



MANAGING TRANSITION FROM A SMALL TO A LARGE BUSINESS - THE CASE OF A DRILL ROD MANUFACTURER.

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ABSTRACT

Transitioning from a small entrepreneurial company to a larger, “structured”, organisation presents both organisational and management challenges to the founding entrepreneur and stakeholders. Various theories have been put forward that have studied the behaviour of the entrepreneur. However the dynamics that evolve with the change process from the behaviour and decisions of the entrepreneurial founder and managerial structures that emerge have not been well researched. Through a case study research this paper reports a longitudinal study done over three years on a company that is into manufacturing of drilling rods. Theory of organisation transition and a framework for longitudinal researching of entrepreneurial organisations making transition into structured organisations was used. The change process was studied through a conceptual framework that has five informational factors. New management systems and structures were put in place; a new manufacturing strategy and business model were developed. The “verbal culture”, of small companies was replaced by written instructions and proper records keeping, the manufacturing process was documented and standardised through the implementation of Total Quality Management. This paper contributes to the understanding of how an entrepreneurial company transition to a structured one and strengthens our ability to assist entrepreneurs in achieving sustainable growth.

Keywords: Transition, entrepreneur, organisation, formalisation, manufacturing strategy and business model.

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1 INTRODUCTION:

The transformation of an entrepreneurially founded company to a large business brings challenges especially to the founder and if the process is badly managed, this can result in either business closure or stagnation. The growth stages of a company from start-up to resource maturity is complex, it brings in formalised structures and decentralisation of power, Solymossy and Penna, [1]. Entrepreneurial companies start without structures, but in order to gain efficiency due to entrepreneurial strains they implement functional structures, Chandler, [2]. Various business development models have been put forward. Most of these models fail to capture how small businesses grow because of flawed assumptions, Churchill and Lewis [3], such as “an assumption that a company must grow and pass all stages of development or die, failure to capture the early stages of a company’s origins and growth and using metrics like annual sales, number of employees, ignoring factors like number of locations, complexity of product line and rate of change in production technology”.

Figure 1 shows a reconciled small business development framework. The framework shows five stages with each stage characterised by “an index of size, diversity and complexity”. The five stages are described by five management factors; managerial style, organisational structure, extent of formal systems, major strategic goals and owner’s involvement in the business”, [3]. Most of these changes take place at the transition point where the entrepreneur and the firm transition to a functionally managed organisation. These five factors are the motivation of this study.

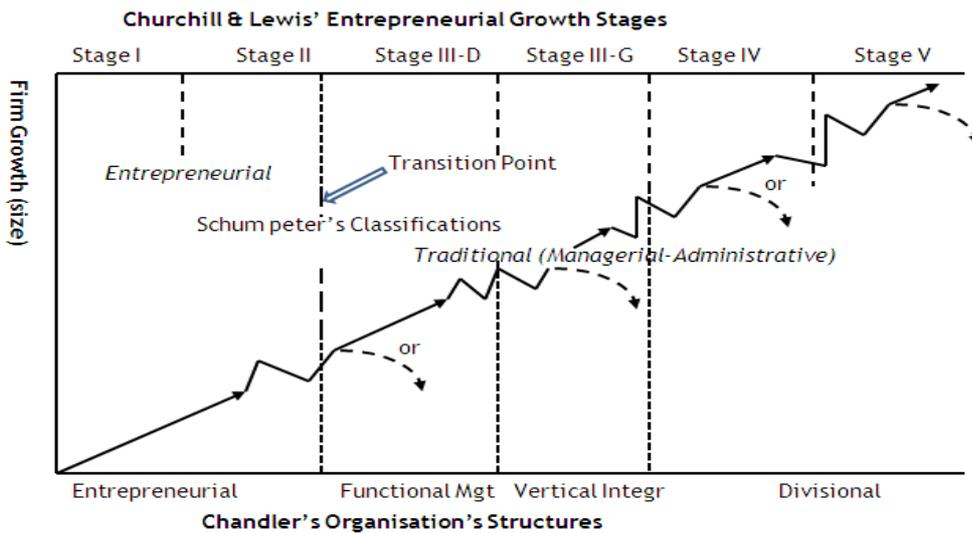


Figure 1: Reconciled Theories of Structural Stages of Growth

Very few small companies successfully transform into large companies. Fenn, [4] suggested that other transition processes leave the founder behind. Problems that stifles growth are the entrepreneur’s lack of communicating his or her vision, Baum, et al,[5], unwillingness to surrender power, O’Neill, [6], and a failure to acquire specific management skills, Johnson, [7].

Successful transitions have been supported by the organisation’s ability to bring in new management personnel, Stevens, [8], and by implementing new organisational systems and structures, Lee, [9]. However these changes require a shift of mindset in the way the entrepreneur used to run the company. Past research has focussed on the entrepreneur and the organisation without paying much attention to the change process, [1]. This paper studies the dynamics that evolved in a drill rod manufacturing company that has been successfully transformed into a large international business over a period of three years.



The theory of organisational change has different organisational change models, Van De Ven and Poole, [10], which are categorised as ; life cycle (developmental models); evolutionary (systems theory and adaptive models); dialectical (political models and social interaction) and teleological (problem solving and organisational development) as shown in Appendix 1. The transition from a small company to a large international company will fit under the Teleological model. The Teleological model assumes that organisations are purposeful and adaptive. Change occurs because leaders, change agents and others see the necessity of change. Individual managers are more instrumental to the change process, Carnall, [11] and Carr, et al [12]. Key aspects of the change process include planning, assessment, incentives and rewards, stakeholder analysis and engagement, leadership and scanning, strategy, restructuring and reengineering, Brill and Worth, [13], [11]. At the centre of the change process is the leader, (in this study the CEO), who aligns goals, sets expectations, communicates, engages, rewards and leads on the development of strategic choices, and this is the focus of this study. Scientific management tools such as Total Quality Management (TQM) and Reengineering can be used as change tools.

TQM is a management philosophy that focusses on issues like continuous quality improvement. Literature suggests that there are various TQM models such as ISO 9000: 2008, Baldrige Quality Award Framework, and European Quality Award Framework that companies can follow in implementing TQM, Das, et al, [14]. These TQM models gives emphasis on developing and focussing on a vision and mission including outcomes of the organisation; creative and supportive leadership, Goetsch and Davis, [15], implementing systematic individual development, making data driven decisions based on facts, Oakland, [16] , ensures collaboration, delegates decision making and proactively plan change, Tari, [17] . Implementing quality brings in new organisational culture, Almaraz, [18].

2 RESEARCH OBJECTIVES

- i) The major aim of this paper is to investigate how an entrepreneurial company successfully transitioned into a large international business.
- ii) Through the five informational factors the paper investigates the changes done on the entrepreneur and how managerial structures, manufacturing strategy and new business model were put in place.

The research framework of this study follows the five informational factors: 1) Evolution of formalisation; 2) Delineation of functions; 3) Identification of motivating factors of the CEO; 4) CEO's cognitive process and 5) Development of strategic processes,[1], [3]. The unit of analysis is the behaviour and decisions made by the Chief Executive Officer (CEO) and new managerial structures that were put in place as the company transitioned from a small to a large established company.

3. LITERATURE REVIEW

3.1 Definition of a Small Scale Business

The qualitative description of a small business takes into account the ownership structure of the business. The business, must be a separate and distinct entity; not be a part of a group of companies; be managed by its owners; be a natural person, sole proprietorship, partnership or a legal person, such as a close corporation or company, National Small Business Amendment Act 26 of 2003, [19], not dominant in its field, no new marketing and no innovation, Carland, et al, [20].The same Act presented a quantitative description of a small business. It classified small businesses into micro, very small, small and medium with respect to number of employees, total turn-over and gross asset value excluding fixed property.

**Table 1: Classification of small business in the manufacturing sector, Adapted from National Small Business Amendment Act, 2003.**

Size of class	Total of full time equivalent of paid employees	Total turnover	Total gross asset value (fixed property excluded)
<i>Medium</i>	200	R 51m	R 19m
<i>Small</i>	50	R13m	R 5m
<i>Very Small</i>	20	R 5m	R 2m
<i>Micro</i>	5	R0.20m	R0.10m

3.2 Differences between a Small Business and an Entrepreneurial Venture

A small business and an entrepreneurial venture both need entrepreneurial action to start-up, Nieman and Nieuwenhuizen, [21]. They both serve different economic functions and fulfill the ambitions of their founders and managers differently, Sexton and Smilor, [22]. A small business owner is motivated by personal goals and the need for security and is not committed to growth of the business, [21]. However an entrepreneurial venture has growth as its main objective, [22]. The growth is identified by new products, new markets and becoming dominant in that field, [21]. An entrepreneurial venture is run by an entrepreneur, who has the willingness and superior ability to make decisions, raise capital, and assumes the risk of failure, Knight, [23]; can perceive new market opportunities and is an innovator, Schumpeter, [24]. This paper will investigate the entrepreneurial activities that were done by the owner-manager during the transition process of his small business into a large business. It is also important to note that the growth of a small business is due the entrepreneurial activity of the owner, [22].

3.3 Growth Determinants of a Small Business

Various theories have been put forward from both the business and economic literature that recognise the role of the entrepreneur in business formation and growth. These theories have noted that differences in attitudes and abilities among individuals are important in determining why some small businesses grow and others do not, You, [25].

3.3.1 The Entrepreneur in Theories of the Firm

Size of firm is determined by the efficient allocation of resources, including entrepreneurial resources and technologies. Growth is from profit maximising and shape of the cost function. Efficient managers will have marginal costs. Managers must delegate tasks, Lucas, [26]. More output is produced by managers who are willing to take risk, Kihlstrom and Laffont, [27]. Entrepreneurial abilities increase with time and learning, hence the variable growth rates among small businesses, Jovanovic, [28].

3.3.2 Theories of Entrepreneurial Choice

The theory of entrepreneurial choice states that people have certain characteristics that are associated with the propensity for entrepreneurship. Individuals who have more of these characteristics are more likely to become entrepreneurs than those who have fewer. "Most individuals create businesses in order to maximise their expected utility. Utility is a function of entrepreneurial or wage income and of attitudes that affect the utility that the person derives from entrepreneurial activity, such as one's taste toward work effort, risk, independence and working close to customers", [27]. Income depends on the individual's ability to generate profit, such as managerial abilities to raise capital and abilities to perceive new market opportunities and to innovate. Firm growth is an indication of

continued entrepreneurship. Javanovic, [28], argues that firm growth is a choice of the owner-manager and profit maximisation is only one of the possible motives for business growth. This paper will look at the characteristics of the owner-manager on how he influenced the growth of his company.

3.3.3 Theories of Stage of Development

Growth is part of the natural evolution of a firm, [3]. Five stages of growth were identified: existence, survival, success, and take-off and resource maturity. Each development stage presents different challenges e.g take-off stage: - ability of the owner to hire new people and delegate responsibility, [3].

These theories together with their assumptions will be used to formulate both quantitative and qualitative questions that will be used in this study with regards to how the small business transitioned into a large business

3.4 Business Model

A business model is part of a business strategy that defines how an enterprise creates, delivers and captures value, Zott, [29]. Every business makes use of a business model either explicitly or implicitly, Lambert, [30]. An enterprise operates as a complex system; it has various parts that interact to function as a whole and these parts are the components that form a business model. The business model concept is built on ideas from the theoretical frameworks of business strategy, strategic management, entrepreneurship, Amit and Zott, [31], Morris et al,[32], and systems engineering, Osterwalder et al,[33]. Figure 2 shows an example of a business model developed by “Bell, et al” in Salvendy, [34], and its associated components that are applicable to various enterprises.

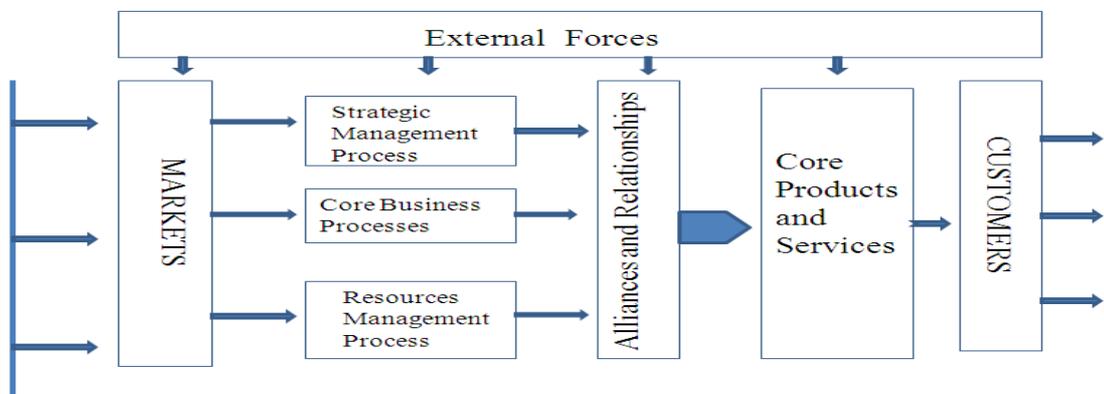


Figure 2: Enterprise Business Model Framework, Adapted from Bell et al, 1997.

3.5 Manufacturing Strategy

Strategy is the determination of basic long-term goals including objectives of and the enterprise, the adoption of courses of action and allocation of resources necessary for carrying out these goals, [2]. Strategy enhances management's focus on linkages between external market requirements and internal organizational and technological resources, capability and competitive advantage, Sun. H., et al, [35]. Enterprise strategies include corporate / business strategy and functional strategies, [35]. Business strategy is the common theme or strategic posture at higher levels of the organisational, encompassing all activities in an organisation. Functional strategies include manufacturing strategy, market



strategy and Research and Development strategy, [2], [35]. Manufacturing strategy is a pattern of decisions, both structural and infrastructural, which determine the capability of a manufacturing system and specify how it will operate to meet a set of manufacturing objectives which are consistent with overall business objectives, Skinner, [36], Hayes and Wheelwright, [37], Swamidas et al, [38]. Factors that influence the choice of a manufacturing strategy include market requirements, manufacturing resources, competitive intensity of the environment and how the manufacturing strategy is aligned to the business strategy, [36]. Five decision areas that are considered in coming up with and implementing a manufacturing strategy, include 1) plant and equipment; 2) production planning and control; 3) labour and staffing; 4) product design / engineering and 5) organisation and management, [36].

3.6 Training

Training helps subordinates to better understand their responsibilities, authority and accountability, Smit, et al, [39], as they contribute to achieving the objectives and goals of the organisation. The aim of training is to impart new knowledge, skills and attitudes (KSA), on employees for the sole purpose of performance improvement, Holladay, et al [40]. Burke, et al [41] argued that training is enhanced by the application of KSA through factors such as goal setting, workload, peer support, coaching, supervisor feedback, individual motivation and job design. Modern and competitive organisations enhance their capabilities by setting up structures that foster a culture of continuous learning and information sharing, Wickramasinghe, [42]. Training must enable workers to adapt to the fast changing global competitive environment, since this is one of the key organisational capabilities, Harvey, et al, [43]. Other key factors that help organisational superior performance is attained through sound knowledge management and proper organisational learning as suggested by Theriou, et al, [44], and this is supported by Lee, et al, [45] who reported that learning capacity and knowledge capability factors can be sources of an organisation's competitive advantage. The impact of training can be evaluated through tangible and intangible factors, Griffin, [46]. Tangible factors include reduced errors and improved quality while intangible factors will include improved employee motivation and self esteem.

3.7 Leadership

Leadership initiates change, with a new vision for the organisation, encouraging as well as motivating people to support the new initiatives, Kotter, [47]. Top management leadership creates goals, values and vision that guide the pursuit of business activities of an enterprise, through the promotion of creativity, developing integrated teams, defining and communicating the shared vision and generating compromise, Guillen, et al, [48], [15]. A good leader creates an enabling environment through their inter-personal relationships and influences others in the change initiative, such as during manufacturing strategy implementation, [14]. Leaders play three roles, namely setting direction, aligning people and motivating and inspiring people, [47]. Competent leaders have a global mindset, Brake, [49]. Progressive leaders keep abreast of world standards of competition, Birchall et al, [50]; they understand the global nature of their businesses and are able to analyze current trends and market conditions, [49].

3.8 Communication

Communication involves the process of transmitting meaningful information. At managerial level communication occurs in three levels intrapersonal, interpersonal and organisational, [39]. Of interest in this paper is the interpersonal and organisational communication spearheaded by the owner-manager and also how a small company managed to grow and implement communication standards found in large businesses such as systematically gathering, analysing data for quality problem solving activities, often called Quality Management Information (QMI), Schniederjans, [51]. QMI provides a wide range of data from purchasing, marketing, manufacturing, design, customers and suppliers, Phan, et al [52].



Communication has also been enhanced by use of software packages such as Enterprise Resource Planning (ERP) and use of Intranets within a company's different departments. Intranets with the support of relevant software such as Enterprise Performance Management (EPM) help employees including management to have a clear understanding of a company's strategy through the display of important information, Denton, [53]. EPM collects data from other applications such as customer relationship management and ERP.

3.9 Total Quality Management

Total Quality Management (TQM), is a broad-based approach used by world class companies to achieve organisational excellence, [16], and satisfying everchanging customer needs, Abdolshah and Abdolshah, [54]. Most reserachers agree that TQM is a useful philosophy for manangement, if it is properly planned and implemented, Thareja et al, [55], it can help management to deliver on organisational goals, targets and strategy, [16], including worker empowerment, improved teamwork and continouous improvement, Thortorn, [56]. Implentation of TQM brings about organisational transformation, Annop, [57]. If the process is not well managed it can result in mis-trust between management and employees leading to demotivated employees, [54], Duffin, [58]. Employee working practices and attitudes can be changed through sound training, open communication and top management support, [16], [18]. Organisations that have successfully implemented TQM have done so through a well planned and resourced training and education strategy, [17].

4.0 RESEARCH METHODOLOGY

The research methodology of this study involved a longitudinal study done over a period of three years on an owner-managed small business that has grown into a well structured large business. Yin, [59], defines case studies as "an empirical inquiry that investigates a contemporary phenomenon with its real life context; especially when the boundaries between phenomenon and context are not clearly evident". Case studies can be used to explore, describe, explain and compare phenomenons, [59]. Denscombe, [60] stated that case studies focus on one instance's relationships and processes in a natural setting with the possibility of using multiple sources and methods for both data gathering and analysis. The triangulation method was used for data gathering as suggested by Scandura et al, [61]. The method included extensive literature review and in depth interviews and document reviews conducted at the researched company. Triangulation offers more complex, overlapping descriptions of the case and makes the report more trustworthy, Lapan et al, [62]. Woodside, [63], identified three triangulation aspects that the researcher must do in-order to get a deep understanding of the case under study, namely:

- observations done by the researcher within the environments of the case,
- probing by asking case participants for explanation and interpretation of "operational data" and
- Analysis of written documents and natural sites occurring in case environment.

The interviews were face to face with promised confidentiality to facilitate candid responses. Site visits and analysis of company database, documents and face to face interviews, served as motivation for the findings.

5.0 RESEARCH FINDINGS

The owner-manager was raised in a family that had two workshops that were into general engineering and contract manufacturing. This background had exposed and developed the owner-manager on how to run a small company. The family helped him in setting up his workshop where he was in charge from the first day. However his company experienced some steady expansion of business into both new and existing markets from 2008 and 2009, as shown in Table 2. This placed pressures on the founding entrepreneur, [5], and few employees who were in employment then. The owner developed a vision and mission of the



company, [2], and was able to share it with his employees, [8]. The mission statement contained three elements, Strong, [64], namely; strategic direction of the company with more emphasis on products, market leadership ambition, commitment to profit, and span of geographic interest. The second emphasis was on customers, employees and suppliers. The third statement focussed on strategy success factors which were related to quality, manufacturing strategy and innovation.

Table 2: Business Growth Factors

Year / Aspect	2008	2009	2010	2011	2012
Number of employees	20	35	58	65	65
Capital Assets (Million Rands)	R 7M	R 10M	R15 M	R 20M	R 24M
Yearly Turn Over	R 21M	R 26M	R 45M	R 51M	R 75M
Market served	Loacl	Local	Local and Export-	Local and Export	Local and Export
Number of products	5	7	8	8	9
Innovation (Incremental)	Low	Low	Medium	High	High
Development of new structures	None	Partial	Developed	Developed	Developed
Meeting Delivery dates	No	Partial	Medium	High	High
TQM Implementation	No	Partial	Medium	High	High
Manufacturing Strategy	None	None	Yes	Yes	Yes

Sharing of the mission statement with his staff helped the owner manager in getting a buy in from the workers, [11] and [12], who then worked hard towards the realisation of the owner's targets. As number of employees increased the owner realised the need to put in place new managerial structures, [8], and this pushed him to delegate responsibilities, [7], to shop floor, human resource and financial matters. Delegation of responsibilities freed the owner's time and was able to concentrate on planning and business development tasks. The owner-manager took the following steps during the transition of the company:

5.1 Evolution of formalisation

The owner started to communicate in writing with his employees. The verbal culture suddenly died out. The need to have written records, [9], within the company became apparent. Employees were given proper contracts with their detailed job descriptions. Working procedures were put in place, [55], with the help of the implementation of Total Quality Management, [16]. Policies were put in place to guide employees on matters such as of purchasing and recruitment. This proved to be the most critical factor as it supports the formulation of organisational structure, formalisation and standardisation of the working environment, [1]. The dominance of the owner-manager on all matters of the company started to disappear. Divisions within the company started to emerge.

5.2 Delineation of functions

With the emergence of different departments within the company the usual way of the owner-manager of performing multiple tasks started to disappear. Delegation of responsibilities became the order of the day. With the developed job description staff was assigned positions of authority in finance, human resources and managing the shop floor. The turning point of the owner-manager was when he was no longer able to carry out his managerial and functional tasks. Initially the structure of the organisation was as shown under “The entrepreneurial firm” in Figure 3. As the company grew the owner-manager assumed the role of Chief Executive Officer (CEO) and he appointed managers. The structure of the company assumed three levels as shown in Figure 3 below under the “functionally structured organisation”, [1], and [3]. Of interest were two senior design engineers, four industrial engineers, two accountants and a production manager who were appointed. The production manager was given the responsibility of running the workshop while one senior accountant was given the responsibility of finance and human resources.

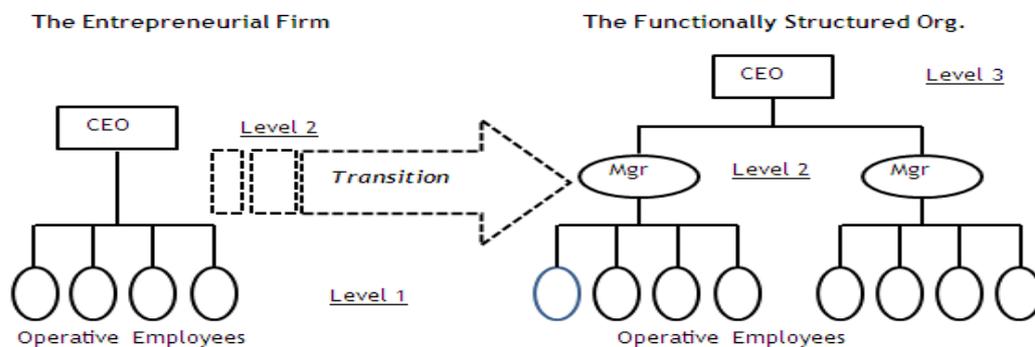


Figure 3: Transition in Organisational Structure for a Growing Firm, adapted from, Solymossy and Penna, 2001.

5.3 Identification of motivating influences on CEO

As the company grew, especially in the period 2009-2010, the CEO realised that he could no longer continue with micro-managing the company. The CEO had numerous visits in the region, where he was promoting the major product. He travelled as far as Ghana, twice in a space of three months. The CEO then realised that production and other business matters were stalling because he had non-decision making employees in his absence. Suppliers' were also complaining of not being paid on time. No one had the authority to approve overtime when demand was high. Skilled and experienced personnel were then recruited and integrated into the company. The CEO also realised that he did not have much experience on administrative, economic and financial tasks. The only way to grow his business was to recruit suitably qualified people.

5.4 CEO cognitive process

Between year 2010 and 2011 changes in the CEO's behaviour were very explicit. His managerial tasks and capabilities were developed in that he was now spending more time in planning and leading his company. Meetings and team briefings were now diarised. He created time for the three managers to regularly update him. Delegation of responsibilities became embedded in the company's culture, [5] and [6]. With the installation of Material Requirements Planning (MRP) software the CEO was now able to check on items like inventory and production targets while seated in his office. However the research did not administer the Myers-Briggs Typological Inventory to measure the CEO's personal changes over the three year study period. From the interviews with the CEO it was established that his preferences were action oriented, he sought knowledge and influence, frequently interacted with his employees and spend most of his time with either his staff or colleagues in the same industry, [7].



Policy area	Current Practice	Quality	Delivery Lead Time	Delivery Reliability	Flexibility in Design	Flexibility in Volume	Cost
Human resources	Single skilled, low training, low involvement	-1	-1	-1	+1	0	-1
Quality	100 % inspection of finished parts and assemblies	+1	-1	-1	+1	0	-2
Control Policies	Batch production No MRP	-1	-1	-2	+1	-1	-1
Suppliers	Multi-sourcing	-1	+1	+1	+1	+1	-1
New Product	CAD System	+1	+1	+1	+2	0	-2

5.5.2 New Business Model Development

To enhance competitiveness the company, through its consultant, developed a business model based on the framework proposed by [33]. The business model has nine building blocks. The nine blocks fall under four sub-headings namely Infrastructure, Offering, Customers and Finance. Under infrastructure there are Key Activities, Key Resources and Key Partners. On Offering there is Value Proposition, under Customers there is Customer Segments, Channels and Customer Relationships. Under Finance there is Cost Structure and Revenue Streams. All the nine blocks were designed and elaborated as shown in Figure 4.

Key Partners Research Institutes CSIR, Universities Key Steel Suppliers Mining Houses	Key Activities Product Development Design and Manufacture of Drilling Rods Rail Transportaione Equipment Key Resources CNC Machines, CAD and Solid Works Design Softwares Steel Treatment to Improve hardness	Value Propositions Well designed And manufactured Drilling Rods and Rail Transport Equipment	Customer Relationships Head Office Data Base Managed by Sales Personnel Channels Sales Personnel Mining Magazines Mining Houses Mining Symposiums Website	Customer Segments Mining Industry (Small scale miners) Rail Transport General Engineering Companies
Cost Structure : Markerting and Sales, Manufacturing, Research and Development.		Revenue System (Local and Export Market) Focus on Mining Industry and Rail Transport		

Figure 4: New Business Model Developed- model framework adapted from Osterwalder, 2010, [33].



5.5.3 Total Quality Management Implementation

The company made use of a quality expert, [54], who was hired to train both senior staff and key production personnel. The company is in the process of implementing ISO 9000:2008, in a staggered manner to accommodate shortage of both technical and human resources. TQM has been targeted to the manufacturing and design sections. The hired industrial engineers played a crucial part in documenting processes, [55] fulfilling one of the requirements for TQM implementation. Through training, top management commitment and good communication, employees are focussed on quality objectives, Motwani, et al, [66], in-turn enabling a smooth implementation of TQM. Common features observed in this company contributing to improved performance are; quality efforts, customer focus, management leadership, employee involvement, open culture, fact based decision making, partnership with suppliers and continuous improvement, Thorton, [67], Kumar et al, [68].

TQM implementation barriers were avoided through education and training. Financial resources were made available. Mistrust between managers and shopfloor workers were avoided due to the fact that the owner clearly communicated his vision and ambition to all employees. Fear of losing jobs was dealt with by encouraging workers to attend further training and participating in quality meetings. Workers' suggestions were accepted and implemented where possible. The company is now using Statistical Process Control (SPC) and other quality tools to collect data. Tangible results that were noticed include reduction in number of defects, set-up times, and downtime and delivery rates. These short term gains have boosted the confidence of both the CEO and his employees that TQM is a viable process. However by the end of the study period the company had not yet applied for ISO 9000:2008 certification.

TQM implementation also helped to strengthen new management structures, [7], that have been set up in this company. The company adopted a TQM implementation framework that has three components, namely; 1) Organisational Elements which focusses on Management, Processes, People and Customers, 2) Quality initiatives which focusses on use of quality tools, supplier development, quality systems ISO 9000:2008, customer satisfaction, quality steering committee, and 3) overall business goals that are aimed at business excellence and continuous improvement, [16].

5.6 Training

The research could not quantify, in terms of monetary value, the return on investment made by training activities. Another limitation was that the research did not look into the quality of training offered, the quality of the methods and techniques used, the quality of pedagogical resources used and the trainer's knowledge as suggested by Pineda, [69]. Barriers to job-related training that were discovered in this research were that workers were too busy at work, courses offered were too expensive and that some courses were offered at an inconvenient time and location. However with the CEO's support most workers managed to get training that enhanced their suitability and placement in the new structures.

5.7 Communication

Communication was found to be better in this company. Manufacturing strategy was well understood, there was greater manager-worker trust and improved employee satisfaction. From TQM implementation, it was observed that the company had sound process management, quality performance data such as defect rate, scrap and rework were effectively collected, analysed and shared this showed an improvement in their quality. This agreed with the work of Zu et al, [70] who established that quality metrics when calculated from reliable and valid data can be used for quality improvement purposes. The research established that the company had made some meaningful investment in information systems, the link between costing office, drawing office and shopfloor was put in place giving a positive impact on overall organisational performance, de Burca et al, [71]



6. LIMITATIONS

Only one enterprise which was owner-managed was studied making it difficult to generalise these results. Growth of small family companies or companies with a partnership structure might behave differently with what was covered in this research. The influence of foreign investment on small businesses and the role of worker unions as stakeholders in the transition process were also not covered and can be treated as future work. Detailed analysis of business results was not done.

7. CONCLUSION

The actual point at which the owner-manager shifted from micro-management to delegation-oriented approach was difficult to pinpoint. Records of new personnel who were appointed to managerial positions suggest late 2009 onwards. The owner emphasised on building a dynamic team that could respond to market and environmental challenges. More emphasis was placed on quality manufacturing and R & D activities. The company now has functional managers who are guided by operational budgets with financial, marketing and production systems in place.

At the end of the study employees were now asking for company shares. This had brought in a new dimension of partnership between the owner and his employees. While the practice is common in other South African large companies, in small and medium companies it is still a growing culture.

The experiences and challenges of owner-managers engaged in small business growth were found to have been influenced by, [1], [3], [8], and [12].

- The owner-manager's personal characteristics was shown by his ability to proactively deal with problems, keep his workers motivated, loyal and committed. The CEO's other ability was that he made effective decisions and had a willingness to take appropriate risks. His background played an important role in achieving his goals.
- The external market condition brought in some opportunities for market growth. The CEO targeted both small and large mining companies that operated in political and economically stable environments.
- The CEO created a work environment where some of his workers became specialists in their jobs thereby giving them autonomy, thus agreeing with the empowerment philosophy expounded by Deming, 2000.
- The company structure of being under a single owner reduced organisational complexity. Decisions on investment, in advanced equipment and technology, in hiring new talented and skilled staff were made at appropriate times

Worker resistance to changing environment was minimised by a clear and effective communication process done by the owner-manager. Workers saw opportunities of learning more, earning more, getting new skills through training in new equipment and technology, being given greater responsibilities and working in a safe environment that guaranteed growth in their profession.

REFERENCES

- [1] Solymossy E. and Penna A.A., 2001. Sustainable Growth for the Small Business: A Theory of Organisational Transition.
- [2] Chandler, 1962. Strategy and Structures: Chapters in the History of the Industrial Enterprise, MIT Press, Cambridge, Mass.
- [3] Churchill, C.N. and Lewis, V.L., 1983. Growing Concerns: The Five Stages of Small Business Growth, *Harvard Business Review*, 3: pp. 30-50.
- [4] Fenn, D., 1996. "Breakthrough Leadership: Higher Ground," Inc., V18:5, PP. 92-99.



- [5] **Baum, J.R., Lockce, E.A., and Kirkpatrick, S.A.** 1998. A longitudinal study of the relation of vision and vision communication to venture growth in entrepreneurial firms, *Journal of Applied Psychology*, 83, 43-54.
- [6] **O'Neill, H.M., 1983.** "How Entrepreneurs Manage Growth" *Long Range Planning*, V16:1, pp. 116-233
- [7] **Johnson, K.L., 1989.** Building Your Management Skills, *Managers Magazine*, V64:7, pp. 21-23
- [8] **Stevens, M., 1988.** Guiding a Business through Its Life Cycles, *D & B Reports*, V 36:3, PP.48-49
- [9] **Lee, P.M., 1989.** Growing Pains, *Small Business Reports*, V14:7, PP. 34-37
- [10] **Van De Ven, A.H. and Poole, M.S., 1995.** Explaining development and change in organisations. *Academy of Management Review*, 20(3), pp.510-540, doi: doi: 10.2307/258786
- [11] **Carnall, C.A., 1995.** Managing change in organisations (2nd Ed.). London, England: Prentice Hall
- [12] **Carr, D. Hard, K. and Trahant, W., 1996.** Managing the change process: A field book for change agents, consultants, team leaders, and re-engineering managers, New York, NY: McGraw-Hill.
- [13] **Brill, J.S. and Worth, R., 1997.** The four levers of corporate change, New York, NY: American Management Association.
- [14] **Das A., Kumar V. and Kumar U.** 2011. The role of leadership competencies for implementing TQM an empirical study in Thai manufacturing industry. *International Journal of Quality & Reliability Management*. Vol. 28 No.2, pp 195-219
- [15] **Goetsch, D.L., Davis, S.B.** 2006. Quality Management: Introduction to Total Quality Management for Production, Processing and Services, Prentice-Hall Inc., Englewood Cliffs, NJ
- [16] **Oakland, J.S.** 1998. "Total Quality Management", Butterworth-Heinemann, pp 34-106, 1998.
- [17] **Tari, J.J., 1996.** "Components of Successful total quality management", *The TQM Magazine*, Vol 17 Iss: 2, pp. 182-194.
- [18] **Almaraz, J., 1994.** "Quality Management and the Process of Change", *Journal of Organisational Change Management*, Vol. 7 Iss: 2, pp. 06-14.
- [19] **National Small Business Amendment Act, 2004.**
http://www.dti.gov.za/sme_development/docs/Amendment04.pdf [Accessed 22/01/2013]
- [20] **Carland, J.W., Hoy, F., Boulton, W.R. and Carland, J.C., 1984.** Differentiating entrepreneurs from small business owners, *Academy of Management Review*, 9(2): 354-359.
- [21] **Nieman, G., and Nieuwenhuizen, C., 2009,** *Entrepreneurship: A South African Perspective*, 2nd ed., Van Schaik, Hatfield, and Pretoria, South Africa.
- [22] **Sexton, D. L. and Smilor, R.W., 1997.** (Eds.). *The Art and Science of Entrepreneurship*, Cambridge, MA: Ballinger, 3-23.
- [23] **Knight, F., 1921.** Risk, uncertainty and profit, New York: Augustus Kelly.
- [24] **Schumpeter, J.A., 1950.** Capitalism, socialism and democracy, (3rd Ed.). NY: Harper and Row



- [25] **You, Jong-Il., 1995.** Small Firms in Economic Theory, *Cambridge Journal of Economics*, 19: pp. 441-462.
- [26] **Lucas, R. E., 1978.** On the Size Distribution Firms, *Bell Journal of Economics*, 9: pp. 508-523
- [27] **Kihlstrom, R. and Laffont, J.J., 1979.** A General Equilibrium Entrepreneurial Theory of Firm Formation Based on Risk Aversion, *Journal of Political Economy*, 59: 719-748.
- [28] **Jovanovic, B., 1982.** Selection and Evolution of Industry, *Econometrica*, 50 (3): pp. 649-670.
- [29] **Zott, C., and Amit, R., 2010,** designing your future business model: An activity system perspective, *Long Range Planning*, 43, pp. 216-226.
- [30] **Lambert, S.C., 2010,** a conceptual model analysis framework: Analysing and comparing business model frameworks and ontologies, Paper presented at the 14th IBIMA Conference.
- [31] **Zott, C. and Amit, R., 2008.** The fit between product market strategy and business model: Implications for firm performance, *Strategic Management Journal*, 29, pp. 1-26
- [32] **Morris, J.F., Schindehutte, M. and Allen, J., 2005.** The entrepreneur's business model: Toward a unified perspective, *Journal of Business Research*, 58, pp. 726-35.
- [33] **Osterwalder, A., Pigneur, Y. and Smith.A. 2010.** Business Model Generation, self published book.
- [34] **Salvendy, G., 2001.** Handbook of Industrial Engineering: Technology and Operations Management, 3rd Edition, John Wiley and Sons INC.
- [35] **Hongyi, S and Hong, C., 2002.** The alignment between manufacturing and business strategies: its influence on business performance. *Technovation* 22, 699-705
- [36] **Skinner, W. 1985.** Manufacturing: the formidable competitive weapon. Wiley, New York
- [37] **Hayes, R.H. & Wheelwright S.C. 1984.** Restoring Our Competitive Edge (Competing through Manufacturing), Wiley, New York.
- [38] **Swamidass, P.M. and Newell, W.T. 1987.** Manufacturing strategy, environmental uncertainty and performance: a path analytic model. *Management Science* 33, 509-524.
- [39] **Smit, P.J. and Cronje, G.J. DE J. 1997.** Management Principles: A contemporary edition for Africa. Juta, Creda Press, Cape Town
- [40] **Holladay, C. and Quinones, M. 2003.** Practice variability and transfer of training: the role of self-efficacy generality. *Journal of Applied Psychology*. Vol. 88 No. 6, pp. 1094-103
- [41] **Burke, L. and Hutchins, H. 2007.** Training transfer: an integrative literature review. *Human Resource Development Review*. Vol. 6 No. 3, pp. 263-95
- [42] **Wickramasinghe, N. 2007.** Fostering knowledge assets in healthcare with the KMI model. *International Journal of Management and Enterprise Development*. Vol. 4 No. 1, pp 52-65
- [43] **Harvey, M., Novicevic, M.M. and Garrison, G. 2004.** Challenges to staffing global virtual teams. *Human Resource Management Review*, Vol. 20 No. 4, pp 275-94



- [44] **Theriou, G.N. and Chatzoglou, P.D.**2008.Enhancing performance through best HRM practices, organisational learning and knowledge management: a conceptual framework.*European Business Review*. Vol. 20 No. 3, pp. 185-207
- [45] **Lee, Y.C. and Lee, S.K.**2007.Capability, processes, and performance of knowledge management: a structural approach.*Human Factors and Ergonomics in Manufacturing*. Vol 17 No. 1, pp.21-41
- [46] **Griffin, R.P.**2011. Workplace learning evaluation: a conceptual model and framework.*Industrial and Commercial Training*. Vol. 43 No. 3, pp 172-178
- [47] **Kotter, J.P.**1990.What leaders really do. *Harvard Business Review*. Vol. 68 No.3, pp. 103-11
- [48] **Guillen, M., Gonzalez, T.F.**2001.The ethical dimension of managerial leadership: two illustrative case studies in TQM.*Journal of Business Ethics*. Vol. 34 No.3-4, pp 175-89
- [49] **Brake, T.** 1997. *The Global Leader: Critical Factors for Creating the World Class Organisation*. Irwin Professional Publishing, Chicago, IL
- [50] **Birchall, D., Hee, J. T., Gay, K.** 1996.Competencies for international management.*Singapore Management Review*. Vol. 18 No. 1, pp. 1-13
- [51] **Schniederjans, M.J., Parast, M.M., Nabavi, M., Rao, S.S. and Raghu-Nathan, T.S.** 2006. Comparative analysis of Malcolm Baldrige National Quality Award criteria: an empirical study of India, Mexico and the United States.*Quality Management Journal*. Vol. 13 No. 14 pp 7-21
- [52] **Phan Chi Anh and Yoshiki Matsui.**2011.Relationship between quality management information and operational performance: International perspective.*Management Research Review*.Vol. 24 No. 5, pp 519-540
- [53] **Denton, D.K.**2010.Performance measurement and intranets: a natural partnership.*International Journal of Productivity and Performance Management*.Vol. 59 No. 7, 2010 pp 701-706
- [54] **Abdolshah, M. Abdolshah, S.,** 2011. Barriers to the successful implementation of TQM in Iranian manufacturing organisations, *International Journal of Quality Management*, Vol 7, Number 3 pp. 358-373.
- [55] **Thareja, P., Sharma, D.D., and Mahapatra, P.B.,** 2011. Total Quality Management-A Development Perspective, *Journal of Production Research & Management*, Vol. 1, No. 1, pp. 34-52.
- [56] **Thorton, P.T.,** 1992. *The Power of Vision: Total Quality Management Awareness*, Martin Marietta Energy Systems, Inc., Oak Ridge Natl. Lab., The M & C Pipeline, Vol. 1, No. 5, June 26, 1992; pp6-7
- [57] **Patel, A.,** 1994. Assessing Total Quality Training in Wales, *Journal of Training for Quality*, Vol 2, No. 2, pp 13-21.
- [58] **Duffin, M.** 1995. Guidelines to TQC, *the TQM Magazine*, Vol. 7 No.4. pp 35-41, 1995.
- [59] **Yin R.K.**2003. Case study research: Design and methods 3RD ed. Thousand OAKS: Sage
- [60] **Denscombe M.** 2003.The Good Research Guide for small-scale social research projects, 2nd ed, ISBN 0 335 21303 0 pb
- [61] **Scandura, T.A.and Williams, E.A.**2004.Mentoring and transformational leadership: the role of supervisor career mentoring.*Journal of Vocational Behaviour*.Vol.65 No.3.pp.448-68



- [62] **Lapan, Stephen D. and Quartaroli, Marylynn T.** 2009. *Research Essentials: An Introduction to Designs and Practices Research Methods for the Social Sciences*. John Wiley and Sons
- [63] **Woodside A.G.** 2010. *Case Study Research*, ISBN 978-1-84950-922-0 Emerald Group.
- [64] **Strong, C., 1997.** The question we continue to ask: how do organisations define their mission? *Journal of Marketing Practice: Applied Marketing Science*, Vol. 3 No. 4, pp. 268-83.
- [65] **Tony Owen.** 1990. Review of *Competitive Manufacturing: A Practical Approach to the Development of a Manufacturing Strategy* by the DTI' Robotica, 8, pp 87-87 doi: 10.1017/S0263574700007372
- [66] **Motwani, J.G., Frahm, L.M. and Kathawala, Y., 1994.** Achieving a Competitive Advantage through Quality Training, *Training for Quality*, Vol 2, No. 1 pp 35-40.
- [67] **Thorton, P.T., 1992.** *The Power of Vision: Total Qulaity Management Awareness*, , Martin Marietta Energy Systems, Inc., Oak Ridge Natl. Lab., The M & C Pipeline, Vol. 1, No. 5, June 26, 1992; pp6-7.
- [68] **Kumar, R., Garg, D. and Garg, T.K., 2011.** TQM success factors in North Indian manufacturing and service industries, *The TQM Journal*, Vol 23, No. 1, pp. 36-46.
- [69] **Pineda, P.** 2010. Evaluation of training in organisations: a proposal for an integrated model. *Journal of European Industrial Training*. Vol. 34 No. 7, pp. 673-693
- [70] **Zu, X., Fredenhall, L., and Douglas, T.J.** 2008. The evolving theory of quality management: the role of Six Sigma. *Journal of Operations Management*. Vol 26 No. 5 pp 630-50.
- [71] **De Burca, S., Fynes, B. and Braaick, T.** 2006. The moderating effects of information technology sophistication on services practice and performance. *International Journal of Operations & Production Management*. Vol. 26 No. 11, pp. 1240-54

Other Readings

DTI (UK Department of Trade and Industry), *Competitive Manufacturing: A Practical Approach to the Development of Manufacturing Strategy*, IFS Publications, Bedford, 1988



Appendix 1: Organisational Change Models.

Types of Organisational Change Models	Evolutionary	Teleological	Life Cycle	Political
Aspect: Why change occurs	External environment	Leaders; internal environment	Leaders guiding individual's natural growth	Dialectical tension of values, norms or patterns
Process of change	Adaption; slow; gradual; non-intentional	Rational; linear; purposeful	Natural progression; result of training and motivation; altering habits and identity	First order following by occasional second order; negotiation and power
Outcomes of change	New structures and processes; first order	New structures and organising principles	New organisational identity	New organisational ideology
Key metaphor	Self-producing organism	Changemaster	Teacher	Social movement
Examples	Resource dependency;; strategic choice; population ecology	Organisational development, strategic planning; reengineering; TQM	Developmental models; organisational decline; social psychology of change	Empowerment; bargaining; political change; Marxist theory
Benefits	Environmental emphasis; systems approach	Importance of change agents; management techniques and strategies	Change related to phases; temporal aspect; focus on people throughout the organisation	Change not always progressive; irrationality; role of power