Strategic Orientation of Small to Medium Scale Manufacturing Firms in Developing Country: A Case of Auto Parts Manufacturing Small to Medium Enterprises (SMEs) in Pakistan

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Abstract: In today's industrial world, SMEs contribute significantly in almost all the sectors especially manufacturing. Business and functional strategies of these SMEs are important research areas. In this qualitative research, multiple case study method has been utilized to explore the business strategies of SMEs operating in auto parts manufacturing sector of Pakistan. Business strategies of SMEs are analyzed as prospectors, analyzers, defenders and reactors utilizing Miles and Snow typology (1978). The researchers investigate that how this business strategy is linked to functional strategies of SMEs operating in business environment marked with limited domestic market and low export orientation. Though operating in same business environment, SMEs vary in their competitive priorities and methods to achieve organizational goal in not so thriving auto parts sector. Manufacturing, Human Resource Management (HRM) and marketing being important functional strategies are explored to find the differences and similarities even when SMEs follow the similar strategic posture. The use of multiple methods for finding the business strategies of SMEs has been resorted to understand the implicit and explicit ways of conducting business.

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1. Introduction

Automotive sector critically impacts the industry structure of any country and as a result it is considered be a vital sector and every emerging economy pays special attention on its development. In today's world automobiles and automotive parts are among the extensively exported entities. (Nag, Banerjee, and Chatterjee 2007). US, Japan, Germany and Korea are major countries which have developed this sector in a very systematic way. India, China and Malaysia are also paying special attention for automotive sector development. Pakistan, with a populous of more than 180 million, the car (fourwheel vehicle) ownership rate in Pakistan currently stands at 11 vehicles (per 1,000 population). This corresponds to a substantial gap with the 27.5 vehicle rate for China and the global average rate of 120 vehicles. In Thailand, a country with a thriving automotive industry, the car ownership rate is 102.0 vehicles per 1,000 population, far higher than in Pakistan. The fortune of the auto parts segment is inextricably linked to the performance of its dominant customer i.e. automotive sector. The small to medium scale auto parts supplier firms dominate the industry in developing country like Pakistan where foreign auto assemblers lead the market. The share of economic contribution by such small to medium enterprises (SMEs) in terms of employment is more in developing countries (Javalgi and Todd

2011). The literature focusing on small firms has increased substantially in the last three decades. Various studies have been conducted by examining dynamics, contributions, constraints and opportunities for SMEs of developing countries (Mead and Liedholm 1998; Nichter and Goldmark 2009; Tambunan 2005). In Pakistan approximately 90% of auto parts industry is composed of SMEs, out of which about 95% are self-financed. Their interaction with the main customers (mostly foreign assemblers), business environment and competitive priorities result in adoption of various strategies. Most of the studies have been conducted with their focus on the prospects and constraints of SMEs in Pakistan (Burki et al. 2011; Seth 2010; SMEDA 2007) but little emphasis has been given to the study of their strategic business orientation and priorities.

Market, in Pakistan, is monopolized by few OEMs, and the products are characterized by relatively low quality, high priced, fewer models, long delivery times and poor service to the customers. Most of the SMEs in auto parts industry are new business entities with limited financial capacity, low manufacturing base, know-how and skills, poor technology levels, and lack the vision to transform the existing levels despite huge potential. The paper examines the SMEs in auto parts industry of Pakistan for their strategic orientation and how this strategic orientation is reflected in functional

strategies of manufacturing, human resource management (HRM) and marketing. The research paper has been divided into five sections: The first section introduces the study. The second section presents literature review while the third section works on presenting the methodology. Section four presents the case studies along with their analysis. The final section of the study presents the results of the study while shedding light onto the conclusions and giving some recommendations in reference to the prospects of future research.

2. Literature Review

Auto technology is still overwhelmingly dominated by Western, Japanese and (to lesser extent) Korean firms with established automobile industry (Noble 2006). Adaptivity to changing environment requires adoption of carefully selected strategy and methods. Due to the requirement of investing large sums of money in the business, majority of the auto parts manufacturing SMEs tend to focus on the production of basic components and refrain from switching to the critical components. (Nag, Banerjee, and Chatterjee 2007). Larger SMEs operating in the traditional supply chain as tier one or two need to calibrate their resources and strategize correctly to become more competitive. The companies can only choose among various strategies once they understand the market and business environment. The present situation of Pakistani auto industry resembles the first phase of India's auto sector which has evolved in two distinct phases. During the first phase imposition of higher tariff on imported auto components was the most important step to the increase the use of locally produced auto parts. In second phase, Indian government abolished the industrial licensing and adopted liberal approach to trade and technological learning at the firm level (Pradhan and Singh 2008). Auto parts sector has unique set of problems like dependence on major assemblers, standardization and government policies. These problems of Pakistani SMEs are not different from those of other developing countries.

Strategy determines the basic long term goals of a firm and the adoption of courses of action and the allocation of resources necessary for achieving these goals (Chandler 1969). A well formulated strategy is helpful in allocating organizational resources into a unique and viable posture based upon their relative internal competences and shortcomings, anticipated environmental changes and contingent moves by competitors (Quinn 1993). There are various definitions of strategy due to its multidimensionality and nature of industry (Hambrick 1983). A firm's strategy consists of business moves and decisions that managers are making to grow business, attract and please customers, conduct operations, and achieve

superior performance (Thompson, Strickland, and Gamble 2006). Two important typologies for strategic orientation have emerged as a result of empirical observations and testing on various sectors (manufacturing and services) which are named after their originators Miles and Snow (1978) and Porter (1980) typologies. The Miles and Snow strategic typology (1978) has received much attention in management literature over the last two decades. It visualizes strategy as the patterns in the decisions by which a business enterprise aligns itself with its environment (Song, Di Benedetto, and Nason 2007). Miles and Snow proposed that firms, in general, develop relatively stable patterns of strategic behavior in order to accomplish a good alignment with perceived environmental conditions. They identified four models (Prospectors, Analyzers, Defenders and Reactors) of firms to define and approach their product-market domains (the entrepreneurial problem) and construct structures and processes (the administrative and engineering problems) to achieve success in those domains. In light of Miles and Snow typology (1978), prospects are the market grabbers as they continuously looking to the locate and exploit new products and opportunities while defenders tend to focus on keeping and maintain their current market share in essence of stable set of products and customers, while analyzers focus on attaining an optimum position, by combining the strengths of defenders and prospectors; these firms stay competitive by holding new positions while maintaining their currents shares in the market, with their stability of products and customers. The fourth and final type, the reactors, do not respond to the entrepreneurial problems consistently. In the context of developing countries very limited research has been conducted in finding the patterns adopted by the SMEs to solve the three stated problems. Zahra and Pearce (1990) found a strong support for Miles and Snow typology after analysis of 17 empirical studies in different business environments. In this study, selected SMEs from auto parts industry are analyzed in the light of Miles and Snow typology due to its strong and theoretical orientation and generalizability as demonstrated in Zahra and Pearce (1990) study. With survey data from 709 firms, another research (China, Japan and United States) by Desarbo et al. (2004) concluded that in reality, firms' business strategic types may not be as 'pure' as Miles and Snow predicted thus opening new avenues for testing this typology in different industry settings. This paper will be analyzing SMEs for their impurities in strategy types by examining their functional strategies of manufacturing, HRM and marketing.

Porter (1980) distinguishes three types of strategy based on how a business attempts to gain and maintain a competitive advantage: 1) overall cost leadership 2) differentiation based on building customer perceptions of superior product quality, design, brand name or service, and 3) a focus strategy whereby the business concentrates on a narrowly defined market niche and uses either a cost leadership or differentiation approach. Porter's typology has been drawn from individual case observation of a variety of businesses and these three categories are defined largely in terms of competitive actions actually undertaken by a business, rather than the kinds of actions management intend to take (Walker Jr and Ruekert 1987). Rugman and Verbeke (1988) argued against the use of Porter's (1980) model of competitive strategy in the context of small firms and advocated that the focus strategy is the only choice for SMEs to compete. The Miles and Snow typology focuses on the 'dynamic process of adjusting to environmental change and uncertainty and effectively takes into consideration the trade-off between external and internal strategic factors (O'Regan, Ghobadian, and Gallear 2006). Moreover Porter's strategies of cost leadership and differentiation resemble Miles and Snow's (1978) defender and prospector strategy respectively (Amoako-Gyampah and Acquaah 2008). Aragón-Sánchez and Sánchez-Marín (2005) analyzed the Spanish SMEs according to their strategic orientation and its impact on the performance and business efficiency. In the study of 1351 SMEs, the researchers have found that these organizations differ in various management aspects as technological position, innovation. organizational design and HRM. In his research, Jahanzaib (2008) identified Pakistani auto parts industry as medium volume and low variety industry presenting a framework for manufacturing strategy to cope up with this manufacturing environment. In his research, the firms have been classified (Protectors, Offensive and innovators resembling Miles and Snow strategic types) on the basis of capacity utilization and agile manufacturing. The emphasis of research has been manufacturing strategy in the context of all type of firms with emphasis on SMEs.

3. Method

The method used to perform this research was a multiple case study. To understand various aspects of SMEs and their management, similar approaches have been used by authors. (Caldeira and Ward 2003; Jones, Hecker, and Holland 2003; Southern and Tilley 2000). Case study is an effective method to carryout a qualitative study which allows better understanding of concepts and rich information from respondents due to close interaction (Yin 2011). For this study, we have selected different firms based on

interview with PAAPAM (Pakistan Association of Automotive Parts & Accessories Manufacturers) chairman, vice chairman and board members. The main criterion for selection of firms was their easy accessibility and willingness of owners to be interviewed and questioned. In more detail, case selection was guided by few considerations. Firstly, the companies should be working in the auto parts manufacturing sector. Secondly, since the study focuses strategies of firms and its relation to their performances so it was considered appropriate to include only organized firms registered with the association (PAAPAM). It was also ensured that the firms included in the case studies should at least to be in the manufacturing for the last 10 years to make sure that these firms are well established and have seen the changes in the industry and should (for convenience reasons) be located in Lahore auto parts cluster for frequent visits and interviews. The consideration was also given to firms making auto parts for large auto assemblers. Based on criteria described four firms were selected for the research. By offering CEOs a report on the results of the study, good access to these firms was made possible. The four firms that finally were selected are given pseudo names to conceal their recognition; A firm, B firm, C firm and D firm had one thing in common that these companies were founded and managed by a single person and come under sole proprietorship. Despite the fact that all three companies deal auto parts manufacturers, all of them possess their own unique business model. For the interview process each of the company's chairman/chief executive was contacted first via email and via telephone to set the date and time for the interview proceedings. The first two rounds of the interview process were concluded in a period of four months, and the follow interviews were conducted if any of the questions were not clearly answered in the previous rounds or the answers had some relative ambiguity. In each of the interview the interviewee was impelled to intricate on its business, manufacturing, human resource and marketing strategies. Beside the interview, comments of auto parts dealers/retailers were used to know the firms' reputation, customer dealing and interaction.

4. Case Studies

4.1 Findings and Analysis from Case 1: Firm A

The firm started its manufacturing business in 1994 with forged and machined parts as its core products. The firm manufactures cam shafts, planetary gears, steering shafts and connecting rods for Millat and Al Ghazi tractors, Pakistan Suzuki Motor Company (PSMC), Indus Motor Company (IMC) and Honda Atlas Cars Limited (HACL). There are about 250 employees in the firm. The firm outsources various minor operations to about 40

vendors. The firm is ISO 9001 and TS 14949 certified (one of the 10 companies at present in the auto parts sector of Pakistan to have this certification). The motto of firm is "Either you should be the first or the best".

Business and Functional Strategies. Through formal interviews with CEO of the firm, information regarding the business and functional strategies was gained. CEO is a mechanical engineer by profession with experience of working in auto sector for about six years before founding this firm. The firm has well established facilities and management hierarchy consisting of top, middle and lower management. CEO pointed out prospector (Miles and Snow typology) as the adopted or ongoing business strategy business through self-typing paragraph descriptions of the strategic archetypes by Snow and Hrebiniak (1980). Later on, multi-item scale for identification of strategic types by Conant, Mokwa, and Varadarajan (1990) was utilized to identify the strategic type of the firm. Out of 11 questions, CEO selected the four choices related to prospector, five choices related to analyzers and only two answer showed the firm to follow the defender strategy. This also helped to confirm the initial description of the firm from selftyping paragraph approach. Now in order to further investigate the firm's strategy similar to investigation carried out by Walker Jr and Ruekert (1987). interviews of the firm's managers (middle and shop floor) were conducted with the permission of CEO of the firm. The interviewees were initially explained the four strategy types with salient features including the differences with examples. Later on, questions were asked to know their understanding of the firm's strategy. The overall stance of the middle and shop floor managers was mixed on the overall business strategy with features of prospectors, analyzers and defenders. Furthermore, observations made during the visits of the firm helped in gaining more information regarding the business strategy of the firm, finally identifying the firm as analyzer after content analysis of the interviews. CEO indicated the firm to be adopting the prospector strategy whereas based on multi-item method and investigations by the researchers, the firm does not seems to follow this strategy in purity but blend of strategies has been observed. Based on the business strategy information of the firm, functional strategies of manufacturing, HRM, marketing were also analyzed to find out their harmonization with the main business strategies. This triangulation process helped in recognizing the adopted strategy of the firm. The interviews revealed that the firm has always tried to be the first in producing some critical components but at the same time competing with other firms to maintain market share of few common components. The firm's motto itself describes the business strategy which firm desires to implement. The firm was analyzed for manufacturing, HRM and marketing strategies with respect to different dimensions of the each functional strategy. The discussion regarding these functional strategies has been made in subsequent paragraphs.

4.2 Findings and Analysis from Case 2: Firm B

The firm was founded in 1983 as sole proprietorship where as in 1992 it was made a Private Limited Firm keeping the dominating role of its founder. The firm was started to take advantage of opportunities arising in the same year with PSMC's launch of its first car in Pakistan with local content. The firm makes auto parts for auto assemblers PSMC and IMC. Besides the major components like fuel tanks and doors, firm also makes various other sheet metal body parts for both companies like brackets, panels and fittings. The firm does not export any components and rely on its major customers (auto assemblers). The ISO certification of the firm has been expired since 2009. The firm has about 35 sub vendors for various small manufacturing operations. With eight managers and 230 employees firm has also started assembling three wheeler vehicles in year 2010 (locally known as rikshaw).

Business and Functional Strategies. Chief Operation Manager (COM) of the firm was interviewed to know the business strategy of the firm. Through self-typing paragraph descriptions of the strategic archetypes by Snow and Hrebiniak (1980) COM pointed out to follow analyzer (Miles and Snow typology) business strategy. Multi-item scale for identification of strategic types by Conant, Mokwa, and Varadarajan (1990) revealed that out of 11 questions, COM selected the two choices related to prospector, eight choices related to analyzers and only one answer showed the firm to follow the defender strategy. The interviews of the shop floor managers and selected employees were also carried out in order to get the real picture of the strategy.

4.3 Findings and Analysis from Case 3: Firm C

Firm was founded in 1942 with manufacturing of different components for industries (automotive, textile and agriculture) and since 1985 it has been working for a tractor manufacturing firm (Millat tractors). Firm specializes in tractor engine valve guides and also manufactures engine crank shaft pulleys and wheel hubs. Firm is under sole proprietorship. The firm employs 50 workers and three shop floor managers and exports its products to Bangladesh and Kingdom of Saudi Arabia (KSA) also. The CEO, metallurgy engineer by qualification, seeks to shift the manufacturing facilities to new location so that more product lines can be added. Business and Functional Strategies. CEO indicated

Business and Functional Strategies. CEO indicated the firm to follow the Defender business strategy

through self-typing paragraph (Snow and Hrebiniak 1980) and multi-item (Conant, Mokwa, and Varadarajan 1990) approaches. CEO selected eight choices related to defender and two choices related to analyzers and only one answer showed the firm to follow the reactor strategy. Detailed structured and non-structured interviews of CEO and managers as well as visits of factory area helped to understand the firm's practicing business and functional strategies. ISO 9000 certification of the firm has expired since 2008, and CEO never felt the reason to renew it until relocation to better location and increase in the export base happen.

4.4 Findings and Analysis from Case 4: Firm D

The firm started working in auto parts sector in 1998. The major customers are tractor, cars and motorcycle assemblers (Millat, Al Ghazi, PSMC, HACL, Dawood Yamaha Limited (DYL) and Chinese motorcycles). The firm's core products are kick spindle for motorcycles, steering stamps, engine related auto parts like valves, push rods and tappet assemblies. For PSMC, sheet metal components are also prepared. The firm chose to manufacture the auto parts in order to exploit the opportunities available in market. There are total of six managers and 215 employees in the firm.

Business and Functional Strategies. The firm is a part of large consortium consisting of other companies manufacturing engineering products for other industries. CEO selected defender as the adopted business strategy of the firm and selected the six choices related to defender and five choices as reactor as per multi item scale devised by (Conant, Mokwa, and Varadarajan 1990). Detailed structured and non-structured interviews of managers, employees and the visits of factory area indicated the firm to follow the reactor strategy. The salient aspects related to practicing business and other functional strategies are given in Table 2.

5. Cross Case Analysis

In order to understand the business strategies of the firms in a medium technology industry marked with the low variety and protected environment, multiple case studies approach was selected. Four companies were analyzed through structured and non-structured interviews of CEOs/production managers, visits and observations to explore the dynamics, strategy decisions and perception of owners with respect to business strategies. The business strategy determination has been made through three methods: self-paragraph typing approach (Snow and Hrebiniak 1980), multiple item technique (Conant, Mokwa, and Varadarajan 1990) and investigator inference(Walker Jr and Ruekert 1987). The three approaches helped in differentiating the companies according to perceived and applied business strategies. The table 1 summarizes the outcomes of the three methods for four cases.

Table 1. Summary of Strategy Classification

Firm	Self-	Multi-	Investigator	
	Typing	item	Judgment	
	Paragraph	Scale		
Α	Prospector	Prospector	Analyzer	
В	Analyzer	Analyzer	Analyzer	
C	Defender	Defender	Defender	
D	Defender	Defender	Reactor	

Firm A, a prospector firm in two out of three criteria used in the study believes in adding to its product lines the variety of auto parts at regular intervals after ascertaining the demand and profitability through its marketing personnel. The firm studies the market carefully and makes efforts to manufacture the quality parts even if it requires extra expenditure on acquisition of new machinery or up grading the existing one. Firm B is analyzed to be following analyzer strategy according to all the three criteria. Firm C is found to be following defender strategy while firm D is analyzed to be following reactor strategy even its CEO has reported defender as the chosen strategy. The firms have been analyzed for their functional strategies and considerable differences have been found. Interestingly, there has been found differences in functional strategies for same type of business strategies in the companies. These differences in business strategies from their "pure" form as per Miles and Snow (1978) and differences among the functional differences even with the same strategies are important areas for research. It has been observed that finding the real business strategy pursued by the firms is a challenging task. Although two validated methods (self-typing paragraph and multi item method) have been utilized for finding the strategy, yet through the visits and detailed interviews, researchers have found considerable deviations and variations in reporting and implemented strategy in the context of auto parts manufacturing SMEs in developing country like Pakistan.

6. Functional Strategies of Companies

The cases (Firms A, B, C, D) are analyzed for their functional strategies besides their practicing business strategy. The three functional strategies, manufacturing, HRM and marketing strategies are selected for analysis and comparison. Through qualitative research using interviews of CEOs and managers (middle and floor), planned and unplanned visits of the companies, key characteristics of the functional strategies have been identified, compared and analyzed. The differences and similarities of these functional strategies among the companies following different/same business strategies have

been noted to understand their actual approach and methods in fulfilling the organizational goal. Salient features of these functional strategies are summarized in Table 2.

Manufacturing Strategy. There is a primary link between business and manufacturing strategy and like other functional strategies; its primary role is to support the overall business strategy (Ward, Bickford, and Leong 1996). Marucheck, Pannesi, and Anderson (1990) concluded that manufacturing strategy is perceived to be reactive and subordinate to business strategy. Many studies suggest the inclusion of criteria such as cost, delivery, flexibility and quality as the key components of manufacturing strategy (Miller and Roth 1994; Ward and Duray 2000; Dangayach and Deshmukh 2000; Sun and Hong 2002) and the manufacturing strategies of the selected companies were analyzed with respect to these four criteria. The type of manufacturing strategy that a firm chooses depends on its chosen business strategy and such alignment leads to enhanced benefits for the firm (Amoako-Gyampah and Acquaah 2008). The differences among the different types are due to many factors including firms' past history. CEOs vision and resources / capabilities as per resource based view (Wernerfelt 1995). The manufacturing strategy of Case 1 and Case 2 firms (analyzers) resembles much to each other with emphasis on cost reduction and reliable delivery of manufactured products to customers. The two firms (Case 1 and 2) are large firms and can afford to pursue a strategy which might act as a defender and other times as a prospector as to do both simultaneously it requires substantial resources; which can be ensured if the company follows the analyzer strategy (Desarbo et al 2004). Considering Case 1 as prospector, the firm has been maintaining a collection of large number of computer numerically controlled (CNC) machines providing capability of high rate of flexibility. But due to reliance on local customer base, with limited variety and up-gradation requirements, the external flexibility as per Lynch and Cross (1995) of Case 1 firm is quite low even in presence of requisite machinery and equipment. Case 2 firm by recognizing the requirement of local customers has invested less to achieve such external flexibility potential and acts like a defender mostly for production of auto parts which are required mostly without major changes by major customers (auto assemblers). On the other hand, both case 1 and 2 firms have high level of internal flexibility (Lynch and Cross 1995) which is relative to the need for operational efficiency, and to continuously improve their material handling and routing processes. Case 3 and 4 firms have very low level of both internal and external flexibility. Quality is considered to be of prime importance for competitive advantage. Prospectors, analyzers and defenders type of firms need to maintain a level of quality essential to maintain their presence in the market. Case 2, 3 and 4 firms do not possess validated quality certifications which are certainly considered to be of utmost importance for doing international business. But these firms are not only operating in the local market but desire to continue without such certifications unless some serious threat from local customers or government is posed. This fact shows their lack of interest towards export and regional expansion. Case 1 firm is ISO certified and one of the few firms in auto parts sector to hold TS-14949 certification.

Human Resource Strategy. In order to maintain the business strategies of the firms, human resource strategies are required to build (defender), acquire (prospector) and allocate (analyze) human resources (Miles and Snow 1985). The skill building and acquisition is considered to be important for the analyzer firms (Case 1 and 2), in the study the firms were analyzed for these two aspects and researchers have found out both of Case 1 and Case 2 firms utilize consistent methods for recruitment. Case 1 firm is closer to the "pure" form of the analyzer by consistently making efforts to support their manufacturing activities through HRM function especially recruitment, acquisition and then training. Case 2 firm is following the "building the human resource" requirement only on need basis. This firm shows more inclination towards the prospector's characteristic of acquiring the human resource. Case 3, a defender type firm, is not following the building human resource strategy and relies mostly on the initial knowledge and skill of worker at the time of recruitment or gained through the experience and working on specific machines over the period of time. No formal training schedule is followed and this aspect of lack of training takes the case 3 firm closer to case 4 firm (reactor) with no emphasis on building skills. The closeness of case 3 and 4 firms with regard to HRM activities become pronounced due to their consistently inconsistent HR recruitment and training policies.

Performance appraisal and compensation system for the workers are the most important tools an organization can use to help attract, retain and motivate key talent in small growing firms (Cardon and Stevens 2004). Prospectors, analyzers and defenders based on solving their three adaptive cycle problems are required to follow a specific pattern of performance evaluation and appraisal (Miles and Snow 1985) which may differ based on the resources and priorities of the firms. The case study firms were analyzed for finding the methods and techniques applied to evaluate the performances of their workers

and how their performances are valued for compensation and rewards. Case 1 firm seems to have an elaborate system for evaluating their performances with adequate appraisal system including cash bonus and promotion incentives. Case 2 firm, although an analyzer does not follow the same consistent approach for performance evaluation and compensation. Case 3, a defender firm, acts more like a reactor firm in terms of performance appraisal and compensation system.

Marketing Strategy. The firms under study were analyzed for their marketing strategies as the more consistent the marketing policies and plans with the overall strategy, the more likely that the strategy will be effective (Walker Jr and Ruekert 1987). Several other studies (Snow and Hrebiniak 1980; Hambrick 1983: McDaniel and Kolari 1987) have tended to confirm the notion that different organization strategies would have different marketing orientations. A particular marketing strategy would predominate within a business strategy type (Miles and Snow 1978; Walker Jr and Ruekert 1987) and the study entailing analysis of the case firms aim to find the connection between marketing and business strategies. The marketing strategy was analyzed for promotion. advertisement planning. communication with customers. According to Slater et al (2006) managers ought not to consider decisions regarding marketing strategy independently of their business strategy because of intricate relationship between these. As the difference in strategies of firms is due to handling of their three problems; entrepreneurial, engineering and administrative (Miles and Snow 1978) hence emphasis on marketing elements by each strategic type is different (McDaniel and Kolari 1987). For analyzer firm, acting both like defenders and prospectors, marketing activities should cater for both stable and new products consistently. The case 1 firm, analyzer by researchers' judgment, shows sound marketing related behavior as compare to case 2 firm, another analyzer firm through multiple criteria. This cross sectional study has been limited to examine the case firms for their ongoing marketing functions without exploring the long term consistency of the firms to gauge the appropriateness and efficacy of the marketing policy due to resource limitations. As expected case 4 firm has showed inconsistency in its marketing plan and the marketing activities, ignoring the basic marketing requirement to survive in the market. The detail summary of marketing functions is given in table 2.

7. Conclusion

Manufacturing SMEs are sources of national and regional economic growth and undoubtedly are the backbone of economy. Their presence is all the more

important for developing country like Pakistan. In the study of business strategies of auto part manufacturing SMEs qualitative methods of interviews, observations and reports' analysis have been used. The use of multiple approaches to find the implemented business strategies helped in validating the methods as well as pointing out their limitations in the context of low competitive environment of developing country. The study shows the differences in functional strategies of SMEs even after pursuing the similar business strategies due to varying interaction with business environment and CEO's vision. In this cross sectional study, case 1 and case 2 firms are judged as analyzers with inconsistencies to the pure features of business strategy as well as functional strategies of manufacturing, HRM and marketing. The case 3 firm, judged as defender, has shown different characteristics from case 4 firm, found as defender but judged as reactor, showing the difference in their business strategies. During the study, efforts were also made to acquire parametric performance measures but companies refused to share any such data. Subjective measurement of performance on the basis of non-parametric measures like market share, production volumes and employees turnover was judged based on the data shared willingly by the SMEs. Two out of four SMEs were judged differently than the outcome of self-typing paragraph approach and multi item scale based on the investigation / observation. Case 1 firm, judged to be an analyzer through investigation, has shown consistency in functional strategies. Special emphasis on training of workforce is given to meet the market challenges of stable products as well as selecting the new product to manufacture. Reward compensation system is quite elaborate systematic with incentive of promotions and up scaling. Marketing planning, advertising participation in exhibitions are given more importance as compared to case 2 firm which has been judged to be analyzer firm by three criteria used for business strategy. The use of internet (ecommerce as well as interaction with the customers) is quite minimal for both analyzer firms contrary to export oriented evolving firms. We have observed high degree of similarities between the case 1 and 2 firms confirming the implemented business strategy. But more research is necessitated to find the causes of differences in their functional strategies. The case 4 firm, which is found to be reactor through investigation, has not aligned its functional strategies with its intended strategy of defender.

8. Suggestions for Future Research

There is a need to carryout empirical investigation of the differences of business and functional strategies among the developing country

manufacturing SMEs. Due to lack of research in the business environment setting such as Pakistan, there exists huge gap between understanding of SMEs operations and their perceived business strategies. Future research may discretely identify the best strategy type to be followed in low competitive business setting. The investigation of large number of SMEs for their business strategies is not possible due to requirement of time and resources hence for such studies, self-typing paragraph/multiple-item approach will be suitable with the chances of misinterpretation for border line cases. Finally, a detailed study may be undertaken to find the key success factors of each type of SME. The parametric measures of performance can be used to find the link

between business strategies corresponding functional strategies and performance and effect of inconsistencies on their operations. The extent of deviation from the pure form of business strategies has not been found in the study, which may be an interesting dimension to explore for SMEs operating in auto parts manufacturing sector.

9. Limitations

First, performances of case firms are based on non-parametric measures and have not been checked against more objective data from parametric measures. The questionnaire is adopted and translated from Conant, Mokwa, and Varadarajan (1990) with validity check of almost 65%, which may have been further improved.

Table 2. Cross Case Analysis

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	Case 1	Case 2	Case 3	Case 4			
Business Strategy	Prospector	Analyzer	Defender	Defender			
(Self-typing paragraph,	Prospector	Analyzer	Defender	Defender			
Multi-item scale,	Analyzer	Analyzer	Defender	Reactor			
Investigator assessment)							
Manufacturing Strategy	Cost	Cost	Cost	Cost			
(Cost, Delivery,	 Inventory control 	 Inventory control 	 Moderate 	 Layoff of workers 			
Flexibility, Quality)	 Capacity utilization 	 Capacity utilization 	infrastructure	Bulk productions			
	Reducing rejection/	Reducing rejection/	 Up gradation of 	• Use of available space			
	rework	rework	existing machinery	Delivery			
	Delivery	No in house R&D	Very limited testing	Contract based system			
	Dedicated teams	Limited testing facility	facility	Production line workers			
		ė ,	No overtimes/extra				
	Tracking system	Delivery	works	utilized for delivery			
	Reporting	Dedicated team		Flexibility			
	Flexibility	 Tracking system 	Delivery	Not practiced due to			
	 Capable of high level of 	 Reporting 	 Limited customers 	fixed products			
	flexibility	Flexibility	 Dispatch of products 	 Nonexistence of process 			
	 Low level modifications 	 Low level of flexibility 	instantaneously	flexibility			
	of products	 Low level modifications 	Flexibility	Quality			
	 Low process flexibility 	of products	 Almost negligible 	 Dependence on 			
	Quality	 Low process flexibility 	 Limited products with 	borrowed check sheets			
	 Qualified and dedicated 	Quality	no major changes	 No certification held 			
	inspectors	Qualified and dedicated	Quality	ISO certification is			
	Formal quality hierarchy	inspectors	 No quality department 	desired			
	Statistical methods for	Formal quality hierarchy	Rejection rate high				
	quality	Statistical methods for	Fixed check sheets				
	ISO/TS certifications held	quality	with workers'				
	130/13 certifications field	1	responsibilities				
		ISO certification is	ISO certification is				
		expired	expired				
Human Resource Strategy	Recruitment	Recruitment	Recruitment	Recruitment			
(Recruitment/selection,							
training, performance	Practical test and	Practical test and	Practical test for	• Recruitment on the basis			
appraisal and	interview	interview	selected operations	of existing employee's			
	Minimum qualification	Probation period not	Previous firm	recommendations			
compensation)	required	strictly observed	reference given	Contract based			
	Preference to old	 Multiple skill holder 	importance	recruitment is done			
	employees' children	workers are preferred	 Need based 	Training			
	 Probation period strictly 	 Experience in previous 	recruitment is	 Informal supervision by 			
	observed	firms is given value	undertaken	the senior workers			
	Training	Training	Training	 No record of training is 			
	In house regular training	 Need based in house 	 No formal in house 	kept			
	sessions	training only	training				
	Selected managers /	• Informal supervision of	 Informal supervision 				
	workers are trained from	new recruits by senior	of new recruits by				
	abroad	workers	senior workers	Performance Appraisal			
	Training reports are taken		No record of training	and Compensation			
	seriously	Performance Appraisal	is kept	 Mostly workers are daily 			
	551104513		nopt	,			

	Case 1	Case 2	Case 3	Case 4
	Formal supervision of new recruits by senior workers Performance Appraisal and Compensation Incentive of training abroad on the basis of performance Department wise keeping of performance record Bonus awards Worker of the month award based on performance and suggestions Limited health care	 and Compensation Bonus on the basis of performance and Kaizan Centralized performance record of workers Compensation on the basis of long stay in the firm New skill acquisition bonus No health care 	Performance Appraisal and Compensation No regular trend /record of performance is kept Monetary compensation to managers only based on the production Incentive on the basis of long stay of workers	contract based • Managers are given monetary compensation on special religious events
Marketing Strategy (Plan, Email, Participation in trade shows/exhibitions Advertising, Packaging)	 Limited health care Plan is given importance and updated regularly Product based marketing plan Availability of dedicated sales and marketing teams E-commerce is not effectively utilized Firm website is maintained In country and out of country trade exhibitions are attended regularly by CEO/higher managers High quality firm and product brochures are prepared Certifications and testing facilities are advertised Briefing and presentations sessions for major customers are conducted 	Plan is given importance and updated on the start of new product manufacturing Product based marketing plan Availability of dedicated marketing teams E-commerce is not utilized Mostly in country trade exhibitions are attended by managers Medium quality firm and product brochures are prepared Firm's website is maintained	No proper plan for marketing is available Marketing on the basis of relationship with customers No dedicated marketing team is available Trade shows or exhibitions are not attended Packaging is given more importance as compared to advertising material No firm website is available	Marketing on the basis of relationship with customers No marketing plan is available Trade shows or exhibitions are not attended No firm website is available Advertising is considered to be waste of money
Performance reported (Last five years)	Increase in Market share Increase in Product line Increase in energy consumption	Increase in market share Increase in product line Increase in energy consumption	 No increase in market share No increase in product line Increase in energy consumption 	Decrease in market share Decrease in product line No increase in energy consumption

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References

- 1. Amoako-Gyampah, K., and M. Acquaah (2008). 'Manufacturing Strategy, Competitive Strategy and Firm Performance: An Empirical Study in a Developing Economy Environment,' International Journal of Production Economics, 111 (2), 575–592.
- Aragón-Sánchez, A., and G. Sánchez-Marín (2005). 'Strategic Orientation, Management Characteristics, and Performance: A Study of

Spanish SMEs,' Journal of Small Business Management, 43 (3), 287–308.

- Burki, Abid A., Kamal A. Munir, Mushtaq A Khan Khan, Adeel Faheem, M. Usman Khan, Ayesha Khalid, and Syed Turab Hussain (2011). 'Industrial Policy, Its Spatial Aspects and Cluster Development in Pakistan'. Policy report. Lahore University of Management Sciences.
- Caldeira, Mário M., and John M. Ward (2003). 'Using Resource-based Theory to Interpret the Successful Adoption and Use of Information Systems and Technology in Manufacturing Small and Medium-sized Enterprises,' Eur. J. Inf. Syst. 12 (2), 127–141.
- Cardon, Melissa S, and Christopher E Stevens (2004). 'Managing Human Resources in Small Organizations: What Do We Know?' Human Resource Management Review 14 (3), 295–323.

- 6. Chandler, Alfred D. (1969). Strategy and Structure: Chapters in the History of the American Industrial Enterprise. Reprint. The MIT Press.
- Conant, Jeffrey S., Michael P. Mokwa, and P. Rajan Varadarajan (1990). 'Strategic Types, Distinctive Marketing Competencies and Organizational Performance: a Multiple Measures-based Study,'Strategic Management Journal 11 (5), 365–383.
- 8. Dangayach, G.S., and S.G. Deshmukh. (2000). 'Manufacturing Strategy: Experiences from Select Indian Organizations,' Journal of Manufacturing Systems 19 (2), 134–148.
- 9. Desarbo, W. S., C. Anthony Di Benedetto, M. Song, and I. Sinha (2004). 'Revisiting the Miles and Snow Strategic Framework: Uncovering Interrelationships Between Strategic Types, Capabilities, Environmental Uncertainty, and Firm Performance,' Strategic Management Journal, 26 (1), 47–74.
- 10. Hambrick, D. C. (1983). 'Some Tests of the Effectiveness and Functional Attributes of Miles and Snow's Strategic Types,' Academy of Management Journal 26 (1), 5–26.
- 11. Jahanzaib, Mirza (2008). 'Coping with Medium Volume Low Variety Manufacturing Environment in Automobile Industry of Pakistan,'Ph.D dissertation, University of Engineering and Technology Taxila.
- Javalgi, Rajshekhar (Raj) G., and Patricia R. Todd (2011). 'Entrepreneurial Orientation, Management Commitment, and Human Capital: The Internationalization of SMEs in India,' Journal of Business Research 64 (9),1004–1010.
- 13. Jones, Colin, Rob Hecker, and Peter Holland (2003). 'Small Firm Internet Adoption: Opportunities Forgone, a Journey Not Begun,' Journal of Small Business and Enterprise Development 10 (3), 287–297.
- 14. Lynch, Richard, and Kelvin Cross (1995).

 Measure Up!: Yardsticks for Continuous
 Improvement. 2nd ed. Wiley.
- Marucheck, Ann, Ronald Pannesi, and Carl Anderson (1990). 'An Exploratory Study of the Manufacturing Strategy Process in Practice,' Journal of Operations Management 9 (1), 101– 123.
- McDaniel, Stephen W., and James W. Kolari (1987). 'Marketing Strategy Implications of the Miles and Snow Strategic Typology,' Journal of Marketing 51 (4), 19.
- 17. Mead, Donald C., and Carl Liedholm (1998). 'The Dynamics of Micro and Small Enterprises in Developing Countries,' World Development 26 (1), 61–74.

- Miles, R. E., C. C. Snow, A. D. Meyer, and H. J. Coleman Jr. (1978). 'Organizational Strategy, Structure, and Process,' Academy of Management Review, 546–562.
- 19. Miles, Raymond E., and Charles Curtis Snow (1978). Organizational Strategy, Structure and Process. Stanford University Press.
- Miles, Raymond Edward, and Charles Curtis Snow (1985). Designing Strategic Human Resources Systems. Institute of Industrial Relations, University of California.
- 21. Miller, Jeffrey G., and Aleda V. Roth (1994). 'A Taxonomy of Manufacturing Strategies,' Management Science 40 (3), 285–304.
- 22. Nag, Biswajit, Saikat Banerjee, and Rittwik Chatterjee (2007). 'Changing Features of the Automobile Industry in Asia: Comparison of Production, Trade and Market Structure in Selected Countries,' Asia-Pacific Research and Training Network on Trade, Working Paper Series (37).
- 23. Nichter, Simeon, and Lara Goldmark (2009). 'Small Firm Growth in Developing Countries,' World Development 37 (9), 1453–1464.
- 24. Noble, Gregory W. (2006). 'The Emergence of the Chinese and Indian Automobile Industries and Implications for Other Developing Countries,' World Bank.
- 25. O'Regan, N., A. Ghobadian, and D. Gallear (2006). 'In Search of the Drivers of High Growth in Manufacturing SMEs,' Technovation 26 (1), 30–41
- 26. Porter, Michael E. (1980). Competitive Strategy: Techniques for Analyzing Industries and Competitors. 1st ed. Free Press.
- Pradhan, Jaya Prakash, and Neelam Singh (2008). 'Outward FDI and Knowledge Flows: A Study of the Indian Automotive Sector'. MPRA Paper.
- 28. Quinn, James Brian (1993). 'Managing Strategic Change,' Managing Change: 65–84.
- 29. Rugman, Alan M., and Alain Verbeke (1988). 'Does Competitive Strategy Work for Small Business?' Journal of Small Business & Entrepreneurship 5 (3): 45–50.
- 30. Seth, Sonia Jahangir (2010). 'SME Development in Pakistan and Its Contribution to Economic Growth,' SMEDA Research Journal 1 (1), 63–92.
- 31. Slater, S. F., E. M. Olson, and G. T. M. Hult (2006). 'The Moderating Influence of Strategic Orientation on the Strategy Formation Capability–performance Relationship,' Strategic Management Journal 27 (12), 1221–1231.
- 32. SMEDA (2007). 'SME Policy 2007; SME Led Economic Growth Creating Jobs and Reducing

- Poverty'. Policy report. Pakistan: Small and Medium Enterprise Development Authority.
- 33. Snow, C. C., and L. G. Hrebiniak (1980). 'Strategy, Distinctive Competence, and Organizational Performance,' Administrative Science Quarterly: 317–336.
- 34. Song, M., C. A. Di Benedetto, and R. W. Nason (2007). 'Capabilities and Financial Performance: The Moderating Effect of Strategic Type,' Journal of the Academy of Marketing Science 35 (1), 18–34.
- 35. Southern, Alan, and Fiona Tilley (2000). 'Small Firms and Information and Communication Technologies (ICTs): Toward a Typology of ICTs Usage,' New Technology, Work and Employment 15 (2), 138–154.
- 36. Sun, Hongyi, and Cui Hong (2002). 'The Alignment Between Manufacturing and Business Strategies: Its Influence on Business Performance,' Technovation 22 (11): 699–705.
- 37. Tambunan, Tulus (2005). 'Promoting Small and Medium Enterprises with a Clustering Approach: A Policy Experience from Indonesia,' Journal of Small Business Management 43 (2): 138–154.
- 38. Thompson, Arthur, A. J. Strickland III, and John Gamble (2006). Crafting and Executing Strategy. 15th ed. McGraw-Hill/Irwin.

- 39. Walker Jr, O. C., and R. W. Ruekert (1987). 'Marketing's Role in the Implementation of Business Strategies: a Critical Review and Conceptual Framework,' The Journal of Marketing: 15–33.
- Ward, Peter T., Deborah J. Bickford, and G. Keong Leong (1996). 'Configurations of Manufacturing Strategy, Business Strategy, Environment and Structure,' Journal of Management 22 (4), 597–626.
- 41. Ward, Peter T., and Rebecca Duray (2000). 'Manufacturing Strategy in Context: Environment, Competitive Strategy and Manufacturing Strategy,' Journal of Operations Management 18 (2), 123–138.
- 42. Wernerfelt, Birger (1995). 'The Resource-based View of the Firm: Ten Years After,' Strategic Management Journal 16 (3), 171–174.
- 43. Yin, Robert K. (2011). Applications of Case Study Research. Vol. 34. Sage Publications, Incorporated.
- 44. Zahra, Shaker A., and John A Pearce (1990). 'Research Evidence on the Miles and Snow Typology,' Journal of Management 16 (4): 751–768.

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