

## Market Orientation, Innovation and Business Performance: Insight from Womenpreneurs in the Fashion Industry in Ghana

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### Abstract

The study explores the relationships between market orientation, innovation and business performance of womenpreneurs in the Ghanaian fashion industry. Assuming a positivist philosophical approach with a quantitative data analysis technique, the study sampled 385 women fashion producers who have at least one workshop within some selected fifteen suburbs of the Accra Metropolitan Area. An Exploratory Factor Analysis (EFA), Confirmatory Factor Analysis (CFA) and Structural Equation Modeling (SEM) were used to assess and confirm the proposed scales validity and the relationships of the research model. The study unveiled that, firms' degree of market orientation have significant impact on business performance. Furthermore, innovation capability partially mediates the relationship between market orientation and business performance of womenpreneurs in the Ghanaian fashion industry. This study suggests that managers are to note that being market oriented even requires a sense of innovation for it to trigger any significant performance for a business. Considering the uniqueness of this study in a Ghanaian context, this paper is one of the first to empirically examine the impact of the innovation on the relationship between MO and business performance among womenpreneurs in the fashion industry.

**Keywords:** market orientation, innovation, business performance, womenpreneurs, fashion industry, Ghana

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### Introduction

In current thinking on business performance, it has been acknowledged that market orientation (MO) and innovation activities play a crucial role. The MO concept over the past few decades has gained popularity in the marketing literature spheres (see Anim & Cudjoe, 2014; Chen, Tang, Narver & Slater, 1990; Jin & Paillé, 2015; Ozkaya, Droge, Hult, Calantone, & Ozkaya, 2015; Kohli & Jaworski, 1990; Lee, Kim, Seo, & Hight, 2015; Kiessling, Isaksson, & Yasar, 2016; Mahmoud, Kastner, & Yeboah, 2010). The MO phenomenon has been analyzed from various and different perspectives, ranging from its conceptualization (see Mahmoud, Blankson, Owusu-Frimpong, Nwankwo, & Trang, 2016; Wymer, Boenigk, & Möhlmann, 2015; Qu & Zhang, 2015), to being viewed as a factor (internal or external) that continuously influences organizational success (see Harris, 2000; Ozer et al., 2006). Additionally, other extant scholars have

connected the MO concept to business performance (Ruekert, 1992; Appiah-Adu & Ranchhod, 1998). With this linkage, several extant scholars (Atuahene-Gima, 1996; Appiah-Adu & Ranchhod, 1998; Narver & Slater, 1990; Agarwal et al., 2003 ) posit that market oriented organizations experience outstanding business performance in terms of employee satisfaction; return on assets; growth in market share; and new product success.

Similar to proponents' ideology of MO and business performance linkage, a considerable stream of scholarly studies have materialized in marketing management literature, suggesting that continuous innovation proves key to stimulating organizational performance (Gyves & O'Higgins, 2008; Prado-Lorenzo et al., 2008). In fact, extant literature has reported a synergistic relationship between innovation and MO (Qu, 2009; Maignan et al., 1999; Narver & Slater, 1990). Other scholars have iterated severally that the determinants of a firms performances does not rely on MO (Agarwal et al., 2003; Han et al., 1998), but with the strong support of a robust innovation.

Although evidence exists to suggest that MO and innovation appears to be vital determinants of business performance, empirical studies that attempt to examine their joint effect on performance are far reaching. In this study, we propose and test a hypothesized model that synthesizes MO, innovation and business performance among womenpreneurs within the fashion industry in Ghana.

Today, the Ghanaian fashion industry has undergone a complete overhaul because of globalization, and womenpreneurs operating in the sector now have to serve customers under intense competitive forces. MO, therefore, appears to be a very important mechanism to womenpreneurs (Kurtinaitiene, 2005). As global competition increases, and consumer needs rapidly changes, organizations must organize their activities with a strong focus on their markets, in order to survive (Mahmoud et al., 2010). Additionally, developing effective innovation strategies could be critical in order to stimulate market performance (Luo & Bhattacharya, 2006; Prado-Lorenzo et al., 2008). To date, studies that have addressed the issues of MO, innovation and business performance among womenpreneurs in the Ghanaian fashion industry are relatively scanty. This study is opportune, as there is increasing call by scholars for an extensive study that focuses on MO models on innovation (see Agarwal et al., 2003; Hurley & Hult, 1998; Carmen & Jose, 2008; Maydeu-Olivares & Lado, 2003). This paper, therefore, sought to find answers to the following questions; thus,

**RQ1.** How does MO affect business performance of womenpreneurs in the Ghanaian Fashion industry?

**RQ2.** Does innovation mediate the MO-Business Performance relationship?

## Literature Review

### Marketing Orientation and Innovation

Following from Hurley and Hult's (1998) ideology, innovation is viewed by many researchers as the degree to which new ideas, processes, products, or services of organizations are accepted, generated, and implemented. According to extant innovation scholars (Damanpour et al., 2009) "organizations innovate because of pressure from the external environment, such as competition, deregulation, isomorphism, resource scarcity, and customer demands, or because of an internal organizational choice, such as gaining distinctive competencies, reaching a higher level of aspiration, and increasing the extent and quality of services." (p. 653). The aforementioned scholars severally iterated that organizational innovation adoption is anticipated to guarantee adaptive behavior, organizational change, and performance improvement. Also, extant innovation studies (Zhara & Covin, 1993; Yamin et al., 1999) have continuously suggested that long-term success of firms can be achieved through innovation. Supporting Hult, Hurley and Knight (2004) ideology, innovation can be said to be one of the critical determinants of business performance. Following from Hult et al.'s (2004) ideology, Agarwal et al. (2003) argued severally that organizations that are less market oriented consider innovation less, hence decreasing business performance. Market orientation is therefore mentioned by numerous and different researchers (Maydeu-Olivares & Lado, 2001) as a key to innovation success in the manufacturing and services sector.

### Concept of Market Orientation (MO)

MO proponents have explained the phenomenon to indicate the extent of an organizations inclination towards the implementation of marketing concepts. Evidently, extant scholars (see Homburg & Pflesser, 2000) have examined the MO concept from two broader perspectives, thus, from both the behavioral and cultural perspectives. Approaching MO from the behavioral arena, Kohli and Jaworski (1990) viewed the concept as "a set of processes relating to the philosophy of an organization, and in that regard is referred to as the organization wide generation of market intelligence or information pertaining to current and future customer needs, dissemination of the information across departments, and organization-wide responsiveness to this information" (Kohli & Jaworski, 1990). Thus, the behavior perspective of MO argues that customer needs and preferences must be well known by firms. Additionally, firms must have the capability of analyzing exogenous factors that have the potential of influencing the needs and preferences of their customers. Culturally, some scholars (Narver et al., 1990) have defined market orientation as "the organizational culture that most effectively and efficiently creates the necessary behaviors for the creation of superior value for buyers which results in superior performance for the business". In this approach, three (3) MO components, thus, customer orientation; competitor orientation; and inter-functional coordination were identified to be critical to firms who want to gain sustainable

competitive advantage.

This study, however, relies on Jaworski and Kohli (1993) define on MO which explains it as an “organization-wide generation of market intelligence pertaining to current and future needs of customers, dissemination of intelligence horizontally and vertically within the organization and organization wide action or responsiveness to market intelligence”.

MO marketing scholars have long ago described the phenomenon as being “customer-led” and have advised companies to see it as a desirable strategy for companies’ pursuance. According to Low et al. (2007, p. 879), MO entails things such as “looking for unmet customer needs, matching these with firm competencies and then obtaining feedback from customers on the desirability of these new offerings”. A critical review of extant literature has found several studies that reported a consistent positive effect on MO and business performance (Kießling, Isaksson, & Yasar, 2016; Abbate & Cesaroni, 2017). Moreover, from the Ghanaian context, a recent study by Mahmoud et al. (2010; 2016) similarly found a positive and significant relationship between MO, ROI, profitability and new product success.

### **Marketing Orientation Practices**

Bigne et al. (2003) submits that measuring the incidence of MO practices in companies has no single generally accepted model. However, over the years, MO practices appear to be mostly and widely viewed from the ideology of Narver et al. (1990), and Kohli et al. (1990). In the year 2006, Kolar developed a model for measuring marketing orientation practices within firms, which were a refined version of the MARKOR, the criteria proposed by Kohli et al. (1993). Kolar (2006), therefore, viewed MO as a function of “intelligence generation, intelligence dissemination, intelligence responsiveness, and marketing culture”. This current study, therefore, operationalizes MO practices from Kolar’s conceptualization of the concept and examines its impact on business performance of womenpreneurs in the Ghanaian function industry.

### **Intelligence Generation**

Pelham (1997) is of the view that companies who have the capability to collect and process market information effectively, have a greater potential in precisely predicting and making changes within a market environment to provide superior value to customer. Similarly, Dwyer, Schurr and Oh (1987) posits that, critical to enhancing business performance is the understanding of the needs of customers through information gathering and the provision of superior good and services to satisfy these needs. It is, therefore, sound to hypothesize that:

**H1:** Intelligence generation positively and significantly affect business performance of womenpreneurs in the Ghanaian fashion industry.

### ***Intelligence Dissemination***

MO concept can achieve success in an organization with an appropriate inter functional coordination system, where exchange of information is viewed as critical towards goal attainment. According to renowned scholars like Quinn (1992) and Glazer (1991), “successful dissemination or sharing of information provides marketers the opportunity to ask questions and amplify or modify interpretations to provide new insights”. Information dissemination is, therefore, critical to MO success and plays a critical role towards increasing organizational performance. As such, on the basis of the foregoing discussions, we hypothesize that:

**H2:** Intelligence dissemination positively and significantly affects business performance of womenpreneurs in the Ghanaian fashion industry.

### ***Intelligence Responsiveness***

Customer needs keep changing day in day out, and it is the duty of marketers to continuously respond to the changing needs of their customers by relying on information generated from the marketplace. Competitive advantage and superior business performance can only be achieved when companies are able to respond and meet the ever changing needs of their customers (Kohli et al., 1990; Day, 1994; Narver et al., 1990). In view of this, it is expected that market orientated firms can become successful if their responsiveness activity has the capability of meeting customer needs. Therefore we hypothesize that:

**H3:** Intelligence responsiveness positively and significantly affects business performance of womenpreneurs in the Ghanaian fashion industry.

### ***Marketing Culture***

Webster (1995) chronicled the marketing culture concept as a “pattern of shared value and belief which enable staff to appreciate and experience the marketing function, thus, providing them with norms for behaviour in the firm as well as the importance given to the marketing function” (Webster, 1995). An extensive review of extant literature makes it clear that for companies to achieving strong competitive edge over competitors, it is important to develop a strong marketing culture (Narver et al., 1990). It is therefore hypothesized that:

**H4:** Marketing culture positively and significantly affects business performance of womenpreneurs in the Ghanaian fashion industry.

### ***Business Performance***

Malhota and Miller (1998) explain business performance as “a consequence of the interaction between actions taken in relation to competitive forces that allow the firm to adapt to the external environment, thereby integrating competence and usefulness”. Some scholars including Archibugi and Sirilli (2000)

have, therefore, measured business performance variously and differently to include service quality, customer satisfaction, gross profit margin, employee satisfaction, increase market share, and return on investment.

### Mediation Effect

#### *Innovation*

Far back from the Schumpeterian (1934) era till date, innovation is said to be all about the creation of “new product or service; new production process technology; new structure or administrative system; and new plans or program pertaining to organizational members”. According to several renowned innovation scholars (Calantone et al., 2002; Agarwal et al., 2003; Lee & Tsai, 2005; Keskin, 2006), firm’s innovation adoption strategy is generally intended to contribute to organizational effectiveness and performance.

Again, it has been widely established in literature that firms facing environmental challenges and uncertainty can achieve superior performance (Han et al., 1998). Calantone et al. (2002, p. 517) note that “innovation capability is the most important determinant of firm performance”, and citing Li and Calantone (1998) they further implied that “firms must be innovative to gain a competitive edge in order to survive” (Calantone et al., 2002, p. 517). Additionally, extant literature has severally confirmed the positive relationship exist between innovation and firm performance (Koellinger2008; Omri, 2015; Calantone et al., 2002).

Interestingly, other scholars (Lado & Maydeu-Olivares, 2001; Jaworski & Kohli, 1993; Slater & Narver, 1994) have mentioned that innovation plays a significant role when it comes to implementation of the MO strategies. A critical review of extant literature unveils that market oriented firms often enhance their level of innovation in order to enjoy greater business success (Jaworski et al., 1993; Slater et al., 1994). It, therefore, comes as no surprise that Deshpande et al. (1993), and Slater and Narver (1995), have indicated strongly that the most important sign of market orientation is the success of innovation enroute to performance.

Supporting this assertion, Agarwal et al. (2003) recognized that although a significant innovation and MO effect is seen on business performance, much of the variance in business performance is accounted for through the mediating role of innovation in the MO- business performance linkage. In support of this ideology, Carmen and José (2008, p. 428) claim that “although the linkage between market-orientation and performance is significant, what best accounts for enhanced performance is innovation”. It is therefore hypothesized that:

**H5:** Innovation positively and significantly mediates the relationship between MO and business performance of womenpreneurs in the Ghanaian fashion

industry.

**H6:** Innovation positively and significantly affects business performance of womenpreneurs in the Ghanaian fashion industry.

### Womenpreneurship in Ghana

Far back from the millennium turn till date, businesses managed and owned by women worldwide is seen to be increasing tremendously (Brush, Bruin, & Welter, 2009; Woldie & Adersua, 2004). There is no doubt that a nation's economic growth is influenced by womenpreneurs. According to GEM 2015 report, approximately 126 million women were estimated to be operating businesses in 67 economies worldwide. In Ghana, the estimated women population of 51% is continually seen to be playing a major role in boosting the economy's growth and development. In 2007, an IFC report unveiled that Ghanaian women comprise of 50% of the entire labour force. Focusing solely on the field of entrepreneurship, women are seen to operate, manage and own, a large number of entrepreneurial enterprises in Ghana (Adom & Williams, 2012; Buame, 2012; Dzisi, 2008).

### Theoretical framework

The theoretical foundation on which this current study sits is the dynamic capabilities theory. From the dynamic capability approach, Teece et al. (1997) established the dynamic capabilities theory (DCT). This theory is "an extension of the resource-based theory that was introduced to explain how firms can develop their capability to adapt and even capitalise on the rapidly changing technological environments" (Montealegre, 2002).

The basic premise of the dynamic capabilities perspective is that the "efficient use of an organization's distinctive capabilities could bring a sustainable competitive advantage and superior performance attainment in the present turbulent business condition" (Teece, Pisano, & Shuen, 1997). Voola and O'Cass (2010) explain MO as "the set of organizational capabilities that facilitates to serve targeted customers and monitor the organization's competitors more efficiently". Precisely, this paper is concerned with the linkage that exist between firms intangible competencies (MO), and business performance. Thus, the DCT was found to be an appropriate theoretical foundation for this current study.

### Conceptual framework

After a taxonomical review of extant literature and theoretical understanding, this paper formulates 6 hypotheses. A conceptual framework (Figure 1) captures and shows the relationship among 6 constructs, thus: Marketing orientation elements (intelligence generation, intelligence dissemination, intelligence responsiveness, and marketing culture), innovation and business performance. Marketing orientation elements were adapted from Kohli et al. (1993) and Kolar

(2006); innovation scales were adapted from Calantone et al. (2002) and Keskin, (2006); and finally, business performance elements which were assessed in five dimensions, thus, service quality, customer satisfaction, employee satisfaction, gross profit margin, and market share were adapted from renowned scholars such as Agarwal et al. (2003), and Day and Wensley (1988).

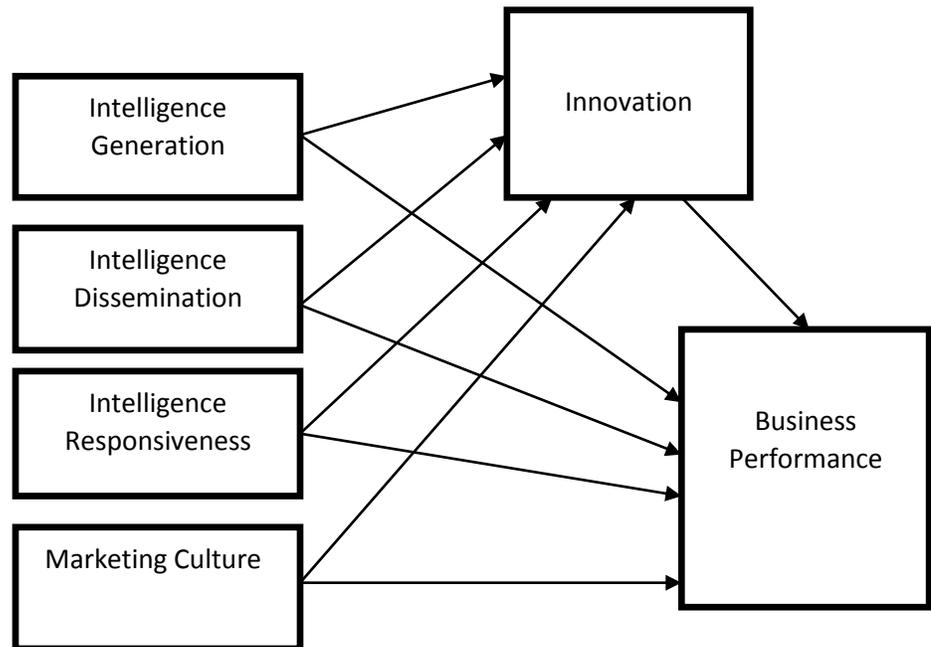


Figure 1. Conceptual Framework

### Research Methodology

The study adopts a positivist methodological paradigm in formulating research questions, hypothesis, and empirically testing constructs under careful controlled circumstances (Boateng, 2016). In this quantitative study, a survey design was used with a semi-structured questionnaire as the primary data collection instrument. The study sampled 385 womenpreneurs who operate in the Ghanaian fashion industry. This sample was convenience and purposive drawn from a population comprising of women fashion producers who have their workshops within fifteen suburbs of the Accra Metropolitan Area. The use of convenience and purposive sampling techniques has been found relevant in previous studies (see. Hall & Lockshin, 2000; Blankson & Stokes, 2002; Osuagwu, 2006; Mahmoud et al., 2010). Managers were considered because it is believed that their position in their organizations gives them much control over the issues under investigation (see. Narver & Slater, 1990; Maignan et al., 1999; Calantone et al., 2002; Keskin, 2006).

## **Measures**

### *Market Orientation*

Most studies on market orientation either adopted MKTOR (the criteria postulated by Narver and Slater, 1990) or MARKOR (the criteria proposed by Kohli et al., 1993) measurement scale or both. In this study, Kohli et al.'s (1993) scale as refined and validated by Kolar (2006) was adopted for its context specific nature. This scale also includes a fourth component, namely marketing culture. Kolar (2006, p.82) argues that marketing culture is an informal counterpart of formal managerial dimensions of market orientation and should therefore be included in any conceptualization of market orientation. Thus, 16 items distributed across intelligence generation, intelligence dissemination, intelligence responsiveness, and marketing culture were used to measure market-orientation with the aid of a five–point Likert scale ranging from 1= “strongly disagree” to 5= “strongly agree”.

### *Innovation*

To measure innovation, we adopted scale from Calantone et al. (2002). A firm's innovation is defined as openness to new ideas through willingness to try out new ideas, seek out alternate ways to do things, creativity in its methods of operation and rate of product introduction (Calantone et al., 2002; Keskin, 2006). In order to ensure uniformity innovation was measured by asking respondents to score their degree of agreement on five– point Likert scale. Three scale items were used.

### *Business Performance*

Following Agarwal et al. (2003), 7 items including service quality, customer satisfaction, employee satisfaction, gross profit margin, customer loyalty, increase in sales and market share were used in the measurement of business performance. Agarwal et al. (2003, p. 74) posit that “judgmental measures of performance that include customer satisfaction, employee satisfaction, and service quality, are important prerequisite for profitability or objective measures of performance” (see also Day and Wensley, 1988). A five-point scale ranging from 1(“Much worse than competitors”) to 5 (“Much better than competitors”) was used for the assessment.

To ensure reliability of the current study, two main criteria were adopted which includes: Cronbach alpha (CA) and composite reliability (CR), which is widely and mostly used in structural equation modeling (Hair, Hult, Ringle, & Sarstedt, 2016a; Hair, Sarstedt, Matthews, & Ringle, 2016b). To ensure validity in this study, construct validity measures such as convergent validity (Rezaei & Ghodsai, 2014; Rezaei, 2015) and discriminant validity (Rezaei, 2015; Rezaei & Ghodsai, 2014) were employed. Discriminant validity used construct correlations and cross-loading criterion while convergent validity employed Average Variance Extracted (AVE) and factor loadings (Kim, Hwang, Zo & Lee, 2016; Rezaei, 2015).

## Results

Before performing the actual analysis of the main data, preliminary data analysis was done. During the preliminary data analysis (PDA), datasets and variables were cleaned and cleansed to eliminate unengaged responses, outliers and replace missing data. Data Analysis was then conducted in four distinct phases. First, the paper shows the descriptive analysis to understand the demographic statistics of study respondents. Second, EFA was conducted using IBM SPSS 20 while CFA was done using AMOS 22. The CFA was performed to assess the extent of model fit and the validity and reliability of the study using CA, CR, and AVE. Structural equation modeling (SEM) was employed to test the hypothesis. This paper begins with the analysis of demographic characteristics of womenpreneurs in the Ghanaian fashion industry included in this study.

Table 1: Descriptive Statistics

Items	Response	Frequency	%
Age of respondents	Below 18	15	3.9
	18-30	45	11.7
	31-40	186	48.3
	41-50	128	33.2
	50+	11	2.9
	Total	385	100
Educational Qualification	SHS and Below	35	9.1
	Professional	97	25.2
	Degree	178	46.2
	Postgraduate	75	19.5
	Total	385	100
Monthly Income	Less than Gh¢500	21	5.5
	Gh¢500-Gh ¢1,000	271	70.4
	Gh¢ 1000+	93	24.2
	Total	385	100
	No. of years in operation	Less than 1 yr	85
1-3 yrs		193	50.1
4-6 yrs		98	25.5
7yrs+		9	2.3
Total		385	100

Table 1 indicates that age wise, out of the 385 women entrepreneurs within the Ghanaian fashion industry included in the study, 186 womenpreneurs representing a majority of 48.3% were within the 31-40 years age bracket.

Regarding education qualification, the result showed that 178 out of the 385, representing 46.2% of the womenpreneurs, have attained at least a first degree. On the category of income range of respondents, the study result showed that majority, representing 70.4% had a monthly income between Gh¢500 and Gh¢1,000. Additionally, probing to find out how long respondents businesses have been in operation, the majority of 193 womenpreneurs representing 50.1% indicated that, their businesses have existed between 1-3 yrs.

Table 2. Means and Standard Deviation

Scale Items	Variable Codes	Mean	Std. Dev.
Our new products offerings allow us to enter new markets.	INNOV1	3.46	1.21
Our company is able to alter products, process and personnel structure to meet special needs.	INNOV2	3.43	1.19
We create special kinds of service experiences based on customer preferences.	INNOV3	3.22	1.06
In this firm, we meet with customers at least once a year to find out what products they will need in the future.	ING1	4.14	1.20
Individuals from our manufacturing department interact directly with customers to learn how to serve them better.	ING2	4.23	1.04
Our company highly adopts IG orientation strategies.	ING3	4.33	1.05
In our firm, intelligence on our competitors is generated independently.	ING4	4.19	1.11
Increased Profit.	BUSPERF1	3.74	1.11
Better sales volumes.	BUSPERF3	4.01	1.17
Increased customer satisfaction.	BUSPERF4	4.01	1.15
Increased customer loyalty.	BUSPERF5	3.68	1.11
Employee satisfaction.	BUSPERF2	3.81	1.15
Increased market share.	BUSPERF6	3.46	1.11
Better Service Quality.	BUSPERF7	3.52	1.19

Scale Items	Variable Codes	Mean	Std. Deviation
When something important happens to a major customer of market, the whole firm knows about it within a short period.	IND1	3.69	0.88
Our firm periodically circulates documents that provide information on our customers.	IND2	3.65	0.91
We have meetings at least once a quarter to discuss market trends and developments.	IND3	3.3	0.98
Data on customer satisfaction are disseminated at all levels in this firm on a regular basis.	IND4	3.17	1.06
We spend time discussing customers' future needs.	IND5	3.55	1.05
Principles of market segmentation drive new product development efforts in this firm.	INTRES1	3.73	1.47
We periodically review our product development efforts to ensure that they are in line with what customers want.	INTRES2	3.58	1.33
The system of continuous improvement is a critical factor to our company for customer satisfaction and service quality.	INTRES3	3.52	1.41
The activities of this firm are well coordinated.	INTRES4	3.51	1.42
Our company always desire to satisfy customers and fulfill their needs.	MKTCUL1	3.71	1.06
Rewarding managers and employees is based on their contribution to customer satisfaction.	MKTCUL2	3.53	1.05
Authority and information for flexible decision making are available when needed.	MKTCUL3	3.57	1.07

Table 2 summarizes the means and standard deviation of the statistics constructs. From the table, intelligence generation recorded the highest mean value of 4.22 indicating that majority of the womenpreneurs included in the study have adopted intelligence generation orientation strategies in their

business practices. The mean of Business performance was 3.75, indicating that the womenpreneurs perceive their firm’s performance to be increasing. The researchers, therefore, further performed an exploratory factor analysis (EFA) and Confirmatory Factor Analysis (CFA).

**Exploratory and Confirmatory Factor Analysis (EFA & CFA)**

Adequacy Test: An EFA was conducted to extract factors with eigenvalue 1 and to suppress the factor loading value 0.5. The Kaiser-Meyer-Olkin (KMO) value for the data was .89 which was within the acceptable range of below .6 (Kaiser, 1970; Kaiser & Rice, 1974) and Bartlett’s Test of Sphericity (Bartlett, 1954) reached statistical significance (Approx.: Chi-square=5425.62, df.= 300 sig. 0.000). This confirms that factor analysis was appropriate.

**Reliability and Validity Test**

Research scholars such as Bagozzi and Yi (2012) have specifically suggested that “testing of a structural model may be meaningless unless it is established that the measurement model holds; if the chosen indicators for a construct do not measure that construct, the specified theory must be modified before it can be tested”. Table 3 shows the Robustness test result of the study constructs for the model to check for model fit.

Table 3: Principal Component, Internal Consistencies, Reliability & Validity Test

Factors	Variable Codes	Varimax Loadings	Variance Explained	CA	KMO	CR	AVE
Factor 1	BUSPERF1	0.69	63.23	0.90	0.91	0.88	0.78
	BUSPERF2	0.65					
	BUSPERF3	0.77					
	BUSPERF4	0.80					
	BUSPERF5	0.80					
	BUSPERF6	0.64					
	BUSPERF7	0.76					
Factor 2	INTRES1	0.77	74.42	0.88	0.82	0.89	0.72
	INTRES2	0.88					
	INTRES3	0.90					
	INTRES4	0.82					
Factor 3	ING1	0.77	78.20	0.91	0.84	0.89	0.74
	ING2	0.84					
	ING3	0.81					
	ING4	0.78					
Factor 4	IND1	0.79	64.99	0.82	0.74	0.80	0.57
	IND2	0.79					

	IND3	0.84					
	IND4	0.77					
Factor 5	INNOV1	0.76	75.82	0.84	0.69	0.86	0.76
	INNOV2	0.76					
	INNOV3	0.79					
Factor 6	MKTCUL1	0.67	61.08	0.68	0.65	0.70	0.50
	MKTCUL2	0.76					
	MKTCUL3	0.74					

### **Validity Test**

Table 3 depicts the principal component analysis (PCA) which revealed the presence of 6 components, internal consistencies of items, reliability test, and Validity test.

*Reliability Test.* Data reliability was tested via CA and CR. For CR, the values recorded a range between .68 and .90. Evidently, all CR values were above 0.6 meeting the acceptable recommended limits stipulated by extant renowned research scholars (Hair et al., 2016b). Again, the Cronbach’s alpha coefficients ranged from .60 to .90. The result indicates appreciable values above the accepted 0.5 desirable level (Coakes et al., 2008; Nunnally, 1978).

*Validity Test.* The researchers ascertained the internal consistency to draw validity conclusions for the data using average variance extracted (AVE) and factor loadings. The AVE values fell between .50 and .78, exceeding the acceptable stipulated limits of .5 (Fornell & Larker, 1981; Hair et al., 2016b). The factor loadings ranged from .64 to .90, which exceeded the acceptable limit of .6, showing a strong reliability status of the items (Hair et al., 2016b).

### **Measurement Model Fit Indices**

In evaluating the appropriateness of the measurement model fit in relation to the data collected, conventionally acceptable values including RMSEA  $\leq$  0.08; GFI  $\geq$  0.90; NFI  $\geq$  0.90; and CFI  $\geq$  0.90 (Hair et al., 2016; Bagozzi and Yi, 2012; Hu and Bentler, 1999) were used. The sufficiency of most theorized model’s creation of a covariance matrix is evaluated by the  $\chi^2$  goodness-of-fit value; it also estimates coefficients compared with the observed covariance matrix. The selection of these fit indices was based on the classifications proposed by Kline (2015) and Byrne (2013) as being the most commonly and widely accepted criteria in social science research. The model fit indices revealed a good fit to the data (RMSEA = .07, NFI = .94, RFI = .91, IFI = .96 and CFI = .96). The  $\chi^2$  -statistic was 189.79 with 75df, with 2.53 representing the Normed Chi-square value. This value fell within the acceptable limit between 0 and 3.

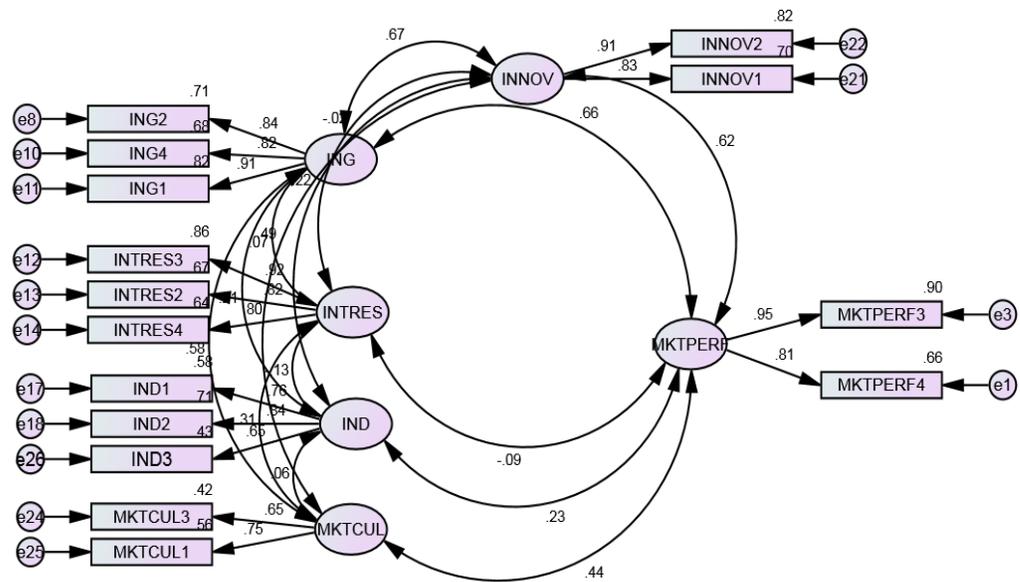


Figure 2. Measurement Model

### The Structural model

The structural model conducted in this study was intended to test some hypothetical propositions based on the research model for this current research. Table 4 below revealed the structural path estimations of the analysis using SEM. As hypothesized earlier, intelligence generation (H1) positively and significantly affect business performance of womenpreneurs in the Ghanaian fashion industry ( $p < 0.01$ ) with a standardized estimate of 0.56. Similarly, intelligence dissemination (H2) had a positive and significant impact of on business performance of womenpreneurs in the Ghanaian fashion industry ( $p < 0.05$ ) with a standardized estimate of 0.28. Additionally, intelligence responsiveness (H3) showed an inverse but significant relationship with the business performance of womenpreneurs in the Ghanaian fashion industry ( $p < 0.01$ ) with a standardized estimate of -0.17. Again, the hypothesized impact of a positive relationship between marketing culture (H4) and business performance of womenpreneurs in the Ghanaian fashion industry was supported by a significant level with  $p < 0.05$  and a standardized estimate of 0.17.

Table 4. Hypothesis Testing

Hypothesis	Structural Paths	Estimate	S.E.	C.R.	P-Value	Label
H1	MKTPERF<--- ING	0.56	0.082	7.272	***	Supported
H2	MKTPERF<--- IND	0.28	0.071	2.518	0.029	Supported
H3	MKTPERF<--- INTRES	-0.17	0.038	3.201	0.001	Supported
H4	MKTPERF<--- MKTCUL	0.17	0.109	2.017	0.044	Supported

### Mediating effects

In testing for mediation, a second order construct was modeled to combine all the four individual constructs to comprise MO as operationalise earlier for this study. To establish meditation effects, all significant parameters were tested using guidelines from Baron and Kenny (1986) for partial and full mediation conditions. A number of regression equations were estimated.

In this study, first, innovation (mediator) was regressed on Market Orientation (independent variable) and it showed a significant effect (MO -> Innovation,  $\beta=0.60$ ,  $p=0.000$ ). Second, business performance (dependent variable) was regressed on MO (independent variable) and this showed a significant effect (MO -> Business Performance,  $\beta=0.59$ ,  $p=0.000$ ). Third, business performance was regressed on the MO and innovation (mediator) and the effect was significant (MO -> Innovation -> Business performance,  $\beta=0.60$ ,  $p=0.000$  was recorded for the first path,  $\beta=0.24$ ,  $p=0.000$  was recorded for the second path).

Table 5. Mediating Possibility Test

Model	Unstandardised Regression Path	$\beta$ Estimate	t- Value	P- value
1	Market Orientation -> Innovation	0.60	8.31	***
2	Market Orientation -> Business Performance	0.59	8.16	***
3	Market Orientation -> Business Performance	0.59	8.16	0.02
	Innovation -> Business Performance	0.24	4.21	***

The assumption was that if all the three relationships are significant, then mediation testing would be possible. From table 5 above, all three relationships tested were significant. Now, determining the type of relationship; if MO on business performance is less in the third model than in the second model, then the mediation is said to be partial. Full mediation holds if the MO has no effect when innovation is controlled. From table 5 above, even though the t- value in the third and second model were the same (8.16), the significant level for model two (p-value= 0.00) was more stronger than that of model three (p-value= 0.02). This indicates a partial mediation.

Table 6, therefore, presents the mediating role of innovation on MO (H5) and business performance relationship of womenpreneurs within the Ghanaian fashion industry. From the results, innovation showed a significant and partial mediating effect on the relationship existing between MO and business performance of womenpreneurs in the fashion industry in Ghana. Finally, the hypothesized impact of a positive relationship between innovation (H6) and business performance was supported by a significant level with  $p < 0.01$ .

Table 6. Mediation Test: H5- H6

	<b>Unstandardised Regression Path</b>	<b><math>\beta</math> Estimate</b>	<b>P- value</b>	<b>Hypothesis Results</b>
1 (Direct Effect Without mediator	Market Orientation -> Business Performance	0.59	***	<b>Supported</b>
2 (Direct Effect with mediator	Market Orientation -> Business Performance	0.59	0.02	<b>Supported <i>partial</i></b>
	Innovation -> Business Performance	0.24	***	<b><i>mediation</i></b> as both direct and indirect paths are significant
3 (Indirect Effect) with mediator	Market Orientation -> Business Performance	0.59	***	
	Innovation -> Business Performance	0.24	***	<b>Supported</b>
<b>RMSEA= 0.043    NFI= 0.95    GFI= 0.98    CFI= 0.99    <math>\chi^2/df= 1.43</math></b>				

### Discussion and conclusion

The study hypothesizes (H1) a positive effect of intelligence generation on business performance. Previous studies (Dwyer, Schurr, & Oh, 1987) have found that, understanding the customer needs is essential to enhancing and improving business performance. The study finding support the view that intelligence

generation positively and significantly improves business performance in relation to service quality, customer satisfaction, gross profit margin, employee satisfaction, increase market share, and return on investment (Archibugi & Sirilli, 2000).

The study also hypothesizes (H2) a positive effect of intelligence dissemination on business performance. Previous studies (Han, Kim, & Sri-va stave, 1998; Quinn, 1992; Glazer, 1991) have found that information dissemination opens an avenue for a business-customer communication linkage, which provides marketers with the opportunity to ask questions and amplify or modify interpretations to gain new insights. This goes a long way to inform marketers about the need of customers which when satisfied enhance their business performance. The study finding supports the view that intelligence dissemination positively and significantly improves business performance. Additionally, the study hypothesizes (H3) a positive effect of intelligence responsiveness on business performance. Previous studies (Day, 1994) have found that superior business performance can only be achieved when firms continuously respond favourably to the customer's ever changing needs. This study finding supports the notion and reveals an inverse but significant relation between intelligence responsiveness and business performance.

Finally, the current study hypothesizes (H4) that marketing culture positively affects business performance. Results from Kohli et al.'s (1990) study is in line with our study and reveals that a significant and positive relationship exists between marketing culture and business performance.

Hypothesis 5 sought to establish mediating role innovation play in the MO-business performance relationship among womenpreneurs within the Ghanaian fashion industry, whereas hypothesis 6 sought to establish the relationship that exists between innovation and business performance. Previous studies (Slater & Narver, 1995; Deshpande et al., 1993) have strongly indicated that the most important sign of market orientation is the success of innovation enroot to performance. Additionally, scholars such as Koellinger (2008), Omri (2015) and Calantone et al. (2002) in their previous studies have supported the findings revealed in hypothesis 6 in the this study, by confirming that a positive relationship that exist between innovation and firm performance.

### **Recommendations and managerial Implication**

Practically, our findings on the role of innovation in this study may improve managers understanding of why innovation matters. Specifically, this study affirms that the MO and innovation linkage is one of the key factors in determining a business performance (eg. Maydeu-Olivares & Lado, 2003; Agarwal et al., 2003; Carmen & José, 2008). This study, therefore, recommends that womenpreneurs in the Ghanaian fashion industry and other developing

countries are to note that their market orientation efforts should concurrently be in sync with an innovation culture so as to boost their business performance.

### Limitations and future research

Results from this current research are largely in accord with theoretical expectations. However, as with any scientific research, a number of study limitations and future direction needed to be pointed out. Scholars argue that acknowledging research limitations is not to render it weak but rather strengthens it by outlining key shortcomings which might particularly be of interest to future researchers (Woloshin & Schwartz, 2002). Adopting a quantitative methodology and being cross sectional in nature, the study sampled womenpreneurs within the Ghanaian fashion industry irrelevance of time effect. Further studies may consider a mixed method longitudinal approach (Bryman, 2015). The conceptual framework used in this study was only applied to womenpreneurs in the fashion industry therefore further studies can apply this framework to other industries to authenticate its applicability. A relatively large sample of respondents was obtained (n=385) for this study. It is therefore empirically relevant for further studies to widen the sample size to how it will work on other samples.

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