Effect of Market Orientation on Channel Strategy- An Empirical Analysis of Pesticide Industry

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K E Y W O R D S

MO, Market Orientation, Channel Strategy, Distribution Channels, Commodity Markets

A B S T R A C T

Research in market orientation has overlooked the importance of its impact on various aspects of marketing strategy, especially on distribution channel strategy. Using Kohli & Jaworski's framework of measuring market orientation (MO) and pesticide industry of Pakistan as a context, this article explores the relationship between various constructs of MO with channel strategy. This paper draws survey data from the pesticide industry in Pakistan. Given the low response rate, a norm in developing countries, bootstrapping technique is employed and tests are run. The results reveal that level MO has an impact on how channel strategies are formulated. Findings of the research indicate that higher level of MO is associated with selective channel strategy involving low intensity of distribution and higher channel control. The results also suggest that the right channel strategy helps an organization to create differentiation and to improve performance in a commodity market.

Introduction

In the literature related to marketing, researchers argue that success of a firm depends upon the extent to which it adopts the marketing concept (Armario, Ruiz, & Armario, 2008; M. A. Farrell & Oczkowski, 1997; Narver & Slater, 1990; Ngai & Ellis, 1998). Following Drucker's (1954) introduction of this concept, the extant literature proposes that market orientation (MO), an operationalization of the marketing concept, has a positive impact upon the firm's

performance (Kohli & Jaworski, 1990). Though the assertion is accepted in general, however, there still exists some equivocality in the results regarding the impact of MO on various performance measures, especially in the context of developing countries (Qu & Ennew, 2008; Shoham, Rose, & Kropp, 2005).

Literature also suggests that the role of MO in developing and influencing the internal processes and strategy of the firm has not been well understood (Murray, Gao, & Kotabe, 2010) as yet. In other words, the question - what strategic actions devolve from the market oriented behaviour, needs to be investigated. This need has been indirectly voiced by Murray et al. (2010) in his article where he proposed that, "only if a firm takes appropriate strategic actions to capitalize on market orientation, it can create a competitive advantage in achieving higher performance" (p253). Thus a gap exists in the literature in the shape of limited empirical research, leading to our understanding of the phenomenon of market orientation and its impact on various aspects of marketing strategy. For example, few articles have researched the relationship of MO and channel behaviour (Siguaw, Simpson, & Baker, 1998) and not much research has been conducted in understanding the impact of MO on designing the marketing channel strategy. As part of marketing strategy, distribution channel decisions are one of the most critical decisions (Kotler, Keller, Koshy, & Jha, 2009). These channels act as assets that help the organization to achieve competitive advantage through creating and differentiating positions in the market (Coughlan et al. 2006). Since distribution channels are directly involved with the customer, they have the ability to also generate a lot of market related information which in turn feeds the strategy development process. Kotler et al. (2009) focuses on the information gathering functions of distribution channel while on the other hand, Kohli & Jaworski (1990) propose that generation of market intelligence is one of the important dimensions of MO. Therefore, one can propose a relationship between the two. Further along the way, a distribution strategy is developed or implemented and affects the performance of the firm (Coughlan et al. 2006). Given the two propositions, it will be of significance to both academicians and practitioners to advance their understanding of the impact that MO may have on the development of distribution strategy as well as its impact upon the firm's performance. Contextualizing the study in a developing country adds further significance as it will help our knowledge of the manner in which the above mentioned relationship plays out in economies which have as yet to fully evolve their marketing structures (Appiah-Adu, 1998). Organizations which are to enter the developing world will also draw insights on how to proceed with developing skills and capabilities that have long term implications for designing the distribution channel.

For the purpose of this paper, the pesticide industry of Pakistan has been selected. Pakistan is an agricultural country. Share of the agriculture sector in GDP is around 25%. Agriculture inputs like seeds, fertilizers and pesticides constitute a major part of this sector. The agriculture industry is highly competitive in nature. Seed and pesticide industry is a deregulated business while companies that manufacture urea are governed by strong governmental policies.

This paper will focus only on the pesticide sector. The subject industry is fragmented in nature and scattered all over the country. This means the task of distributing the product to farmers in far flung areas at affordable prices is one of the biggest challenges confronting any company in the business. This challenge is further compounded by the fact that most of the products offered are commoditized products with very little differentiation and fetch low prices.

A manner of competing in this industry is to differentiate the services associated with the product itself requiring heavy investments in distribution systems which enables them to reach geographically dispersed segments to achieve economies of scale. Thus, in this highly competitive environment, service differentiation offers an opportunity to the companies to create competitive advantage.

The paper is organized in the following manner. First, literature review of market orientation, distribution channels and industry context is presented, followed by hypothesis development. Subsequently, research methodology is explained followed by data analysis, results and recommendations. Finally, conclusions are stated along with few research limitations.

Literature Review

Market Orientation

The term "market orientation" has now become synonymous with implementation aspect of marketing concept (Lafferty and Hult, 2001). At present, there are many definitions, operationalizations and measurements of market orientation (M. Farrell, 2002; Lafferty and Hult, 2001). However, two perspectives have received the most attention; namely activity based perspective of Kohli & Jaworski (1990) and cultural perspective of Narver & Slater (1990). In their seminal paper, Kohli & Jaworski (1990) defined the construct and also presented a framework to empirically test the hypothesized relationship of market orientation and business profitability. Almost at the same time, Narver & Slater (1990) also presented their definition and findings on MO.

According to Narver & Slater (1990), MO comprises of three cultural aspects or orientations such as customer orientation, competitor orientation and inter-functional coordination. They defined MO as "the organizational culture that most effectively and efficiently creates the necessary behaviours for the creation of superior value for buyers, and thus, continues superior performance for the business" (p. 21).

Kohli & Jaworski (1990) defined MO as "Market orientation is the organization wide generation of market intelligence pertaining to current and future customer needs, dissemination of the intelligence across departments, and organization wide responsiveness to it" (p7). According to their definition, MO consists of three activities that an organization may undertake. These are: Market intelligence generation; organization wide dissemination; and responsiveness which is the ability of the organization to take action based on the information generated. They propose that their MO construct is a continuum where organizations may fall at any level. Hence it is an issue of degree of market orientation rather than the case of presence or absence of it. The difference, they argue, may lie in managing any of the three aspects of MO.

The paper will utilize Kohli & Jaworski's (1990) frame work of MO as the activities highlighted therein are germane to our understanding of how these may impact the formulation of the distribution strategy. In this form, the manner and type of information gathered and distributed across the organization results into the decision on the strategy.

Market Intelligence Generation

Market intelligence generation refers to the ability of the organization to collect information regarding not only current customer needs but also about the changing trends of the market, both in the task and macro environment, that may influence the future needs of the customer.

Intelligence Dissemination

It is the process that enables the organization to make the information available with and across various departments of the given organization. The dissemination of intelligence should occur through both formal and informal channels and should lead to a consensual interpretation and agreement on what the intelligence really means for the organization as this will enable a collectively planned response.

Responsiveness

Responsiveness is the ability of the organization to take action as a result of the generated and disseminated intelligence This aspect covers both planning in response to market information and speed and coordination among various departments regarding implementation of various marketing programs like segmentation and new product development (Kohli & Jaworski, 1990).

Channel Strategy

Development of marketing strategy requires taking decision not only in choosing segments, targeting and positioning, but also in taking decision on the marketing mix (product, price, place, promotion). Unlike the other P's (price, product, promotion), place is highly fixed, most capital intensive and greatly impacts the positioning of the firm (Coughlan et al. 2006); and is more difficult to change. According to Kabadayi et al. (2007), channel decisions have a direct bearing on the company's long term performance as it is a long-term commitment to its markets (Rangan, 1987).

Thus, selecting a distribution channel is not only one of the key decisions in marketing strategy (Kotler 2009), managing them can also be considered as one of the key strategic capabilities of an organization (N. Morgan, Vorhies, & Mason, 2009). Channel strategy not only impacts the product positioning but also the level of service the organization intends to provide. Traditionall, channels fill the gap between production and consumption and these gaps may arise due to various factors like geographic separation or time, etc. Moreover, channel choice is dependent upon the objectives that the organization seeks to pursue.

It needs to be recognized that a marketing channel is actually an integrated effort by a number of organizations trying to satisfy a customer need. Hence marketing channel is defined by Coughlan et al. (2006) as "a set of interdependent organizations involved in the process of making a product or service available for use or consumption" (p.2). As has been stated earlier distribution channel design decisions are, therefore, of a long term nature and are more difficult to change than other decisions of the marketing mix as they involve more than one organization (Rangan, 1987). Channel design varies considerably in a given market as well as for a given product, thus necessitating a more thoughtful and calculated approach requiring significant input of particular information to help in making the long term decision.

The simple model of distribution system is manufacturer – distributor – retailer – customer. Other variations do exist (Coughlan et al., 2006). For example, a supplier may use multiple

channels and may not depend only on a single channel. It is to be noted that a producer has only two basic options regarding distribution: either to work with intermediaries or else assume their role and push the product directly to consumers.

Channel decision is also dependent upon the level of communication between the firms that comprise the channel members (Mohr & Nevin, 1990) and is also affected by the MO of both the manufacturing and distributor firms. The decision of channel strategy, of necessity, is information intensive which according to Kabadayi et al. (2007) enables the alignment of the channel strategy with the overall strategy of the firm and its environment, and positively affects the firm's performance. As the market sensing and information generation activity can become a source of competitive advantage (Elg, 2002; Siguaw et al., 1998), the centrality of MO in developing a channel strategy becomes desirous. Based on this Siguaw et al. (1998) are one of the few to recognise the significance of market orientation in inter-organisational settings. They discuss how the degree of market orientation of one member of a distribution channel will influence market orientation of another channel member, and how market orientation is related to other relevant distribution channel characteristics. Their research has highlighted the fact that the ability of a firm to communicate and coordinate its activities are especially crucial if the network is to develop successfully and this becomes a critical element in the overall marketing strategy.

Channel Strategy Formulation

According to Rosenbloom (1991), there are six major decisions areas that are required while designing channel strategy. These are: 1) channel strategy formulation, 2) channel structure, 3) selection of channel members, 4) motivation of channel members, 5) evaluation of channel performance, and 6) channel control. According to Bucklin (1965), channel structure decision requires decisions on the issues of substitutability, postponement and speculation. According to Rangan & Jaikumar (1991), the design of channel requires two types of decisions which are 1) strategic - number of levels required, and 2) tactical - that discusses issue of intensity. Whereas according to Keller, Koshy, & Jha (2008), channel design decision requires three steps; namely, analyzing customer needs, establishing channel objectives, and identifying and evaluating alternative channels (p 410). They also highlight channel control as a major decision factor.

Coughlan et al. (2006) present a four step process of designing the channel. Their model includes: performing segmentation, choosing channel structure, splitting workload, and degree of commitment. They also discuss channel power as an important aspect in channel

design decision. Process of segmentation refers to choosing the channel flows to be per-formed, while structure refers to various types of channels available and their intensity.

Synthesizing the discussion, it can be seen that issues of channel structure, control and commitment are amongst the most important decisions in the channel strategy perspective though other factors are important but are company specific and difficult to generalize.

Channel Structure

As mentioned earlier, channel structure refers to various types of channels available and the intensity or the number of members in the channel.

Channel structure may be in the form of single channel or multichannel. In the context of channel development, multichannel strategy is a very significant area of research. However, not much work has been done to explore the strategic dimension including the impact of MO behaviour on this issue. Few articles that have discussed multichannel strategy have focused either on consumer satisfaction or on management aspects of multichannel implementation issues (Coelho & Easingwood, 2008; Kabadayi et al., 2007; Montoya-Weiss, Voss, & Grewal, 2003). Multiple channels are becoming very popular in current business environment. In their article, Rangaswamy & Bruggen, (2005), defined the role and function of multichannel marketing as: "Multichannel marketing enables firms to build lasting customer relationships by simultaneously offering their customers and prospects information, product, services and support (or any combination of these) through two or more synchronized channels"(p. 6). They also highlight the fact that managing multiple channels is more complex than manag-ing single channel system.

Rosenbloom (2007), on the other hand, highlights various issues which precede the channel strategy decision and include: channel integration, channel mix optimization, conflict in multiple channels, channel tradeoffs, and financial performance. As mentioned earlier, an organization can go to the customer through many ways. It can go directly without any intermediary, may use an intermediary, use sales force channel along with traditional retail channel or may choose to use various other formats of distribution (Kabadayi, et al., 2007). The logic behind going through various channel formats lies in the number of customer segments available to the firm (Coughlan et al., 2006). Higher the number of customer segments, larger will be the number of different types of channels that a firm will utilize. Wallace et al. (2004) also find that the multiple channel format increases customer satisfac-tion and loyalty, and the firm can focus on any one of the four outcomes that an organization may pursue in developing its channel strategy which includes: performance, commitment,

coordination and satisfaction (Mohr & Nevin, 1990). Thus managing multiple channels requires managing multiple outcomes. According to literature, multiple channel may help in increasing sales growth, extended market coverage and also generate better market information but at a lower profitability (Coelho, Easingwood, & Coelho, 2003).

Based on the discussion from here to fore including the intuitive link between MO and channel strategy, the following section presents the theoretical framework.

Multichannel Strategy

Since market orientation means that a firm has a higher ability to notice, prepare and respond to changes in the marketplace, it is logical to suggest that this alignment will lead to the firm's superior performance. Information dissemination pertains to sharing of data between firms and collective responsiveness takes place when both parties join hand to serve the customer in a better way. In other words, high level of MO will induce the organization to undertake and execute key MO activities across a number of distribution formats with the goal of serving its customers across segments in a better manner. Hence it can be argued that organization with high MO will prefer multichannel strategy.

Hypothesis 1: Organizations with high MO will prefer multichannel strategy

Intensity

Decision regarding intensity requires company's objective of reach (Coughlan et al., 2006). Intensity refers to the number of intermediaries to be used. There are various factors that determine the level of intensity that an organization will choose while developing its channel strategy. These include environmental issues, cost, control, brand strategy and quality issues among other critical issues.

Environmental factors also play a critical role in selecting a channel of distribution (Kotler et al., 2009). These environmental factors include, but are not limited to, competition, type and location of customers, legislation, product characteristics, and company's own strengths and weaknesses. These factors may push a company to choose from the three basic segmentation strategies: undifferentiated, differentiated and concentrated marketing. It is also to be noted that each of these options is accompanied with relevant distribution strategies, i.e., intensive, selective and exclusive distribution (Kotler, 2009). Undifferentiated segmentation strategy requires intensive distribution while concentrated will generally utilize exclusive distribution to achieve the company's objectives. An important criterion for channel intensity calculation is the tradeoff between channel cost and channel control, also referred to as

channel power (Chung, Jin, & Sternquist, 2007). In line with their thoughts, an increase in channel intensity will result in the reduction of channel control (Coughlan et al., 2006).

According to Frazier (1996), decision on channel intensity requires consideration on the following issues: manufacturer brand strategy, quality, manufacturer channel practices including manufacturer coordination efforts and support programs. He also proposes that low quality brands normally use high intensity while high end brands are selective in distribution (ibid). Although by increasing the intensity, the overall flow of information to the firm may increase but the cost required to process, filter and analyze the diversity of information flowing in may increase manifold, which may impact the overall responsiveness of the organization due to dissipation of effort. According to Rosenbloom (1999), manufacturers that require close coordination will prefer low intensity distribution and would prefer to have low inter-brand competition, hence projecting a tendency to have more channel control and thus using selective channel strategy. Hence, it can be argued that organizations with high level of MO will prefer to have low intensity as their channel strategy.

Hypothesis 2: Organizations with high MO will prefer selective channel strategy

Channel Control

"Power, in its most general sense, refers to the ability of one individual or group to control or influence the behavior of another" (Hunt & Nevin, 1974, p. 186). Bucklin (1973) defines channel control as the ability of one channel member to control the behaviour of another channel member. Organizations that seek to gain competitive edge through channel control will like to control the behaviour of other channel partners and will require the channel members to behave in a manner which is in line with its own requirements (Siguaw et al., 1998). Frazier (1996) points to the fact that using contracts, the manufacturer can reduce the retailer's freedom of choice. It can set various standards of performance regarding goals, behaviours and duration of contract for a retailer. Companies that use franchising seek higher level of control than those who do not. A market oriented company therefore, will prefer to have policies that are targeted at channel control.

Hypothesis 3: Organizations with high level of MO will have higher channel control

Research Methodology

The paper will utilize Kohli & Jaworski (1990) construct to measure MO which is superior to other instruments as it measures activities rather than culture and according to Siguaw et al. (1998), is more feasible to measure MO. Moreover, the instrument was also used by Siguaw et

al. (1998) in their research that discusses the same two variables, i.e., market orientation and channel. The construct also appears to be easily adaptable to the Pakistani environment as it is simple to use and understand. Moreover, it is more strategy oriented (Siguaw et al. 1998) and also covers specific actions of the firm. Hence, it provides a better measure of activities undertaken by a firm related to its strategy.

Measuring Channel Strategies

Channel Control

According to Bucklin (1973) factors of channel control are: resale price control, power to dictate the terms, overall channel power and knowledge function in terms of training and experience. For the purpose of the paper, interviews were conducted along the line proposed by Bucklin (1973). Issues of power are highlighted from the interviews and a scale comprising of six elements is constructed. The elements reflect the everyday issues of channel control like selling on cash, dictation of the terms and conditions to the channel member, impact of knowledge function on channel power and channel commitment.

Channel commitment is also a major issue in the literature that directly affects the overall level of commitment of channel members (Brown Robert & James, 1995). Although literature presents various measures of commitment (Frazier & Lassar, 1996), for the purpose of the paper, it is measured directly through a single item given below.

– Dealers are committed to the business of your firm

Channel Structure

This paper utilizes the following channel formats for the purpose of the research: direct marketing, dealer, franchising, missionary sales people, telemarketing, company sales force.

Definitions of various sales force types have been taken from Moncrief (1986). This is in line with channel descriptions given by Friedman & Furey (1999.) as cited by Rosenbloom (2007) and includes sales force as one such channel (p. 4). Therefore, in line with that thinking this paper treats various types of sales force being used in the pesticide industry as separate channels as given above.

Channel Intensity

Frazier and Lassar (1996) define channel intensity as "the number of intermediaries used by a manufacturer within its trade areas" (p. 1). Hence intensity is simply the number of intermediaries that a firm chooses to carry its products. Literature on channel intensity and interviews

with the experts reveal that three main types of situations may exist for any given product in the pesticide industry of Pakistan: intensive where "n" number of intermediaries can carry the product; selected few can carry the product; or exclusive distribution. i.e., only one intermediary can carry the product. Adopting the methodology of paragraph formulation typology of Miles & Snow (1978), four possible formats of channel decisions were developed in consultation with industry experts (see Table 1 for formats).

The instrument for measuring channel control, structure and intensity is developed using methodological process of Miles & Snow (1978). In order to identify what questions are to be included, semi-structured interviews have been conducted with three industry experts. The purpose of the interview was to identify relevant issues for developing and managing channels in pesticide industry. The scales were then purified by obtaining inputs from academic experts to improve the wording of the questions. Pre-testing was done with a small sample of respondents. Internal consistency was checked by measuring coefficient alpha (for the construct of channel control only) before conducting the final survey. Reliability analysis was done and satisfactory results were obtained.

Table 1

a. Situations for channel structure

We sell our products through dealers
We use franchise system for distribution and sales force that goes to the farmer to market our product
We use franchise, sales force that gets in touch with farmer and telephone sales department to sell our products
We sell directly to the customer

b. Situations for measuring channel intensity

In any given market many dealers/franchises can carry our product
In any given market few dealers/franchises can carry our product
In any given market only one dealer/franchise can carry our product

Population and Sampling Frame

To gather data, a list of companies was secured from the association of the industry, i.e., Pakistan Crop Protection Association (PCPA). The list contained around 140 members. An expert opinion was taken to identify active vs. inactive companies, and consequently, inactive companies were removed from the list resulting in around 110 companies. Further shortlisting was done to identify and eliminate the small companies (5-10 employees) with very small scope of operations. The final list of around 70 was finalized. Since the final number was not very large, hence, for the purpose of the research, all 70 were included in the sample frame.

Data Collection

Since the pesticide industry is highly dispersed around the country with offices spread all over Pakistan, questionnaires were mailed to respondents. As the study relates to decision making, the target respondents were CEOs, marketing managers and GMs of companies. The respondents represent educated cadre versed in reading, writing and speaking English, hence no translation of the questionnaire was needed.

Questionnaires were sent to all the 70 companies with a return envelope. In the first week, only 10 questionnaires were returned representing 7% of the population. To increase the response follow-up letters were sent after two weeks of the first mailing. As mentioned by Krishnaswamy (2006), that as multiple contacts increase response rate also increases, hence phone calls were also used to improve the quantity of data collected. As a result, 6 more questionnaires were received taking the total to 16, which is around 22% response rate. This response rate though is low but for a developing country like Pakistan, is in line with the findings of other researchers (Azhar, 2008).

Results

For the purpose of analysis, data was entered in SPSS. Presented below are the summary results of statistical analysis. As the data collected was very small to run any significant test, bootstrapping procedure was run (Zikmund, 2003). Bootstrapping is a computer-based method for assigning measures of accuracy to sample estimates (Efron and Tibshirani 1993). It estimates the standard error of the median by re-sampling the actual dataset. Bootstrap technique was proposed by Bradley Efron (Davidson, 2009) and further developed by Efron and Tibshirani (1979). According to Adèr et al. (1993), bootstrapping can be used in situations when the sample size is insufficient for straightforward statistical inference, given that the underlying distributions are well known. Since there was representation from all sectors of the industry (see Table 2 for the descriptive), the procedure was suitable to apply in the present case. After performing bootstrapping procedure, the size of the data increased to 47 values.

Further reporting reliability statistics of the constructs is an important consideration in research. In the present case, the reliability statistic of the scale MO and channel control is reported in Table 3.

Table 2: Respondents Organization's Profile

		Percent
	Large	62.5
	Medium	31.3
	Small	6.3
	Total	100.0

Table 3: Reliability Statistics

Instrument	**Cronbach's Alpha**	**N of Items**
Channel control	.771	6
Market orientation (overall)	0.90	30
Information generation	0.775	10
Information dissemination	0.874	8
Responsiveness	0.889	12

Hypothesis 1a: There is a positive relationship between MO and channel structure
Hypothesis 1b: Organizations with high MO will prefer multichannel strategy

To test the Hypothesis 1a, Pearson chi-square test was done. Results (Table 4) show that relationship is significant at p=0.000 with a positive value of 0.576. Hence we fail to reject our hypothesis. In order to test Hypothesis 1b, ANOVA is performed. Results show that the mean of MO is significantly different (see Table 4a), subsequently Tukey test was performed to compare mean of dealer strategy with franchise and telemarketing strategy. Results depict clearly that franchising strategy with missionary sales force option has the highest mean. Hence Hypothesis 1b has been supported (see Table 4b).

Table 4: MO and Multiple Channel Strategy

		Value	Approx. Sig.
Interval by Interval	Pearson's R	.576	.000[c]
Ordinal by Ordinal	Spearman Correlation	.583	.000[c]
N of Valid Cases		46	

Table 4a: ANOVA					
mean overall MO					
	Sum of Squares	Df	Mean Square	F	Sig.
Between Groups	9.146	2	4.573	25.646	.000
Within Groups	7.845	44	.178		
Total	16.991	46			

Table 4b: Multiple Comparisons						
Dependent Variable: mean over all MO Tukey HSD						
(I) channel structure	(J) channel structure	Mean Difference (I-J)	Std. Error	Sig.	95% Confidence Interval	
					Lower Bound	Upper Bound
dealer	Dealer					
	Franchise	-.99729[*]	.19547	.000	-1.4714	-.5232
	Telemarketing	-.84774[*]	.13193	.000	-1.1677	-.5277
franchise	Dealer	.99729[*]	.19547	.000	.5232	1.4714
	Franchise					
	Telemarketing	.14956	.19655	.729	-.3272	.6263
telemarketing	Dealer	.84774[*]	.13193	.000	.5277	1.1677
	Franchise	-.14956	.19655	.729	-.6263	.3272
	Telemarketing					

Hypothesis 2: Organizations with high MO prefer selective channel strategy

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Relationship between MO and channel intensity is measured using Pearson chi-square. The relationship is significant at p=0.000. Results (Table 5) show that there exists a strong association between MO and channel intensity. Since the result says nothing about direction or preference, ANOVA is performed to check whether the difference between the mean of "many dealers/franchisees can carry" versus "only one dealer/franchisee can carry" is significant or not. Analysis reveals that the means are significantly different (see Table 6). To further check directionality, means are compared (see Table 7). The results clearly show that organizations with high MO prefer selective channel strategy. Finally to check the strength of the relationship, Pearson Contingency Coefficient (Lancaster & Hamdan, 1964) is calculated (see Table 8). The maximum value for chi square is calculated using the formula of $\sqrt{((k)-1/k)}$, where k is the number of row/ column whichever is lower. As intensity variable has three outcomes, hence it is of lower value than MO which is measured on a scale of 5, the value

Table 5: MO and Channel intensity

		Value	Approx. Sig.
Interval by Interval	Pearson's R	-.705	.000^c
Ordinal by Ordinal	Spearman Correlation	-.755	.000^c
N of Valid Cases		47	

Chi-Square Tests			
	Value	df	Asymp. Sig. (2-sided)
Pearson Chi-Square	94.000^a	26	.000
Continuity Correction			
Likelihood Ratio	100.049	26	.000
Linear-by-Linear Association	22.848	1	.000
N of Valid Cases	47		
a. 42 cells (100.0%) have expected count less than 5. The minimum expected count is .47.			

Table 6: ANOVA					
Mean over all MO					
	Sum of Squares	**Df**	**Mean Square**	**F**	**Sig.**
Between Groups	9.306	2	4.653	26.638	.000
Within Groups	7.685	44	.175		
Total	16.991	46			

Table 7: Mean comparison

Channel Intensity		**Mean**	**Std. Deviation**
Many can carry	mean overall MO	**2.7790**	**.31073**
Few can carry	mean overall MO	**3.5751**	**.47466**
One can carry	mean overall MO	**3.7787**	**.50989**

Table 8: Contingency Coefficient

		Value	**Approx. Sig.**
Nominal by Nominal	Contingency Coefficient	**.816**	**.000**
N of Valid Cases		47	

Hypothesis 2: Organizations with high MO prefer selective channel strategy

Relationship between MO and channel intensity is measured using Pearson chi-square. The relationship is significant at p=0.000. Results (Table 5) show that there exists a strong association between MO and channel intensity. Since the result says nothing about direction or preference, ANOVA is performed to check whether the difference between the mean of "many dealers/franchisees can carry" versus "only one dealer/franchisee can carry" is significant or not. Analysis reveals that the means are significantly different (see Table 6). To further check directionality, means are compared (see Table 7). The results clearly show that

Table 9: MO and Channel Control Chi-Square Tests

	Value	Df	Asymp. Sig. (2-sided)
Pearson Chi-Square	282.000[a]	78	.000
Likelihood Ratio	170.280	78	.000
Linear-by-Linear Association	36.151	1	.000
N of Valid Cases	47		

a. 98 cells (100.0%) have expected count less than 5. The minimum expected count is .09.

Table 10: Regression

Model Summary

Model	B	R Square	Adjusted R Square	Sig
1	.839[a]	.703	.697	,0000

a. Predictors: (Constant), mean over all MO1

organizations with high MO prefer selective channel strategy. Finally to check the strength of the relationship, Pearson Contingency Coefficient (Lancaster & Hamdan, 1964) is calculated (see Table 8). The maximum value for chi square is calculated using the formula of (k(-1/k), where k is the number of row/ column whichever is lower. As intensity variable has three outcomes, hence it is of lower value than MO which is measured on a scale of 5, the value comes out to be 0.816, highlighting a very strong model fit. Hence the paper fails to reject the hypothesis.

Hypothesis 3: Organizations with high level of MO will exhibit high level of channel control

The relationship between MO and channel control is measured by using Pearson chi-square test. The relationship was positive (0.839) and significant at p=0.000 as hypothesized. Results (Table 9) show that there exists a strong positive relationship between MO and channel control. Hence we fail to reject the hypothesis. To measure the impact and directionality, regression is also performed. The results are highly significant at p=0.000 (see Table 10).

Discussion and Conclusion

This final section discusses the empirical findings. The aim is to present and discuss potential implications of the results in light of the theoretical frameworks. It also provides conclusion along with limitations and future research directions.

Market orientation has been researched extensively in various parts of the world and it has been more or less established that there exist a positive link between MO and firm performance, but it has been under-researched in the context of Pakistan (Azhar, 2008). The article seeks to fill this gap. The main aim of the article is to establish the link between MO and channel strategy. Three important elements of channel strategy are tested; namely, channel intensity, channel structure and channel control.

Hypothesis 1 states that organizations with high level of MO will pursue multiple channel strategy. Our results indicate that high level of MO is associated with multichannel strategy. Since the number of channels that an organization will use is dependent upon customer segments available and channel service requirements (Vieira, 2010), hence an organization that seeks to serve number of customer segments or to improve its service levels will tend to use multichannel strategy.

Implementation of a successful multichannel strategy depends on the level of cooperation and coordination between these channels. To achieve this end, organizations resort to develop strategic alliances. Such alliances help organizations share goals and resources.

Hypothesis 2 signifies clearly that as the level of MO increases, channel intensity decreases. According to Siguaw et al. (1998), manufacturers' MO affects distributors' MO and according to Rosenbloom (1999), higher the level of closeness of relationship, lower will be the intensity. Hence, it can be clearly seen that as the level of MO of an organization increases, so does its requirement of close cooperation with distributor. On the other hand, as the number of channel members in any given area increases, the level of coordination decreases. Moreover, as discussed earlier, product strategy is also an important factor in channel design. In the case of pesticide industry, the product is specialized and generic in nature which is being differentiated using the services that are being provided through the channel. What this means is that the channel is being used as a source of differentiation or as a source of differential advantage. Literature generally suggests that close coordination with channel members requires managing channel flows (Coughlan et al. 2006), hence organizations that are using channel as a basis of competitive strategy will seek to control channel intensity and will pursue selective strategy of channel design.

Hypothesis 3 states that organizations with high level of MO will exhibit high level of channel control. The results show that as level of MO increases so does the level of control on channel. In the literature channel power and channel commitment are studied side by side (Siguaw et al., 1998). Channel control is measured in terms of power that one party has over the other (Brown, Lusch, & Nicholson, 1995; R. M. Morgan & Hunt, 1994). The results of regression analysis clearly suggest that higher the level of MO, higher will be the control of the organization on its distribution channel.

Conclusion

All hypotheses were supported and we can conclude that MO does impact all aspects of channel strategy that an organization pursues. Higher level of MO is associated with not only low intensity strategy but also with multichannel format. Organizations that have high level of MO also enjoy higher level of channel control and commitment from their channel members.

Looking at the results from the managerial perspectives, it can be clearly seen that activities of MO help an organization define its competitive strategy, especially in terms of designing its distribution channel structure and policies.

Limitations and Future Research Directions

The research has a number of limitations. First of all, it is a one-industry study that makes

generalizability an issue. However, in industries where channel is being used as a basis of creating differentiation, the results can be helpful in developing a focus on MO as it has been demonstrated that with higher level of MO the choice of appropriate channel strategy will be formulated. Secondly, the major constraint faced has been imposed by the low response rate. This low response rate in developing economies has been a constraint in studies carried out in the region (Brown et al., 1995). This low response rate is due to cultural value system where a need for protecting information and lack of understanding of the aim of research cause reluctance in responding. This led to bootstrapping data in this instance. An attempt to conduct similar research with higher level of participation is indicated.

It is a first of its kind research in this direction, therefore further research in this area is needed. Channel strategy and MO relationship need to be studied from the capability framework also to ascertain the relationship between MO as a capability framework and channel strategy. Moreover, using dynamic capability framework, it should also be studied that whether selection of channel strategy improves the level of MO or not.

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