

Efficacy of Marketing in Innovation Processes

Eficacia del marketing en procesos de innovación

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ABSTRACT

The responsibility for innovation management has dispersed among many innovation stakeholders reflecting the interwoven nature of contemporary innovation processes in Marketing. The objectives of the study was to examine the relationship between INI (Internationalization networking & innovativeness) and the Firm Performance, to determine the extent to which Marketing affect source of information in innovation processes and also to investigate the relationship between Market Orientation and Product Innovativeness. This research employed survey research design. Primary method of data collection was used for this study which includes interview and questionnaire tools to gather relevant data. 172 employees of ten multinational innovative firms were purposefully selected for the study. Sample size of 120 respondents was used to conduct the research. The researcher adopted Stratified sampling & Purposive sampling to select the respondents of the study. The cronbach Alpha was employed to assess the reliability of the data. The study made use of statistical tools which include: SPSS, analysis of variance (ANOVA), correlation efficient in testing hypotheses where applicable. The study found out that there exist a significance relationship between INI (Internationalization networking & innovativeness) and the Firm Performance. Also it was observed that there was a significant relationship between Marketing and source of information and innovation processes. The research has shown that there is a significant relationship between Market Orientation and Product Innovativeness. From the result of findings it was also concluded that technology platform based on using the communality principle in developing new products services and combining resources and capabilities would contribute to developing capabilities required to develop successfully integrated solutions. This empirical finding contributed to the literature of

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marketing innovation to develop successfully integrated solutions and thus foster solution innovation.

KEYWORDS: Marketing, INI (Internationalization networking & innovativeness), Firm Performance, Market Orientation, Product Innovativeness.

RESUMEN

La responsabilidad de la gestión de la innovación se ha dispersado entre muchas partes interesadas, lo que refleja la naturaleza entrelazada de los procesos de innovación contemporáneos en marketing. Los objetivos del estudio fueron examinar la relación entre INI (internacionalización en red e innovación) y el desempeño de la empresa, para determinar en qué medida el marketing afecta a la información en los procesos de innovación y también para investigar la relación entre la orientación al mercado y la innovación del producto. Esta investigación empleó un diseño de investigación de encuestas. Para este estudio se utilizó el método principal de recopilación de datos, que incluye herramientas de entrevistas y cuestionarios para recopilar datos relevantes. 172 empleados de diez empresas innovadoras multinacionales fueron seleccionados para el estudio. Se utilizó un tamaño de muestra de 120 encuestados para realizar la investigación. El investigador adoptó el muestreo estratificado y el muestreo intencional para seleccionar a los encuestados del estudio. Se utilizó el Alpha de Cronbach para evaluar la fiabilidad de los datos. El estudio descubrió que existe una relación significativa entre INI (redes de internacionalización e innovación) y el desempeño de la empresa. También se observó que existía una relación significativa entre el Marketing y la fuente de información y los procesos de innovación. La investigación ha demostrado que existe una relación significativa entre la orientación al mercado y la innovación del producto. A partir de los hallazgos se concluyó que la plataforma tecnológica basada en el uso del principio de comunalidad en el desarrollo de nuevos productos, servicios y la combinación de recursos y capacidades contribuiría a desarrollar las capacidades necesarias para desarrollar soluciones integradas con éxito.

PALABRAS CLAVE: Marketing, INI (Redes de internacionalización e innovación), Desempeño empresarial, Orientación al mercado, Innovación de productos.

INTRODUCTION

There is a widespread recognition that understanding the levels of innovations newness is important for successful marketing and management (Henderson, 2006; Berger, 2010; Hung, 2007). Innovation typologies are dominantly based on the level of innovativeness. While most of the innovation typologies were developed in the physical product context, services market-

ing literature offers several service innovation typologies, taking into account the specific properties of services (Michal, 2011; D Arpizo, 2011; Hatman, 2006). In recent years, numerous innovations process in marketing are result of information and communication technology (ICT) application, which has led to the recognition of the specifics of electronic services (Poplawski et al, 2008; Armbruster, 2008). The raising importance of ICT in marketing has also influenced the evolution of product innovation typologies. Most of these typologies are conceptual in nature and rare ones that are empirically-based were not developed nor tested in the electronic services context. Garcia and Calantone (2002) claim that consistent marketing innovation typology is a prerequisite for advancement of knowledge on innovations. Though the very concept of innovation stayed unchanged during the last sixty years but the innovation processes have been evolving continuously. The model of innovation altered radically influencing the role and significance of marketing in innovation processes. The most general question of this paper is whether the model of innovation dominating in an economy may have an influence on marketing role in innovation processes. This research seek to answer the following research questions (i) What relationship exists between INI (Internationalization networking & innovativeness) and the Firm Performance (ii) Does Marketing plays important role as a source of information in innovation processes (iii) Is there a relationship between Market Orientation and Product Innovativeness.

Objective of the Study

- Examine the relationship that exists between INI (Internationalization networking & innovativeness) and the Firm Performance
- Determine the extent to which Marketing affect source of information in innovation processes.
- Investigate the relationship between Market Orientation and Product Innovativeness

Literature Review

Conceptual Review

THE CONCEPT OF INNOVATION IN MARKETING

Drucker's approach to innovation has been widely adopted by marketing theory. The both concepts of innovation developed in marketing theory are based on an assumption that innovation is a process embedded in a firm (Drucker, 1992). Depending on the innovation type – whether it is based on vertical or lateral thinking - the dominant power is in the marketing department or widespread within the firm (Raza, 2014). The need for coordination and optimization of these activities moved the responsibility for inno-

vation to higher management level of the firm (O'Sullivan & Dooley, 2009). The integrated, network model of innovation is also broadening the arena on which the innovation process takes place - the innovation is generated and used globally (Tidd, Bessant & Pavitt, 2005; Boutellier, 2008; Arshad et al, 2012). The comparison of the contradicting research results concerning the role of marketing and marketing departments in stimulating innovativeness of a firm calls for this research. Having in mind the theoretical assumptions presented above, some questions about the role of marketing in today innovation processes conducted by firms from developing economies may be asked. First, whether there is a difference in the model of innovation predominating in developing economy? Does the model of innovation dominating in a developing economy influence the role and importance of marketing in innovation processes? Or may it be the early stage of market development which influences the findings? These questions are very complex and difficult to research on a comprehensive basis.

HOW INNOVATIVE ARE PRODUCTS AND SERVICES?

Innovation typologies are focused primarily on newness to the market versus newness to the firm, i.e. newness of the technology (Al-Matari et al, 2014; Greenley, 1995). Offerings which have a high degree of newness are seen as highly innovative (radical) and on the opposite extreme of the continuum are low innovative offerings (Taranko, 2009). Within this research tradition, the most widely accepted innovation typology is the one offered by the consulting firm (Han et al, 2010). Besides classifying innovations solely by using the dimensions of newness to the market and to the firm, there are several other approaches, such as delineating between: architectural and modular innovations (Herrmann, Tomczak & Befurk, 2006; Kotler & Trias, 2004; Niestroj, 2009; Szymura, 2009). Three most popular service innovation typologies of product and services are rooted in the typology (Alegre, Lapiedra & Chiva, 2006; Angel et al, 2013). The major challenge in classifying service innovations is in the delineation between service products and service processes, since services are by their nature processes (Trung et al, 2010). Hung (2007) Posit that motivated innovation typologies mostly result from rather arbitrary combinations of various dimensions of newness, Mason (1981) offered the most comprehensive empirically-based service innovation typology for new financial services. Their typology was empirically tested by Mothe & Nguyen (2015), as a part of the cross-national study of USA and Australian large financial service firms. Primarily due to the advance of the ICT and its role in the services delivery, Verhoef & Leeflang (2009) conceptualized the most recent service innovation typology. Above mentioned three typologies form a basis for further examination of service innovativeness within the described research tradition. It should be noted that an alternative research tradition

could arise within the service-dominant logic (Sadikoni & Zehir, 2008). Pittaway (2004) conceptualized service innovation typology which describes radical and incremental service innovations in regard to three contexts simultaneously: environmental uncertainty, strategic orientation and market orientation. According to Berger (2010) electronic service innovation can be: technology and product based-innovation, delivery system innovation, customer interface innovation. Although service firms can introduce an electronic service as a core service (if a service is information-based), most e-service innovations seem to be introductions of supplementary services (for example, to a traditional service) or service augmentation (Arshad, Asifat & Baloch, 2012). Our attempt is to assess the extent to which a current knowledge on product innovations typologies can be applied in the context of electronic services.

MEDIATING EFFECT OF MARKET ORIENTATION AND PRODUCT INNOVATIVENESS

With some exceptions there is hardly enough evidence on how market orientation constructs (customer and competitor orientation and inter functional coordination) work in emerging economies, (Akimova, 2000; Greenley, 1995; Hung, 2007). The discussion on relationship between both constructs of market orientation and innovativeness has been developed in later research (e.g., Grinstein, 2008; Michal, 2011), among which an alternative approach has been presented – opposing market orientation and innovation orientation as a strategic choice of a firm (Berthon et al, 2004). Thus in the latter approach market orientation and innovation orientation are looked at within dichotomy “to serve or to create” (Berthon et al, 1999), discussing opportunities of firm’s focus on just one of these two strategic orientations. The more radical innovation strategy, the less might be importance of market orientation. The focus of firms, “creating the market”, thus is not determined by current customer needs and may neglect them in order to develop offerings, satisfying latent or future demand. Ability to develop and bring to the market new products and services is considered as one of the main capabilities of a firm (Trung et al, 2010). Underlying factors of product innovations are often linked to either substantial change in value chain, product platform or development of a unique customer solution or their range. Sawhney et al (2006) consider both these factors –product platform and customer solution– as dimensions of innovations in firm offering, resulting in new products and services with added value for customers. Platform innovation depends on good knowledge of customers, competitors and ability to integrate internal functions (e.g. marketing and R&D): An increasing research discussion is devoted to *solution innovation* (Hung, 2007; Evanschitzky et al, 2011; Henderson, 2006; Berger, 2000). Evanschitzky et al (2011) highlighted the role of competition in manufactured goods and noted that services might be more attractive from the profitability perspective, thus increasing attractiveness for

firms in combining products and services. Success of firm's ability to innovate via developing customer solutions depends on the level of market orientation. Considering higher uncertainty in emerging economies context (Paladino, 2008; Grinstein, 2008). The moderating effect of the *product innovativeness* might strengthen relationship between the market orientation and innovation capabilities of a firm. The growth of emerging markets provides solid chances for successful innovations to support firm's position in own economy and even internationalization to other countries (D Arpizo, 2011). Thus we assume that the level of product innovativeness might have effect on market orientation in developing firm's ability. Creating platform and solution innovations has impact on market orientation and sub dimensions. The role of firm's innovativeness on firm performance has been widely discussed in existing research literature, providing diverse results (Morgan and Berthon, 2008; Pittaway et al, 2004). We assume that in a context of Nigeria emerging economy there is an even higher role of innovativeness in influencing firm's results.

CREATING STRONG BRANDS OF PRODUCTS THROUGH INTERNAL MARKETING:

Brand equity (BE) is considered to be a major concept in innovation processes as well as in academic research (Angel et al, 2013; Veblen, 1989; Henderson, 2006), as it has been clearly linked with successful brands (Kasser & Ryan, 2006). Firms which possess brands with high brand equity tend to have easily extendable brands, enjoy premium prices and larger margins of profit. This reduced vulnerability to competitive marketing actions and creates customer loyalty which can ensure an increased market share (Bellaiche et al, 2010). In 1993, Keller introduced the CBBE pyramid to describe the process of building CBBE at a product level in the eyes of consumers. The CBBE pyramid has received increased attention by researchers (Han et al, 2010; D Arpizo, 2011; Hung, 2007; Poplawski et al, 2008; Almatari et al, 2014) Keller's approach is so vital for creating CBBE that any adaptations cannot really depart from the original key propositions. Employees are the only source of sustainable competitive advantage. The experience and satisfaction of front-line employees has been positively related with customer experience and satisfaction (Hatman, 2006; Sadikoglu & Zehir, 2010).

RELATIONSHIP BETWEEN INNOVATIONS AND INVENTION

Innovation has been the main focus of many firms and governments for years. It plays an important part in shaping the growth and competitiveness of firms, industries and regions (Kor, 2006). Literature on the topic dates back to the 1960s and, on an economic level, to the beginning of the twentieth century (Kraus et al, 2006). From the strategic point of view, innovation can be con-

sidered as an important factor to increase competitive strength (Teace, 2007). Hence, innovation is seen as a factor to generate new income and profits which can fuel the business growth of the firm (Teace, 2014). Invention is an emergence of an idea for the first time whereas; innovation is an attempt to convert the idea into practice for the first time (Abubakar & Amad, 2010). A wide range of research on innovation was conducted in the twentieth century and it has seen a phenomenal rise in the last decade. There is an acceptance in the research community that innovation is not just a random occurrence and there is a “method to madness” and this can be studied systematically (Lado et al, 2006). It has been widely accepted that Schumpeter is the pioneer in introducing the study of innovation. He advocated innovation as a source of economic change and technological innovation as a source of business cycles. Schumpeter was the first to make a clear distinction between invention and innovation. In his view, innovation is an economic decision of a firm whereas invention is an intellectual creativity which has no importance to economic analysis unless it is adopted successfully by the firm (Schumpeter and Swedberg, 1994, Godin, 2008). If innovation is defined as the first commercial introduction of a product or process to the world, there is very little action that might be described as “innovation”, especially in developing countries such as Nigeria. Therefore innovation is something new but not in absolute terms. Some ideas might be innovative in developing countries but would not be regarded as such in developed economies. Subsequently, this study adopts a broad definition of innovation as an activity that involves substantial novelty for the adopting company, but is not necessarily new to the world.

THEORETICAL REVIEW

Resource-Based View of the Firm and Dynamic Capabilities Theory

Resource-based view of the firm and dynamic capabilities theory are extensively used in the study of innovation and marketing (Kostopoulos et al., 2002, Vicente et al., 2015). There are number of critical resources both tangible and intangible which are an important inputs in producing an innovative output using existing capabilities which can then be turned into a competitive advantage for the firm. Resource-based view has been used in many management studies and there has been also critical evaluation and scrutiny of its contribution to firm development (Kraaijenbrink et al., 2010, Abrantes et al., 2015). Resource-based view was developed to complement the industrial organization view which focused on the structure-conduct-performance paradigm. The determinants of firm performance in industrial organizations were mainly drawn from the structure of the industry which was external to the firm. However, resource-based view tried to explore the internal sources of sustained competitive advantage of a firm and explain the possible reasons for

the difference in performance of the firms from the same industry (Kostopoulos et al., 2002). Another important theory which has made a contribution to the study of strategy is dynamic capability theory. In order to survive in the ever-changing market, firms should possess the ability to make sense of changing business environments and organize, recombine and reorganize resources and make changes to their business models. To achieve this they need to have dynamic capabilities (Abrantes et al, 2015), which is defined as “the ability to integrate, build, and reconfigure internal and external competences to address rapidly changing environment” (Vicente et al., 2015). However, firms can achieve a positive effect only when the capabilities they possess surpass the threshold level of the industry standards. There is an increase in attention towards dynamic capability theory in the management literature which has resulted in the long-standing importance given to the link between the strategic choices of the firm and its environmental conditions in the literature of strategy and organization theory (Kim et al, 2015). Dynamic capabilities approach was proposed as an extension to Barney’s resource based view of the firm. Teece et al. (1997) proposed a framework to fill the gap in RBV’s argument on firm performance as RBV was considered by its critics as static in nature and not adequate to explain how a firm can achieve competitive advantage in a changing environment. The management research has proposed many models and frameworks based on RBV and Dynamic capability to explore various factors that contribute to better performance of the firm (Teece, 1997). He tried to explore the sources of sustained competitive advantage and the link between resources of the firm and its competitive advantage, emphasized the importance of both internal analysis and external

EMPIRICAL REVIEW

Lee and Kim (2015) found that innovation activities are thought to influence each other and thus need to be implemented in conjunction with each other. The disputed relationship between technological innovation and marketing innovation centers on whether they are complements or substitutes. The study of Abrantes et al, (2013) revealed that it is quite intuitive that the introduction of a new process or product calls for changes in marketing strategies. For instance, a new product line often requires changes in packaging and sales channels. Teece (2012) provide an example from the tobacco industry, in which the introduction of flavored cigarettes was intensively supported by marketing innovations. However, other authors found that marketing innovations do more than merely support technological innovations (Leroy & Yami, 2007; Lado et al., 2006). Following this reasoning, Schubert (2010) study observed that marketing innovations are, on average, complements – rather than substitutes – for technological innovations but notes that this relationship is sensitive to external and internal factors, such firm size and technologi-

cal opportunities. However, this author revealed that marketing innovations make product and process innovations more successful. Furthermore, Laforet & Tann (2006) concludes that organizational, marketing and service (or product) innovations are interrelated in public organizations. In a study of manufacturing firms in Turkey, positive relationships were shown between INI (Internationalization networking & innovativeness) and the relationship between Market Orientation and Product Innovativeness (Keun et al, 2008). Vicente et al, (2015) study shown that successful innovation management is related to the building and improving of effective routines and processes. For instance, Moore (2004) in order to answer to the questions, “how should managers and executives decide where to focus?” and “which types of innovation should they pursue?”, describes a more reliable way to solve the problem of focus, which is to think of different types of innovation as Innovation Management - being privileged at different points in a market’s life.

RESEARCH METHOD

This research employed the use of survey research design. Primary method of data collection will be used for this study which includes interview and questionnaire tools to gather relevant data. This study, efficacy of Marketing in Innovation Processes will be conducted among ten (10) selected Multinational Innovative Firms in Nigeria. It will be purposefully selected, in which 172 employees of the ten Multinational Innovative firms will be used for the study. The names of the ten innovative firms for the study are as follows:

- Nestle Nigeria Plc, Lagos state
- Unilever Nigeria Plc, Lagos state
- Con Oil Plc, Lagos state
- Guinness Plc, Lagos state
- Mobil Plc, Lagos state
- Dangote Group Plc, Lagos state
- Cocacola Bottle Company Plc, Lagos state
- China Civil Engineering Construction Corporation (CCECC)
- Cadbury Plc, Lagos state
- Stallion Groups Lagos state

This will gives the entire Firms to have an equal opportunity of being selected and all data and information that will be collected over the suggested matter accordingly. The sample will be determined from various employees of the innovative firms. To this extent the sample size will be determined by simple computation method with formula:

$$n = \frac{N}{1 + N(e)^2}$$

Where, n = sample size

N = population

e = 5% level of significance

Given; N = 172, e = 0.05 at 5% level of significance

$$n = \frac{172}{1 + 172(0.05)^2}$$

$$n = \frac{172}{1 + 172(0.0025)}$$

$$n = \frac{172}{1 + 0.43}$$

$$n = \frac{172}{1.43}$$

$$n = 120.27 \text{ respondents}$$

Therefore, an approximate sample size of 120 respondents will be used to conduct the research. The sample frame that will be used are the employees and the managers of the selected firms. The researcher used Stratified sampling & Purposive sampling to select the respondents of the study. The cronbach Alpha will be used to assess the reliability of the data. The sampling validity will be used to access the validity of the data. It is a measure of validity obtained, to ensure that the measure covers the broad range of areas within the concept through a sample size under the study in order to achieve the research objective. The responds gotten from the questionnaire was sorted, coded and the SPSS Version 17.0 was used for the analysis. The study made use of statistical tools which include: analysis of variance (ANOVA), correlation efficient in testing hypotheses where applicable.

Data analysis and Hypothesis Testing

Table 1.		
Distribution of respondents and response rate		
Respondents Occupation	Questionnaire administered (sampled)	Percentage of total response (%)
Top Level	27	27.0
Middle Level	20	30.0
Lower Level	53	53.0
Total	100	100.0
Gender/Category	Questionnaire administered (sampled)	Percentage of total response (%)
Male	46	46.0
Female	54	54.0
No of Returned	100	83.3
No of Not Returned	20	16.7
Total no of Questionnaires	120	100

Source: Field Survey 2017

Table 2.		
The Descriptive statistics of Marketing and Innovation Processes.		
Responses	Total (N)	Mean
Internationalization, Networking & Innovativeness (INI) and Firm Performance		
Internationalization, networking and innovativeness (INI) of researched firms is positively interrelated.	100	4.86
The degree of internationalization, networking and innovativeness is higher when compared with domestic firms than when assessed against foreign competitors.	100	3.99
The marketing department is engaged in managing the internal process of innovation and management staff takes most of the responsibility.	100	3.88

Table 2.		
The Descriptive statistics of Marketing and Innovation Processes.		
Responses		
Marketing influence on innovation activities was also strongly connected with the type of partners participated in the innovative cooperation.	100	3.65
Marketing and source of information in innovation processes	Total	Mean
Marketing plays important role as a source of information in innovation processes	100	3.88
The role of marketing and sale functions as sources of information for innovation is increasing together with the degree of innovativeness of a firm.		
What are the likely outcomes for a company that continuously implements innovation in products/services	100	3.89
Market Orientation and Product Innovativeness	Total	Mean
There is a relationship between Market Orientation and Product Innovativeness	100	3.99
Market Orientation and innovative capabilities engage create an effect on firm performance	100	3.79
Adaptation of organizational capabilities and value chain are required for solution development	100	3.79

Source: Field Survey 2017

Test of Hypotheses and Discussion of Results

The survey has been based on questionnaire interviews carried out among 172 employees of the most innovative firms in Nigeria at the end of the year 2017. The representatives of the surveyed companies were asked series of detailed questions concerning internationalization (Int), networking (Net) & innovativeness (Inn) of their firm's activity and also relationship between Market Orientation and Product Innovativeness. Three hypotheses were proposed and tested.

Hypothesis One

Ho: There is no significant relationship between INI (Internationalization networking & innovativeness) and the Firm Performance

Hi: There is significant relationship between INI (Internationalization networking & innovativeness) and the Firm Performance

Table 3.
 Model Summary^b

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate	Durbin-Watson
1	.349 ^a	.122	.116	1.703	1.997

a. Predictors: (Constant), Internationalization, networking and innovativeness (INI)

b. Dependent Variable: Firm Performance

Source: Authors Computation, 2017

Table 4.
 ANOVA^a

Model		Sum of Squares	Df	Mean Square	F Sig.
1	Regression	63.476	1	63.476	21.897 .000 ^b
	Residual	458.024	158	2.899	
	Total	521.500	159		

a. Dependent Variable: Firm Performance

b. Predictors: (Constant), Internationalization, networking and innovativeness (INI)

Source: Authors Computation, 2017

INTERPRETATION OF RESULTS

The result from the model summary table revealed that the extent to which the variance in Firm Performance can be explained by Internationalization, networking and innovativeness (INI) is 12.2% i.e. (R square = 0.122). The ANOVA table shows the F_{cal} 21.897 at a significance level. The table shows that both variables are significant at a significance level of 0.01.

Model		Unstandardized Coefficients		Standardized Coefficients	T	Sig.
		B	Std. Error	Beta		
1	(Constant)	10.617	1.504	.349	7.061	.000
	Discount	.396	.085		4.679	.000

a. Dependent Variable: Firm Performance

Source: Authors Computation, 2017

The coefficient table above shows that the simple model that expresses the relationship between INI (Internationalization networking & innovativeness) and the Firm Performance. The model is shown mathematically as follows:

$y = a + bx$, where y is Firm Performance and x is INI (Internationalization networking & innovativeness), a is a constant factor and b is the value of coefficient. From this table therefore, Firm Performance = $10.617 + 0.396$ INI (Internationalization networking & innovativeness). It shows that both tested variables are at a significance level of 0.01, which means that there exists a significance relationship between INI (Internationalization networking & innovativeness) and the Firm Performance. Therefore, for every 100% increase in customer loyalty, discount offer contributed 39.6%.

DECISION

The significance level below 0.01 implies that a statistical confidence of above 99%. This implies that there is a positive significant relationship between INI (Internationalization networking & innovativeness) and the Firm Performance. Thus, the decision would be to reject the null hypothesis (H_0), and accept the alternative hypothesis (H_1).

Hypothesis Two

H_{0_2} : There is no significant relationship between Marketing and source of information in innovation processes

H_{1_2} : There is significant relationship between Marketing and source of information in innovation processes

Table 6.			
Correlations			
		Marketing	source of information in innovation processes
Marketing	Pearson	1	.355**
	Correlation		
	Sig. (2-tailed)		.000
	N	100	100
Source of information in innovation processes	Pearson	.355**	1
	Correlation		
	Sig. (2-tailed)	.000	
	N	100	100

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

Source: Authors Computation, 2017

Result: Pearson Correlation Value of the hypothesis is 0.355 having the r value of 0.001 (in which P – value is lesser than 0.01) it shows that the correlation result is considered to be significant. This shows a correlation between the dependent and independent variables with the value of 0.355 at a significance level. Hence, it is concluded that there is a significant relationship between Marketing and source of information in innovation processes.

Therefore, the decision would be to reject the null hypothesis (Ho), and accept the alternative hypothesis (H1).

Hypothesis Three

Ho₃: There is no significant relationship between Market Orientation and Product Innovativeness

Hi₃: There is significant relationship between Market Orientation and Product Innovativeness

Table 7.
Correlations

		Market Orientation	Product Innovativeness
Market Orientation	Pearson Correlation	1	.203*
	Sig. (2-tailed)		.043
	N	100	100
	<hr/>		
Product Innovativeness	Pearson Correlation	.203*	1
	Sig. (2-tailed)	.043	
	N	100	100
	<hr/>		

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

Source: Authors Computation, 2017

Result: Pearson Correlation Value of the hypothesis is 0.203 having the r value of 0.001 (in which P – value is lesser than 0.01) it shows that the correlation result is considered to be significant at 0.05 level. This shows a correlation between the dependent and independent variables with the value of 0.203 at a significance level of 0.05. Hence, it is concluded that there is a significant relationship between Market Orientation and Product Innovativeness. Therefore, the decision would be to reject the null hypothesis (Ho), and accept the alternative hypothesis (H1).

DISCUSSION OF FINDINGS

The surveyed firms were asked about the sources of information used in innovation processes and partners in innovation cooperation. The survey shows that firms use different sources of information for innovation and none of them are used regularly. The sources most often used are the internal sources such as the management. A difference may be observed as the most innovative and least innovative firms are compared: the role of marketing and sale functions as sources of information for innovation is increasing together with the degree of innovativeness of a firm. This may prove that marketing having the insight into customer's needs, are still important drivers of innovation together with management staff. Some more detailed data derived from the survey document that marketing is the most important sources for the marketing

and product innovations. Worth mentioning is the fact that R&D function is very rarely used as source of information for creating any innovation being the highest for the product both in the most and in the least innovative firms. The important sources of information for innovation were also some of the external sources i.e. suppliers, buyers and customers. Their role in supporting innovativeness was more important than the role of such functions in a firm as R&D or the firms from the same group. Marketing influence on innovation activities was also strongly connected with the type of partners participated in the innovative cooperation. To analyze the correlation between the MO and PI of the surveyed companies, the Pearson Correlation coefficient was used. Coefficient's values indicated a moderate positive correlation. The fact is difficult to interpret now but further studies should give more detailed objective data on Market Orientation and Product Innovativeness of Innovative firms. The results of analysis in the context are thus providing a new angle to previously confirmed results on the way Market Orientation and innovative capabilities engage and create an effect on firm performance. Adaptation of organizational capabilities and value chain are required for solution development. For integrated solutions an essential driver is creation of a solution platform which includes strategy and supporting infrastructure. From the result of findings it was also found that technology platform based on using the communality principle in developing new products services and combining resources and capabilities would contribute to developing capabilities required to develop successfully integrated solutions and thus foster solution innovation

CONCLUSION

Many features of the innovation processes conducted in developing economies indicate that the role of marketing in innovation processes is still significant. The marketing department is engaged in managing the internal process of innovation and management staff takes most of the responsibility. Because of the low level of R&D expenditure in the country the enterprises follow mainly the vertical concept of innovation described in marketing literature as the one recommended for less developed markets. Vertical marketing places the responsibility for innovation in marketing departments, which – together with sale department - may have the best insight into market and customer's needs. Close relationship with market partners (suppliers and buyers) reinforces the marketing role. All this may be reasons for stronger influence of marketing on innovation processes conducted in this study. To confirm the preliminary findings some further studies should be carried on.

RECOMMENDATIONS

- i. There must be high level of R&D expenditure in the country and also R&D function must be used as source of information for creating any innovation being the highest for product both in the most and in the least innovative firms.
- ii. Adaptation of organizational capabilities and value chain must be maintained to enhance solution development. For integrated solutions, an essential driver is creation of a solution platform which includes strategy and supporting infrastructure.
- iii. Firms must understand and manage the moderating effect of product innovativeness. It is observed from the study that the effect of product innovativeness strengthens the relationship between the market orientation and innovation capabilities of a firm. The growth of emerging markets provides solid chances for successful innovations to support firm's position in the economy and even internationalization to other countries.
- iv. Some of the external sources as a source of information i.e. suppliers, buyers and customers must be considered during innovation processes in marketing. Their role in supporting innovativeness cannot be neglected.

REFERENCES

- Abrantes, R., & Figueiredo, J. (2015), Resource management process framework for dynamic NPD portfolios, *International Journal of Project Management*, 33, 1274-1288.
- Abu Bakar, L. J. & Ahmad, H. (2010). Assessing the relationship between firm resources and product innovation performance: A resource-based view. *Business Process Management Journal*, 16, 420-435.
- Alegre, J., Lapiedra, R., & Chiva, R. (2006). A measurement scale for product innovation performance. *European Journal of Innovation Management*, 9 (4), 333-346.
- Al-Matari, E. M., Al-Swidi, A. K., & Bt Fadzil, F. H. (2014). The Measurements of Firm Performance's Dimensions. *Asian Journal of Finance & Accounting*, 6 (1).
- Angel, L., Meroño-Cerdan, & López-Nicolas, C. (2013). Understanding the drivers of organization innovation. *The Service Industries Journal*, 33 (13), 1312-1325.
- Armbruster, H. (2008). Organisational innovation The challenge of measuring non-technical innovation in large scale surveys. *European journal*.
- Arshad, S., Asif, R., & Baloch, M. A. (2012). The impact of "Fairness" in working conditions on organizational performance in Pakistan telecom-

- munication companu, limited, Pakistan. *International Journal of Economics adn Management Sciences*, 2 (4), 10- 19.
- Akimova, I. (2000). Development of market orientation and competitiveness of Ukrainian firms. *European Journal of Marketing*, 34 (9/10): 1128 - 1148.
- Berthon, P., Hulbert, J.M. & Pitt, L.F. (1999). To serve or to create? Strategic orientations toward customers and innovation. *California Management Review*, 42 (1): 37-56.
- Berthon, O., Hulbert, J.M. & Pitt, L. (2004). Innovation or customer orientation? An empirical investigation. *European Journal of Marketing*, 38 (9/10): 1065-1090.
- Boutellier, R., Gassmann, O., & von Zedtwitz, M. (2008). *Managing Global Innovation. Uncovering the Secrets of Future Competitiveness*. Berlin Heidelberg: Springer-Verlag.
- Berger, J., Ward, M. Subtle Signals of Inconspicuous Consumption, *Journal of Consumer Research*. Vol. 37, December 2010, pp. 555-569.
- Bellaiche, J.-M., Mei-Pochtler, A. & Hanisch, D. (2010). *The New World of Luxury, Caught Between Growing Momentum and Lasting Change*. The Boston Consulting Group. <http://www.bcg.com/documents/file67444.pdf>
- D'Arpizio, C., (2011). *Altgamma 2011 Worldwide Markets Monitor*. Bain &Company, Fondazione Altgamma.<http://affaritaliani.libero.it/static/upload/bain/bain.pdf> or:
- Godin, B. (2008). *In the Shadow of Schumpeter: W. Rupert Maclaurin and the Study of Technological Innovation*. Berlin, Springer
- Drucker, P. (1992). *Praktyka zarządzania* (T. Basiuk, Z. Broniarek, J. Gołębiowski, Trans.). Warszawa: Czytelnik. (Original work published 1954) (in Polish).
- Greenley, G.E. (1995). Market orientation and company performance: Empirical evidence from UK companies. *British Journal of Management*, 6: 1-13.
- Grinstein, A. (2008). The effect of market orientation and its components on innovation consequences: a meta-analysis. *Journal of the Academy of Marketing Science*, 36: 166-173. Is innovation a missing link? *Journal of Marketing*, 62: 30-45.
- Han, Y. J., Nunes J. C., Drèze X. (2010). Signaling Status with Luxury Goods: The Role of Brand Prominence. *Journal of Marketing*. Vol. 74, July 2010, pp. 15-30.
- Hartmann, A. (2006). The role of organizational culture in motivating innovative behaviour in construction firms. *Construction Innovation*, 6 (3), 159-172.

- Henderson, R. (2006). The Innovator's Dilemma as a Problem of organizational competence. *Product Innovation Management*, 23, 5-11.
- Herrmann, A., Tomczak, T., & Befurt, R. (2006). Determinants of radical product innovations. *European Journal of Innovation Management*, 9 (1), 20-43.
- Heiner Evanschitzky, Florian V. Wangenheim, David M. Woisetschläger. Service & solution Innovation (2011): Overview and research agenda *Industrial Marketing Management*, Volume 40, Issue 5, July 2011, Pages 657-660.
- Hung, h.-m. (2007). Influence of the Environment on Innovation Performance of TQM. *total quality management* , 18 (7), 715-730.
- Kasser, T., Ryan, R.M. (1996). Further examining the American dream: differential correlates of intrinsic and extrinsic goals. *Personality and Social Psychology Bulletin*. Vol. 22. No. 3, pp. 280-287.
- Kotler, Ph., & Trias de Bes, F. (2004). *Marketing lateralny*, (A. Ehrlich, Trans.). Warszawa: PWE. (Original work published 2003) (in Polish).
- Kim, M., Song, J., & Triche, J. 2015. Toward an integrated framework for innovation in service: A resource-based view and dynamic capabilities approach, *Information Systems Frontiers*, 17, 533-546.
- Kolk, A., & Püümann, K. 2008. Co-development of open innovation strategy and dynamic capabilities as a source of corporate growth. *Journal of Economic Literature*, 1, 73-83.
- Kor, Y. Y. 2006. Direct and interaction effects of top management team and board compositions on R&D investment strategy. *Strategic Management Journal*, 27, 1081-1099.
- Kostopoulos, K. C., Spanos, Y. E., & Prastacos, G. P. 2002. The resource-based view of the firm and innovation: identification of critical linkages. *European Academy of Management Conference*, Stockholm, May 9-11.
- Kozan, M. K., Oksoy, D. & Ozsoy, O. 2012. Owner sacrifice and small business growth. *Journal of World Business*, 47, 409-419.
- Kraaijenbrink, J., Spender, J., & Groen, A. 2010. The Resource-Based View: A Review and Assessment of Its Critiques, *Journal of Management*, 36, 349-372.176
- Kraus, S., Harms, R. & Schwarz, E. J. 2006. Strategic planning in smaller enterprises- new empirical findings. *Management Research News*, 29, 334-344.
- Kuen-Hung, T., Christine, C. & Ming-Yi, C. 2008. Does matching pay policy with innovation strategy really improve firm performance?: An examination of technologybased service firms. *Personnel Review*, 37, 300-316.
- Lado, A. A., Boyd, N. G., Wright, P., & Kroll, M. 2006. Paradox and theorizing within the resource-based view. *Academy of Management Review*, 31, 115-131.

- Laforet, S. & Tann, J. 2006. Innovative characteristics of small manufacturing firms. *Journal of Small Business and Enterprise Development*, 13, 363-380. competitive advantage? *Strategic Management Journal*, 36, 97-112.
- Le Roy, F. & Yami, S. 2007. The development of an innovation strategy in the SME context. *International Journal of Entrepreneurship and Small Business*, 4, 431-449.
- Lee, J., & Kim, S. 2015. A Study on the Moderating Effects of Learning Capabilities on the Types of Strategic Alliance and Performance-Resource Based View. *Advanced Science and Technology Letters*, 84, 45-49.
- Mason, R. (1981). *Conspicuous Consumption*, Grower, Westmead.
- Mazurkiewicz, P. (2012). Adidas wygrywa z Chanel [Adidas wins with Chanel]. *Rzeczpospolita*. 03 04 2012.
- Michal, B. P. (2011). Nonprobability sampling. *Encyclopedia of survey Research Methods 2008*. SAGE.
- Morgan, R.E. & Berthon, P. (2008). Market orientation, generative learning, innovation strategy and business performance inter-relationships in bio-science firms. *Journal of Management Studies*, 45 (8): 1329-1353.
- Mothe, C., & Nguyen-Van, P. (2015). organizational innovations for technological innovation: the role of knowledge management practices. *applied economics* .
- Niestrój, R. (ed.) (2009). *Wizerunek marketingu w Polsce*, Kraków: Wydawnictwo Uniwersytetu Ekonomicznego w Krakowie (in Polish).
- O'Sullivan, D., & Dooley, L. (2009). *Applying Innovation*, Sage Publication Inc.
- Popławski, W., Sudolska, A., & Zastempowski M. (2008). *Współpraca przedsiębiorstw w Polsce w procesie budowania ich potencjału innowacyjnego*, Toruń: Wydawnictwo Dom Organizatora (in Polish).
- Paladino, A. (2007). Investigating the drivers of innovation and new product success: A comparison of strategic orientations. *Journal of Product Innovation Management*, 24: 534-553.
- Pittaway, L., Robertson, M., Munir, K., Denyer, D., & Neely, A. (2004). Networking and innovation: a systematic review of evidence. *International Journal of Management Reviews*, 5/6:137-68.
- Rothwell, R.,(1992), Successful Industrial Innovation: Critical Success Factors for the 1990s', *R&D Management*, 22, 221-239
- Raza, K. (2014). Application of Network Closure Theory towards Firm innovation in Pakistani Telecom Sector. *Scholarly Journal of Business Administration*, 8 (2), 170- 178.
- Sadikoglu, E., & Zehir, C. (2010). Investigating the effects of innovation and employee performance on the relationship between TQM practices and firm performance an empirical study of Turkish firms. *International journal of production economics*, 127 (1), 13-26.

- Sawney, M. & J. Chen. (2009). Defining and Measuring Business Innovation: The Innovation Radar. Working Paper.
- Schumpeter, J. A. & Swedberg, R. (1994). Capitalism, socialism, and democracy, London & New York,: Routledge, 5th ed..
- Szymura-Tyc, M. (2009). The role of marketing intellectual capital in creating competitive advantage in international market - theoretical assumptions and empirical evidence of Polish firms competing in European markets. *Journal of Economics & Management*, 6, 161-186
- Taranko, T. (2009). Ocena aktywności marketingowej przedsiębiorstw za pomocą indeksu rozumienia i stosowania marketingu. In: R. Niestrój (ed.), *Tożsamość i wizerunek marketingu*, Warszawa: Polskie Wydawnictwo Ekonomiczne. (in Polish).
- Teece, D. J. 2007. Explicating dynamic capabilities: the nature and micro-foundations of (sustainable) enterprise performance. *Strategic Management Journal*, 28, 1319-1350.
- Teece, D. J. 2012. Strategy, innovation and the theory of the firm, Cheltenham, Edward Elgar.
- Teece, D. J. 2014, The Foundations of Enterprise Performance: Dynamic and Ordinary Capabilities in an (Economic) Theory of Firms, *Academy Of Management Perspectives*, 28, 328-352.
- Tidd, J., Bessant, J., & Pavitt K. (2005). *Managing Innovation. Integrating-Technological, Market and Organizational Change*. Chichester: John Wiley & Sons Ltd.
- Truong Y., McColl R., Kitchen P. J. (2010). Uncovering the relationships between aspirations and luxury brand preference. *Journal of Product and Brand Management*. vol. 19, No 5, pp. 346-355.
- Verhoef, P., & Leeflang, P., (2009). Understanding the Marketing Department' Influence Within the Firm, *Journal of Marketing*, 73, 14-36.
- Veblen, T. (1899). *Théorie de la classe de loisir*. Editions Gallimard, 1970, (first edition: TheMacmillan Company).
- Vigneron, F., Johnson, L. W. (1999). A Review and a Conceptual Framework of Prestige-Seeking Consumer Behavior. *Academy of Marketing Science Review*. Vancouver. vol. 1.
- Vicente, M., Abrantes, J., & Teixeira, M. 2015. Measuring innovation capability in exporting firms: the INNOVSCALE, *International Marketing Review*, 32(1), 29-51.