.741
Customer satisfaction		0.481	9.110	0.000

t = 5.24, p<0.05), intelligence dissemination ( $\beta = 0.370$ , t = 2.89, p<0.05), interfunctional coordination ( $\beta = 0.321$ , t = 5.64, p<0.05) and intelligence generation ( $\beta = 0.255$ , t = 2.41, p<0.05). Responsiveness has the smallest influence on business performance ( $\beta = 0.180$ , t = 2.47, p<0.05). Hypothesis 2 postulated that market orientation directly and positively influences customer satisfaction. Regression analysis was conducted to test this hypothesis.

The results shown in Table 3, indicated that all dimensions of market orientation (i.e., competitor orientation, customer orientation, interfunctional coordination, distributor orientation, intelligence dissemination, intelligence generation and responsiveness) have significant impacts on customer satisfaction. Remarkably, the results determined that responsiveness has the largest influence on customer

satisfaction ( $\beta = 0.511$ , t = 8.91, p<0.05) followed by competitor orientation ( $\beta = 0.422$ , t = 7.13, p<0.05), customer orientation ( $\beta = 0.411$ , t = 6.10, p<0.05), interfunctional coordination ( $\beta = 0.409$ , t = 4.20, p<0.05) and distributor orientation ( $\beta = 0.401$ , t = 6.77, p<0.05), then, intelligence generation ( $\beta = 0.399$ , t = 5.33, p<0.05) and intelligence dissemination ( $\beta = 0.291$ , t = 3.21, p<0.05).

Hypothesis 3 suggested that customer satisfaction directly and positively affects business performance. In order to examine this hypothesis, customer satisfaction was introduced as a predictor of business performance in the presence of market orientation dimensions, i.e. as a mediator in the relationship between each dimension of market orientation and business performance.

According to Ismail *et al.* (2009), there are three conditions when examining the mediating effect of a

Table 11: Results of hypotheses testing

Hypothesis	Results
H <sub>1</sub> ; Market orientation directly and positively affects business performance	Partially supported
a; Customer orientation directly and positively affects business performance	Partially supported
b; Competitor orientation directly and positively affects business performance	Partially supported
c; Interfunctional coordination directly and positively affects business performance	Partially supported
d; Distributor orientation directly and positively affects business performance	Partially supported
e; Intelligence generation directly and positively affects business performance	Partially supported
f; Intelligence dissemination directly and positively affects business performance	Partially supported
g; Responsiveness directly and positively affects business performance	Partially supported
H <sub>2</sub> ; Market orientation directly and positively affects customer satisfaction	Partially supported
H <sub>3</sub> ; Customer satisfaction directly and positively affects business performance	Partially supported

variable in a relationship between independent and dependent variables. For the current study, the first condition stated that the predictor variable (market orientation) has a significant relationship with the mediator (customer satisfaction). The second condition supposed that both predictor and mediator variables have a significant relationship with the dependent variable (business performance). Finally, the third one presumed that the significant influence of the predictor variable (market orientation) on the dependent variable (customer orientation) becomes less or non-significant after the introduction of the mediator variable into the regression model.

From the results, it was clear that the introduction of customer satisfaction into the regression model results in lessen impact of customer orientation on business performance ( $\beta_1 = 0.408, \beta_2 = 0.351, p < 0.05$ ). That is to say, customer satisfaction mediates the relationship between customer orientation and business performance which means that customer orientation positively but not directly, affects the dependent variable. Precisely, there is an indirect positive relationship between customer orientation and business performance.

In relation to competitor orientation, the results confirmed that the effect of competitor orientation was decreased after the addition of customer satisfaction ( $\beta_3 = 0.399, \beta_4 = 0.385, p < 0.05$ ). The same was true for interfunctional coordination ( $\beta_5 = 0.321, \beta_6 = 0.281, p < 0.05$ ) and intelligence generation ( $\beta_9 = 0.225, \beta_{10} = 0.141, p < 0.05$ ). Interestingly, the relationship between distributor orientation, intelligence dissemination, responsiveness and business performance turned into non-significant after the inclusion of customer satisfaction into the regression model, distributor orientation ( $\beta_7 = 0.401, p = 0.000, \beta_8 = 0.208, p = 0.121$ ), intelligence dissemination ( $\beta_{13} = 0.370, p = 0.000, \beta_{14} = 0.131, p = 0.641$ ) and responsiveness ( $\beta_7 = 0.180, p = 0.000, \beta_8 = 0.135, p = 0.741$ ). Table 11 provides a summary of the hypothesis-testing results.

The aim of the current study is 3-fold. First, to investigate the relationship between market orientation (i.e., competitor orientation, customer orientation,

interfunctional coordination, distributor orientation, intelligence dissemination, intelligence generation and responsiveness) and business performance. Second, to explore the relationship between market orientation and customer satisfaction. Finally, to analyse the relationship between customer satisfaction and business performance. In fact, studying these relationships in the same model implies an implied role of customer satisfaction as a mediator ingredient. Consonant with numerous previous findings, the current research found a positive effect of all dimensions of market orientation on business performance. Particularly, market orientation has a positive impact on profitability (Slater and Narver, 2000), market share, return on investment and sales of new products to total sales (Matsuno *et al.*, 2002) and the overall business performance (Cano *et al.*, 2004; Wang *et al.*, 2012; Ogbonna and Ogwo, 2013; Salyova *et al.*, 2015).

The results also pointed out that all dimensions of market orientation are positively related to customer satisfaction. Chiquan (2002), Kirca *et al.* (2005), Lings and Greenley (2009), Jyoti and Sharma (2012), Guo and Wang (2015) and Altarifi *et al.* (2016) revealed similar results. Concerning the relationship between customer satisfaction and business performance, the results by Zhang and Pan (2009), confirmed the positive impact of customer satisfaction on business performance. Inconsistent with these results, Neupane (2014) disproved the significant impact of customer satisfaction on business performance. Market orientation dimensions continue to have a direct as well as positive effect on business performance until the introduction of customer satisfaction into the regression model. Thereupon, customer satisfaction reduced the impact of market orientation on business performance or turned it to non-significant which denotes a mediating effect of customer satisfaction in the relationship between market orientation dimensions and business performance. In short, market dimensions have an indirect positive impact on business performance.

Chiquan (2002), Singh and Ranchhod (2004) detected a positive impact of market orientation and customer

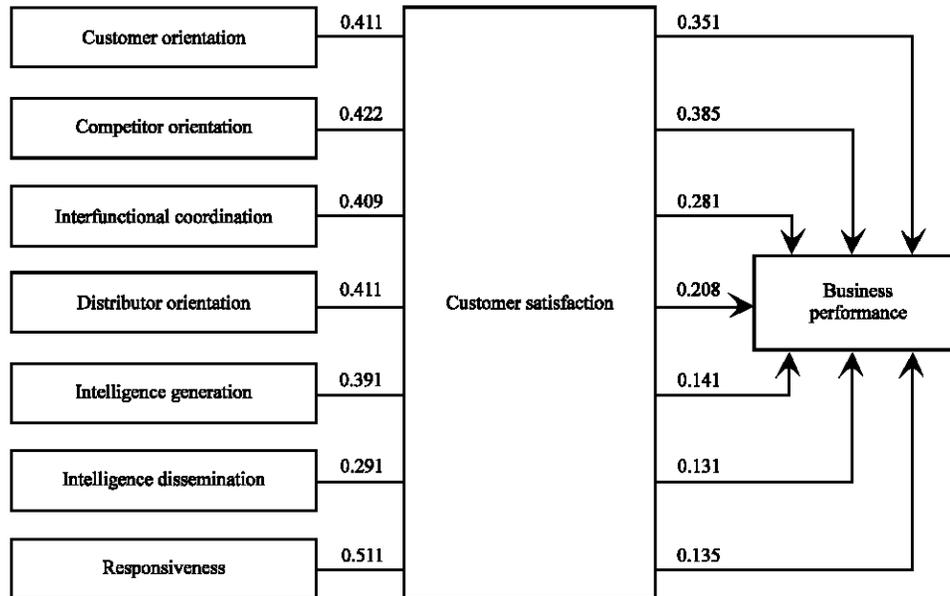


Fig. 2: Regression analysis results

satisfaction on business performance. On the other hand, an evidence of the mediating role of customer satisfaction in the relationship between market orientation and business performance was cited in the literature. Kirca *et al.* (2005) and Lin and Brown (2010) found that customer satisfaction mediates the relationship between these constructs (Fig. 2).

### CONCLUSION

Building on the findings of the current research paper, the major conclusion that could be drawn from the results is that the improvement of business performance is not restricted to market orientation strategies but also to customer satisfaction. That is, customer orientation, competitor orientation, interfunctional coordination, distributor orientation, intelligence generation, intelligence dissemination and responsiveness might not be enough to affect business performance when measured by sales volume, profit, market share, return on investment, customer satisfaction improvement and employee satisfaction improvement. Satisfied customers are pivotal determinant of the positive impact of market orientation on business performance. The study contributes to the body of knowledge by investigation market orientation using behavioural and cultural perspectives.

Strictly speaking, market orientation was assessed utilizing seven dimensions such as customer orientation, competitor orientation, interfunctional coordination,

distributor orientation, intelligence dissemination, intelligence generation and responsiveness. In contempt of some limitations, the findings inform managers as well as researchers that customer satisfaction should be premediated strategies of market orientation. That is organizations should consider customer's overall satisfaction, expectancy disconfirmation and performance score comparison to a customer ideal.

### LIMITATIONS

This research has three main limitations. First, it explores the role of one mediator, that is customer satisfaction. Second, the sample was selected from managers only. Hence, the generalizability of the results in this case is subject to sample composition. Third, managers answered all questions that reported in the questionnaire about market orientation, customer satisfaction and business performance and this might be a source of respondent bias problems.

### RECOMMENDATIONS

On the basis of these limitations, it was suggested that future research should consider additional effects of other mediators such as employee satisfaction or organizational trust. Second, future research should measure customer satisfaction by customers themselves in order to reduce or eliminate respondent bias

problems. Future research is required to take responses from other sectors into consideration for generalizability purposes.

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