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TOWARDS A GENETIC BUSINESS CODE FOR GROWTH IN THE SOUTH AFRICAN TRANSPORT INDUSTRY

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ABSTRACT

As with each living organism, it is proposed that an organisation possesses a genetic code. In the fast-changing business environment it would be invaluable to know what constitutes organisational growth and success in terms of such a code. To identify this genetic code a quantitative methodological framework, supplemented by a qualitative approach, was used and the views of top management in the Transport Industry were solicited. The Repertory Grid was used as the primary data-collection method. Through a phased data-analysis process an integrated profile of first- and second-order constructs, and opposite poles, was compiled. By utilising deductive and inductive strategies three strands of a Genetic Business Growth Code were identified, namely a Leadership Strand, Organisational Architecture Strand and Internal Orientation Strand. The study confirmed the value of a Genetic Business Code for growth in the Transport Industry.

OPSOMMING

Daar word voorgestel dat 'n organisasie, soos elke lewende organisme, oor 'n genetiese kode beskik. In die snelveranderende sake-omgewing sal dit onskatbaar wees om te weet wat organisasiegroei en –sukses veroorsaak. 'n Kwantitatiewe metodologie-raamwerk, aangevul deur 'n kwalitatiewe benadering is gebruik om hierdie genetiese kode te identifiseer, en die menings van topbestuur in die Vervoerbedryf is ingewin met behulp van die "Repertory Grid" as die vernaamste metode van data-insameling. 'n Geïntegreerde profiel van eerste- en tweedeorde-konstrukte, met hulle teenoorgestelde pole, is opgestel. Drie stringe van 'n Genetiese Sakegroeikode, nl. 'n Leierskapstring, die Organisasieargitektuur-string en die Innerlike-ingesteldheidstring is geïdentifiseer deur deduktiewe en induktiewe strategieë te gebruik. Die studie bevestig die waarde van 'n Genetiese Sakekode vir groei in die Vervoerbedryf.

"Business will never be the same" – this seems to be the new slogan for present and future Chief Executive Managers. The fact of the matter is that the business environment is changing at a frightening pace. The question is – "what can we expect to happen in the business environment?" In an attempt to answer this question authors such as Nadler and Tushman (1999); Peters (1997); Grulke and Silber (2000); Davis (1988); and McCrimmon (1997) identified important key characteristics of business success in pursuit of competitive advantage in an uncertain world.

Inevitably, the rules of the business game are being redefined as changes occur in the business environment. An interesting topic of discussion thus is "what are these new rules now?" and what will they be in the future. The challenge for CEOs, as key element in organisational success in the new millennium, is "How do I face the new environment and make a success of my company?" Determining the performance drivers of organisations, the rules, is nothing new. Many authors have spent much time and effort on this topic. They have expressed early warnings about change; given explanations of the change process and how to make the best of change; and also offered perfect 20-20 hindsight explanations of why the change had happened and what can be learned from it. The question, however, is what the new rules are in the changing environment which will enable business success and growth.

The use of the analogy of a "Genetic Code", or sometimes referred to as the DNA Code of organisations, shows some promise of shedding light on the variables affecting business success and growth. A genetic code provides the means by which organisms can grow successfully in their environments. The genetic code of any organism is the key to life. It is the means by which genetic information is stored as sequences of nucleotide bases in the chromosal DNA (Complete Wordfinder, 1993) enabling (or disenabling) the organism to live and grow successfully in its environment. It seems reasonable to argue that if a Genetic Business Code for Growth could be developed it would serve as a crucial enabler of business growth.

The concept of a Genetic Code for organisations is not new. Cannon (1996) stated that the value of the genetic code of organisations is shaped by the environment in which the organisation has to attain success. He elucidated that such a code largely prescribes how an organisation responds to conditions and stimuli. This Code is deeply embedded in the enterprise and rooted in the culture and values of the organisation. Identifying the basic genetics of successful organisations is the objective of this research.

The concerted effort to grow organisations in volatile times requires an understanding of the capabilities and competencies of organisations, which are held together by the organisation's make-up (i.e. the way in which the organisation is put together and held together to deliver value on a sustainable basis). The CEO must have a very clear view of the challenges that the organisation faces, but s/he must also understand the genetic code for organisational success. The ways in which these capabilities of the organisational genetic code combine and interact with one another will determine the success of the organisation. According to Cannon (1996) this will create a competitive advantage for the company. It is generally believed that the development of a Genetic Business Code for growth will assist managers in understanding business change and will dispel the uncertainty of how to deal with the changing business environment.

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AIMS

The **first aim** of this study was to identify a Genetic Business Code for Growth. Referring back to the changing business environment it would indeed be a daunting task to determine what "really" makes an organisation grow and prosper. Based on scientific beliefs related to both positivistic and humanistic philosophical assumptions, the **second aim** was to develop an appropriate methodology to develop the Business Code. Differently phrased, the challenge here is to apply qualitative and quantitative methodological elements to gather relevant data to develop the Business Code. The **third aim** was to use the results of this study as a departure point to explore the possibility of developing an assessment tool to assess organisations; determine their current "Code"; and identify gaps for renewal interventions.

RESEARCH DESIGN

Research can be categorised into two distinct styles: qualitative and quantitative. The former concentrates on people's feelings and emotions as expressed by, *inter alia*, words and observations used to conceptualise social reality and attempt to describe people in their natural situations or habitat. In contrast, the quantitative approach grew out of a strong academic tradition that places considerable trust, *inter alia*, in quantification by means of numbers, frequencies and concepts or variables. I.e., indicators and measurements of people's perceptions and opinions. It goes without saying that when researchers opt for a combination of these two approaches the study's complexity increases and clarifying its approach becomes a crucial responsibility of the researcher. This study used a mixture of quantitative and qualitative styles.

It is difficult to find an unambiguous and definite statement of what qualitative research compromises in business growth. This is, *inter alia*, due to the fact that the vast majority of research regarding success factors in business is quantitatively orientated. However, the researcher surmises from this study, i.e. determining the Genetic Business Code for Growth, that qualitative research has, amongst others, the following features: carefully collecting data that focus on naturally occurring, ordinary events in natural settings; highlighting the complexity of growth in the everyday business reality; providing ample "rich descriptions", nested in a real-life context, for interpretation; reflecting on the views and experiences of CEOs and Executive Managers, these descriptions can be studied, compared and analysed in the field of business; and locating the meanings CEOs and Executive Managers place on events and processes in organisations, because these constructions are "lived experiences".

The research in this study was, for the greater part, done within a quantitative methodological framework, supplemented by a qualitative approach. As far as the data collection process was concerned, the study is quantitative since (a) a semi-structured interview (the Repertory Grid) was used providing certain themes (regarded as important by the researcher) to the research participants; and (b) a definition of business growth was presented in cases where the research participants needed clarification. The collected data are qualitative because (a) the research participants were requested to provide their views and experiences of the topics freely, i.e. no structured answer possibilities were provided (a qualitative characteristic of the Repertory Grid); (b) the researcher spent some time with the research participants in their natural habitat and at least played some role in discussing their construction of constructs with them; and (c) the perceptions of the research participants were captured in relatively detailed field notes.

Theoretical framework adopted

In order to meet the principle research objective, mainly to describe and explain the views of CEOs regarding business success, a research design was opted for that utilises both quantitative and qualitative assumptions. Symbolic interactionism provided a theoretical framework for this mixed methodology since it describes in a meaningful, intelligible way how research participants perceive and manage their business. In addition, symbolic interactionism also enables researchers to approach social reality by means of positivistic logic when they implicitly or explicitly count and measure their data.

Denzin and Lincoln (1994) explain that symbolic interactionism rests on three premises: **Firstly**, human beings act toward the physical objects and other beings in their environment on the basis of the meanings that these things have for them. **Secondly**, these meanings derive from the social interaction between individuals. **Thirdly**, these meanings are established and modified through an interpretive process. Symbolic interactionism requires that the inquirer actively enter the worlds of people being studied in order to "*see the situation, as it is seen by the actor, observing what the actor takes into account, observing how he interprets what is taken into account*" (Mead, G.H. & Blumer, H., as cited in Denzin & Lincoln, 1994. p. 56).

The participants

The transport organisation that was selected to participate in this study is a diverse national company, operating from all major centres across the country with a turnover of R35, 8 billion and employing more than 80 000 people.

In this study 22 people participated. Their characteristics can be summarised as follows:

- Males dominated the sample, 18 males out of the sample of 22.
- Six CEOs, seven General Managers, six Executive Managers, one Chief Operations Manager and two Senior Managers were interviewed.
- 86% of the South African transport industry was represented in this study.
- 231 constructs were developed.
- The average time spent on an interview was 90 minutes.
- 20 interviews were conducted in the natural habitat of the research participant while two interviews were conducted in the office of the researcher due to logistical reasons.

The breakdown of the sample in terms of designation, gender, and industry representation is summarised in Table 1.

Data collection

The real challenge in this study was not to distinguish between successful and less successful organisations, but to identify those capabilities that actually made the difference. The challenge was to apply managerial subjectivity and perspective and to harness them in such fashion that a realistic Genetic Business Code for Growth could be produced. Therefore, what was required was a tool to quantify the "unquantifiable". It was decided the Repertory Grid presented such a tool.

The Repertory Grid is extremely valuable and enable managers to give some shape to their vague ideas and notions about business success and growth and help them to voice their attitudes, beliefs, feelings and perceptions in a non-threatening way. It provides a means of measuring and representing how they view what is going on around them. Together with a little creative thought, the Repertory Grid became an excellent tool for identifying the elements of the Genetic Business Code for Growth. It is important to take note of the quantitative, as well as the qualitative components of the Repertory Grid. The quantitative components of the Repertory Grid consisted of the selection of elements and elicitation of constructs in a relatively strict environment, which is central to the Grid process. The qualitative component of the Repertory Grid involved the opinionated, free-flowing perceptions, views and opinions that the research participants produced, without being interrupted or restricted.

Table 1
Key features of the sample

Business Unit	Industry	Designation developed	# Constructs	Gender
Business Unit 1	Maritime	CEO	10	Male
Business Unit 2	Not represented	Executive Manager	10	Female
		Executive Manager	11	Male
		Executive Manager	10	Male
		CEO	10	Male
Business Unit 3	Rail	General Manager	10	Male
		General Manager	9	Male
		General Manager	11	Male
		General Manager	9	Male
		General Manager	9	Male
		General Manager	9	Male
Business Unit 4	Maritime	General Manager	15	Female
		Senior Manager	9	Male
		CEO	9	Male
Business Unit 5	Not represented	CEO	13	Male
Business Unit 6	Rail Executive	Manager	10	Male
Business Unit 7	Freight Handling	CEO	17	Female
		Executive Manager	9	Male
Business Unit 8	Aerospace	CEO	11	Female
		Chief Operations Manager	9	Male
Business Unit 9	Not represented	Executive Manager	10	Male
		Senior Manager	11	Male
Total # constructs			**231**	

The constructs listed by the research respondents were recorded on specially prepared perception sheets. These perception sheets displayed, on the left-hand side, all the similarities of the elements and on the right-hand side all the differences. Between them all the elements were listed, because the research participants were asked to rank each of the constructs. Ranking the constructs allowed one to see how each construct was used and to compare constructs, if necessary. The ranking of the constructs can be done in two ways, namely by using the Across-method or the Down-method.

Considering the above, the researcher decided to:

- Interview Chief Executive Officers and Executive Managers in 9 Business units of this transport organisation.
- Use the flowchart, as depicted in Figure 1 as guideline during the data collection process.
- Use the Triads of Elements, and specifically the Minimum Contest Card Form, as construct elicitation method because of its simplicity and user-friendliness.
- Elicit the constructs by allowing the research participant to develop his/her own views and ideas in a free-flow manner. Therefore, the research participant was not influenced in the elicitation process.
- Use the Across-method in the ranking of constructs because this method leads to neater constructs – there is more opportunity and incentive to re-define the construct in use on the one hand, and to eliminate the perceived complexity of the Repertory Grid on the other.

Data analysis

The Repertory Grid produced 231 constructs from 22 research participants. The classification of these constructs involved inductive, as well as deductive reasoning. In the inductive reasoning the first-order constructs were scrutinised in order to establish some sort of revealing pattern that would assist in the classification of the constructs into Strands.

In the deductive reasoning existing findings, views and opinions of scholars in the fields of leadership and organisational management were used to assist in the clustering of constructs in a particular Strand, and into different components. The strategy was to use the views and opinions of current national and international scholars, particularly in the Leadership, Organisational and Human fields of study.

A flowchart of the data analysis process is given in Figure 2. This process flowchart consists of ten different phases and each phase will be discussed separately to facilitate understanding.

Phase 1: Data-gathering: All the constructs captured on the final perception sheets were used. That is, all of the 231 constructs obtained from the 22 participants during the data collection phase.

Phase 2: Classification: This entailed the classification of elements that were used in this study. As this study is interested in the border between performing Business Units and non-performing Business Units a range of Business Units were selected that can be described as performers and non-performers. To classify these Business Units the Corporate Financial Office of this transport organisation was requested to classify the nine Business Units in terms of performers and non-performers. The formula that was used was not prescribed, but reflects the generic formula of Net Operating Profit after financial cost for the year 2001/2. The Business Units were classified in terms of their percentage improvement.

According to the classification the top performers were identified as Business Unit 1, Business Unit 2, Business Unit 3 and Business Unit 4, all with positive improvement results. These four Business Units will ultimately be used to identify the capabilities that will make up the Genetic Business Code for Growth. The non-performers were Business Units 5,6,7,8 and 9. These Business Units will be used to highlight the absence of a Genetic Business Code for Growth ("negative code").

Phase 3: Data combination # 1: This phase involved the following: The gathering of all constructs that were developed for each business unit; as various research participants developed these constructs, all the contributions were combined into one table consisting of the second-order construct, as well as the opposite pole of the construct.

Phase 4: Data reduction # 1: This phase dealt with the elimination of duplication. This procedure involved the following: The physical listing of all the constructs that were developed; the identification of duplicated constructs between research participants; and the elimination of the duplicated constructs.

The end result of this process was the compilation of nine profiles of second-order constructs.

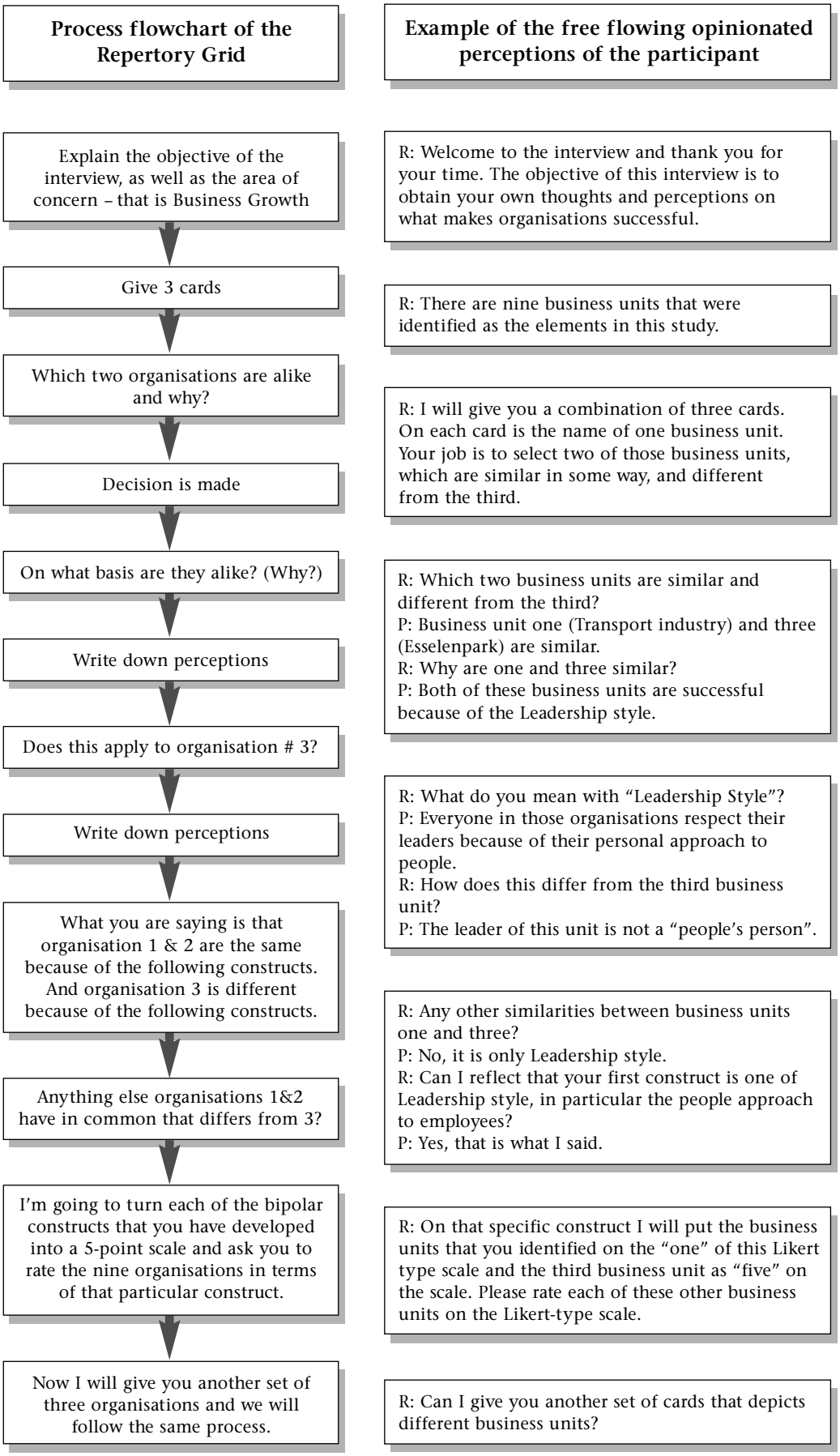

Figure 1: The Repertory Grid procedure (Key: P=Participant; R=Researcher)

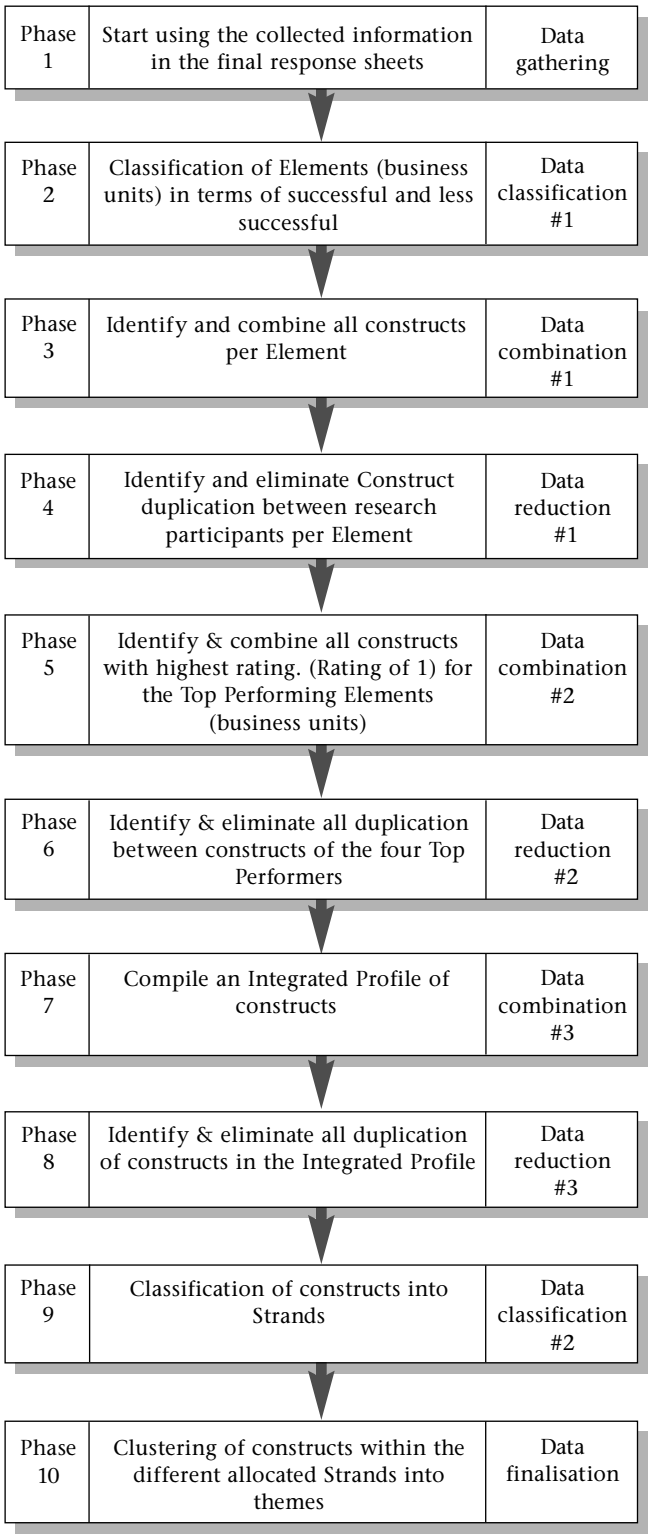

Figure 2: The data analysis process

Phase 5: Data combination # 2: This phase included the identification of the constructs with the highest ranking given by the research participants (ranking of 1).

Phase 6: Data reduction # 2: This phase encompassed the identification and elimination of all duplication of the compiled profiles developed in the previous phase. The end result of this phase was four profiles of the highest-ranked constructs without duplication.

Phase 7: Data combination # 3: This phase dealt with the compilation of an integrated profile of first- and second-order constructs.

Phase 8: Data reduction # 3: This phase included the identification and elimination of the duplication between the four profiles. The end result of this phase was an integrated profile of first-and second-order constructs, without duplicated constructs.

Phase 9: Data classification # 1: This phase involved the classification of the constructs into "themes". The procedure in this phase involved the scrutinising of the constructs and by the inductive way of reasoning underlying similarities or themes were identified. The constructs were then classified into specific themes based on the underlying meaning and themes.

Phase 10: Data finalisation: This phase dealt with the identification of components within the identified Strands through inductive and deductive reasoning.

Table 2 summarises the results of the data analysis reduction process (i.e. Phases 1 to 6).

RESULTS

The Integrated Profile

The integrated profile was the result of Phases one to eight in the data analysis process and consisted of 207 constructs. After three processes of data reduction it was evident that the "business language" of the research participants in this transport organisation was relatively similar. This was substantiated by the fact that 120 duplications were eliminated to produce the final integrated profile of just 89 constructs. The integrated profile with the first- and second-order constructs is given in Table 3.

The first-order constructs listed are the "raw" constructs as identified and developed by the research participants, as they conveyed them to the researcher. In clarification of some of these constructs the Laddering method was used as described by Stewart and Stewart (1990). It is obvious that there are comprehensive similarities between the first- and second-order constructs. The researcher did not add ideas or change constructs in order to make sense of the final constructs.

The constructs that were most frequently duplicated were: "alignment of business processes"; "clarity of purpose"; "integration of processes"; "innovation"; "leadership"; and also people issues, such as "people development" and "retention of talent".

The identification of Strands

Within the 89 constructs given in Table 3 lies the Genetic Business Code for Growth. These 89 constructs are the views and beliefs of 22 research participants of what makes an organisation successful. In the identification of the **first Strand** the 89 constructs of the integrated profile were scrutinised using an inductive strategy in order to establish meaningful relationships or patterns. The field notes were also scrutinised to assist with the establishment of relationships, resulting in 22 constructs that showed a strong relationship with respect to the leadership dimension (the first order constructs 1 to 22 in Table 3). In fact, the construct leadership was one of the most duplicated constructs. These constructs also showed similarities in terms of human behaviour, ethical behaviour, in fact all the "soft" capabilities and competencies that are expected of leaders.

In the deductive approach specific efforts were made to obtain the views of specialists regarding leadership, ethical behaviour, as well as the different components of leadership. These views are summarised in Table 4. It is a fact that the "*under-performance of organisations, nations, families and sporting endeavors can be directly ascribed to ineffectual leadership*" (Charlton, 2000, p. 29). Charan and Tichy (1998), Garratt (2000) and Maxwell (1998) support the complexity of the Leadership dimension. In order to catagorise the developed constructs even further into different components of Leadership, the components indicated by literature as given in Table 4 are used to guide the classification process.

Table 2
Results of the data reduction process

			Constructs awarded by Business Units itself		Constructs awarded by other Business Units		
Business Unit	Research Participants	**Phase 2** Performance Status	**Phase 3** Combination of constructs	**Phase 4** Final set of constructs per element	**Phase 5** # of highest-ranking constructs	**Phase 6** Final set of constructs	Examples of typical constructs
1	1	Successful	10	10	66	48	Leading by example Innovation Clear direction Customer focused Retention of talent Training and development Alignment of processes
2	4	Successful	41	28	88	54	Leadership Customer centric culture People/intangibles Process alignment and integration
3	6	Successful	57	42	103	63	Clarity of purpose Innovation Customer centric culture Business process integration and alignment
4	3	Successful	33	25	76	42	Values Market growth
5	1	Less successful	13	13	Not done	Not done	Clear organisational purpose Reaction to change Direction update frequently Fast reaction to new opportunities Development of human capital
6	1	Less successful	10	10	Not done	Not done	Leadership Clear direction and focus Speed of decisionmaking Heavy investment in people Cutting-cost culture Re-engineering capability
7	2	Less successful	26	20	Not done	Not done	Innovation Customer People
8	2	Less successful	20	17	Not done	Not done	Values People
9	2	Not classified (participants used as substitutes)	21	19	Not done	Not done	Customers

By using these views it seems that the following components of Leadership can be identified: Purpose; Personal competence; Ethical competence; and Transformational competence.

The identified 22 constructs (constructs 1 to 22 in Table 3) showed similarities with the above-mentioned classification. The constructs that supported this classification are given in Table 5.

The following meaning can be attributed to the identification of these constructs:

- It is clear that the research participants ranked the following constructs very high: clarity of purpose; strategic partnerships; sensitivity towards the environment; and leadership. This view is indicative of what is happening in this environment at this stage.
- The construct "understanding the global environment" seems out of place, but if the first-order construct is studied, it is clear that this construct belonged to this dimension.
- The emphasis on values and the management thereof in this organisation can be attributed to the leadership style of the Managing Director and the Board. It is also evident that very few research participants identified specific values. This can be attributed to the lack of consensus with regard to specific values. In the recent past some very high-ranking individuals in this organisation had been disciplined. This also has send a very clear message regarding certain values.
- The constructs, "innovation culture" and the "predisposition to change", dominated the transformational competence component. In this environment the introduction of the Balanced Scorecard as a management tool focused business units with regard to four perspectives, namely Financial performance, Customer satisfaction, Internal Business Processes, and Innovation and Growth. Innovation and transformation is presently very visible because of the measurable criteria linked to it in the Balanced Scorecard.

The visualisation of the Leadership Strand is given in Figure 3.

Table 3
The integrated profile

	First-order constructs	Second-order constructs
1	It is not so much the change but the reaction to it and the ability to handle it. Ability to handle change is a characteristic of a good leader.	Ability to handle change
2	The ability to communicate issues to lower levels is crucial.	Ability to share information
3	Business acumen competencies are crucial.	Business acumen competencies
4	A compelling strategy is to have a clear vision.	Clarity of purpose
5	This environment is known for its strong Leadership. Leadership creates Impact.	Competent Leadership
6	You need to instill values in the organisation. Show me a successful business and I will show you Values, the opposite is painfully also true.	Entrench values in the organisation
7	One of the challenges is the flexibility in decision-making.	Flexibility in decision-making
8	Focus on intangibles.	Focus on intangibles
9	The Leader will focus on operational efficiency in this way he will influence its profitability, by transforming the present operations. I believe that no organisation has ever changed without being efficient first.	Focus on operational efficiency
10	This is sometimes the only decision the CEO can take to survive, it is to ensure existence. This is a strategic decision taken by the CEO. I would expect a Leader to take such a decision. Sometimes an organisation cannot exist without strategic partnerships. It is a characteristic of a good leader to instill direction.	Forming strategic partnerships
11	Loyalty is important.	High levels of loyalty
12	Honesty is a sign that values are managed.	Honesty as a value
13	In today's world you need to be innovative. If your EXCO is innovative everybody will be – people are scared of innovation. You can only transform if you innovate. You need to nurture that competency.	Innovation culture
14	This value is according to me the most important value to consider. What People do not realise is that values is a top-down approach and not a bottom-up approach	Integrity clearly visible
15	By setting an example you are leading by example. If you lead by example you are passionate.	Lead by example
16	As there is ongoing change you must have a predisposition to change. They have a predisposition to change.	Predisposition to change
17	The reaction to change will make the difference and how the leader will react to change. Change transforms people, as well as organisations	Reaction to change crucial
18	To re-engineer means you are not satisfied with the status quo, you need to transform your business.	Re-engineer systems to improve service delivery
19	Environment is a strategic decision; it should come from the top.	Sensitive towards environment
20	A people orientated business, you need to be sensitive towards people.	Sensitive towards people component
21	Solid understanding of the industry is crucial.	Solid understanding of the Industry
22	In the world of globalisation the understanding of this environment is crucial for success. The leadership must understand the global environment.	Understand the global environment
24	Alignment will create value. Alignment will improve productivity. Integration to gain competitiveness. Integration of process is a seamless approach.	Alignment of operational processes
25	They have alternatives in delivery.	Alternatives in service delivery
26	Otherwise the customer will not get to know you. The image drive is for the customer. Image is important for the retention of the market.	Build a strong image
27	Not the clarity of the Vision but clarity of the mission. If you are doing the wrong things you will never get to your destination	Clarity of their mission
28	They have complex internal business processes.	Complex internal business processes
29	They innovate services in order to operate better. Innovation in terms of service delivery.	Consistent innovation of services
30	To integrate your processes is a seamless approach. Integrate processes to gain operating efficiency	Consolidate & integrate business processes
31	If you don't cut costs you will not survive. They are managing the cost structures, in order to operate better.	Cost-driven
32	A customer focused culture. You need to delight the customer. The airline industry is more sensitive towards clients. This how they are doing business.	Customer centric culture
33	It is just evident that some organisations develop strategies in this regard, to improve their customer profitability. It will ensure their existence.	Drive a strategy to grow the market
34	People development is crucial. People development is a priority. Should drive this trough SDF's and budgeting processes. The development should be a strategy. The opposite is bankruptcy.	Drive people development
35	They drive performance management as a process.	Drive performance management within business
36	These are driven by economic principles	Driven by economic principles
37	An empowerment culture exists. Knowledge grows people. More productive employees.	Empowerment culture
38	Engineering driven solutions makes a difference will improve operational efficiency.	Engineering-driven solutions
39	If you are too big for your own shoes you need to go across border. But it is strategic decision, can influence your purpose.	Expansion strategies across border

40	If your marketers cannot decide you're dead. Otherwise you will close your doors.	Fast decision-making speed
41	Fast reaction to new opportunities.	Fast reaction to new opportunities
42	Speed to customer counts.	Fast response time to customer
43	They focus on a limited number of products.	Focus on a limited number of products
44	This decision was made on a strategic level.	Focus on core business processes
45	This is a monopolistic regulated environment.	Highly regulated environment
46	These are in a competitive environment.	In a competitive environment
47	The internal communication is good.	Internal communication excellent
48	Internal relationships with people are stable. You can grow in this environment. Stable environment grows people.	Internal relationships with employees very stable
49	Introduction of technology to improve business processes.	Introduction of technology in business processes
50	Invest in operational infrastructure.	Invest in operational infrastructure
51	There should be a very strong learning capability.	Learning capability
52	The safety drive is prominent. Safety as an integral business process.	Manage safety as integral business process
53	They have multiple opportunities for personal exposure	Many opportunities for personal exposure
54	They have a monopoly in the market.	Monopoly in the market
55	These businesses optimise their logistics offering.	Optimise logistics offering
56	You got to play to your strengths, outsource. Outsource non-core business.	Outsource non-core processes
57	The ownership of the infrastructure is a competitive advantage.	Ownership of infrastructure is a competitive advantage
58	The competency lies with people, you need to be people orientated.	People-oriented businesses
59	They are perceived to be for the common good.	Perceived to be for common good
60	They recruit talented people.	Recruit talented people
61	Will improve service delivery and effectiveness.	Redesign business processes
62	You need to re-evaluate your operating assets. This is a strategic decision.	Re-evaluation of operating assets in terms of their life cycle
63	Extensive training and the refocusing of training and development are important. You got to refocus your training.	Refocus training and development
64	The environment will allow you just that much, you need to reposition yourself to the market.	Reposition to market
65	The planning of processes made a difference.	Require strict planning of internal processes
66	They retain customers because of their strategies.	Retention of customers as a strategy
67	These businesses are retaining talent. The management and retention of talent.	Retention of talent
68	You can manage cost structures by ringfencing the business.	Ringfence the business to identify the cost-drivers
69	Pursue a short-term agenda Some organisations pursue short-term agendas for strategic reasons.	Short-term agenda
70	You got to build an Infrastructure base.	Spent time to build infrastructure base
71	This is a regulated industry where the laws govern.	Subject to regulation
72	Teams prosper in this environment.	Teams prosper
73	They unbundled their processes.	Unbundle their processes
74	These businesses understand customer needs.	Understand customer needs
75	They use excellent service as a differentiating strategy. They differentiate themselves in terms of service delivery.	Use excellent service as a differentiating strategy
76	You must lift the bar of performance. The utilisation of intellectual capital gives you that advantage.	Utilisation of intellectual capital
77	Identify the contributions in the value chain.	Value chain focus
78	Where there is passion there is success. Passionate leaders. Passion in people.	Business drive and passion visible
79	This is a mind thing – you cannot accept your direction for very long. In the changing environment you cannot accept your direction for very long.	Direction updated frequently
80	There is a drive towards efficiency to optimise value through competitiveness.	Drive towards efficiency to optimise value through competitiveness
81	This is an interesting one, if the majority of the people are committed and are passionate the chances are that their business is successful. This is according to me a distinguishable characteristic.	High commitment of employees
82	Intrapreneurship capability is more prominent.	Intrapreneurship
83	Inventing your future is a predisposition to change, look at the Transport industry, they make things happen.	Invent their future
84	It is a concerted effort to make happen what you believe in. You got to manage your own destiny as a person first and then it will rub off on everyone else.	Manage own destiny
85	This is very much a spiritual thing.	Personal insight
86	You do a reality check. You cannot accept that everything will stay the same. I know it is difficult for some people to frequently check and re-check, but you must do it.	Reconsider identity
87	They were forced out of their mental state of being a parastatal – they had to redefine their purpose.	Redefine purpose
88	I see this as a state of mind of people. You are knocked down and you keep coming up, keep improving your services this is resilience and renewal	Resilience & renewal
89	Improved service offering means a sustainable commitment to excellence, this is a drive.	Sustainable commitment to excellence

Table 4
Leadership components indicated by literature

Component	Authors
Personal competence	Bennis and Mische (1995); Covey (1997); Garratt (2000); Kotter (1995); Maxwell (1998); Veldsman (2002)
Ethical competence	Bennis (1997); Cannon (1996); Charan and Tichy (1998); Garratt (2000); Kotter (1995); Maxwell (1998); Veldsman (2002)
Purpose	Bennis (1996, 1997); Bennis and Mische (1995); Cannon (1996); Senge (1990)
Transformational competence	Bennis (1989); Charan and Tichy (1998); Veldsman (2002)

The motivation for this study states that the findings of this study could be utilised for future renewal and redesign exercises within this transport organisation. Linked to this is the practical contribution, of this study, the development of a tool, as one of the major outcomes of the proposed research. To achieve this objective it was decided to apply the opposite construct pole in the same manner as with the Leadership Strand to visualise the opposite dimensions and components. With this approach a clearer vision of leadership, as it was developed in this study, would be created. As this opposite pole indicates several deficiencies in leadership as it was developed in this study, this Strand was aptly named the Leadership-deficiency Strand. Given space constraints this Strand could not be included in the article but it is available in Vermeulen (2002, p.65).

Purpose
- Clarity of purpose
- Forming strategic partnerships
- Sensitive towards environment

Personal Competence
- Ability to handle change
- Ability to share information
- Business acumen competencies
- Competent leadership
- Flexibility in decision-making
- Focus on intangibles
- Sensitive towards the people component
- Solid understanding of the industry
- Understand the global environment

Ethical Competence
- Entrench values in the organisation
- High levels of loyalty
- Honesty as a value
- Integrity clearly visible
- Lead by example

Transformational Competence
- Focus on operational efficiency
- Innovation culture
- Predisposition to change
- Reaction to change crucial
- Re-engineering capability

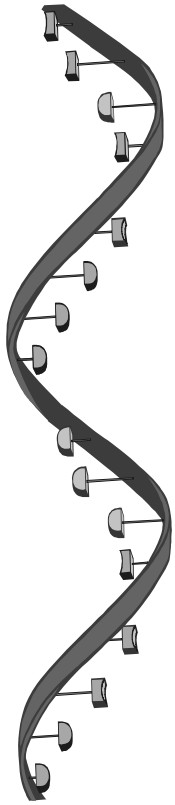

Figure 3: The Leadership Strand

Table 5
Leadership components supported by constructs

Component	Construct	# Respondents	Typical comments
Purpose	Clarity of purpose Forming strategic partnerships Sensitive towards the environment	14 participants 8 participants 2 participants	"This is sometimes the only decision a CEO can take to survive. It is to ensure existence" "This is a strategic decision taken by the CEO. I would expect a leader to take such a decision" "It is a characteristic of a good leader to instill direction." "It is not really a new thing, it is a very old principle to be sensitive towards the environment. It should come from the top, it is a strategic decision."
Personal competence	Ability to handle change Ability to share information Business acumen competencies Competent leadership Flexibility in decision-making Focus on intangibles Sensitive towards people component Solid understanding of Industry Understand the global environment	1 participant 1 participant 1 Participant 11 Participants 1 Participant 2 Participants 1 Participant 1 Participant 2 Participants	"Leadership creates impact". "A people orientated business, you need to be sensitive towards people." "This environment is known for its strong Leadership." "Business acumen competencies are crucial."
Ethical competence	Entrench values in the organisation High levels of loyalty Honesty as value Integrity clearly visible Lead by example	6 Participants 1 Participant 1 Participant 2 Participants 1 Participant	"This value is according to me the most important value to consider. What people do not realise is that values is a top-down approach and not a bottom-up approach." "Show me a successful business and I'll show you values. The opposite is, painfully, also true."
Transformational competence	Focus on operational efficiency Reaction to change crucial Predisposition to change Innovation culture Re-engineering capability	1 Participant 1 Participant 4 Participants 12 Participants 1 Participant	"The reaction to change will make the difference and how the leader will react to change. Change transforms people, as well as organisations." "You can only transform if you innovate", "Innovation needs to be built as a competence in the organisation" "The leader will focus on operational efficiency, in this way he will influence its [the organisation's] profitability, by transforming the present operations. I believe that no organisation has ever changed without being efficient first." "To re-engineer means you are not satisfied with the status quo, you need to transform your business."

The same methodological approach was followed in the development of the **second Strand**. By using an inductive approach the first- and second-order constructs were scrutinised, and based on the meaning the research participants gave to these, 55 constructs were identified that showed certain similarities with business processes in an organisation (constructs 23 to 77 in Table 3). Processes such as performance management, cost management, and decision-making were mentioned. Where the previous constructs focused on the "soft" issues in an organisation, these constructs focused more on the "hard" aspects of an organisation.

A deductive approach was followed in identifying the components of the organisational architecture environment. "*After all we have said about the characteristics of the 21st century Corporation and the drivers of change, the new markets, the information technology, the stakeholders, and so forth, what can we say about what the new corporation looks like? What's its architecture?" (Wind & Main, 1999. p. 301).* On the same subject Veldsman (2002) emphasises that, *"Architecture is one of the most important means to bridge the strategic gap between the organisation's present and desired future positions. Decisions regarding architecture determine how the organisation interfaces with its markets and clients, where the organisation focuses its energies, influences the deployment of resources, facilitates or constrains the accomplishments of work, motivates various types of job performance, and shapes the pattern of formal and informal interactions and relationships that unfold over time*" (p. 103). The components indicated by literature are presented in Table 6 to guide the classification process.

TABLE 6
ORGANISATIONAL ARCHITECTURE COMPONENTS INDICATED BY LITERATURE

Component	Authors
Strategic direction	Clegg and Birch (1998); Garratt (2000); Ghoshal and Bartlett (1995); Longenecker, Simonetti and Sharkey (1999); Sunter (1992)
Customer centricity	Hamel (1990); Nadler and Tushman (1999); Porter (1979); Prahalad and Wilson (1999)
People effectiveness	Garratt (2000); Ghoshal and Bartlett (1995); Huang (2001); Kaplan and Norton (1996); McCoy (1996); Veldsman (2002)
Operating efficiency	Beer and Nohria (2000); Kaplan and Norton (2001); Nohria and Ghoshal (1997); Owen, Mundy, Guild and Guild (2001); Porter (1987)

By considering the results of the inductive and deductive reasoning, and for the purposes of this study Organisational Architecture will be seen as a series of related processes that focuses on the achievement of strategic direction, customer centricity, people effectiveness and operating efficiency.

Table 7 reflects these components as supported by the constructs.

In order to attach meaning to these elicited constructs the following comments are appropriate:

- The majority of constructs were developed in the customer centricity, people effectiveness and operating efficiency components. This can be ascribed to a degree of uncertainty that exists in this environment with regard to strategic direction.
- It seems that the majority of research participants identified the following constructs: "build strong image", "customer centric culture", "drive a strategy to grow the market", "fast decision-making speed", "fast reaction to new opportunities" and "reposition to market". The first-order constructs were scrutinised and the source of these constructs seemed to be all of the Business Units. This result could be ascribed to the introduction of the Balanced Scorecard in this environment.
- The "people effectiveness" component was dominated by one Construct, namely "drive people development". The source of this component was all of the Business Units involved in this study.
- The constructs "internal relationships with employees" and "empowerment culture" were the only two constructs that were not that obviously related to the development of people. The first-order constructs, however, indicated that these constructs definitely belonged to this component.
- The fact that the majority of research participants identified the "people development" construct, but few broke it down into other components can be attributed to the fact that in this environment heavy emphasis is currently placed on human development.
- The constructs "recruit talented people" and "retention of talent" indicated the urgency in this organisation to manage talent. This could also indicate the undersupply of appropriate talent in the Transport Industry.
- The fact that the "alignment and integration of processes" received so much attention, whereas the construct "introduction of technology" received so little attention, was difficult to explain, as this environment is strongly technology driven.
- With regard to "safety" and "cost-driven" the source of these constructs was only one Business Unit. This seemed acceptable as especially the safety issue is of the utmost importance to this Business Unit as several accidents had influenced its image during 2000/1.

Taking the above-mentioned into consideration, the second set of constructs were classified as the Organisational Architecture Strand. This Strand is visualised in Figure 4.

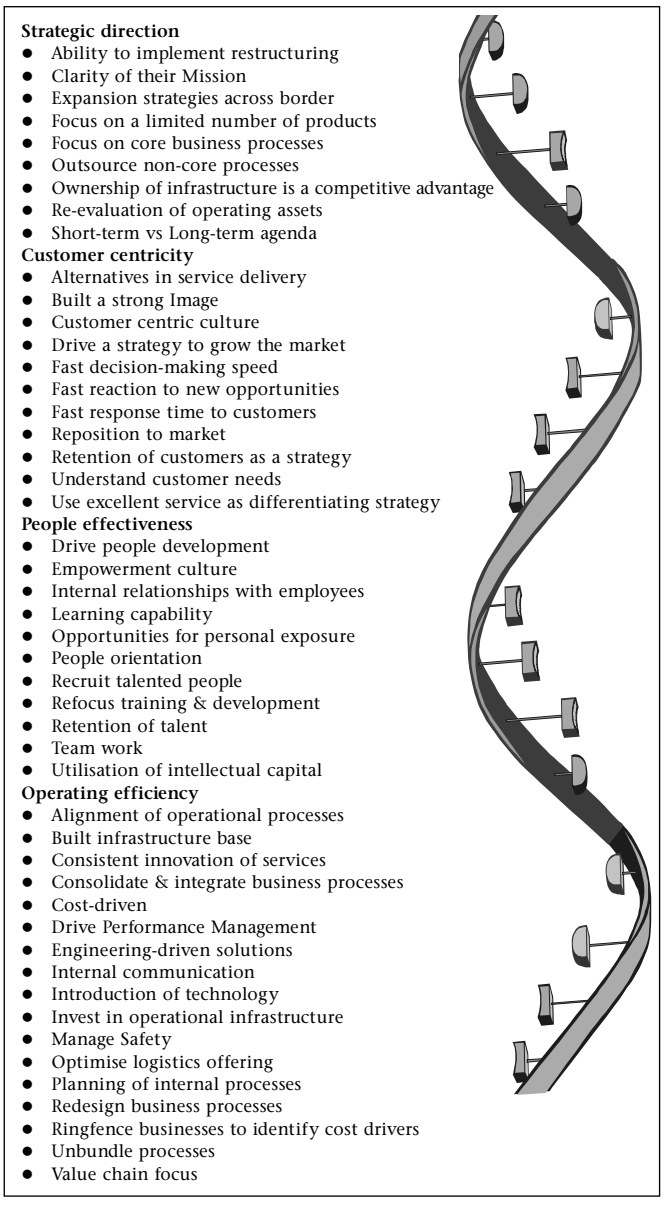

Figure 4: The Organisational Architecture Strand

TABLE 7
ORGANISATIONAL ARCHITECTURE COMPONENTS SUPPORTED BY CONSTRUCTS

Component	Construct	#Respondents	Typical comments
Strategic direction	Ability to implement restructuring	2 participants	"They implement restructuring efforts."
	Clarity of their mission	1 participant	"Not the clarity of the Vision but clarity of the Mission
	Expansion strategies across border	1 participant	If you are doing the wrong things you will never get to your destination."
	Focus on limited number of products	1 participant	"If you are too big for your own shoes you need to go across border
	Focus on core business processes	2 participants	But it is strategic decision, can influence your purpose."
	Outsource non-core processes	2 participants	"This decision was made on a strategic level"
	Ownership of infrastructure is a competitive advantage	1 participant	"You got to play to your strengths, outsource." "Outsource non-core business."
	Re-evaluation of operating assets	1 participant	"You need to re-evaluate your operating assets. This is a strategic decision."
	Long-term vs. Short-term agendas	1 participant	"Pursue a short-term agenda. Some organisations pursue short-term agendas for strategic reasons."
Customer centricity	Alternatives in service delivery	1 participant	"They have alternatives in delivery."
	Build a strong image	7 participants	"Otherwise the customer will not get to know you."
	Customer centric culture	17 participants	"The image drive is for the customer. Image is important
	Drive a strategy to grow the market	7 participants	for the retention of the market."
	Fast decision-making speed	5 participants	"You need to delight the customer."
	Fast reaction to new opportunities	3 participants	"It is just evident that some organisations develop
	Fast response time to customer	1 participant	strategies in this regard, to improve their customer
	Reposition to market	4 participants	profitability. It will ensure their existence."
	Retention of customers as a strategy	1 participant	"If your marketers cannot decide you're dead."
	Understand customer needs	1 participant	"Speed to customer counts."
	Use excellent service as a differentiating strategy	1 participant	"The environment will allow you just that much, you need to reposition yourself to the market." "They use excellent service as a differentiating strategy. They differentiate themselves in terms of service delivery."
People effectiveness	Drive people development	14 participants	"People development is crucial. People development is a priority.
	Empowerment culture	2 participants	Should drive this through SDFs and budgeting processes. The development
	Internal relationships with employees	2 participants	should be a strategy. The opposite is bankruptcy."
	Learning capability	1 participant	"An empowerment culture exists. Knowledge grows people. More
	Opportunities for personal exposure	1 participant	productive employees."
	People orientation	1 participant	"Internal relationships with people are stable. You can grow in this
	Recruit talented people	2 participants	environment. Stable environment grows people."
	Refocus training & development	1 participant	"There should be a very strong learning capability."
	Retention of talent	2 participants	"The competency lies with people, you need to be people orientated."
	Team work	1 participant	"These businesses are retaining talent. The management and retention
	Utilisation of intellectual capital	1 participant	of talent."
Operating efficiency	Alignment of operational processes	5 participants	"Alignment will create value. Alignment will improve productivity.
	Built infrastructure base	1 participant	Integration to gain competitiveness. Integration of process is a
	Consistent innovation of services	1 participant	seamless approach."
	Consolidate and integrate business processes	8 participants	"You got to build an Infrastructure base."
	Cost-driven	1 participant	"They innovate services in order to operate better. Innovation in terms
	Drive performance management	2 participants	of service delivery."
	Engineering-driven solutions	1 participant	"To integrate your processes is a seamless approach."
	Internal communication	1 participant	"Integrate processes to gain operating efficiency."
	Introduction of technology	1 participants	"If you don't cut costs you will not survive. They are managing the cost
	Invest in operational infrastructure	2 participants	structures, in order to operate better."
	Manage safety	1 participant	"They drive performance management as a process."
	Optimise logistics offering	2 participants	"Engineering-driven solutions make a difference will improve operational
	Planning of internal processes	2 participants	efficiency."
	Redesign business processes	2 participants	"The internal communication is good."
	Ringfence business to identify cost-drivers	1 participant	"Introduction of technology to improve business processes."
	Unbundle processes	1 participant	"The safety drive is prominent. Safety as an integral business process."
	Value chain focus	1 participant	"Will improve service delivery and effectiveness." "You can manage cost structures by ringfencing the business." "Identify the contributions in the value chain."

The opposite Construct pole was applied in the same manner as with the Leadership Strand to visualise the contrasting dimensions and components. As this opposite pole indicates confusion with regard to direction, a total lack of movement (or speed) and a lack of pro-active decision-making it was decided to name the opposite strand the Dinosaur Strand. Clegg and Birch (1998) also refered to this type of characteristics as "dinosaur" characteristics (see Vermeulen, 2002, p.74 for a visual representation of this Strand).

The identification of the first two Strands paved the way to classify the rest of the constructs into a **third Strand**. The field notes were scrutinised to assist with the establishment of relationships. Twelve constructs showed a strong relationship with respect to a mental attitude that is needed to ensure growth (constructs 78 to 89 in Table 3). It seems that these constructs indicated that, besides the behavioural competencies and the organisational capabilities, a third "theme" was necessary to ensure organisational success. This "theme" included an "attitude" or "personality" that individuals possess and impose onto their respective organisations which made a difference.

An inductive way of reasoning was also used in order to classify the identified constructs into components. Charan and Tichy (1998) mentioned that the one factor that distinguishes organisations that grow from organisations that cannot grow is not the businesses they are in, because there are losers in growth industries or markets, and winners in declining ones. Neither is it the tactics they use. It is rather "a state of mind". This "state of mind" seems to be the "third" element that ensures sustainable growth. De Geus (1997) proposed that it is "*the innate spirit that moves and propels a company*". He explains that an organisation is not just a bundle of individuals or a combination of assets and individuals. Each living being has an undifferentiated wholeness, with its own character, which can be called its "Persona". Zohar (1997) calls this "one factor" the "instinct" of an organisation. She explains that deep transformational change requires that one literally rewire one's brain, that one grow new neural connections.

Table 8
Internal orientation components indicated by literature

Component	Authors
Spiritual core	Cavanagh (1999); De Geus (1997); Hock (1999)
Mental core	Charan and Tichy (1997); Hock (1999)
Emotional core	Charan and Tichy (1997); Cooper and Sawaf (1997)
Drive and Passion	Charan and Tichy (1997); Clegg and Birch (1998); Collins and Porras (1998); Levicki (1998)

In order to catagorise the developed constructs even further, the components indicated by literature is presented in Table 8 to guide the classification process.

By following inductive and deductive strategies a third Strand was identified. This Strand for the purposes of this study will be classified as the Internal Orientation Strand. This Strand consists of the spiritual, emotional and mental core with drive and passion as foundation. The supporting constructs are depicted in Table 9.

The following observations regarding the identification of this Strand are relevant: To establish meaning was difficult in the case of this Strand, as not enough constructs were developed. The inability of more research participants to recognise drive and passion, whereas the people component, and especially the "people effectiveness" component, received so much attention is difficult to explain. An indication could be that the majority of the research participants believed that the influence of drive and passion was minimal. Another reason for the apparent lack of more constructs in this component could be that the sample of 22 research participants was just not enough to identify sufficient similar constructs.

The Internal Orientation Strand is visualised in Figure 5.

The opposite-construct pole was applied to develop the opposite of the Internal Orientation Strand. This opposite Strand was characterised by a general absence of a "spirit" in the organisation and the absence of mental and emotional competencies. As the term "zombie" refers to the absence of "spirit" in general, it was decided to call this Strand the "Zombie Strand" (see Vermeulen, 2002, p. 79 for a visual representation of this Strand).

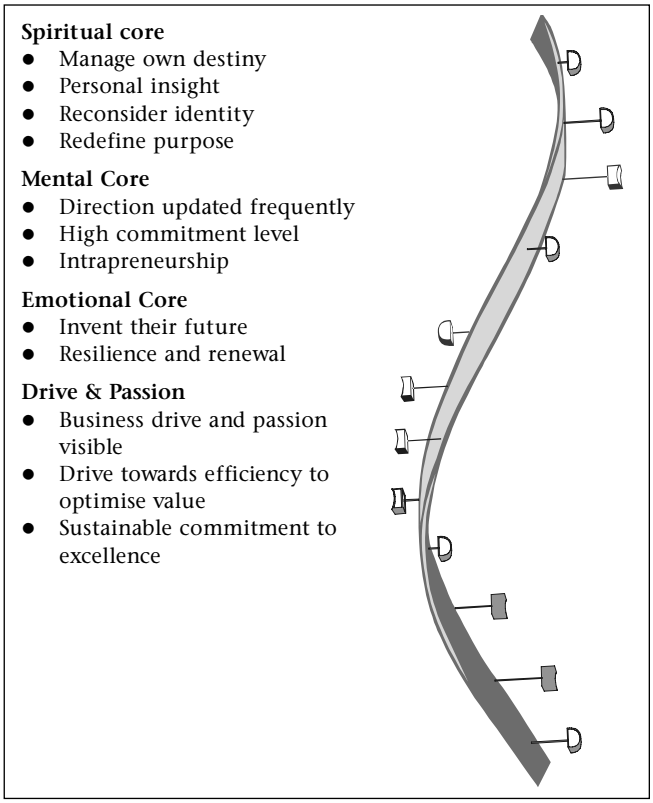

Figure 5: The Internal Orientation Strand

Table 9
Internal orientation components supported by constructs

Component	Construct	#Respondents	Typical comments
Spiritual core	Manage own destiny Personal insight Reconsider identity Redefine purpose	2 participants 1 participant 1 participant 2 participants	"It is a concerted effort to make happen what you believe in. You got to manage your own destiny as a person first and then it will rub off on everyone else." "This is very much a spiritual thing." "You do a reality check. You cannot accept that everything will stay the same. I know it is difficult for some people to frequently check and re-check, but you must do it." "They were forced out of their mental state of being a parastatal – they had to redefine their purpose."
Emotional core	Invent their future Resilience and renewal	1 participant 1 participant	"Inventing your future is a predisposition to change, look at the Transport industry, they make things happen." "I see this as a state of mind of people. You are knocked down and you keep coming up, keep improving your services this is resilience and renewal."
Mental core	Direction updated frequently High commitment level Intrapreneurship	3 participants 1 participant 2 participants	"This is a mind thing – you cannot accept your direction for very long. In the changing environment you cannot accept your direction for very long." "This is an interesting one; if the majority of the people are committed and are passionate the chances are that their business is successful. This is according to me a distinguishable characteristic." "Intrapreneurship capability is more prominent."
Drive and Passion	Business drive and Passion clearly visible Drive towards efficiency to optimise value Sustainable commitment to excellence	1 participant 1 participant 1 participant	"Where there is passion there is success. Passionate Leaders. Passion in people." "There is a drive towards efficiency to optimise value through competitiveness." "Improved service offering means a sustainable commitment to excellence, this is a drive."

DISCUSSION AND APPLICATION OF FINDINGS

Based on the above findings an Integrated Genetic Business Code Model is proposed (given in Figure 6) which depicts three strands with the Internal Orientation Strand in the centre. (In contrast the Genetic Code for all known organisms has two strands and is therefore refered to as the "double helix"). According to Zohar (2000) when individuals use their spiritual intelligence, they see things from the centre of their being. It can therefore be argued that the Internal Orientation Strand acts as the "spinal cord" of the Genetic Business Code. Charan and Tichy (1998) highlight that the genetic code embodies the leader's ideas, values and emotional energy. According to Charan and Tichy (1998) this strand indicates how everyone thinks, acts and behaves. Ideas for Growth will originate from the centre strand, namely the Internal Orientation Strand, and values by the ethical component of the Leadership Strand.

The "constituting" role is the function of the Internal Orientation Strand, whereas the "structuring" role is the function of the Organisational Architecture Strand. The "acting" role is the function of the Leadership Strand. The horisontal and vertical characteristics of the Model highlight the interdependency and interrelatedness between these Strands, as well as their components. A deficiency in one component will consequentially influence the total alignment and functioning of the Model.

As all of the research participants identified constructs for each Business Unit, relatively "thick" descriptions are available of those capabilities and competencies for business success. The application of the findings is focused by specific Business Unit, as seen by the research participants. Although based only on the views and perceptions of the research participants, these profiles can be presented with the objective of establishing patterns and exploring the possibility of developing an assessment tool that would indicate possible areas of intervention or renewal. A pattern represents different combinations of the three Stands developed above.

In order to establish patterns, the highest-ranking constructs for each of the Business Units was used to compile a profile for each of the nine Business Units. These profiles were compared to the respective strands of the Genetic Business Code for Growth (see Figures 3,4 and 5) and the fit was expressed as a percentage. With these profiles certain patterns were identified as given in Table 10. From studying Table 10 it was evident that Business Unit 3 has the highest fit (77.25%) followed by Business Unit 2 (64,6%), Business Unit 9 (61,25%), Business Unit 1 (57,5%), Business Unit 7 (47,8%), Business Unit 8 (47%), Business Unit 4 (41,4%), Business Unit 5 (41,1%) and Business Unit 6 (22%).

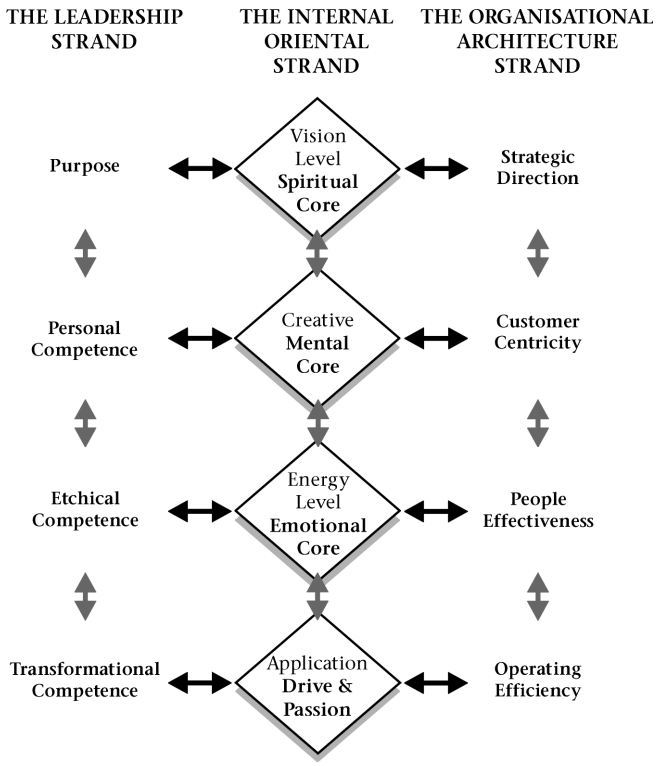

Figure 6: The Integrated Genetic Business Code Model

TABLE 10
SUMMARY OF PERCENTAGE FIT BETWEEN PROFILES FOR THE PARTICIPATING BUSINESS UNITS

		Business units (From performing to underperforming)								
Strands	**Components**	**Business Unit 3**	**Business Unit 2**	**Business Unit 9**	**Business Unit 1**	**Business Unit 7**	**Business Unit 8**	**Business Unit 4**	**Business Unit 5**	**Business Unit 6**
Leadership	Purpose	100	100	100	100	66	66	100	100	60
	Personal competence	55	33	55	55	44	55	77	33	22
	Ethical competence	100	80	60	60	20	40	60	60	20
	Transformational competence	100	60	100	60	80	80	40	60	20
Organisational Architecture	Strand Strategic direction	77	77	33	44	33	66	55	33	11
	Customer centricity	54	72	90	54	63	63	45	36	54
	People effectiveness	45	81	63	54	36	36	54	36	36
	Operating efficiency	70	41	52	64	41	41	41	70	23
Internal Orientation Strand	Spiritual core	60	50	50	50	75	25	25	0	25
	Mental core	66	66	66	66	33	60	0	33	0
	Emotional core	100	50	0	50	50	0	0	0	0
	Drive and Passion	100	66	66	33	33	35	0	33	0
	% Fit	**77,2%**	**64,6%**	**61,2%**	**57,5%**	**47,8%**	**47,0%**	**41,4%**	**41,1%**	

Business Units 1,2 and 3 had been identified as high performers in the initial classification of the Business Units. Business Unit 9, although not participating in the study, was highly ranked by the research participants. This exercise showed a high correlation with the initial classification of the Business Units in terms of hard performance measurements (Phase 2 of data analysis). The validity of the Strands is therefore confirmed by the high relationship between the classification of the participating Business Units in terms of performance measures and their profiling in terms of the Strands.

The performance averages on the different strands is depicted in Table 11.

In order to develop patterns it is essential to look at the average performances in the different Strands. Only two Business Units, namely Business Unit 2 and 3, performed well in all the Strands. It is believed that if less than 50% of the components of the Genetic Business Code for Growth are present it shows a weakness in that specific Strand, and if more than 50% is present it indicates adequate representation. All possible permutations were present in the sample, namely a fit with all three Strands being adequately present; secondly two Strands being adequately present; thirdly only one Strand being adequately present; and lastly no Strands being adequately present. These four types of combinations were used to establish patterns.

As this method of classification has not yet been tested extensively to establish its validity and reliability, it is difficult to assess which of the Strands are relatively more valuable in predicting organisational success. However, it is hypothesised that the Internal Orientation Strand will be the first Strand to show a weakness when an organisation is faced with a challenge, because this Strand provides orientation and strength towards problem solving. The second Strand to show weakness will be the Organisational Architecture Strand, followed by the Leadership Strand.

As the classification showed that Business Units 2 and 3 were adequate in all three Strands (see Table 11) the pattern typifying these Business Units were entitled as **Wealth Creators**. Organisations that displayed such a balanced profile usually create wealth in the environment in which they operate. This type of organisation has all the potential to unlock the vision level as described in the discussion of the Integrated Genetic Business Code Model (see Figure 6). Because there are creative resources available, the organisation moves effortlessly to the collective human energy level that enables the organisation to use individual drive and passion to apply strategic thinking. Both these Business Units were rated relatively high on the Organisational Architecture Strand, which means that they are perceived to have clarity with regard to their strategic direction; that the majority of the employees are sensitive to the customer; and that the people are effective and the processes efficient. The perceived strength of both these Business Units lie in the Leadership Strand.

Business Units 1,8 and 9 were classified as manifesting the **Wealth Inhibitor** pattern. All three Business Units were perceived to be insufficiently strong in the Internal Orientation Strand. Although these Business Units displayed a certain amount of purpose, personal competence, ethical competence and transformational competence (i.e. Leadership Strand), the weak link, were that they lack the Internal Orientation Strand that produces creative ideas for growth; the collective human energy; and drive and passion for application. The value of the Internal Orientation Strand was evident in this case. If this deficiency is not addressed the chances are that these Business Units could lose momentum in the quest for success because this distinct pattern hinders or restrains action.

Business Units 4,5 and 7 displayed the **Wealth Terminator** pattern. The characteristic of this pattern is that it destroys the organisation from the inside. All three these Business Units were perceived to have certain leadership competencies. Although there seems to be purpose supported by certain personal, ethical and transformational competence, the "constructing" and "structuring" functions were absent. This means that the organisational environment is not conducive to leadership influences, resulting in the lack of unleashing the transformational leadership competence. Although the workforce might understand the purpose, there is not enough drive, passion and collective human energy to apply transformation. In turn, this influences the Organisational Architecture Strand with a subsequent underperformance in customer centricity, people effectiveness and operating efficiency.

The last distinct pattern was named the **Wealth Demolisher** pattern. This pattern depicted an organisation that is under-performing in all three Strands. Business Unit 6 was perceived by the research participants to be in this category. This pattern is characterised by the total breakdown of essential processes, competence and ideas. It is believed that the majority of the workforce would be frustrated in this type of environment. No vertical and horisontal alignment would exist between the Strands because of the breakdown in trust. In this type of work environment people would just doing enough to stay out of trouble, resulting in an under-performing organisation.

CONCLUSION

A quantitative methodological framework, supplemented by a qualitative approach was used to identify a Genetic Business Code for Growth consisting of a Leadership Strand, an Organisational Architecture Strand and an Internal Orientation Strand.

The development of a Genetic Business Code for the Transport Industry described above, could add value in terms of:

- performance improvement: the introduction of the Code can assist organisations in improving their financial performance, delivery and customer satisfaction;
- establishing a holistic approach to business growth within organisations, in this way establishing systemic thinking;
- developing an assessment tool to identify strengths and weaknesses regarding their Genetic Business Codes; and
- assisting Business Units in developing appropriate measurable criteria for inclusion in their respective Balanced Scorecards.

TABLE 11
PERFORMANCE AVERAGES ON THE DIFFERENT STRANDS

Strands	Business Unit 3	Business Unit 2	Business Unit 9	Business Unit 1	Business Unit 7	Business Unit 8	Business Unit 4	Business Unit 5	Business Unit 6
Leadership Strand	**88**	**68**	**78**	**68**	**60**	**52**	**69**	**63**	30
Organisational Architecture Strand	**61**	**67**	**59**	**54**	**51**	43	48	43	31
Internal Orientation Strand	**81**	**58**	45	49	29	47	6	16	6

The major strengths of the study are that a Genetic Code of Business Growth was developed, applied empirically and validated; the research design adopted a combination of qualitative and quantitative research; and the opportunities the study opens up for future research. The major weaknesses are that the study was limited to a single organisation dominating a single industry, hence the generalisation of the findings is limited at this point in time; and the unfamiliarity of the researcher initially with a qualitative research approach may have hampered the optimal execution of the study. All in all it is believed, however, that the strengths of the study outweigh its weaknesses.

REFERENCES

Bartlett, C. & Ghoshal, S. (1995). Changing role of Top Management. Beyond Structure to Process. *Harvard Business Review*, January/February 1995, 86-96.

Beer, M. & Nohria, N. (2000). *Breaking the code of change*. United States: Harvard School Press.

Bennis, W. (1997). Becoming a leader of leaders. In: *Rethinking the future*. R.Gibson (ed.). Great Britain, Nicholas Brealey Publishing Limited.

Bennis, W.B. & Mische, M. (1995). *The 21st Century Organization*. Johannesburg: Pfeiffer & Company.

Bogdan, R & Biklen, S.K. (1998). *Qualitative research for education*. An introduction to theory and methods. Boston: Allyn & Bacon.

Cavanagh, G.F. (1999). Spirituality for managers: context and critique. *Journal of Organizational Change Management*. Volume 12, Number 3, 186-199.

Cannon, T. (1996). *Welcome to the Revolution. Managing Paradox in the 21st Century*. London: Pitman Publishing.

Charan, R. & Tichy, N.M. (1998). *Every Business is a Growth Business*. New York: Three Rivers Press.

Charlton, G. (2000). *Human habits of highly effective organisations*. Pretoria: Van Schaik.

Clegg, B. & Birch, P. (1998). *Disorganization – The Handbook of creative organizational change*. London: Financial Times Pitman Publishing.

Collins, J.C & Porras, J.I. (1998). *Built to last*. Successful habits of visionary companies. London: Random House Business Books.

Cooper, R.K & Sawaf, A. (1997). *Emotional Intelligence in Leadership and Organizations*. New York: The Berkley Publishing Group.

Covey, S. (1997). *Putting principles first*. In: Rethinking the future. Gibson, R. (ed). London: Nicholas Brealey Publishing.

Craig-Cooper, M. & De Backer, P. (1993). *The Management Audit. How to create an effective Management Team*. London: Financial Times. Pitman Publishing.

Davis, S.M. (1988). *2001 Management*. London: Simon & Schuster.

De Geus, A. (1997). *The Living Company*. London: Nicholas Brealey Publishing.

Denzin, N.K. & Lincoln, Y.S. (1994). *Handbook of Qualitative Research*. London: SAGE Publications.

Denzin, N.K. (1971). The logic of naturalistic inquiry. *Social Forces*, Volume *50*, 166-182.

Drucker, P.F. (1961). *The Practice of Management*. London: Heinemann.

Fransella, F. & Bannister, D. (1977). *A Manual for Repertory Grid Technique*. London: Academic Press.

Garratt, B. (2000). *The twelve organizational capabilities*. London: HarperCollins Publishers.

Ghoshal, S. & Bartlett, C. (1995). Changing role of Top Management. Beyond Systems to People. *Harvard Business Review*, May-June 1995, 132-142.

Grulke, W. & Silber, G. (2000). Ten Lessons from the Future. Parklands: @ One Communications.

Grundy, T. (1995). *Breakthrough strategies for growth*. London: Pitman Publishing.

Handy, C. (1994). *The Empty Raincoat: Making sense of the future*. London: Arrow Books Limited.

Hensler, D.A. & Torres, D.P. (2001). Developing the organization for growth. *Measuring Business Excellence*, Volume 5, Number *1*, 36-41.

Hock, D. (1999). *Birth of the Chaordic Age*. San Francisco: Berrett-Koehler Publishers, Inc.

Hopkins, W.G. (2000). *Qualitative research design*. http://www.sportsci.org/jour/0001/ wghdesign. html.

Huang, T. (2001). The relation of training practices and organizational performance in small and medium size enterprises. *Education + Training*, Volume 43, Number *8/9*, 437-444.

Huberman, A.M. & Miles, M.B. (1994). *Data management and analysis methods*. In: Handbook of Qualitative Research. N.K. Denzin & Y.S. Lincoln (eds.) California: Sage Publications.

Kaplan, R.S & Norton, D.P. (1996). *The Balanced Scorecard*. Boston: Harvard Business School Press.

Kaplan, R.S & Norton, D.P. (2001). *The Strategy focused Organization*. Boston: Harvard Business School Press.

Kelly, G.A. (1955). *The psychology of personal constructs*. New York: W.W. Norton & Company. Inc.

Kotter, J.P. (1995). *The new rules*. New York: The Free Press.

Levicki, C. (1998). *The Leadership Gene*. London: Financial Times, Pitman Publishing.

Longenecker, C.O, Simonetti, J.L & Sharkey, T.W. (1999). Why organizations fail: the view from the front-line. *Management Decision*, Volume 37. Number *6*, 503-513.

Mason, J. (1996). *Qualitative researching*. CA: Thousand Oaks.

Maxwell, J.C. (1998). *The 21 irrefutable laws of leadership*. Nashville: Thomas Nelson Publishers.

McCoy, T.J. (1996). *Creating an Open Book Organization*. New York: Amacom.

McCrimmon, M. (1997). *The Change Master*. London: Pitman Publishing.

McGivern, M.H. & Tvorik, S.J. (1997). Determinants of organizational performance. *Management Decision*, Number *6*, 417-435.

Meyer, T. (1996). *Creating Competitiveness through Competencies*. Randburg: Knowledge Resources (Pty) Ltd.

Mouton, J. & Marais, H.C. (1996). *Basic Concepts in the methodology of the social sciences*. Pretoria: HSRC Publishers.

Murphy, L. (1995). A qualitative approach to researching management competencies. *Executive Development*, Volume 8, Number *6*, 32-34.

Nadler, D.A. & Tushman, M.L. (1999). Strategic Imperatives and Core Competencies for the 21st Century. *Organizational Dynamics*, 45-59.

Neumann, Y & Finally-Neumann, E. (1994). Management Strategy, the CEO's Cognitive Style and Organizational Growth/Decline. *Journal of Educational Administration*, Volume 32, Number *4*, 66-76.

Owen, K, Mundy, R, Guild, W. & Guild, R. (2001). Creating and sustaining the high performance organization. *Managing Service Quality*, Volume 11, Number *1*, 10-21.

Patton, M.Q. (1990). *Qualitative evaluation and research methods*. Newbury Park: Sage.

Porter, M.E. (1979). How competitive forces shape strategy. *Harvard Business Review*. March-April, 1979. 137-145.

Porter, M.E. (1987). From competitive advantage to corporate strategy. *Harvard Business Review*. May-June, 1987. 43-59.

Porter, M.E. (1980). *Competitive Strategy: Techniques for Analyzing Industries and Competitors*. New York: Free Press.

Peters, T. (1997). *The circle of Innovation*. United Kingdom: Hodder & Stoughton.

Prahalad, C.K. & Hamel, G. (1990). The Core Competence of the Corporation. *Harvard Business Review*, May/June, 79-91.

Schurink, W.J. (1979). Crime problems. In: Lotter, J.M. (ed.). *Social problems in the RSA: Research by the ISDCR*. Pretoria: HSRC, 1-19. (Report S-68).

Schurink, W.J. (1986). *Reconstructing social reality. In Ferreira, M. et al. Introduction to qualitative research methods*. Pretoria: HSRC.

Schurink, W.J. (1992). Methodological approaches utilized in victimization studies. In Schurink, W.J., Snyman, I. & Krugel, W.F. (eds.). *Victimisation. Nature and trends*. Pretoria: HSRC. 63-118.

Schurink, W.J. & Schurink, E.M. (2001). Lecture One. Deciding to use a qualitative research approach. In: Schurink, W.J. *Models of qualitative research*. Part One. Doctoral Programme: Leadership in Performance and Change. Department of Human Resource Management at RAU, Johannesburg, 7-9 May 2001.

Selznick, P. (1957). *Leadership in Administration: A Sociological Interpretation*. New York: Harper & Row.

Senge, P.M. (1990). *The Fifth Discipline. The art and practice of the learning organization*. New York: Doubleday Currency.

Spear, S. & Bowen, H.K. (1999). Decoding the DNA of the Toyota Production System. *Harvard Business Review*, September-October, 97-106.

Stewart, V. & Stewart, A. (1990). *Business Applications of Repertory Grid*. Goodwood, South Africa: National Printers.

Sunter, C. (1992). *The New Century*. Tafelberg: Human & Rousseau.

Sveiby, K.E. (1997). *The New Organizational Wealth*. San Francisco: Berrett-Koehler Publishers, Inc.

Sveiby, K.E. (1998). A knowledge focused strategy: a recipe for business success. *Management Today*, Volume 14, Number 9, 18-19.

Tesch, R. (1990). *Qualitative research. Analysis types and software tools*. New York: The Falmer Press.

Tulloch, S. (1993). Complete Wordfinder. London: The Readers Digest Association Limited.

Van Maanen, J. (2000). *Qualitative methods in management research*. London: Sage.

Veldsman, T.H. (2002). *Into the People Effectiveness Arena*. South Africa: Knowledge Resources (Pty) Ltd.

Vermeulen, J., (2002). *Towards a Genetic Business Code for Growth in the Transport Industry*. Unpublished dissertation, Rand Afrikaans University.

Wilson, T.B. (1999). *Rewards that drive High Performance*. New York: Amacom.

Wind, J.Y. & Main, J. (1999). *Driving Change. How the best companies are preparing for the 21st century*. London: Kogan Page.

Zohar, D. & Marshall, I. (2000). *Spiritual Intelligence the ultimate intelligence*. Great Britain: Bloomsbury.

Zohar, D. (1997). *Rewiring the corporate brain*. San Francisco: Berrett-Koehler Publishers, Inc.