Rhodes Business School

Leadership for Sustainability

THE STRATEGIC ALIGNMENT MATURITY OF BUSINESS AND INFORMATION TECHNOLOGY AT VOLKSWAGEN SOUTH AFRICA

A dissertation submitted in partial fulfilment for the requirements of the degree

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By

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DECLARATION

I, Lavendra Naidoo, do hereby declare that thesis is my own work and that all reference sources have been accurately acknowledged and documented. Further, this document in its entirety or in part has not previously been submitted to any University in order to obtain an academic qualification.

Lavendra Naidoo Date: December 2011

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Integrative Summary

The integrative summary provides an introduction of the research case study, research area, presents the objective and concepts.

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1. Background of Research Case Study

During the past three decades Information Technology (IT) has been constantly evolving and has emerged into a significant component and enabler of most organisations strategy, to the point that modern day organisations are intrinsically dependent on IT (Peppard and Ward, 2004). Henderson and Venkatraman (1993) advocate that for an organisation to be successful in a dynamic and competitive business environment it is imperative that there is an effective and efficient IT strategy that enables the business strategy and processes.

Volkswagen South Africa (VWSA) in 2007 launched its corporate strategy, 1:10:100 – 2010 At the end of this stated period 2010, VWSA achieved several of its objectives, namely surpassing its competitors in passenger vehicle sales volume, improving its customer satisfaction, achieving a higher level of local parts content per unit, developing its people and improving its infrastructure and processes.

2. Objective of Case Study

The objective of this research was to establish as an observer the strategic management processes that were followed in the formulation and implementation of the strategy and to measure the Strategic Alignment Maturity (SAM) level of Business-IT during the 2008 to 2010 strategic period and its influence in VWSA achieving these objectives.

3. Rationale of Case Study

This research was motivated in wanting to determine and identify the organisations Business-IT functions alignment maturity level focused on the strategic initiatives and operational process requirements during the specified strategic period of VWSA.

4. Importance of Business-IT Alignment

Given the importance and proposed benefits of alignment, the number of organisations that successfully align their IT strategy with business strategy is shown to be considerably low. Researchers as per the literature review undertaken advocate that strategic alignment has become embedded in the strategic management processes and requires a committed

integrated relationship between Business and IT management to prioritise IT projects that support and enable the strategy.

While IT projects specific to the corporate objectives may be formulated at a strategic level its impetus more often wanes as it filters through the organisation and its original intent is lost (Gutierrez, 2009). Researches also argue for the need to have a strong Business and IT relationship also at the implementation level to ensure that objectives are well communicated and understood as the dependence on IT innovation increases in the absence of integrated technology and business strategies.

5. Key Concepts of Case Study

According to Chan and Reich (2007) one of the initial steps towards achieving alignment is to have an adequate means to measure it. This research case study is intended to demonstrate the use of a strategic alignment maturity process and assessment tool that can help to establish a mature long-term Business-IT alignment in the absence of a miracle cure. The Luftman (2000) Strategic Alignment Maturity (SAM) assessment provides a framework and benchmark of leading management practices and strategic choices that can guide leaderships‟ thinking in integrating Business and IT initiatives.

This assessment framework provides best practices in Business-IT communications, measuring competency and value of IT, IT governance, Business-IT partnerships, IT scope and architecture (technology) and IT skills (Luftman, 2000). Alignment of Business-IT strategies is fundamental to any organisation hence the researchers objective to establish the strategic alignment level during the stated strategic period at VWSA.

6. Research Methodology

This research will be presented in the form of a case study which is intended to describe and assess the strategic alignment maturity level of VWSA. The observations were captured during interview sessions with board members, senior management and line management. The Business-IT alignment maturity was measured from fifteen respondents with the use of Luftman‟s (2000) SAM assessment tool to determine the organisations alignment maturity level.

This research is conducted using the interpretive paradigm as it is appropriate in addressing the goal of this research, where according to Orlikowski and Baroudi (1991) facts and values are entwined and knowledge exists in understanding how social process, mechanisms and practice are formed and informed by language and culture.

7. Structure of Dissertation

This dissertation consists of 3 sections.

Section 1: Case Study

The section introduces the research area, provides the objectives of the research, provides contextual background information and describes the rationale for conducting the research. This section further describes the VWSA strategic objectives that are represented in 1:10:100 – 2010, it is also intended to highlight the specific strategic management processes that were followed in the formulation and implementation of the strategy.

This section further describes the sample and presents the results of the survey, where the results are collated and reviewed in the context of the Luftman (2000) SAM criteria, maturity levels and maturity levels previously measured. It also presents a ranking of the recommendations by the survey participants that will support a higher level of Business-IT Alignment both at a strategic and operational level.

Section 2: Literature Review

The objective of the literature review is to provide a critical assessment and evaluation of previous research in the field of Business and IT Strategy Alignment. The literature review evaluates the key elements of an effective Business and IT Strategy formulation and implementation and is followed by a review of literature pertaining to Business and IT Strategic Alignment.

Section 3: Research Methodology

This section presents a description of how the research work was conducted. It presents the research process followed in compiling this case study, represented by the aims and objectives, research methodology and design, data collection techniques and data analysis.

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Section 1 – VWSA Case Study

VWSA 1:10:100 by 2010 Strategy

This section provides a background to VWSA, the VWSA strategy formulation, overview of the strategic objectives and implementation process. Results of the alignment survey, levels of strategic alignment maturity and alignment recommendations.

1.1. Introduction

This section of the research comprises of sub-sections that provides a background to Volkswagen Group South Africa (VWSA) and its IT organisation. A high-level overview is provided to outline the strategic objectives of each component and supporting objectives of the VWSA corporate strategy 1:10:100 by 2010. A further sub-section describes as per the literature review, the strategy formulation, implementation and management processes of the strategic objectives and the leadership culture that the organisation adopted to ensure a successful strategy implementation while delivering and maintaining operational processes of the business.

Also contained within this section of the research are the results of the business and IT strategy alignment survey that was conducted at VWSA. The survey was conducted through the utilisation of Luftman‟s (2000) Strategic Alignment Maturity model to assess the maturity level of Business-IT strategic alignment at VWSA. The VWSA maturity level results are presented by each of the six alignment criteria and are compared to Luftman and Kempaiah (2007) research on different industry types. VWSA is numerically compared to the manufacturing industry alignment maturity level per criteria. The researcher further provides an observation of the measured result. The best practise alignment maturity is described to provide an indication of the difference between the measured alignment and best practice.

In addition to the alignment survey, a set of recommendations by alignment criteria was issued to the survey participants to choose the most appropriate recommendation that they believed if implemented would improve overall business and IT alignment and relationship.

1.2. Background to Volkswagen Group South Africa

The Volkswagen Group South Africa (VWSA) was established in 1946 as an affiliate of Volkswagen Aktiengessellschaft, Germany (VWAG). The company and its production facilities are situated in the town of Uitenhage in the Eastern Cape, 30 Kilometres outside of Port Elizabeth. VWSA is one of the main contributors to direct international investment in South Africa, this is accomplished through vehicle and component manufacturing technology and skills enhancement through training and development (VWSA, 2011).

On the 18th February 1949 the South African Motor Assemblers and Distributors (SAMAD) officially opened and on the 31st August 1951 the Uitenhage factory produced its first Beetle and by 2007 the company celebrated production of the 2.5 millionth car. Since its opening Volkswagen cars have effectively set higher standards in the relevant vehicle segments, exemplifying the company‟s pioneering character (VWSA, 2011).

In January 2008 the brand claim „Das Auto‟, meaning „*The Car*‟ in German, was adopted by VWSA and marked an essential milestone in the growth of the Volkswagen brand in South Africa and further underlined the group‟s vision for the future to be the most innovative volume brand in the world. „Das Auto‟ articulates this, and is an enduring long-term brand pledge that is destined to grow and strengthen the brand into the future (VWSA, 2011).

The VWSA Board of Directors consists of five executive directors and two non-executive directors. The company provides employment for nearly 6000 people, VWSA believes very strongly that job creation and skills development will fuel economic prosperity but to do so the company has a priority to strengthen itself before it can empower others. The company‟s first priority is to build a strong, successful and sustainable business that protects and creates jobs within Volkswagen and the broader Volkswagen family of suppliers and franchised Dealers (VWSA, 2011).

1.3. VWSA Information Technology Organisation

The Information Services Division (ISD) of VWSA is an internally focused Information Technology (IT) services organisation, headed by the Chief Information Officer (CIO) and managed by a governance team consisting of the Chief Technology Officer (CTO) and Process Integration Officers (PIO). ISD is staffed with full-time employees and contracted services from IT vendors. ISD performs a pivotal role in the organisation, responsible for the development and enablement of processes, solutions and services, business support systems and Enterprise Information Technology. These responsibilities form the core of the ISD objectives in support of the VWSA corporate strategy, processes and objectives.

The ISD organisation however was challenged by its organisational structure and ability to meet the increasing demands of the business for process efficiency and innovation, this was further complicated by the inherent business assumption that ISD were the owners of the

business processes due to ISD having the detailed knowledge. In 2008 an ISD organisational restructure was deemed necessary to firstly change its rigid structural alignment to the corporate organisational structure of VWSA that was focused on segmented business units rather than an alignment to Corporate strategy and objectives and secondly to set in motion its enabling function of business processes through a very simple process of expectation management and flexibility. The ISD management also realised that it was important to have the ability to speak the language of the customer to engage the business, to do so ISD would have to leverage off its subject matter knowledge to appropriately consult with the business.

The ISD range of products are specialised and conforms to VW Group IT standards aligned to the Master Construction Plan (MCP) for processes and applications and Book of Standards (BoS) for technology and local IT standards. The services offered by ISD as listed in Table 1 below are offered throughout the VWSA organisation:

Table 1: ISD Organisation Services

Process Integration Organisation	**Infrastructure Technology Organisation**
Business Process Analysis Business Process Integration Consulting Services Business Strategy Process Change Management Process and Innovation Project Management Application Management Services Risk Management and Governance	Data Centre Technology and Operations Enterprise Architecture Data and Information Management IT Strategy and Governance Network Technology and Operations Client Services Web Portal Infrastructure Business Intelligence Infrastructure Security Solutions SAP Solutions Microsoft Solutions VW Group Solutions Workplace and Collaboration Technology Digital Factory Architecture Technology Consulting Disaster Recovery Services

Having concluded the restructuring and functional transitioning of staff and responsibilities to ensure that the process and support structures are entrenched, the new ISD organisation believed that it was now enabled and positioned to be a more business process, customer centric and service orientated organisation. ISD believed also that it was ready to re-affirm its critical role in the organisation to enable the VWSA vision and strategy.

1.4. VWSA Strategy 1:10:100 - 2010

1.4.1. Introduction

The following is an excerpt from the November SIS International Research article (2007), relating to the South Africa motor manufacturing industry in 2007,

- "South Africa‟s automobile sector contributed 7.5% to the country‟s GDP in 2006." (2007:7)
- "South Africa‟s government will be completing its review of the Motor Industry Development Program (MIDP) by December 2007. Industry participants are requesting government to extend the program." (2007:7)
- "Fifty thousand union members of the National Union of Metalworkers of South Africa (NUMSA) have ended their two-week strike, demanding wage increases between 8-10%. The strike crippled work at Volkswagen SA, DaimlerChrysler SA, Nissan, Toyota, and Ford. Volkswagen lost production at the rate of 500 cars per day because of the strike." (2007:7)
- "Vehicle sales in August fell 3% to 58,040 units when compared to 2006, since higher interest rates and the National Credit Act have dampened sales. Commercial vehicle sales also declined in August after holding steady up to August 2007. Passenger vehicles registered a 14.7% growth over July at 42,270 units in August, though they fell when compared to August 2006. Light vehicle sales registered 18,195 vehicles." (2007:7)

It is important to understand the aforementioned economic situation in the automotive industry at that point in time as it was amid this time frame that the VWSA 1:10:100 by 2010 strategy was formulated. Consequently it was in February 2007 that VWSA had a change in managing directors. This was perhaps the possible impetus that the organisation needed to

reinvent itself or possibly an acknowledgement that the organisation needed a mechanism for survival.

What follows is a translation and interpretation by the researcher of the feedback received during the interview sessions that were conducted with the managing director, other board members and management based on a pre-determined set of questions as listed in Appendix 1

1.4.2. VWSA 1:10:100–2010 Formulation

According to Collis (2005), by definition strategy development and formulation is generally about doing the right things with focus on what organisations do particularly well and ensuring that this phase of the process establishes detailed planning and critical decision making is undertaken resulting in the establishment of the organisational goals and specific strategic plans.

Strategy formulation at VWSA predating 2007 has always been about achieving certain targets, for example, build a specific number of vehicles for the year, sell a total number of vehicles per annum or achieve a certain percentage of the market share. An analysis of the organisation and the environment it operates within is normally the initiator to formulating the strategic objectives that the organisation wants to implement to meet a specific vision or intent.

In the case of VWSA and its 1:10:100-2010 there was an overall consensus that no formal analysis was undertaken but according to the managing director (2011), ”It was fairly obvious that the organisation needed operational and tactical focal points to reinvent itself and create a revolutionary step-change in the way business is conducted.” It appeared that the organisation was in a state of lull and perhaps certain aspects complacent in its ability to meet numeric targets. By the boards critical observation based on supporting information, foresight and the looming global economic challenges it was evident that the organisation needed a corporate strategy that focused all entities of the organisation with a single-minded focal point, survival.

Survival implied having a competitive product range, retaining and increasing export volumes, not just drawing level with the competition but out competing them, significantly improving quality of product, services and support, creating a superior brand, understanding and listening to what customers are asking and creating a workforce across all levels that

were competent to implement the changes and sustain the organisation. What emerged from a series of discussions amongst the board and some key senior management but more the board lead by a determined managing director was a top down strategy for the organisation. To their credit the board members acknowledged during the interview that this was not the way to formulate a strategy but it was a survival necessity to take personal accountability and to ensure that there was focus in „driving the process and progress".

The 2007 VWSA Management Conference was a landmark event for the management team, held at an exclusive venue and was more than a conference, it was as spectacular as a product launch. This was the official launch of the 1:10:100-2010 strategy.

1.4.3. The VWSA 1-10-100 by 2010 Strategic Objectives

The VWSA corporate strategy was officially launched to VWSA leadership, comprising, Board of Directors, General Managers and Managers in November 2007. In his opening statement on the strategy, the VWSA managing director, David Powels (2007) articulated, "This is not just a collection of random numbers but a representation of the largest challenge the Volkswagen South Africa Group has faced and outlines the future, incorporating the company's most essential goals. In order to achieve the goal not only was a new strategy required but a new type of leadership is required which inspires people to do the exceptional on a daily basis."

What follows is an overview of the stated strategic objectives as recorded in the VWSA Strategy handbook (2007) also presented to all attendees at the conference.

1-10-100 – **Customer Centricity**

"We will be the automotive benchmark in Customer Service. Audi will be the benchmark in Customer Service Index (CSI) in the premium segment and VW will be the benchmark in Customer Service Index (CSI) in the volume segment. We will be the benchmark in Customer Loyalty and Number 1 in the Passenger Car market share. We plan to achieve this objective through the roll-out of a Customer Centricity programme at the Dealerships and within VWSA." (2007: 8)

1-**10**-100 – **Production and Quality**

"We will be one of the Top 10 Performing production plants in the VW Group, in terms of Product Quality, Quality of our Processes and Productivity. We plan to achieve this Top 10 status through the sustainable implementation of the VW Group Production System at VWSA." (2007:8)

1-10-**100** – **Supplier Strategy**

"We will significantly increase the competitiveness of our component costs, both from in-house manufacturing and from our Suppliers. This means that the cost of our components in South Africa must as a first step, not be more than 100% of the cost of these same components in Western Europe. This is necessary for us not only to be price competitive within the VW Group, but more importantly to deliver competitive pricing to our customer. We aim to achieve this objective with a significant increase in local content levels and through improving the competitiveness of our Supplier base through new Suppliers and new technology." (2007:9)

"We aim to achieve all of these key focus points by 2010" (2007:9)

In addition to the 1-10-100 by 2010 strategy, the company also launched two enabling strategic projects:

The Learning Organisation

"We will be the skills development benchmark for the local auto industry by 2010 where the focus is on attracting and growing talent by creating a culture of life-long learning and a hunger for knowledge and new skills. We will develop technical, business and specialist skills and competencies in a blended learning environment through Learning Academies in Uitenhage and Midrand. We will attract and retain top talent by creating an attractive Employee Value Proposition and expand our personnel marketing activities." (2007:10)

Transformation/Broad-Based Black Economic Empowerment

"We are fully committed to a socio-economic transformation in South Africa which will, via Broad-Based Black Economic Empowerment (BBBEE), significantly increase the number of Black people that manage and control the country"s economy. Volkswagen Group South Africa is committed to achieving the management and equity targets set out in the BBBEE Codes of Good Practice. Our goal is to be 100% BBBEE compliant (Level 4) in terms of the Codes of Good Practice." (2007:11)

While the aforementioned reflects the core strategic objectives and intent of VWSA for the period 2008 to 2010 a multitude of small, medium and large initiatives (projects) were spawned within them with an alignment to meet the over-arching objective. For confidentiality purposes the researcher is not at liberty to share or include that level of detail within the research.

1.5. The Call for Strategic Leadership

Amos (2006:353) suggests the following as the tasks of effective strategic leaders in implementation of strategy, setting organisational direction to engender commitment, ensuring appropriate leadership at all management levels to drive strategy, staffing the organisation and developing social capital, building and using core capabilities, organisational alignment, creating an organisational culture supportive of the strategy and leading change.

When responding to the question of strategic leadership the interviewees were a little unsure on how to answer or comment on the question if it at all existed during the strategic period or was it even necessary to have this type of leadership at all levels in the organisation.

The VWSA Leadership Brand

These references below contained within the VWSA strategic handbook (2007) speaks directly to the aforementioned attributes of strategic leadership. While it appears to be unknown to VWSA from a theoretical foundation, strategic leadership was defined within the leadership brand and would appear to have been present and is on a path to become engrained in the organisation.

"Over the years, we have made some very strong promises. We have promised top quality cars through our product brands VW, Audi, Seat and VW Commercial Vehicles. We have assured our investors, the VW Group, a good return on their investments, and we have committed to a clear strategic direction in the 01-10-100 by 2010 projects. Strong leadership is essential for any company to be successful. As the leadership team, we have to deliver on the promises we have made to our customers, our shareholders and our people." (2007:13)

"With these promises, comes responsibility. As a leadership team, we have to deliver results. We have to continuously seek innovations to meet world standards, and we must strive to be entrepreneurial in order to meet our sales and financial targets. We must enthuse our people with our passion and commitment and deliver on our 01-10-100 by 2010 strategic projects." (2007:23)

"This is the new leadership culture that is vital to our ultimate success. It requires you to measure your success by the success of your team. If your team excels, you"ve excelled. If your team fails, you"ve failed. It is not threatened by other"s potential, but seeks to see it realised. It inspires you to lead, by creating new leaders. Together, we must become these new leaders – committed to achieving world-class quality standards and redefining customer service. To continue to improve innovate and inspire on every level. To make decisions and deliver exceptional results. To be entrepreneurial and to do all this, with passion and commitment." (2007:29)

1.6. The Strategy Name

The single-minded object of the name 1:10:100 by 2010 was simplicity. Simple in name but dynamic in communication and the requirement for every employee to understand what they symbolised and where they were contributing was a resounding acceptance success according to the interviewees. It captivated what the tangible goals of the organisation were, created an accelerating perspective and by when it must be achieved**.**

Figure 1 below is a copy of the branding that was associated with the strategy which was used in its simplicity to articulate throughout the organisation the objectives of the strategy.

Figure 1: VWSA Strategy Logo

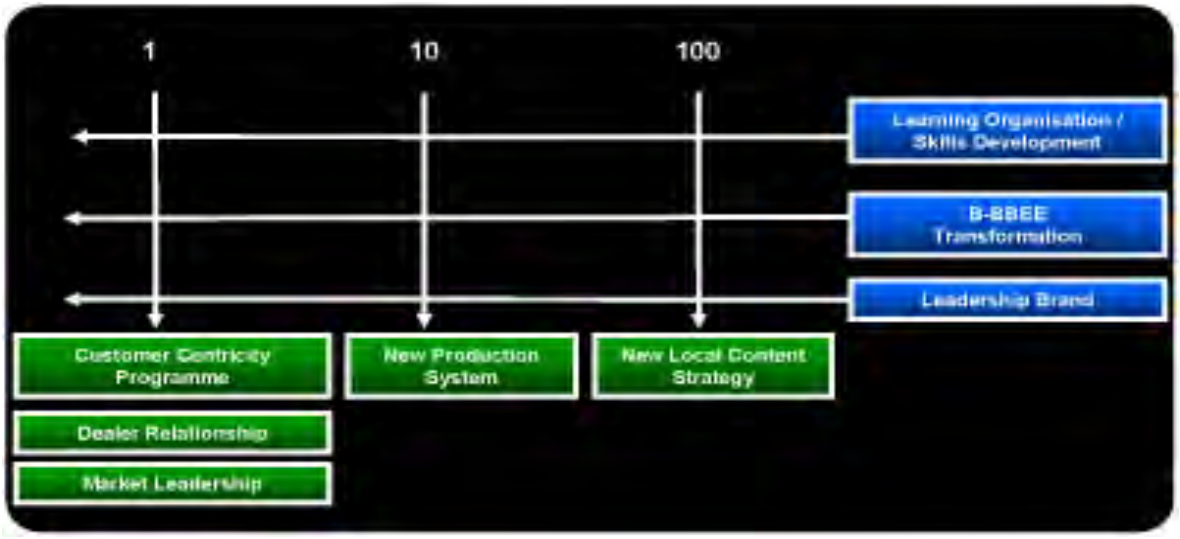


Figure 2: 1:10:100 by 2010 Strategic Objectives (2007)

Figure 2 above was additionally used to contextualise the strategic objectives. This provided the employees within the organisation a focal point on each of the strategic objectives intent.

1.7. VWSA 1:10:100 by 2010 Strategy implementation

Strategy implementation and execution also followed a top down approach, where the board was directly involved in the detail and decision making processes of the supporting strategic initiatives, much to the organisations frustration at times. The board maintained their view that without this level of involvement and control the thrust to move the organisation forward would have been at risk and that it was paramount to set the pace and lead from the front.

The following observations articulate the process that was employed at VWSA to meet its requirement for the successful implementation of the objectives:

- The board were clear in their resourcing of the organisation and identified that there was a requirement to bring in new people with the required skills and expertise and internally transfer key resources that would define, build and strengthen the strategy implementation and also perform core business activities in a strategy supportive manner.
- The board had also cleared the financial path of the strategy by ensuring that the VW Group was supportive of the strategy and allowed that funds could be re-directed from existing local budget to facilitate the strategy. This called for sustainable operational rationalisation and efficiency and prudent strategic investments which were managed on a monthly basis by a Contracts Committee and Investment Committee respectively.
- Project champions were allocated per defined initiative and these included board members, division heads and functional management. Six status reviews per project per annum were required at board of management meetings to ensure that deliverables and timings were on schedule, the board acted as overall steering body for the strategy, testament again of its unwavering determination to maintain the top down control.
- Communication of the project activities and status were communicated to all employees through quarterly mass addresses, management and supervisor meetings on a quarterly basis where more detail was shared with the explicit requirement that this information is cascaded further into the departmental functions and at annual management meetings where overall status was reviewed and the next set of initiatives were presented.
- A culture of respect for all irrespective what your daily function was from cleaner to engineer was initiated through the Production facilities as this was fundamental in wanting to implement the Vehicle Production Process as this required that all direct and indirect employees were aligned to the goals of the new production system as this required a mammoth collaborated effort. Underpinning this focal point was the adoption of the Kaizan principle where the best practises for core processes were applied and striving for continuous improvement by always asking the what, why and how questions. This process was managed on daily basis by the newly appointed production director, who against Volkswagen precedent was employed from outside the VW Group.
- IT like the other corporate functions of Finance and Human Resources played a key supportive role to the overall strategic objectives and were also required to present their

strategic supporting and enabling projects to the board. It was a directive from the board that all projects where applicable incorporate IT into their strategic initiatives to ensure that best practise and leading processes and technologies were deployed to enable the organisations changes required to deliver the objectives of the strategy. The role of IT during this period was focused on maintaining delivery of operational services, business process functionality, and support and enables Business strategy initiatives and builds for the future.

1.8. VWSA IT Strategy Management

The IT organisation at VWSA concluded its internal restructuring to align itself to the business and to be able to support the corporate strategy. This required a more business process and technology innovative approach to support and enable the corporate strategy initiatives. Traditionally the ISD maintained its own three year strategic outlook reviewed annually, it identified that with the new corporate strategy this process would have to change. The VWSA management board influenced this by instructing the general manager of ISD to present its strategy to the board at the outset of the 1:10:100 strategic period.

1.8.1 IT Strategy Planning

ISD conducted a series of workshops internally to first understand and assess the influence 1:10:100 would have on its resources, how the resources were allocated, support processes and technology improvements it would have to introduce to support and enable the strategy. Armed with its own perspective of what 1:10:100 would require, business and IT workshops were conducted to determine the requirements of the business strategic initiatives.

Further refinement and definition discussions took place where the ISD presented various solutions and technologies to the business and the most appropriate were selected based on the VW Group systems strategy and technology standards or best practise solutions. Once this was defined and agreed between business and ISD a solutions roadmap by business entity was created and was presented to the board for approval. However further refinement and flexibility was required by both business and ISD to ensure that the effectiveness and efficiency of the solutions kept abreast with the changing business environment or tactical changes during the strategic period.

1.8.2. IT Portfolio Management

ISD also realised that a higher level of transparency was required to ensure the successful implementation of the business objectives and that it required a framework wherein the multitude of business requirements were managed. IT portfolio management within VWSA entailed:

- The creation of a formal program and project management office (PPMO) function managed by the respective IT manager.
- The creation of a PPMO portal where the status of all initiatives were displayed.
- Training of relevant IT staff in project management according to the PMBOK project management principles.
- Conducting formal planning, monitoring, prioritisation and tracking with the business.
- PPMO meetings where held monthly within IT and quarterly with the business.
- Individual projects were discussed on a more frequent basis with the business through project meetings and steering committee meetings.
- The overall status by initiative was reviewed every two months by the board.

1.9. Conclusion

Upon reflection of the VWSA strategic management processes it is evident that no formal theoretical foundation or framework existed for strategy management within the organisation. This however does not imply that the objectives of the strategy were not met, in reality the strategy was very well managed and the objectives were successfully implemented as was ascertained during the various interviews.

The strategic management processes followed at VWSA do not directly conform to the processes defined in the literature review but there is a correlation to the views expressed by Thompson et al (2007:15) that a clear and reasoned strategy is management"s prescription for doing business, a roadmap to competitive advantage, a plan for pleasing customers and for improving financial performance. And Werbach (2009:9) supporting this added that where a strategy that is well defined, well managed and well led will ensure that the organisation survives and thrives by following emerging trends in society, technology and natural resources.

2. VWSA Survey Results

This section presents the consolidated view of the survey conducted to identify the VWSA business-IT Strategic Alignment Maturity (SAM) level. This section presents the maturity level for each of the six alignment criteria by firstly describing the criteria attributes, presenting the VWSA maturity level for each criteria and a comparison to Luftman and Kempaiah (2007) manufacturing industry maturity levels assessment. Appendix 3 outlines the overall maturity levels across the various industries (Luftman and Kempaiah: 2007).

2.1. VWSA Business-IT Strategic Alignment Maturity Level

The survey incorporated questions specific to each of the six alignment criteria of communications, value measurement, governance, partnership, technology and skills. Within each criterion six or seven questions were framed for the participant"s selection. Fifteen participants from Business and IT completed the survey scoring each question between levels one and five, where one was strongly disagree and five representing strongly agree. The average was calculated for each criterion from the scores of the survey population and an overall average was calculated for each criterion and then averaged for the overall maturity level. Figure 3 below represents the overall maturity level of VWSA across all alignment maturity criteria.

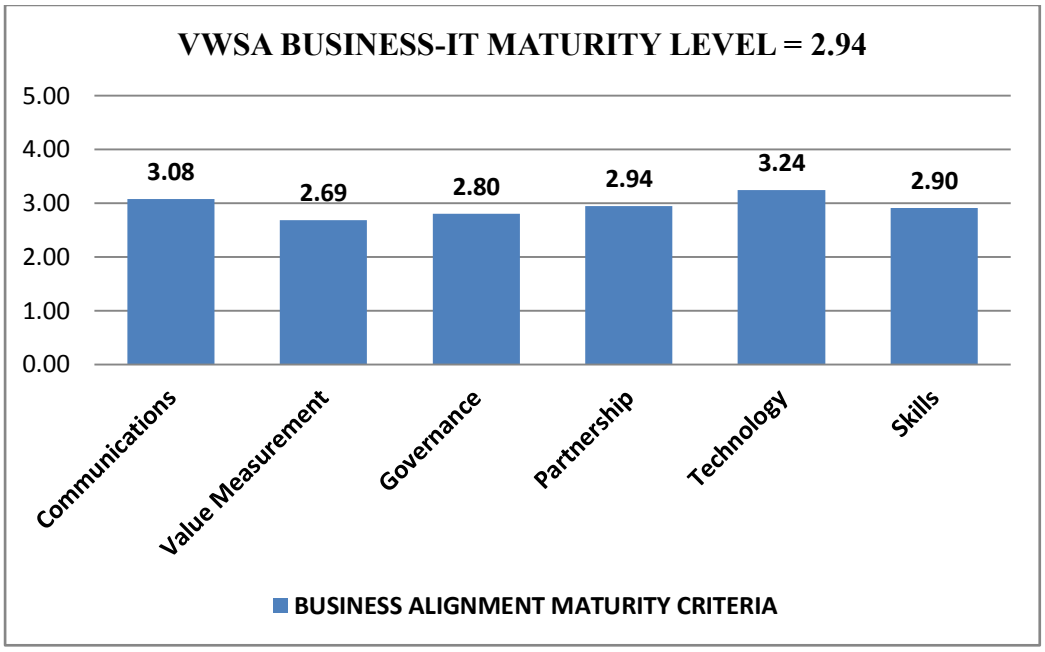


Figure 3: VWSA Strategic Alignment Maturity Level

Table 2 below illustrates the overall average per criteria with technology being the highest and value measurement being the lowest scoring criteria. The overall average maturity level for VWSA was measured at 2.94, which corresponds to a level 2 alignment maturity which defines organisations as having commitment to start being more strategically aligned. While the overall VWSA maturity level is positioned at a Level 2 there is a significant amount of criterion represented in Table 2 by the 16 green shaded blocks that placed these within a Level 3 maturity which signifies an established focussed process. The yellow shaded blocks represent criterion with a maturity Level 1 that signifies poor and adhoc processes within the organisation. The results for each measured criteria at VWSA is reflected below and a description of the results is outlined.

Table 2: VWSA Strategic Alignment Maturity Criteria Averages

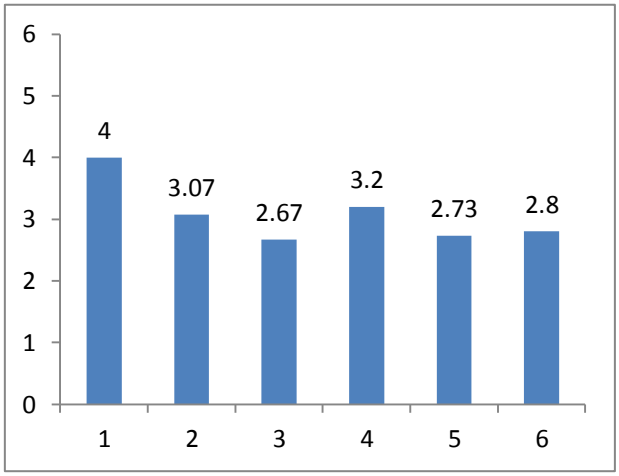
Criteria	Average	Q1	Q2	Q3	Q4	Q5	Q6	Q7
Communications	**3.08**	4.00	3.07	2.67	3.20	2.73	2.80	
Value Measurement	**2.69**	3.27	2.67	2.80	2.00	2.27	2.87	2.93
Governance	**2.80**	2.93	3.33	1.27	2.33	3.40	3.53	
Partnership	**2.94**	2.53	2.60	2.80	3.47	2.80	3.47	
Technology	**3.24**	3.13	3.47	3.33	3.07	3.60	2.87	
Skills	**2.90**	2.67	3.07	2.53	3.73	2.53	2.87	2.93

2.2. Communication Measurement

Luftman‟s (2000) SAM describes the communication criteria as the sharing of information for mutual understanding between the IT and Business functions. This implies effective exchange of ideas, knowledge, information and a clear understanding of what it takes to ensure successful strategies are high on the list of enablers and inhibitors to alignment.

Table 3: VWSA Communication Maturity Level

1	Understanding of the Business needs by IT	4.00
2	Understanding of IT and it‟s needs by Business	3.07
3	Understanding and learning about the business and it‟s processes by IT	2.67
4	Protocol rigidity – the style of interaction between Business and IT staff	3.20
5	The extent of information and knowledge sharing	2.73
6	The liaison or working relationship effectiveness between Business and IT	2.80
	Communication Maturity Level	**3.08**



Manufacturing Industry Maturity Level: 3.22

Description of results: Based on the alignment criterion ratings reflected in Table 3 indicates that there is a strong view that the IT understanding of business requirements was better than business understanding the needs of IT and the requirements that IT has to enable value contribution to business needs and requirements. Formal knowledge sharing is sporadic and inconsistent resulting in the business view that IT does not effectively understand the business operations and processes. The above rating for business and IT interaction levels was possibly influenced by the organisations emerging systemic communications process related to overall corporate strategy that has perhaps forced an increased communications level between business and IT to review and manage business and IT strategic initiatives.

Observation: Open communication requires an organisational culture that fosters consistent communication by ensuring that it is ingrained as a fundamental task of every manager and employee.

SAM Best Practice: Communication between IT and business should be pervasive throughout the organisation, informal, regularly occurring, and use rich methods such as e-mail, videoconferencing, and face-to-face.

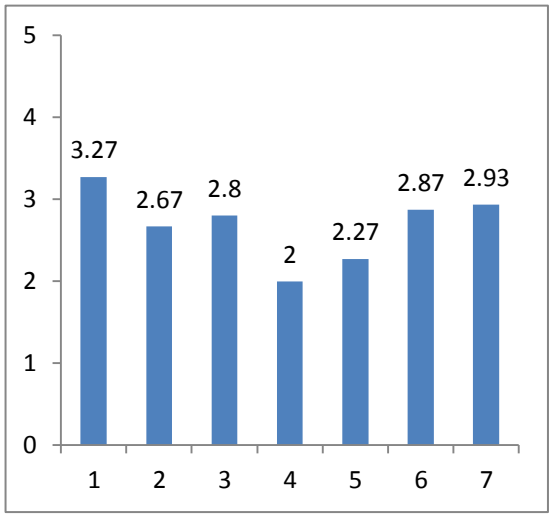
2.3. Competency/Value Measurement

The SAM assessment describes Competency/Value Measurement as:

The management practices and strategic IT choices an organisation makes when determining the importance and contribution of IT to the firm. Many IT organisations cannot demonstrate their value to business in terms that the business understands. Frequently Business and IT metrics of value differ. Service levels that assess IT"s commitments to the business often help. However, the service level must be expressed in terms that the Business understands and accepts. The service levels must be tied to criteria that clearly define the rewards and penalties for surpassing or missing the objectives (Luftman, 2000:15).

Table 4: VWSA Value Measurement Maturity Level

1	The way IT metrics are presented to the business	3.27
2	How Business metrics are presented	2.67
3	Balanced metrics – the linkage between Business and IT metrics	2.80
4	Are service level agreements in place for IT services provided to the Business	2.00
5	Are benchmarking exercises undertaken for IT services provided to Business	2.27
6	Are there formal assessments following an IT investment or project	2.87
7	Are there continuous improvement processes to improve Business-IT alignment	2.93
	Competency / Value Measurements Maturity Level	**2.69**



Manufacturing Industry Maturity Level: 3.1

Description of results: From the business participants perspective they are aware of IT having metrics in place as a measure of its operational and project delivery effectiveness. From the overall response across the criterion reflected in Table 4 it is significantly evident by the low ratings that business and IT do not have a set of specific metrics that bring business and IT metrics together to deliver business value, lacking also is the use of service

level agreements between business and IT. This requires formal definition and acceptance by business, the customer and IT, the service provider related to the service delivery time or performance to ensure effective business process operation. The view from the business and IT is that the service level agreement will ensure that there is a common understanding about services, priorities and responsibilities supporting the relevant business processes. There is however an emerging consensus that business and IT having worked on projects together to develop business cases and project reviews has improved the understanding of each other‟s areas.

Observation: Include and formalise business-related metrics, such as user satisfaction and IT‟s responsiveness and effectiveness to the business, with technical service level agreements to form more of a partnership between IT and the business. Additionally, measurements like quality, productivity improvements and contribution to profits should be applied whenever possible.

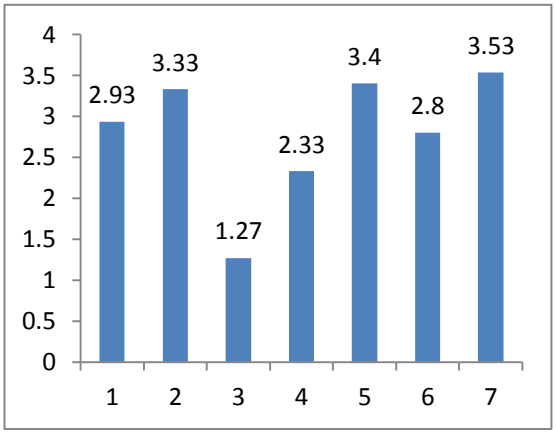
SAM Best Practice: Business metrics, IT metrics, and SLAs also extend to external partners, and benchmarking is routinely performed with these partners.

2.4. Governance

Governance considerations according to Luftman (2000:17) are ensuring that the appropriate Business and IT participants formally discuss and review the priorities, this is necessary as the allocation of IT resources is among the most important enabler or inhibitor of alignment. This decision making authority for IT activities such as selecting and prioritising projects, assuming ownership of technology, controlling budgets and IT investments needs to be clearly defined.

Table 5: VWSA Governance Maturity Level

1	The level of contribution / input by IT during Business strategic planning	2.93
2	The level of contribution / input by Business during IT strategic planning	3.33
3	Reporting/organization structure	1.27
4	How is IT budgeted and controlled	2.33
5	What is the rationale for IT investment / spending	3.40
6	The number and frequency of meetings of Business-IT steering committee(s)	2.80
7	Prioritisation of projects by the Business and IT	3.53
	Governance Maturity Level	**2.80**



Manufacturing Industry Maturity Level: 3.15

Description of results: Based on the alignment criterion ratings reflected in Table 5, the criterion of IT input into business strategic planning is rated as a less than established focused process is a consequence of IT becoming involved after the business strategy has been formulated according to some respondents. However the business contribution to IT strategic planning is perceived to be an established process due to IT having to revisit the business strategy with the business to gain an insight into the strategy and its tactical objectives prior to IT establishing its own strategy to enable and support the business strategy.

The reporting structure of IT according to Luftman and Kempaiah (2007:176), where the chief information officer (CIO) reports to the chief financial officer (CFO) is considered to be

limiting a more appropriate structure would be when IT reports to the chief executive officer (CEO), this was determined by their industry assessment in 2007 where there was a high correlation between organisations with higher maturity levels and having the CIO report to the CEO than those that did not. It is critical that the CEO understands how IT works, its role and is involved in ensuring that this limited resource is used effectively. The CFO by definition is to be risk adverse, IT undertakes initiatives that are new to the organisation and are difficult to estimate and quantify which are imperatives for the CFO.
IT is considered a cost centre in relation to its operational processes which are set according to requirements presented by IT and not influenced by the business while investment budget is managed on a per project basis and is recognised as an established process in the organisation. With regards to the IT steering committee meetings the frequency is deemed to be limited and is not appropriately focused to address the changing requirements of the business. Project prioritisation is an established and effective process driven by IT through its project management office processes and is transparent to the business.

Observation: There should be a more inclusive business and IT strategic planning session in developing the overall business and IT strategy for the organisation. Equally important and to bridge the language gap it is imperative that the IT organisation understands and can talk the business process. IT steering committee meetings should be held more frequently but should be adapted to a per business functional level as opposed to representation by all business units in one meeting.

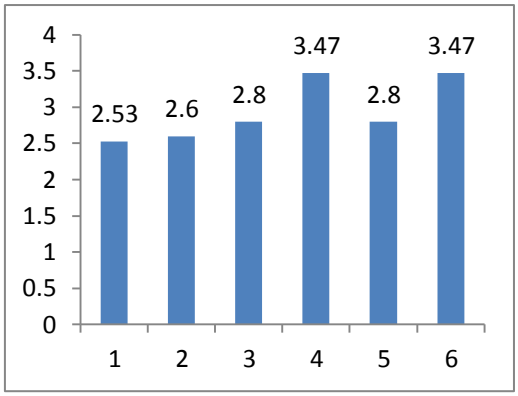
SAM Best Practice: Business and IT strategic planning should be integrated across and outside the organisation to include business partners, ensure adequate budget control on investments and operational costs move from cost centre to profit centre. Business and IT must be a partnership to ensure competitive advantage of the organisation. CIO reports to CEO.

2.5. Partnership Measurement

Luftman (2000:17) has identified that the relationship that exists between the Business and IT organisations is another criterion that ranks high among the enablers and inhibitors of alignment. The ensuing partnership refers to how the IT and Business functions perceive the contribution of each other, including the trust that develops among the participants, and the sharing of risks and rewards. Giving the IT function the opportunity to have an equal role in defining business strategies is obviously important. This partnership should evolve to a point where IT both enables and drives changes to both business processes and business strategies underpinned by Business and IT leadership having a clearly defined shared vision (Luftman, 2000:18).

Table 6: VWSA Partnership Maturity Level

1	Business perception of IT value	2.53
2	Role of IT in strategic business planning	2.60
3	Shared goals, risk, rewards/penalties	2.80
4	IT program / project management	3.47
5	Relationship/trust style between IT and Business	2.80
6	Business sponsor/champion	3.47
	Partnership Maturity Level	**2.94**



Manufacturing Industry Maturity Level: 3.3

Description of Results: Within these criteria the criterion of project management and business sponsor can be interpreted as an established process attributable to the organisations approach to ensuring that there is accountability for the strategic objectives steered by the board. As reflected in Table 6 the overall perception of the value and contribution of IT to the strategic objectives of the organisation is rated poorly can be attributed to the overall lack of understanding each entity has of each other in this regard. This is also an indication of where the influence of having balanced metrics based on the sharing of risk and reward can improve the relationship of business and IT.

These ratings are also indicative that there are difficulties experienced in business and IT integration with the corporate strategic objectives which can further influence the relationship and trust that should exist for a successful integrative approach to strategic planning that can ultimately yield business competitive value. While there are difficulties in the initial phases these seemingly improve considerably once a project is defined and the implementation process is underway.

Observation: To ensure that a partnership can be established and to overcome the relationship difficulties this will require a higher level of consistent interaction and collaboration between business and IT to ensure greater business value is attainable.

SAM Best Practice: IT coexists with business to improve business perception of IT value and is seen has a valued contributor to strategic business planning. A culture of continuous improvement must be maintained to ensure effective program and project management with board level involvement at sponsor or champion function.

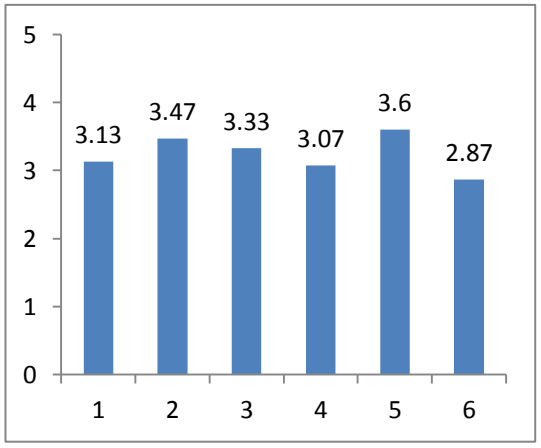
2.6. Scope and Architecture: Technology

Scope and Architecture refers to the management decisions and strategic choices an organisation makes when allocating resources toward its information technology infrastructure, including its reach and range. Luftman (2000:19) further describes this set of criteria as an assessment of information technology maturity to the extent where IT is able to:

- go beyond the back office and front office of the organisation
- assume a role of supporting a flexible infrastructure that is transparent to all business customers and partners
- Evaluate and apply emerging technologies to effectively enable or drive business processes and strategies
- Provide solutions customizable to customer needs

Table 7: VWSA Technology Maturity Level

1	How has the primary IT systems evolved - traditional, enabler/driver, external	3.13
2	Standards – how well defined are the IT standards for infrastructure and systems	3.47
3	The level of integration of IT systems at a departmental level	3.33
4	The level of integration of IT systems at an enterprise level	3.07
5	The level of integration of IT systems with external partners	3.60
6	IT systems flexibility and transparency - perceived	2.87
	Technology Maturity Level	**3.24**



Manufacturing Industry Maturity Level: 3.17

Description of Results: Table 7 reflects the organisations assessment that Technology is an established process and has the potential to become a mature process in the organisation. There is level of confidence that the business has in IT, where IT ensures that the appropriate and most effective technology solutions are implemented to support the organisations business processes. This however is contradictory in light of the perceived value contribution

of IT. A high level of IT standardisation is evident which is positively influencing the integration within the organisation and external partners. IT flexibility is considered as an inhibitor due to its standardisation and governance constraints which impacts the flexibility the business requires to manage the constant change in the business environment.

Observation: To maintain and mature this process it is imperative that more knowledge sharing sessions are facilitated across the organisation between business and IT to improve business understanding of IT and increase transparency. IT should consider the implementation of sustainable enterprise solutions that are adaptive and easily customisable to support business requirements.

SAM Best Practice: IT scope and architecture is utilised as an enabler and driver of business strategy through integrated enterprise standardisation extending to business partners. Key to planning and implementing a flexible and manageable IT landscape is attributable to the extent that the business understands the IT capabilities, benefits and constraints.

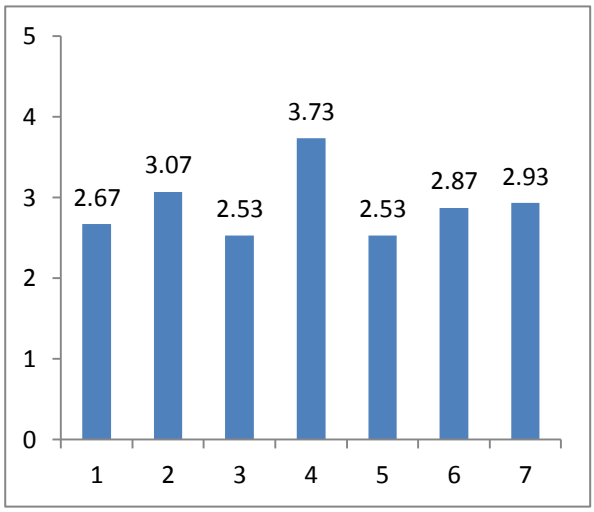
2.7. Skills

Luftman (2000:19) describes skills as the management practices and strategic choices an organisation makes concerning human resource considerations such as the cultural and social environment it cultivates, going beyond the traditional considerations such as training, salary, performance feedback, and career opportunities. Examples provided by Luftman (2000:20) include:

- Is the organisation ready for change in this dynamic environment?
- Do individuals feel personally responsible for business innovation?
- Can individuals and organisations learn quickly from their experience?
- Does the organisation leverage innovative ideas and the spirit of entrepreneurship?

Table 8: VWSA Skills Maturity Level

1	Creating and working within an innovative and entrepreneurial environment	2.67
2	Locus of power – who makes IT decisions	3.07
3	What is the organisation‟s management style	2.53
4	What is the organisation‟s attitude to change	3.73
5	Are there career crossover opportunities between functions	2.53
6	What are the opportunities for cross functional training and job rotation	2.87
7	The level and quality of social interaction between Business and IT	2.93
	Skills Maturity Level	**2.90**



M**anufacturing Industry Maturity Level: 2.9**

Description of Results: Table 8 reflects that Innovation and entrepreneurship is considered conservative and is moderately encouraged in the organisation, this can be attributed to the management style in the organisation which is based on control and consensus. The organisations overall ability to adapt to and manage business strategy and process change is considered good. However the organisation is hampered in its ability to create crossover career opportunities, the opportunities are rare and sometimes occur within the departmental

level only. There is no crossover of business and IT staff for the improvement of understanding of business by IT and IT by business. The organisations staff retention is good and is perhaps more indicative of career security as opposed to career progression.

Observation: The level of innovation and entrepreneurship must be improved and by doing so it will improve the levels of accountability by business and IT staff alike while influencing the organisations ability to stay competitive and increase process efficiency. Renewed effort should be undertaken for the cross training of IT staff with business process key users and consider rotation of IT and business staff into business and analyst roles.

SAM Best Practice: Innovation and entrepreneurship is an organisational norm, the management style of the organisation is based on strength of relationship, cross-training and career crossover is encouraged across the enterprise. The organisation culture is geared for change.

2.8. Conclusion

The overall SAM result of 2.94 for VWSA was lower than expected given the resounding overall successful implementation of the organisations strategic objectives. The result is equivalent to a level 2 maturity as per the Luftman (2000) maturity model. Luftman and Kempaiah (2007:173) comments that traditionally organisations at this level are described as having:

- Commitment to begin the process for strategic alignment.
- Localised to functional areas
- Business and IT have limited understanding of each other"s roles.
- Business and IT interactions are transaction based.
- IT spend is operationally focused.
- Limited IT involvement in strategic business planning

While these descriptors reflect an organisation at maturity level 2 and is the level at which VWSA has been measured, it would be remiss not to recognise that across all the six criteria that there is close alignment to a level 3 organisation. This is represented by the distribution of the 38 alignment criterion scores, 1 at level, 21 at level 2, 15 at level 3 and 1 at level 4

The average alignment score for the manufacturing industry is 3.15 as measured by Luftman and Kempaiah (2007:169). Their assessment found that technology had the highest score while skills the lowest. The VWSA case study assessment found that technology was the highest scoring criteria and value measurement the lowest.

The findings of this case study while initially intended to determine the strategic alignment maturity at VWSA post the implementation the organisations 1:10:100 – 2010 corporate strategy, can be utilised as a initiator measurement to present a more complete view of the strategic alignment process to guide executives and management to attain and sustain the alignment. In interpreting the scores across all alignment criterions the following are considerations for the organisation,

- Communication requires an organisational culture that fosters consistent communication and collaboration, the business is required to reconsider their strategic process and maintain planning integration as one of their primary goals and increase their

communication and interaction with IT.

- Include and formalise business-related metrics, such as user satisfaction and IT‟s responsiveness and effectiveness to the business, with technical service level agreements to form more of a partnership between IT and the business. Formalise strategic roles and responsibilities between business and IT regarding integration, implementation and decision making processes.
- IT steering committee meetings should be held more frequently but should be adapted to a per business functional level as opposed to representation by all business units in one meeting.
- To maintain and mature this process it is imperative that more knowledge sharing sessions are facilitated across the organisation between business and IT to improve business understanding of IT and increase transparency.

3. The Five Levels of Strategic Alignment Maturity

This describes each of the five levels of strategic alignment maturity and presents the overall strategic alignment maturity of VWSA. The Luftman (2000:37-48) descriptions of the five maturity levels are stated below as:

3.1. Level 1 – Initial/Ad Hoc Process

Organisations that meet many of the characteristics of the attributes in the criteria for Level 1 can be characterised as having the lowest level of SAM. It is highly improbable that these organisations will be able to achieve an aligned IT business strategy, leaving their investment in IT significantly unleveraged.

3.2. Level 2 – Committed Process

Organisations that meet many of the characteristics of the attributes in the criteria for Level 2 can be characterised as having committed to begin the process for SAM. This level of SAM tends to be directed at local situations or functional departments within the organisation. However, due to limited awareness by Business and IT of the different functional uses of IT, alignment can be difficult to achieve. Any Business-IT alignment at the local level is typically not leveraged by the organisation, however, the potential opportunities are beginning to be recognised.

3.3. Level 3 – Established Focused Process

Organisations that meet many of the characteristics of the attributes in the criteria for Level 3 can be characterised as having established a focused SAM. This level of SAM concentrates governance, processes and communications towards specific business objectives and is reflective that IT is becoming embedded in the Business. Level 3 organisations leverage IT assets on an enterprise-wide basis and applications systems demonstrate a planned and managed direction away from traditional transaction processing to systems that use information to make business decisions. The IT extra structure (leveraging the inter-organisational infrastructure) is evolving with key partners.

3.4. Level 4 – Improved/Managed Process

Organisations that meet many of the characteristics of the attributes in the criteria for Level 4 can be characterised as having a managed SAM. This level of SAM demonstrates effective governance and services that reinforce the concept of IT as a value centre. Organisations at

Level 4 leverage IT assets on an enterprise-wide basis and the focus of applications systems is on driving business process enhancements to obtain sustainable competitive advantage. A Level 4 organisation views IT as an innovative and imaginative strategic contributor to success.

3.5. Level 5 – Optimized Process

Organisations that meet the characteristics of the attributes in the criteria for Level 5 can be characterised as having an optimally aligned SAM. A sustained governance process integrates the IT strategic planning process with the strategic business process. Organisations at Level 5 leverage IT assets on an enterprise-wide basis to extend the reach of the organisation into the supply chains of customers and suppliers.

3.6. VWSA Strategic Alignment Maturity

Table 9 below reflects the assessment findings of Luftman and Kempaiah (2007) conducted with executives from 197 global companies across the industries listed in the table. The VWSA strategic maturity level as indicated is rated at 2.94 and is indicative of a high level 2 in the 5 level maturity model while the average for the manufacturing industry is 3.15. This implies that VWSA through the 1:10:100 by 2010 strategic phase has begun enhancing its business-IT relationship to a committed process. Organisations at this level can be described and also for VWSA is reflected accordingly by the maturity levels of the six criteria where, the business and IT have limited understanding of each other‟s responsibilities and roles. IT metrics and service levels are technical and cost based, with no linkage to business metrics. Emerging continuous improvement processes exist but are not consistent. Management interactions between business and IT are situational as opposed to a partnership based relationship. IT involvement in strategic business planning is not considered as an enabler and perception is that IT value is limited to basic operations. IT reporting structure is considered as an inhibitor. Technical skills are considered the most important for IT and cross-over into business is project orientated.

Table 9: Luftman and Kempaiah (2007) - Industry Maturity Levels by the Six Criteria

Industry Name	Overall Average
Retail	3.7
Transportation	3.54
Hotel / Entertainment	3.49
Services	3.2
Insurance	3.15
Manufacturing	3.15
Health	3.11
Chemical	2.93
Financial	2.9
Government	2.9
Oil / Gas / Mining	2.9
Utilities	2.88
Pharmaceutical	2.7
Educational	1.17
VWSA	**2.94**

3.7. Conclusion

This case study while initially undertaken to assess the VWSA alignment maturity level can now be expanded into a set of strategic alignment maturity processes and assessment tool that can help to promote long-term IT-business strategic alignment within VWSA. The Strategic Alignment Maturity assessment provides a framework and benchmark of leading management practices and strategic choices that can guide management‟s thinking in integrating information technology and business initiatives.

4. VWSA Alignment Recommendations

During the SAM Survey a series of pre-determined recommendation options for the six alignment criteria were provided to the participants to select in their opinion the two most appropriate for implementation in the organisation that will effectively improve the maturity of the specific criteria for further improvement in the strategic alignment of business and IT.

Table 10 below is a collated representation of the three highest scoring recommendations per criteria based on the number of responses received. Only three have been selected for representation as they articulate the respondent‟s priority recommendations that should be addressed to ensure a continued improvement in business and IT alignment. The complete recommendation results are available in Appendix 4.

Table 10: **VWSA Top Three Recommendations per Criteria**

Recommendations to improve Communications	**Response**
Business and IT committees to oversee IT projects, processes, applications and operational issues at strategic, management and team leader level	27%
Quarterly feedback sessions from IT Business Manager on their IT processes, Incident and Problem logging, prioritisation, escalations and support of IT issues	20%
Create an IT Balanced Scorecard with Business which reflects and measures the Business and User needs	13%
Recommendation to improve levels of competency / value measurements	**Response**
Formal Project Post implementation review and Project Sign-off process	37%
Create an IT Balanced Scorecard with Business which reflects and measures the Business and User needs	30%
Business Review of IT Key Performance Indicators (KPI‟s)	13%
Recommendation to improve Governance	**Response**
Undertake joint Business Process Re-engineering reviews and projects to identify opportunities to utilise IT technology	33%
Quarterly Business-IT feedback briefings on strategy, core processes and applications, prioritisation, service deliver and issues	20%
A seat on Business Projects for an IT representative, either functional departmental or divisionally	17%
Recommendation to improve Partnership	**Response**
Undertake joint Business Process Re-engineering reviews and projects to identify opportunities to utilise IT technology to enable sustainable business strategies	27%
Sharing of risk and reward by Business and IT in relation to Programme and Project Management, and implementation of projects	17%
Business-IT management to organise IT's financial, technical, and human resources around business value and they must provide oversight of IT-related activities to manage Business-IT related risks	17%
Recommendation to improve Technology Integration	**Response**
Business Process Mapping to corresponding IT Technologies local and VW Group to support, align and enable sustainable business strategies	37%
Quarterly Business-IT feedback briefings on strategy, core processes and applications, prioritisation, service deliver and issues	20%
Business-IT management to review quarterly, IT funding and solutions to ensure alignment with sustainable business strategies	17%
Recommendation to improve Skills	**Response**
IT to create knowledge sharing opportunities with Business to establish business process „super“ users	17%
Knowledge sharing to understand and improve IT project management, processes, applications and operational issues	17%
Business-IT must align its maturity with the needs of the organisation to improve the compatibility of technology and processes, as well as to adequately leverage its people skills and attitudes	17%

Upon review of the recommendations it is possible to note the correlation to the ratings of the six criteria and respective criterion where the participant"s ratings were low. It is also the researchers opinion that an assumption can be made that through the organisations experiences during the strategic 1:10:100 by 2010 period there is an emerging acceptance for and recognition of the need to improve business and IT collaboration for organisational value.

Many organisations have found that alignment is difficult to achieve because the information and knowledge gulf between IT and the various business units is too wide. Often there is poor communication, levels of trust, respect and or the two groups are simply focused on different internal objectives.

The case study alignment assessment results and associated recommendations reflected in Table 10 provide valuable insight into what the organisation has identified as inhibitors to strategic alignment what it further believes are opportunities to strengthen the partnership and relationship between the IT and business entities to improve and sustain the alignment. The IT department being the service provider to the business should consider the following as its main focal points for alignment improvement:

- **Participation in the corporate planning process:** If IT does not participate in business planning process related to tactical and operational objectives, IT will still have to be included when the business expands and that may require more effort and investment to meet the business objectives. If IT is part of the corporate planning process from the outset, the business case and investment requirements can be clarified and agreed at point of initiation and objective definition and the value measurement of IT can be made transparent. Importantly for IT to be aligned with business goals, it is imperative for key IT personnel to be involved in the strategic direction of the company.
- **Speak the language of the business:** Talk about problem solving and solutions and not technology. Instead of dwelling on the technological capabilities, emphasize the business benefits that can result from using technology, for example as improved integration with customers and partners and improved process efficiency. IT should invest more time and effort in understanding the business process and develop key business process knowledge within IT.

- **Be pro-active:** Through the on-going business process knowledge being developed learn to anticipate needs before business does and identify operational risk prior to potential impact. IT have to start identifying with the business and thinking about which applications have the biggest business impact and try to support and improve the availability of business critical applications. IT management must also work with their peers to understand their business, proactively considering how IT can be applied to enable and improve business processes and maintain operations.
- **Accountability.** IT must accept defined responsibility for the delivery of projects within quality requirements, specification and timeline agreements, by doing so will vastly improve the business perception of IT and constantly improve the levels of trust and respect. IT must also accept responsibility for the development of clear governance processes to ensure clear and transparent feedback on strategy, core processes and applications, prioritisation, service deliver and issues. IT must also reduce the costs of implementing and operating IT. IT must fully understand what it already has, ensuring that all assets are optimally utilised and identify opportunities for reusability. To work towards greater transparency, business managers should be involved in technology governance and there can be a dedicated business sponsor for major IT projects.

5. Case Study Conclusions

This case study was introduced with an overview of the stated objective of the research, where, the researcher set out to establish as an observer the strategic management processes that were followed in the formulation and implementation of the VWSA corporate strategy. Secondly through the utilisation of Luftman"s Strategic Alignment Maturity model (2000) assess the maturity level of Business-IT strategic alignment at VWSA. Once the maturity level was established and understood it will be used to determine opportunities to enhance the Business-IT strategic alignment.

Upon reflection of the VWSA strategic management processes it was evident from the results and feedback of the interviews conducted that no formal theoretical foundation or framework existed for strategy management within the organisation. This however did not impact on the objectives of the strategy being met it was in reality very well managed and communicated within the organisation, this was the general consensus ascertained during the various interviews.

The strategic management processes followed at VWSA did not directly conform to the processes defined in the literature review but there was a correlation to the views expressed by Thompson et al (2007:15) that a clear and reasoned strategy is management"s prescription for doing business, a roadmap to competitive advantage, a plan for pleasing customers and for improving financial performance. Werbach (2009:9) supported this view and added that where a strategy that is well defined well managed and well led will ensure that the organisation survives and thrives by following emerging trends in society, technology and natural resources. The impetus for ensuring success of the strategy was also very closely related to the acknowledgement that this strategy was a survival strategy for the organisation.

Strategy alignment research over the past three decades has consistently identified IT-business strategy alignment as a pervasive problem, Luftman (2000:5) stated that alignment"s importance has been well known and documented since the late 1970's. Luftman (2000:5) elaborates that alignment still continues to be a concern amongst business executives as the dependence on IT innovation increases in the absence of integrated technology and business strategies. The various researches supports the hypothesis that for those organisations that successfully align their business strategy with IT strategy will outperform those that do not. Alignment leads to more focused and strategic use of IT which, in turn, leads to increased

performance (Chan et al, 2006).

Business-IT alignment is considered a continuous evolutionary process that organisations are consistently required to adapt for the changing business environment (Gutierrez, 2009). Alignment assessments have been traditionally researched through the views of senior managers and executives, whilst they represent the most informed participants in the organisation, at VWSA the views of senior management and managers alike at tactical and operational level reflect the reality people face in day-to-day implementation of the strategies. Both views need to be understood and considered to improve alignment maturity.

Strategic alignment is a dynamic process and is very difficult to achieve due to the continuous change process in business and technology environments. Therefore, for VWSA to attain and sustain business-IT strategic alignment that will lead to a sustainable competitive advantage and business value, the following has to be addressed:

- Determine and define effective management practices that involve knowledge, skill and practices for both business and IT management people, where IT people have to be highly skilled and knowledgeable with business management issues, and the business people have to be skilled and knowledgeable with IT management issues.
- Institute a regular program of knowledge sharing and cross training of business process and IT. Incorporate cultural change into the organization to change business practices, and create a business-IT culture among people in the organization to create a corporate business-IT culture environment.
- Business and IT management at all levels including executives need to develop a shared understanding and vision of the role of IT within the VWSA. IT must evolve and be recognised as a business enabler within the organisation.
- Communication between IT and business should be pervasive throughout the organisation to ensure that a partnership can be established, this will require a higher level of consistent interaction and collaboration between business and IT to ensure greater business value is attainable.
- There should be a more inclusive business and IT strategic planning sessions in developing the overall business and IT strategy for the organisation.

Further to the aforementioned it must be noted that the recommendations reflected in Table 10 are what the organisation has identified as inhibitors to strategic alignment and what it further believes are opportunities to improve and sustain the alignment.

The process of aligning IT with the organisations strategic objectives is not a simple task, it requires that the organisation is aware of the multitude of factors that affect business and IT alignment and have measures in place to manage the processes. An organisations successful performance is dependent on its structures and integrated capabilities that support and enable the implementation of strategic objectives hence it is imperative that business and IT are aligned to deliver organisational benefit. Henderson and Venkatraman (1993) aptly stated that alignment is a two-way process, business and IT alignment is not an event but a process of continuous adaptation and change.

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Section 2: Literature Review

The literature review provides a critical assessment and evaluation of previous research in the field of Business and IT Strategic Alignment.

Introduction

With the increasing demand and dependence on Information Technology (IT) it has become an imperative business strategy and process enabler and has organisations at crossroads in attempting to bridge the Business and IT alignment divide to successfully attain its strategic objectives and consequently sustain the organisations longevity. The objective of this literature review is to provide a critical assessment and evaluation of previous research in the field of Business and IT Strategy Alignment. This literature review evaluates the key elements of an effective Business and IT Strategy formulation and implementation and is followed by a review of literature pertaining to Business and IT Strategic Alignment.

In the context of the aforementioned the research case study objective is to establish the level of Business and IT strategy alignment that existed during a specific corporate strategic phase at Volkswagen South Africa (VWSA) namely "1:10:100 – 2010." The research is intended to address and highlight that Strategy and Alignment is a process, including corporate strategy, organisation, IT Strategy and through a survey quantify the actual levels that these concepts of strategy were utilised in the formulation and implementation of the VWSA corporate strategy.

6. Literature Review - Corporate Strategy

6.1. Introduction

Every organisation has the capability of assessing market requirements, competitive analysis, planning initiatives, and revenue forecasting which are considered as standard operating processes. The organisational imperative should however be to incorporate the aforementioned filters into defining its strategy for competitive advantage and financial benefit. The challenge however lies in the execution of the strategy. This chapter provides an introduction of the key concepts required for Corporate Strategy. The chapter further explores the foundational attributes of the strategic management process required for an effective strategy formulation and implementation.

6.2. Definition of Corporate Strategy

The original meaning of the word strategy is commonly stated as a derivative from the Greek word strategia, which is used in the military terms and represents the ability to employ available resources to win a war (Liddell-Hart: 1967). The direct interpretation of this definition is clearly draconian when the concept is applied to an organisational context, it indirectly implies struggle and focus on opponents. Post-industrial age strategy however may be defined as the pattern or plan that integrates an organisation‟s major goals, policies, and action sequences into a cohesive integrated process to achieve and sustain competitive advantage. (Hill, 2005: 411).

There are several definitions and variants for corporate strategy, the most simplistic way to understand corporate strategy can be related to the Drucker definition, strategy is about knowing where your company is today, where you want to take it, and how you are going to get there. (SerachCIO.com:2006).

6.3. Definition of Strategic Management

Strategic Management according to the definition proposed by Sanchez and Heene (1997), articulate that this refers to the management processes that define an organisation‟s goals for value creation and distribution, and design the way the organisation will be structured and co-ordinated in pursuit of its goals. Louw and Venter (2006:21) further emphasise that strategic management is also concentrated on the organisations ability to set effective strategies that ensure a balance of the organisations resource and capabilities, values and goals with its external environment.

Thus ensuring that the organisations architecture and activities are synergistically integrated to achieve effective performance, strategic competitiveness and earn sustainable above average returns. This invariably indicates an understanding of the industry structure, organisations strategic intent and purpose, strategic analysis, strategy development, formulation and implementation (Louw and Venter, 2006:31).

6.3.1 Strategic Intent and Purpose

Is essentially the direction in which an organisation wants to go, what it aspires to become and how it proposes to get there, aided through defining a Vision and Mission statement (Staude, 2006:46).

6.3.2 Strategic Analysis

Porter (2008) identified the framework of 5 forces that incorporates the threat of new entrants, bargaining power of suppliers, jockeying for position among current competitors, bargaining power of customers and threat of substitute product or services. This framework has become tantamount with strategy (Porter: 2008).

While Porters 5 Forces pertain to competitive analysis, Louw and Venter (2006:84) indicate that it is equally important that further analysis is conducted of the environmental influences namely socio-cultural, technological, economic, ecological and political-legal forces commonly referred to as the STEEP Framework to aid strategy formulation by identifying emerging opportunities and threats.

6.3.3. Strategy Development

Strategy development and formulation is generally about doing the right things with focus on what organisations do particularly well. While implementation is about doing things right (Collis, 2005).

Core to this phase of the process is to ensure that detailed planning and critical decision making is undertaken that leads to establishing the organisational goals and specific strategic plan. Louw and Venter (2006:177) further advocate that organisations consider the options for future corporate, business and global strategies while being strategically flexible.

- Pearce and Robinson (2003:311) articulate that corporate strategies refer to the master strategy, irrespective of being a multi or single business organisation, as cited by Rwigema (2006:213).
- Business-level strategies focus on integration and coordinated, commitments and actions that are imperative to an organisations competitive advantage. (Hoskisson, et al, 2008:128)
- Global strategies as explained by Neuland and Hough (2007:214) generally focus on increasing profitability by benefiting from cost reductions, economies of scale and location economics.

6.3.4 Strategy Formulation

Porter (1979:46) advocates that once strategists have completed the analysis process should formulate strategic objectives that may include:

- Positioning the company so that its capabilities provide the best defence against the competitive force.
- Influencing the balance of the forces through strategic moves, thereby improving the company's position.
- Anticipating shifts in the factors underlying the forces and responding to them.
- Exploiting change by choosing a strategy appropriate for the new competitive balance before opponents recognize it.

Thompson et al (2007:35) are aligned to the Porter perspective on strategy formulation but approach the formulation process through a series of hows:

- How to grow the business?
- How to please customers?
- How to outcompete rivals?
- How to respond to changing market conditions?
- How to manage each functional piece of the business and develop required competencies and capabilities?
- How to achieve strategic and financial objectives?

Thompson et al (2007:35) advocate further that astute managerial entrepreneurship is required to choose the appropriate strategic option from the alternatives presented.

6.3.5 Strategy Implementation

The manner in which the strategy of an organisation is implemented can have a significant influence in determining its measure of or total success. In large organisations the implementation of the strategy will be most likely be carried out by different individuals or business units from those that formulated them. Communication of the strategy and its background and context is an imperative pre-requisite to the actual implementation to ensure that all stakeholders are aligned and support the objectives.

Strategy implementation and execution according to Thompson et al (2007:42) is an operations oriented, make things happen activity primarily focused on performing core business activities in a strategy supportive manner. They articulate that the management of the implementation process includes the following principles:

- Resourcing the organisation with the required skills and expertise, building and strengthening strategy supportive competencies, competitive capability and managing the work effort.
- Allocating the right and sufficient resources to the critical strategic activities imperative for success.

- Policies and procedures must facilitate rather than impede effective implementation.
- Use best practises for core business processes while striving for continuous improvement. Organisational units must assess effectiveness and pursue efficient changes and improvements diligently.
- Motivate people resources to pursue objectives energetically and where applicable be flexible if and when responsibilities need to change to fit the strategic requirements.
- Rewards and incentives must be directly related to achievement of performance objectives.
- Create and maintain an organisational culture and work climate that is conducive to successful strategy implementation.
- Leadership to drive implementation and improvement and when faced with challenges ensure timeous and effective resolution.

Noble‟s (1999) strategy implementation framework is focused on four major stages of the implementation process, namely, pre-implementation, organising the implementation requirements, managing the implementation process, maximising cross-functional contribution and performance. There are five managerial levers for these implementation phases, namely, goals, organisational structure, leadership, communications, and incentives. Noble elaborates that the management of these factors changes through the implementation stages and they are all important in every single phase. The framework is tabulated below in Table 11.

Table 11: **Noble's (1999) Strategy Implementation Framework**

LEVERS	STAGES			
	Pre - Implementation	Organizing the Implementation Effort	Managing the Implementation Process	Maximizing Cross-functional Performance
Goals	Ensure that all managers are aware of the strategic goals of the firm	Introduce goals of the strategy being implemented, incl. fit within organisations broader strategic vision	Maintain the flexibility to adapt goals based on environmental changes	Develop and focus on common goals to encourage cross-functional cohesiveness
Organisational structure	Ensure that functional areas have the slack resources needed to be able to contribute to an implementation effort	Establish a formal implementation unit and ensure its visibility throughout the firm	Ensure equal representation by all affected functional areas	Temporarily suspend key implementation team members" normal responsibilities to allow them to focus on the implementation effort
Leadership	Develop employees" knowledge and appreciation of multiple functional areas	Establish a "champion" who has both official cross-functional authority and general respect in the firm	Ensure that leaders show equal attention to all functional-level concerns	Balance visible and charismatic leadership with a maintenance of autonomy for functional-level implementation efforts
Communications	Maintain regular cross-functional communications to foster understanding and appreciation	Discuss and resolve implementation details early in the process	Update implementation team frequently on progress and changes in objectives	Communicate implementation progress across the entire organisation to foster buy-in
Incentives	Reward the development of cross-functional skills	Develop time and performance-based incentives for implementation while lessening traditional functional incentives	Adjust incentives as strategy and environmental conditions change during implementation	Establish visible and consistent cross-functional rewards for successful implementation efforts

6. 3.6. Knowledge Management in Strategy

Nonaka and Takeuchi (1995:74) define the influence of knowledge as the organisations aspiration to its goals whereby the efforts to achieve the intention takes the form of strategy within the business setting. They further state that the essence of strategy lies in developing the organisational capability to acquire, create, accumulate and exploit knowledge which forms a core element of corporate strategy in the conceptualisation of a vision related to the type of knowledge that should be developed and to operationalize it into a management system for implementation.

The value chain is one such management system that represents a strategic tool to analyse relative cost position, differentiation and the role of competitive scope for achieving competitive advantage. (Porter, 1985:36). While Porter popularised the value chain as a value adding process its true significance lies in its ability to force organisations to make explicit what they have and what they do. With the insights of the Porter value chain, Wang and Ahmed (2005:322) enhanced its development into a knowledge value chain to capture the essence of the knowledge economy within a framework that categorises, KM Processes, KM enablers, organisational capabilities and performance.

6.3.7 Strategic Leadership

This type of leadership as suggested by Hellriegel (Hellriegel et al, 2004) referenced by Amos (2006:354), implies that this occurs at all levels within an organisation, with the best organisations having effective leaders at all levels. Amos further suggests in support of Rowe‟s argument (2006:355), that strategic leadership synergistically combines visionary and managerial leadership required to lead entire organisations, understanding the operational environments and creating sustainable strategic change through people within the organisation for short-term stability and long- term viability (Rowe, 2001).

Amos (2006. 353) suggests the following for effective strategic leaders in implementation of strategy, setting organisational direction to engender commitment, ensuring appropriate leadership at all management levels to drive strategy, staffing the organisation and developing social capital, building and using core capabilities, organisational alignment, creating an organisational culture supportive of the strategy and leading change.

6.3.8. Strategy for Sustainability

In building a strategy for sustainability, organisations must accept that a constant state of change is becoming the status quo (Werbach, 2009:15). Werbach (2009:16-37) further advocates that a strategy for sustainability differs from green strategy in scope and purpose and that organisations should:

- Integrate short term objectives with long term strategy
- Base plans on unpredictable energy and commodity costs
- Build for a 9-billion-person world with aging populations in many of the richest economies.
- Plan for change
- Employ cyclical, constant actions
- Provide deep induction processes with long equity and viability.
- Demonstrate that our people are our most important asset
- Stay highly networked to outside organisations and companies

6.4. Conclusion

In review of the aforementioned strategic management processes it can be noted that it is imperative that an organisation have a strategy that enables its continued sustainable advantage. Thompson et al (2007:15) support this by stating that a clear and reasoned strategy is management"s prescription for doing business, a roadmap to competitive advantage, a plan for pleasing customers and for improving financial performance.

A strategy focused organisation is most likely to succeed as it would imply that all organisational units are aligned to the strategic objectives and that management are committed to its priorities. This is also evidence of the strategic leadership qualities that exist or should exist in organisations to ensure strategic management success. A strategy that is well defined, well managed and well led will ensure that the organisation survives and thrives by following emerging trends in society, technology and natural resources (Werbach,2009:9).

7. Literature Review - Information Technology (IT) Strategy

7.1. Introduction

IT Strategy is required to define an IT vision and a strategic roadmap for developing IT capabilities that are in line with the corporate strategy, business objectives and goals. The focus of developing a formal IT strategy through a top-down analysis is to ensure that IT is investing in the right programs and earning the confidence of business stakeholders. The strategy development is an effort that results in a strategic plan and a set of tactical plans that identify the project portfolio with collective contribution from key business and IT stakeholders and leaders. It is an opportunity that enhances the stakeholders‟ understanding on innovation-by-technology as a means to build competitive advantage. The strategy development is an iterative process that gets refined based on the learning from the execution of the plan. In order to set an IT strategy, it‟s critical to understand the strategy of the enterprise in which IT is operating.

This chapter provides an introduction of the key concepts required for IT Strategy. The chapter further explores the foundational attributes of the IT strategic management process required for an effective strategy formulation and implementation.

7.2. Definition of IT Strategy

There are some terms that are utilised more often than they are understood, IT Strategy is one that also suffers this consequence (CIOIndex.com, 2006). Buchta et al (2007:13) define IT Strategy as the identification of innovative projects that will sustain the competitiveness of the organisation and increase its value long term, used in this formation IT Strategy is also an enabler for business. Willcocks et al (2002:38) substantiate that the key to effective use of IT strategy is having a clear business strategy and business model and that IT is essential to the processes of strategic management.

Willcocks et al (2002) further elaborate that IT Strategy is subdivided into:

- Information Technology (IT) strategy which caters for supply side, infrastructure and technology platforms.
- Information Systems (IS) strategy which is focused on demand side, business applications and business process.

- Information Technology Governance (ITG) strategy is centred on information communications technology leadership, how IT is managed, roles and responsibilities and how IT is structured.

Similar to the principles of Corporate Strategy, IT strategy also follows a framework that encompasses:

- Strategic Planning
- Organisational Structure
- Portfolio Management
- Corporate and IT Strategy Alignment
- Technology Management

7.3. IT Strategic Planning

IT strategy not only enables the effectiveness of an organisation but also defines the efficiency of the information. If an organisation needs to be competent in the market, good IT strategy and execution is needed to create value (Seetharaman, 2008). This emphasises that, to ensure that IT Strategy is successful in this fast paced business climate there is a strong requirement for collaboration between the Business and IT across environment, technology and internal competencies (Seetharaman, 2008). Environment in this case is considered to mean changes in the economy, regulation, industry etc. that can have an impact on your organisation. Technology means improvement in current technology or introduction of new technology that can improve or alter the effectiveness or efficiency of your organisation. Internal competencies means changes in skills, processes or intellectual capital that can give the organisation competitive advantage or vice versa.

This assumes that an IT Strategy is never completely "done" but is crafted over time through a process of multiple "learn and do" cycles. One creates a "big picture" then takes baby steps to it – refining it along the way as needed (Hajela, 2006).

7.4. IT Organisational Structure

An organisational structure is more than just reporting lines or workgroups. The organisation must be designed so that resources can be managed and deployed to best meet business expectations. This implies an understanding of how well the current structure of the IT organisation is positioned to support how the organisation expects to operate in the future. A further imperative would be assessing whether changes in application or technology directions will require changes to the organisation (Info-tech, 2010). Equally important, as IT becomes ubiquitous in all organisations and a critical element of new business strategies and tactics, most IT leaders have found that their people were lacking in business knowledge and skills. If the necessary relationships are to be built, IT re-skilling must go beyond technology skills to business skills (Rockart, et al, 1996:18).

7.5. IT Portfolio Management

IT portfolio management as defined by Kaplan (2005:21) is a method for governing IT investments across the organisation and managing them for value. IT portfolio management can be further described as an integral framework and tool for realising the correlation between the investment on IT and the subsequent corresponding productivity increase. Maizlish and Handler (2005:17) advocate that IT portfolio management exists in all organisations and have very similar goals and objectives regarding the maximising of tangible and intangible value.

Maizlash and Handler (2005:18) provide a step-by-step methodology for applying IT portfolio management that has eight stages:

1. Developing an IT portfolio management game plan
2. Planning the IT portfolio
3. Creating the IT portfolio
4. Assessing the IT portfolio
5. Balancing the IT portfolio
6. Communicating the IT portfolio
7. Developing and evolving IT portfolio governance and organisation
8. Assessing IT portfolio management process execution

There is no single best way to implement IT portfolio management and therefore a variety of approaches can be applied, portfolio management in any organisation is an imperative strategic function as it enable the organisation to conduct proper planning, evaluation, prioritisations, monitoring, management and project tracking. It is important to note that the methods are not set in stone and will require flexibility and altering depending upon the individual circumstances of different organisations.

7.6. IT Technology Management

Technology is a catalyst for competitive advantage, however, it is how the technology is selected and used that leads to an organisations improved performance (Janszen, 2000). Salhieh (2007) adds that organisations continuously investigate and adopt new technologies, trends and develop strategies to compete. Gupta et al (2001), advocate that the benefits derived from new technologies depends on the manner in which the technology is deployed and used. As a result of these factors, organisations need to understand how the perceived benefits from newer technologies can be better utilised to drive competitive advantage.

Ross and Beath (2002) argue that new technologies present organisations with opportunities to adopt new business models. Although research shows the benefits associated with new technology adoption, Hanna-Kisa et al (2009) argue that many managers struggle to adopt and integrate available technologies either new or mature into their business. New technology is often hampered by resistance to change, which affects an organisations culture and climate. Technology adoption is often open to varying technology choices. Nelson (1991) argues that some technologies can lead to success and some could impede progress, therefore choosing the right technology is crucial for implementing a long-term technology strategy. Maintaining a long-term technology planning and selection process is crucial to supporting the technology and business strategy. It may be argued that organisations that adopt a defined technology planning and selection process are better positioned to create an environment that allows for managed technology adoption. Hunter and Westerman (2009:142) support this perspective by identifying six dimensions of change that should be considered in technology implementation and management:

1. The vision of the problem or opportunity
2. The solution and how is it enabled via IT
3. The business case for change
4. Internal business process change
5. Internal organisational change
6. Customer adoption, which often requires customer or societal changes

7.7. Conclusion

The review of the various aforementioned researches has shown that a IT strategy is a set of directional statements intended to achieve specific organisational goals and objectives and with strategic IT management these plans turns direction into action, outlining a series of projects and initiatives designed to support the business strategy. This view is supported by the Luftman, et al (2004:31) statement that an IT strategy should have committed direction and flexibility to adapt to the changing environments.

The process of developing an IT strategy and a strategic plan plays an important role in shifting the IT department to be more business-centric. Outlining the long-term objectives, as well as the short term objectives to achieve those goals, moves IT from behaving reactively to behaving more deliberately and innovatively with a focus on supporting the overall priorities of the enterprise (Info-Tech, 2007). This transformation occurs as a result of the strategic plan which accomplishes the following:

- It clearly articulates the priorities of the IT organisation.
- It provides focus and alignment for IT initiatives by linking them to business objectives.
- It serves as a tool for negotiating with other stakeholders in the organisation.
- It aids in setting goals and marking progress or lack thereof through time.

“Your IT strategy should develop and sustain a portfolio of services and capability. At the heart of the strategy are prioritisation and the investments decisions you and your business colleagues make” (Broadbent and Kitzis, 2005:131).

8. Literature Review - Corporate and IT Strategy Alignment

8.1. Introduction

Business IT alignment is possibly the biggest challenge faced by many IT functions. The most fundamental issue is the inability to link IT to enterprise value creation. As IT capabilities are built bottom-up based on stakeholder influence driven by a competitor strategy or a perceived market need, the contribution of IT to enterprise value is not understood. IT capabilities are not determined based on a top-down analysis of long-term corporate strategy and near-term business objectives and goals. As business strategies are realigned to changing economic and market conditions, IT capabilities are not necessarily revisited. Instead, IT investments continue to be based on incremental budgets which make the IT delivery owners incognizant of the enterprise value proposition of their projects. As most IT delivery organisations map to silo business functions faced with shrinking budgets and demanding silo needs, and with the lack of a formal vision of an enterprise IT strategy, the asset efficiency possible to achieve is low resulting in higher IT delivery costs.

This section is intended to outline the literature available to define, describe, contextualize and state the importance and need for Business and IT strategic alignment in an organisation. This section will also briefly reflect on circumstances that affect Corporate (Business) and IT alignment and outline a Strategic Alignment Maturity Model (SAM) that will be adopted in integrating the case study.

8.2. Overview and Definition

Defining strategic alignment is a challenge in the context of the varied perspectives and many definitions that have emerged over the past two decades, these definitions, and focus on how to improve organisational capabilities through technology with subtle differences. Alignment is an imperative and comprehensive change process for the success of any organisation participating in any business environment, it is designed to align vision, culture, strategy, goals leadership, teams, and individuals. It guides the organisation's ability to execute as one and deliver sustainable successful outcomes. (leadershipadvantage.com, 2007)

Simply put, when a company arranges, coordinates and organizes its capabilities around an agreed vision and set of priorities, it has successfully achieved alignment. Specifically for the IT organisation, successful alignment means that IT is actively and directly enabling business objectives, following the same game plan as the other business functions resulting in a complete lack of distinction between business and IT investments and initiatives (Info-tech, 2010). This is not a new phenomenon, Luftman et al (1999:3) in their research defined alignment, as the application of IT in an appropriate and timely way, in harmony with business strategies, goals and needs.

8.3. Strategy Alignment

Given the importance and proposed benefits of alignment, the number of organisations that successfully align their IT strategy with business strategy is shown to be considerably low. Rosa‟s (1998) study identified that only a mere eight percent of IT and business managers considered themselves very effective in aligning Corporate and IT strategic objectives. Similarly, Luftman et al. (1999:10) noted that only half of more than one thousand executives that participated in their survey reported that their organisations have achieved some degree of alignment. Chan (2002) prompts the question, “Why haven‟t we mastered alignment?”

Supposedly the answer to these questions lies in the effectiveness of the organisations alignment process, Kaplan and Norton (2006:3) elaborated on their previous writings, „The Balance Scorecard: Translating Strategy into Action‟ (1996) and „The Strategy-Focused Organisation‟ by identifying five key principles for aligning an organisation (2001):

- **Mobilisation:** orchestrating change through effective leadership
- **Strategy Translation:** define Strategy Maps, Balanced Scorecards, targets and initiatives
- **Organisational Alignment:** aligning corporate, business units, support units, external partners and boards with the strategy
- **Employee Motivation:** providing education, communication, goal setting, incentive compensation and training of staff
- **Governance:** integrating strategy into planning, budgeting, reporting and management reviews

Kaplan and Norton (2006: 133) further advocate that organisations who do not adopt a leadership position with IT by taking advantage of its continued evolution and forefront emergence will be overtaken by their competitors who do. It is therefore imperative that organisations identify and create the portfolio of IT initiatives necessary to enable and execute its strategy. Kaplan and Norton offer the following as the IT portfolio guideline:

- **Business analytics and decision support:** applications that promote analysis, interpretation, and sharing of information or knowledge
- **Transaction processing:** systems that automate the basic repetitive events of the organisation
- **Infrastructure:** the shared technology and management expertise required to enable effective delivery and use of information capital

8.4. Importance of Business – IT Alignment

Luftman (2000:5) stated that alignment‟s importance has been well known and documented since the late 1970's by citing the examples of previous research (e.g., McLean and Soden, 1977; IBM, 1981; Mills, 1986; Parker and Benson, 1988; Brancheau and Whetherbe 1987; Dixon and Little, 1989; Niederman et al., 1991; Chan and Huff, 1993; Henderson and Venkatraman 1996; Luftman and Brier, 1999). Luftman (2000:5) elaborates that alignment still continues to be a concern amongst business executives as the dependence on IT innovation increases in the absence of integrated technology and business strategies.

Factors of Importance:

- Ideal enabler to support dynamic business strategies
- Improves effectiveness and efficiency
- Improves goal attainment through cohesive activity
- Manages priority
- Transparent communication
- Improves Business – IT knowledge of each other‟s environments
- Improves appropriate application of technology
- Commitment and focus
- Standardised processes

8.5. Challenges in Business–IT Alignment

Chan and Reich (2007) in their informational article present that the Business and IT performance implications of alignment have been demonstrated empirically and through case studies during the last decade and cite the following research, Chan et al (1997) de Leede et al (2002), Irani (2002) and Kearns and Lederer (2003). The various researches supports the hypothesis that for those organisations that successfully align their business strategy with IT strategy will outperform those that do not. Alignment leads to more focused and strategic use of IT which, in turn, leads to increased performance (Chan et al, 2006).

However, the motivation for and methods of alignment research have also been challenged. As a counter-argument scholars argue that the alignment literature fails to capture important phenomena and that in fact, alignment is not always desirable (Chan and Reich, 2007). The arguments according to Chan and Reich (2007) can be summarised as follows:

- alignment research is mechanistic and fails to capture real life
- alignment is not possible if the business strategy is unknown or in process
- alignment is not desirable as an end in itself since the business must always change
- IT should often challenge the business, not follow it

Chan and Reich"s (2007) opinion is that the above are challenges in attaining alignment rather than why it should not be pursued. To simplify the various views of past research it is clear that there is a significantly higher perspective that there is an imperative need for organisations, independent of industry to have an alignment process. While realistic it does not come without its challenges in having to manage this dynamic.

The key challenges for Business-IT alignment have been described in previous research and are varied, the challenge of knowledge as articulated by Chan and Reich (2007):

- refers to the common problem that IT management are not always part of the formulation of the corporate strategy and implies that the organisations leadership have limited or no knowledge about IT). Baets (1996) further found that IT alignment was hindered by a lack of specific industry knowledge through research about the banking industry. In particular, it was found that IT alignment was negatively influenced when awareness of

the banking industry issues was low and when the interaction of different aspects within the corporate strategy was not well known to managers, indicating the need for . A deeper knowledge of the industry itself was required.

The challenge of creating corporate strategy awareness and support is a recurring concern described in previous alignment research by Reich and Benbasat (2000) where they refer that often corporate strategy is unknown or alternatively is not transparent enough or unclear and difficult to adapt and implement according to Baets (1992). Baets (1996) further state that many business managers are unaware of the importance of IT alignment and have little belief that IT can solve important business problems or provide organisational value. Henderson and Venkatraman (1993) research found that managers were more comfortable with their ability to comprehend business positioning choices rather than IT positioning choices.

Campbell (2005) suggests that alignment challenges related to locus of control and the status of IT occur when managers are faced with a business challenge, they make decisions based on their locus of comprehension and their locus of control, constraints that impact alignment.

The business environment is constantly changing, forcing and challenging organisations to adapt to the requirements for sustainable success, hence there can be no static state of alignment. Strategic alignment is therefore a process of change over time and continuous adaptation according to Henderson and Venkatraman (1993). Van Der Zee and De Jong (1999) state that the business environment and technology change so quickly, there is a high probability that the plan and the technology are already obsolete and is identified as a problem with alignment related to the lag between business and IT planning processes.

Luftman, et al. (1999) provided earlier insight through their research survey and analysed the following enablers and inhibitors, in Figure 1, to be the six most enablers and inhibitors of Business-IT alignment:

Table 12: Adapted from, Luftman, et al (1999), Enablers and Inhibitors of Business-IT Alignment

ENABLERS	INHIBITORS
Senior executive support for IT	IT/business lack close relationships
IT involved in strategy development	IT does not prioritize well
IT understands the business	IT fails to meet its commitments
Business - IT partnership	IT does not understand business
Well-prioritized IT projects	Senior executives do not support IT
IT demonstrates leadership	IT management lacks leadership

It is clearly identifiable through the above mentioned research that these challenges will inhibit organisations in their search of Business-IT Alignment but of equal importance, measures can be adopted to limit and or eradicate the issues.

8.6. Strategy Alignment Model

One such measure alluded to in the previous section is the adoption of a Strategy Alignment Model (SAM) which best suits the environment. Business-IT strategic alignment is one of the most popular modern management concepts in Business and IT management particularly in academia and industry (Shamekh, 2008:2). Shamekh (2008) further articulates that Business-IT strategic alignment refers to the degree of congruence between Business and IT strategies. While its importance is well researched and documented, no organisation can attain maturity without adopting a process within a framework to ensure a measure of success in alignment.

Henderson and Venkatraman (1993) were influenced by Massachusetts Institute of Technology (MIT) research in their creation of the Strategic Alignment Model (SAM), which is perhaps the most widely cited of all alignment models. The Strategic Alignment Model (SAM) can be defined as a Business-IT management framework to enable successful implementation of Business and Information Systems/Information Technology (IS/IT) and their corresponding infrastructure components (Shamekh, 2008). The SAM model is based on four related key domains of strategic choice, namely business strategy, organisational infrastructure and processes, IT strategy and IT infrastructure and processes (Henderson and Venkatraman, 1993)

The SAM model is a representation of the strategic and functional integration alignment between the business strategy context and the IT strategy context. Each domain has its own underlying dimensions that consist of three components as presented in Figure 2 (Henderson and Venkatraman, 1993:476).

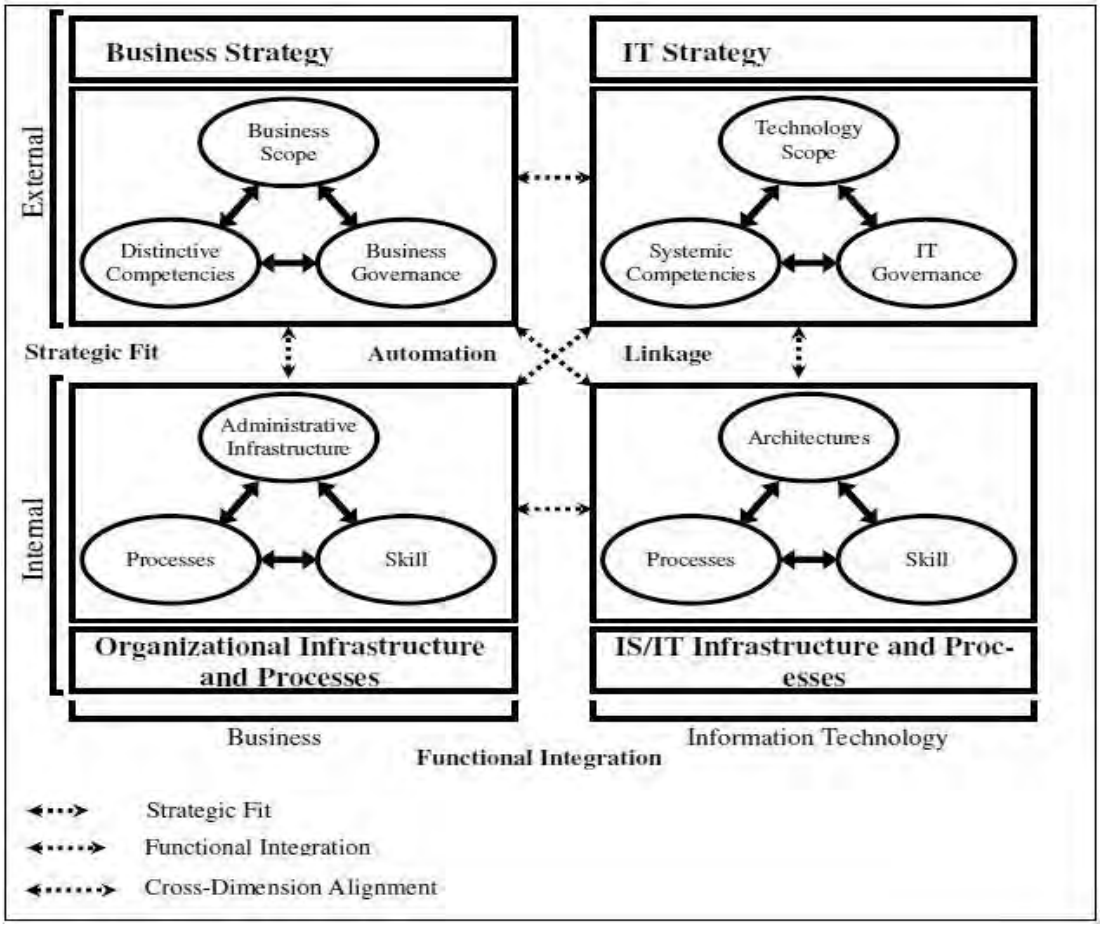

Figure 4: Strategic Alignment Model, Henderson and Venkatraman (1993:476)

The components of the strategic alignment model are twelve components that further define Business-IT strategic alignment (Luftman et al. 1993). Luftman (2000) outlines these components in Table 13 as follows:

Table 13: The Twelve Components of Alignment (Luftman, 1996: 7)

1. BUSINESS STRATEGY **1**. **Business Scope** – Includes the markets, products, services, groups of customers/clients, and locations where an enterprise competes as well as the competitors, suppliers and potential competitors that affect the competitive business environment. **2. Distinctive Competencies** – The critical success factors and core competencies that provides a firm with a potential competitive edge. This includes brand, research, manufacturing and product development, cost and pricing structure, and sales and distribution channels. **3. Business Governance** – How companies set the relationship between management stockholders and the board of directors. Also included are how the company is affected by government regulations, and how the firm manages its relationships and alliances with strategic partners.
2. ORGANISATION INFRASTRUCTURE & PROCESSES **4. Administrative Structure** – The way the firm organizes its businesses. Examples include central, decentral, matrix, horizontal, vertical, geographic, federal and functional. **5. Processes** - How the firm"s business activities (the work performed by employees) operate or flow. Major issues include value added activities and process improvement. **6. Skills** – H/R considerations such as how to hire/fire, motivate, train/educate, and culture.
3. IT STRATEGY **7. Technology Scope** - The important information applications and technologies. **8. Systemic Competencies** - Those capabilities (e.g., access to information that is important to the creation/achievement of a company"s strategies) that distinguishes the IT services. **9. IT Governance** - How the authority for resources, risk, and responsibility for IT is shared among business partners, IT management, and service providers. Project selection and prioritization issues are included here (See Section IV).
4. IT INFRASTRUCTURE AND PROCESSES **10. Architecture** -The technology priorities, policies, and choices that allow applications, software, networks, hardware, and data management to be integrated into a cohesive platform. **11. Processes** - Those practices and activities carried out to develop and maintain applications and manage IT infrastructure. **12. Skills** - IT human resource considerations such as how to hire/fire, motivate, train / educate, and culture.

A framework for strategic alignment is an imperative for any organisation wanting to ensure a sustainable competitive advantage. To do so however a SAM must be adopted from the options available or what best suits the organisation culture, there a number to choose from but the following are according to Shamekh (2008) undoubtedly the most popular concepts:

- According to Henderson and Venkatraman (1993), the strategic alignment refers to "Strategic Fit" and "Functional Integration" among business strategy, IT strategy, business infrastructure and IT infrastructure.

- According to Reich and Benbasat (1996 and 2000), the strategic alignment refers to "The degree to which the IT mission, objectives and plans support and are supported by the business mission, objectives and plans.
- According to Luftman, the strategic alignment refers to Business-IT alignment applying Information Technology (IT) in an appropriate and timely way, in harmony with business strategies, goals and needs" (Luftman 2000). It is synonymous with such terms as integration, cohesion, fusion, fit, match and linked (Luftman 2005).

Gutierrez (2009) analysed the following comparative assessment of the aforementioned concepts and established that only three were not associated to Luftman"s model:

- External IT expertise
- Environmental uncertainty
- Organisational size

Table 14: Alignment of IT Projects with Business Strategy Gutierrez (2009: 45)

Reference	Rationale of assessment	Antecedents of alignment factors	Related factor in Luftman (2000)
Luftman (2000)	Analyse the level of alignment maturity	1. Communication 2. Competency/Value 3. Governance 4. Partnership 5. Scope and architecture 6. Skills	
Reich & Benbasat (2000	Analyse the social dimension of alignment	1. Shared domain knowledge 2. IT implementation success 3. Communications between IS and business executives 4. Connections between IS and business planning processes	Communication Partnership Communication Governance
Hussin et al. (2002)	Analyse alignment for SMEs	1. IT sophistication 2. CEO commitment to IT 3. External IT expertise	Governance IT Governance/ Partnership Not related
Chan et al. (2006)	Analyse antecedents of alignment and the business performance outcome	1.Shared domain knowledge 2. Planning sophistication 3. Prior IS success (IS department track record) 4. Organisational size 5. Environmental uncertainty	Communication Governance Partnership Not related Not related

Gutierrez (2009) argued and supported the view that different types of alignment are becoming more and more important to control. Gutierrez (2009) further established that while most early research on alignment was focused on internal alignment, this type of alignment was mainly engaged in how Business and IT single enterprises collaborated, IT usage by the enterprise and how well IT supports business strategies. The importance of Gutierrez‟s research is relevant and pertinent in the information intensive environment that organisations need to operate within and implies that organisations should focus more of their resources on how IT could support and enable their strategies (Gutierrez, 2009).

8.7. Luftman's Strategy Alignment Maturity Model

Luftman (2000) presented an approach to assess and evaluate the maturity of an organisations Business-IT alignment, he had provided a maturity level of alignment called the strategic alignment maturity (SAM) model. Understanding the maturity of its strategic alignment processes and practises would empower the organisation to improve or adopt new and additional approaches to its Business-IT alignment (Luftman, 2000). This model is consistent with his previous research and, using the same knowledge he concluded that the relationship between the 12 components of the original SAM model (Henderson and Venkantraman, 1993) is further influenced by six factors: communication, IT value, governance, partnership, scope and architecture, and skills. Luftman (2000) defined attributes that determine the level of maturity in each one. He concluded that once the maturity level is understood, the assessment method will provide the organisation with a roadmap that identifies opportunities for enhancing and harmonising the relationship of Business and IT.

Gutierrez (2009), referred to the Luftman model as being beneficial and advantageous to an organisation as it categorised and defined every factor and that it could be practically applied to the management practises within the organisation. These attributes are represented as:

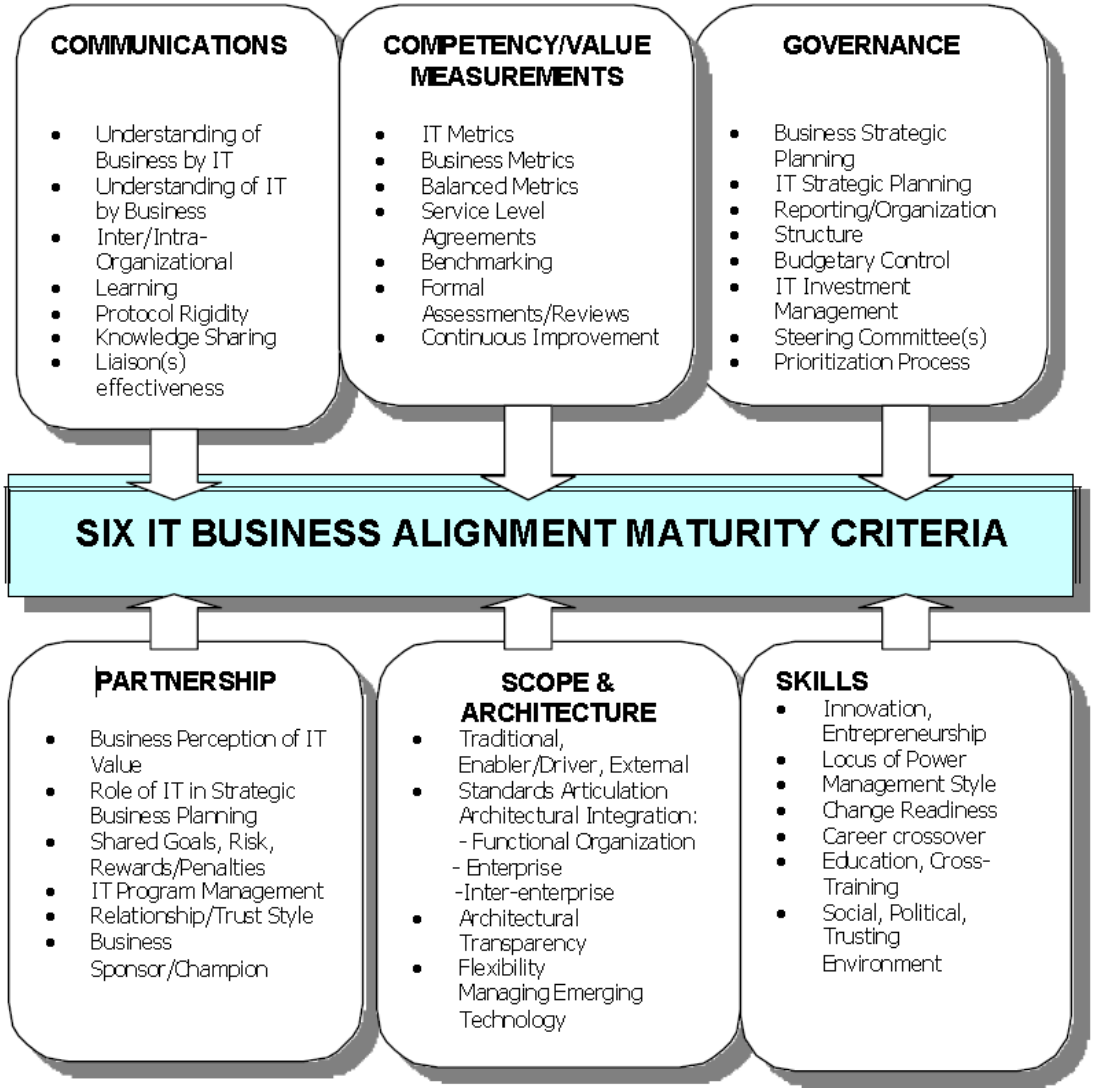

Figure 5: Luftman's Business-IT Alignment Maturity Criteria (2000:12)

8.8. Strategic Alignment Process

Luftman (2000) defines the strategic alignment process as an approach to attain and sustain Business-IT alignment by maximising alignment enablers and minimising inhibitors. The process is characterised by the following six process steps:

- Set the goals and establish a team.
- Understand the Business-IT relationship.
- Analyse and prioritise gaps.
- Specify the actions (project management).
- Choose and evaluate success criteria.
- Sustain alignment.

These process steps in conjunction with the aforementioned criteria are the SAM model that organisations can utilise to assess and evaluate the maturity of the organisations Business-IT alignment and further identify at which maturity level the organisation is placed. The SAM model has five levels of strategic maturity, represented below:

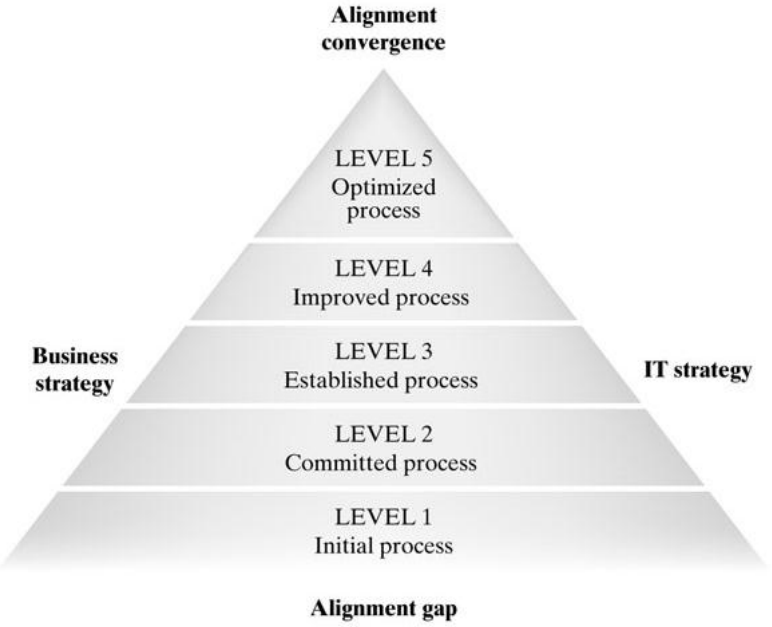

Figure 6: Luftman's Business-IT Alignment Maturity Levels (2000)

- Initial/Ad Hoc Process
  - Business and IT not aligned
- Committed Process
  - Organisation commits to becoming aligned
- Established Focused Process
  - Established and Focused on business objectives
- Improved/Managed Process
  - Reinforcing concept of IT as "Value Center"
- Optimized Process
  - Integrated/Co-adaptive business and IT strategic planning

8.9. Conclusion

From the various literature reviewed it is evident that the various researchers and authors share similar views that alignment of business and IT strategies is imperative for an organisation to be sustainably competitive. Weiss and Anderson (2004:1) comment that the alignment of Business-IT strategy has been utilised by organisations to create and improve, improve efficiency, reduce costs, create barriers to entry, improve customer, buyer and supplier relationships, and to create new products and business solutions. Failure to align business strategy with IT according to the Weiss and Anderson (2004) research can result in the following concerns, inability to invest IT funding wisely and to create mechanisms for investment and funding, inability to gain credibility with the business and provide proactive rather than reactive services, inability to attract, retain and resource the appropriate skills, inability to measure IT‟s contribution to the business and inability to communicate strategy to employees and link strategy to budgets.

Norton (2002) articulates that the alignment problem is being addressed however it can't be solved within the confines of IT. Norton further expresses that the problem is bigger than IT and that it can't be solved from "IT out." it must be solved from the "enterprise in," or more specifically, from "strategy in." The further conclusion that can be drawn from the reviewed literature is that strategic alignment of Business-IT is a process and becomes progressively more important as the size and complexity of an organisation grows and must be seen as an organisational opportunity.

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Section 3: Research Methodology

This section describes the research methodology undertaken during the research case study. This includes the context and objectives of the research, assessment tool, data management and ethical considerations.

9. Research Methodology

9.1. Introduction

This section presents a description of how the work in this research was conducted. This research will be presented in the form of a case study which is intended to describe, understand and evaluate rather than predict and explain (Remenyi:1996). It presents the research process followed in compiling this case study, represented by the aims and objectives, research methodology and design, and data collection techniques.

9.2. Context of Research

During the past three decades Information Technology (IT) has been constantly evolving and has emerged into a significant component and enabler of most organisations strategy, to the point that modern day organisations are intrinsically dependent on IT (Peppard and Ward, 2004). Henderson and Venkatraman (1993) advocate that for an organisation to be successful in a dynamic and competitive business environment it is imperative that there is an effective and efficient IT strategy that enables the business strategy and processes.

Volkswagen South Africa (VWSA) in 2007 launched its corporate strategy, 1:10:100 – 2010 At the end of this stated period 2010, VWSA achieved several of its objectives, namely surpassing its competitors in passenger vehicle sales volume, improving its customer satisfaction, achieving a higher level of local parts content per unit, developing its people and improving its infrastructure and processes.

9.3. Aims and Objectives

Yin (1994:13) defines the case study as an investigation of a contemporary phenomenon within its real life context, especially when boundaries between phenomenon and context are not clearly evident. It is within this context that the objective of this research is set, to describe the concepts and theory of Corporate and IT strategic management processes and to deduce the influence these principles had on the formulation and implementation of the VWSA 1:10:100 – 2010 strategy.

Secondly through the utilisation of Luftman"s Strategic Alignment Maturity model (2000) assess the maturity level of Business-IT strategic alignment at VWSA. Once the maturity level is established and understood it will be used to determine opportunities to enhance the Business-IT strategic alignment.

9.4. Research Paradigm

A paradigm according to Babbie (2008:34) is one of the fundamental models or frameworks of reference we use to organise our observations and reasoning. Mingers (2001) study on information systems research explains that a paradigm is a construct that specifies a general set of philosophical assumptions.

Orlikowski and Baroudi (1991) further suggested that three distinctive paradigms can be identified in Information Technology research, namely, positivist, interpretive and critical. This research is conducted using the interpretive paradigm as it is appropriate in addressing the goal of this research, where the philosophical assumptions, based on Orlikowski and Baroudi (1991) are:

- Ontology - Reality is subjective or inter-subjective human construction.
- Epistemology - Facts and values are entwined. Knowledge exists in understanding how social process, mechanisms and practice are formed and informed by language and culture.
- Axiology - Situated and descriptive understanding of a situation.
- Methodology - Researcher's assumptions, beliefs and values shape and are shaped by investigation.

9.5. Case Study Method

The VWSA case study attempted to highlight the real life processes followed and challenges the organisation encountered in context of the theoretical frameworks of strategic management and Business-IT alignment. The researcher adopted the case study method because of its qualitative method, according to Reige (2003:77) this follows a realistic mode of inquiry that discovers new relationships of realities and builds and understanding of the meanings of experiences rather than to verify predetermined hypotheses. Gray (2004:123)

supports this view by stating “Case studies then explore subjects and issues where relationships may be ambiguous or uncertain.”

In this research the researcher adopted the single case study method, which according to Gray (2004:131) is holistic as only a single case is examined in the context of the organisations strategy which was an entire programme as opposed to individual components within it. Reige (2003:80) cautions researchers to the subjective perception of a case study research due to the direct and personal relationship with the organisation. Reige further adds that researchers make every effort to refrain from subjective judgements during periods of research design and data collection to enhance construct validity. For this case study it was done in accordance with the research goals that are set out to understand the important integrated relationship factors that affect Business-IT alignment in strategy formulation and implementation.

9.6. Data Collection Techniques

The research data was collected through theoretical foundation and position (Gray, 2004: 126) related to Business and Information Technology strategic management processes and alignment.

The research for this case study was conducted at VWSA, where the organisations corporate strategy 1:10:100-2010 was evaluated against the principles of Business and IT strategic management processes and Luftman‟s (2000) Strategic Alignment Maturity assessment (SAM) model. The data collection techniques used was in the form of structured interviews and a survey questionnaire.

The research interview questions were formulated based on the theoretical foundations that are applicable to Business and IT strategic management processes and to deduce the Business and IT level of understanding of these processes and their relationship in strategy formulation and implementation. Secondly the survey questions were formulated in accordance with the Luftman (2000) SAM model, to determine the organisations Business-IT alignment maturity level.

An interview and survey of the questions were carried out during individual interview sessions as this was the most appropriate method for data collection. Gray (2004:124) supports this method by articulating that this is appropriate in a case study method when a „how" or „why" question is being asked about a contemporary set of events over which the researcher has no control. The interview and survey audience included board members, senior management, IT senior management and line management at VWSA.

The interview and survey questionnaire was drawn up from previous research reviewed in the literature review:

1. Luftman (2000) – Assessing Business-IT Alignment Maturity
2. Marley (2009) – Business-IT during a Post-Merger Integration
3. Gutierrez (2009) - Alignment of IT Projects with Business Strategy

The detailed questionnaire can be found in Appendix 1 and 2

9.7. Data Analysis

The informative data collected during the interview sessions was utilised to create the background and detail narrative to understand the strategic management processes that were followed during the formulation and implementation of the organisations strategy.

The survey incorporated questions specific to each of the six alignment criteria of the SAM. Within each criterion six or seven questions were framed for the participant"s selection. Fifteen participants from Business and IT completed the survey scoring each criterion between one and five. The average was calculated for each criterion from the scores of the survey population and an overall average was calculated for each criteria and then averaged for the overall maturity level.

9.8. Ethical Considerations

Permission has been granted to the researcher by the VWSA General Manager Education and Training to carry out the research and conduct aforementioned interviews (see appendix ?). The researcher in conducting this case study has ensured that ethical and confidentiality considerations with the interview and data collection have been maintained. As per the

perceived subjectivity of case study research, this research is dependent on the integrity of the researcher, as the primary individual responsible for collecting and presenting the case study data. The researcher also declares personal involvement in the case due to the researcher being the Chief Technology Officer in the Information Services Division at VWSA and being responsible for IT strategy implementation.

Each participant was made fully aware of the research nature and intent of the interview and survey questionnaire and that their confidentiality and anonymity was ensured.

9.9. Conclusion

This case study research, using the SAM assessment tool to assess the strategic alignment maturity of the organisation is fairly important from the researcher‟s perspective. According to the interview and survey participants, no assessment of this nature has been undertaken at the organisation. The result and ensuing recommendations will create an awareness of what needs to be considered as the organisation moves forward on its next set of strategic objectives. The results of the survey data are presented and commented on to provide an overall assessment of the strategic alignment maturity Luftman‟s Business-IT Alignment Maturity Criteria (2000).

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Appendix 1 – Interview Questions

REFLECTION ON THE VWSA 1:10:100 – 2010 STRATEGY…

This interview is based on a series of questions compiled by the researcher to gain an understanding of the strategic management processes adopted during this strategic period of the organisation.

"Strategic management is concentrated on the organisations ability to set effective strategies that ensure a balance of the organisations resource and capabilities, values and goals with its internal and external environment. Thus ensuring that the organisations architecture and activities are synergistically integrated to achieve effective performance, strategic competitiveness and earn sustainable above average returns (Louw and Venter, 2006)

Your inputs are treated as confidential and are for academic research purposes only.

QUESTIONS

Question 1:

- Why do you believe there was a need for a strategy for VWSA

Question 2:

- What decision making process was followed in determining that this was the strategy for VWSA

Question 3:

- While there is rich detail in the strategic plan why the name 1:10:100-2010

Question 4:

- What in your opinion is the board"s role in the formal strategic planning process

Question 5:

- In developing 1:10:100-2010 was any formal analysis process undertaken (swot / porters five forces)

Question 6:

- Did the analysis incorporate - the threat of new entrants, bargaining power of suppliers, jockeying for position among current competitors, bargaining power of customers and threat of substitute product or services

Question 7:

- Was further analysis conducted of the environmental influences namely socio-cultural, technological, economic, ecological and political-legal forces to aid strategy formulation by identifying emerging opportunities and threats

Question 8:

- Alternatively was the strategy formulation approached by - how to grow the business, how to please customers, how to outcompete rivals, how to respond to changing market conditions, how to manage each functional piece of the business and develop required competencies and capabilities, how to achieve strategic and financial objectives

Question 9:

- How would you describe the role that the strategic management processes played in developing 1:10:100-2010

Question 10:

- How was the progress of the defined strategic initiatives monitored and by whom

Question 11:

- How would you define the tasks of effective strategic leaders at all management levels to drive strategy implementation

Question 12:

- What is your opinion on the overall success of 1:10:100-2010

Question 13:

- How effective was the organisations IT strategy in supporting and enabling 1:10:100-2010

Question 14:

- Reflecting on 1:10:100-2010 what would you recommend / implement as a change to the VWSA strategic management process

Appendix 2 – Alignment Survey Questionnaire and Recommendations

CONSIDER THE ALIGNMENT AND UNDERSTANDING BETWEEN BUSINESS AND IT AT VWSA…

This survey is a standard tool used at over 200 international organisations to benchmark the level of alignment between the Business and IT. It reflects on six key criteria: Communications, Competency / Value Measurement, Governance, Partnership, Technology and Skills.

"Business-It alignment refers to the application of Information Technology (IT) in an appropriate and timely way, in harmony with business strategies, goals and needs. This definition of alignment addresses how IT is aligned with the business and how the business should and could be aligned with IT." (Luftman, 2000)

The survey is designed in a simple multi-choice format and should take no more than 10 – 15 minutes to complete. The contents of your input are treated as confidential and are for academic research purposes only.

1. ALIGNMENT MATURITY CRITERIA 1 – COMMUNICATIONS

This refers to the effective exchange of ideas, knowledge and information sharing among the IT and Business managers, enabling them to have a clear understanding of the organisations strategies; Business and IT environments, the priorities and what must be done to achieve them.

Please select only one option per question.
Indicate your choice by 'X' in the circle next to the statement that best reflects your understanding for each question.

UNDERSTANDING OF THE BUSINESS NEEDS BY IT

- ○ IT management are not aware of Business needs
- ○ There is a limited IT awareness of Business needs
- ○ IT Senior and mid-management are not aware of Business needs
- ○ Awareness of Business is pushed down through the IT organisation
- ○ Awareness of Business needs is clearly visible across all levels of the IT organisation

UNDERSTANDING OF IT AND IT'S NEEDS BY BUSINESS

- ○ Business management are not aware of IT needs
- ○ There is a limited Business awareness of IT needs
- ○ There is emerging business awareness
- ○ Business is aware of the potential of IT
- ○ Awareness of IT needs are clearly visible across all levels of the Business

UNDERSTANDING AND LEARNING ABOUT THE BUSINESS AND IT'S PROCESSES BY IT

- ○ Casual and ad-hoc
- ○ Informal – newsletters, reports, email
- ○ Regular, clear – training departmental meetings
- ○ Unified, bonded - formal methods, led by senior management
- ○ Strong and structured – monitored for effectiveness

PROTOCOL RIGIDITY – THE STYLE OF INTERACTION BETWEEN BUSINESS AND IT STAFF

- ○ Business to IT only, formal interaction - Command and control
- ○ One-way, somewhat limited and informal
- ○ Two-way - emerging formality
- ○ Two-way, somewhat limited and informal
- ○ Two-way , informal and flexible

THE EXTENT OF INFORMATION AND KNOWLEDGE SHARING

- ○ Ad-hoc
- ○ Semi structured and some sharing
- ○ Structured around key processes
- ○ Institutionalized – formal sharing at all levels
- ○ Formal sharing extended to external partners (e.g. customers and suppliers)

THE LIAISON OR WORKING RELATIONSHIP EFFECTIVENESS BETWEEN BUSINESS AND IT

- ○ None or ad-hoc only as required
- ○ Limited tactical technology based – primarily an It to Business link
- ○ Formalized, regular meetings – facilitated knowledge transfer
- ○ Facilitated relationship building, effective at all internal levels
- ○ Building relationship with external partners (e.g. customers and suppliers)

PLEASE SELECT THE TOP TWO IDEAS YOU BELIEVE WOULD IMPROVE THE LEVELS OF COMMUNICATION BETWEEN THE BUSINESS AND IT:

- ☐ Business and IT committees to oversee IT projects, processes, applications and operational issues at strategic, management and team leader level
- ☐ Quarterly feedback sessions from IT Business Manager on IT strategy local and VW Group, core processes and applications
- ☐ IT representative to attend monthly Divisional meetings
- ☐ Quarterly feedback sessions from IT Business Manager on their IT processes, Incident and Problem logging, prioritisation, escalations and support of IT issues
- ☐ Bi-annual / Annual Business-IT reviews – 'health check' to identify opportunities for improvement and requirements
- ☐ Create an IT Balanced Scorecard with Business which reflects and measures the Business and User needs
- ☐ Annual User Satisfaction Survey
- ☐ None of the above

DO YOU PERHAPS HAVE YOUR OWN IMPROVEMENT IDEA OR COMMENT?

2. ALIGNMENT MATURITY CRITERIA 2 – COMPETENCY / VALUE MEASUREMENTS

This refers to the assessment of key performance indicators to demonstrate the contributions of IT to the Business in terms that both the Business and IT understand and accept.

Please select only one option per question.
Indicate your choice by 'X' in the circle next to the statement that best reflects your understanding for each question.

THE WAY IT METRICS ARE PRESENTED TO THE BUSINESS

- ○ Technical; Not related to business
- ○ Measured in terms of cost efficiency
- ○ Measured in traditional financial terms
- ○ Measured in terms of process and or cost effectiveness
- ○ Extended to external partners (e.g. customers and suppliers)

HOW BUSINESS METRICS ARE PRESENTED

- ○ Ad-hoc; Not related to IT
- ○ At the functional departmental level
- ○ Traditional financial
- ○ Also measure customer value
- ○ Balanced scorecard, extended to external partners (e.g. customers and suppliers)

BALANCED METRICS – THE LINKAGE BETWEEN BUSINESS AND IT METRICS

- ○ Value of IT investments are rarely measured
- ○ Business and IT metrics unlinked
- ○ Emerging business and IT metrics becoming linked
- ○ Business and IT metrics formally linked, reviewed and acted upon
- ○ Balanced scorecard, extended to external partners (e.g. customers and suppliers)

ARE SERVICE LEVEL AGREEMENTS IN PLACE FOR IT SERVICES PROVIDED TO THE BUSINESS

- ○ Sporadically present
- ○ Technical at the functional / departmental level
- ○ Emerging across the organisation
- ○ Organisation wide
- ○ Extended to external partners (e.g. customers and suppliers)

ARE BENCHMARKING EXCERCISES UNDERTAKEN FOR IT SERVICES PROVIDED TO THE BUSINESS

- ○ Seldom or never - Not generally practiced
- ○ Sometimes informally
- ○ Focussed on specific processes
- ○ Routinely performed
- ○ Routinely performed and measure results

ARE THERE FORMAL ASSESSMENTS FOLLOWING THE IMPLEMENTATION OF AN IT INVESTMENT OR PROJECT

- ○ None
- ○ Some; Typically for problems
- ○ Emerging formality
- ○ Formally performed and act on findings
- ○ Routinely performed , act and measure results

ARE THERE CONTINUOUS IMPROVEMENT PROCESSES IN PLACE TO IMPROVE BUSINESS-IT ALIGNMENT

- ○ None
- ○ Minimum – effectiveness not measured
- ○ Emerging - starting to measure effectiveness
- ○ Frequently measure effectiveness
- ○ Routinely performed and measures well established

PLEASE SELECT THE TOP TWO IDEAS YOU BELIEVE WOULD IMPROVE THE LEVELS OF COMPETENCY / VALUE MEASUREMENTS BETWEEN THE BUSINESS AND IT:

- ☐ Publish Monthly Reports on IT Helpdesk and Client Support Performance, Application Management Services and IT Systems Availability on the VWSA Intranet (VIKI)
- ☐ Publish Incident and Problem Reports for IT Systems and Applications failures and corrective actions on VWSA Intranet (VIKI)
- ☐ IT representative to attend monthly Divisional meetings
- ☐ 3rd Party Review and Benchmarking Report of current IT performance
- ☐ Publish IT Project Status Reports on the VWSA Intranet (VIKI)
- ☐ Formal Project Post implementation review and Project Sign-off process
- ☐ Create an IT Balanced Scorecard with Business which reflects and measures the Business and User needs
- ☐ Business Review of IT Key Performance Indicators (KPI's)
- ☐ None of the above

DO YOU PERHAPS HAVE YOUR OWN IMPROVEMENT IDEA OR COMMENT?

3. ALIGNMENT MATURITY CRITERIA 3 – GOVERNANCE

This refers to IT decisions and the degree to which the authority for making them is defined and shared among management, and the processes managers in both IT and Business apply for the setting of strategic, tactical and operational IT priorities and the allocation of IT resources.

Please select only one option per question.
Indicate your choice by 'X' in the circle next to the statement that best reflects your understanding for each question.

THE LEVEL OF CONTRIBUTION / INPUT BY IT DURING BUSINESS STRATEGIC PLANNING

- ○ No IT input, Ad-hoc as required
- ○ Basic planning at the Business functional level – slight input by IT
- ○ Some IT input and inter-organisational planning
- ○ At departmental and organisational functional level, with IT
- ○ Integrated across and outside the organisation (e.g. customers and suppliers)

THE LEVEL OF CONTRIBUTION / INPUT BY BUSINESS DURING IT STRATEGIC PLANNING

- ○ No Business input, Ad-hoc as required
- ○ Basic planning at IT functional level – slight input by Business
- ○ Some Business input and inter-organisational planning
- ○ At IT departmental and organisational functional level, with Business
- ○ Integrated with Business and outside the organisation (e.g. customers and suppliers)

REPORTING/ORGANIZATION STRUCTURE

- ○ Central/De-central; CIO reports to CFO
- ○ Central/De-central; Some co-location; CIO reports to CFO
- ○ Central/De-central; Some federation; CIO reports to COO
- ○ Federated; CIO reports to COO or CEO
- ○ Federated; CIO reports to CEO

HOW IS IT BUDGETED AND CONTROLLED

- ○ Cost Centre; as a cost of doing business – unpredictable spending
- ○ As a cost of doing business by functional organisations
- ○ Some IT Projects are treated as investments
- ○ IT is treated as an investment
- ○ IT as a Profit Centre (Internal Business)

WHAT IS THE RATIONALE FOR IT INVESTMENT / SPENDING

- ○ Reduce costs
- ○ Cost based; Operations and maintenance focussed
- ○ As a Process enabler
- ○ As a process driver and a strategic business enabler
- ○ Business value – for competitive advantage and profit

THE NUMBER AND FREQUENCY OF MEETINGS OF BUSINESS-IT STEERING COMMITTEE(S)

- ○ Don't have them
- ○ Periodic organised communication as required
- ○ Regular clear communication - formal committees meet regularly
- ○ Formal effective committees
- ○ Partnership – also include external partners (e.g. customers and suppliers)

PRIORITISATION OF PROJECTS BY THE BUSINESS AND IT

- ○ Reactive to Business or IT needs
- ○ Determined by IT function
- ○ Determined by Business function
- ○ Mutually determined – value add
- ○ Value added partner

PLEASE SELECT THE TOP TWO IDEAS YOU BELIEVE WOULD IMPROVE THE LEVELS OF GOVERNANCE BETWEEN THE BUSINESS AND IT:

- ☐ Business and IT committees to oversee IT projects, processes, applications and operational issues at strategic, management and team leader level
- ☐ A seat on Business Projects for an IT representative, either functional departmental or divisionally
- ☐ Programme and Project Management – to manage and publish information on all across organisation
- ☐ Quarterly Business-IT feedback briefings on strategy, core processes and applications, prioritisation, service deliver and issues
- ☐ Undertake joint Business Process Re-engineering reviews and projects to identify opportunities to utilise IT technology
- ☐ Quarterly communiqué to all stakeholders reflecting status and information on key projects
- ☐ None of the above

DO YOU PERHAPS HAVE YOUR OWN IMPROVEMENT IDEA OR COMMENT?

4. ALIGNMENT MATURITY CRITERIA 4 – PARTNERSHIP

This refers to the relationship between Business and IT organisations, including the IT involvement in defining business strategies, the degree of trust between the two organisations, and the ways in which each perceives the contribution of the other.

Please select only one option per question.
Indicate your choice by 'X' in the circle next to the statement that best reflects your understanding for each question.

BUSINESS PERCEPTION OF IT VALUE

- ○ IT perceived as a cost of doing business
- ○ IT emerging as an asset
- ○ IT is seen as an asset – enables future business activity
- ○ IT is part of the business strategy – drives future business activity
- ○ IT partners with the Business in creating value.

ROLE OF IT IN STRATEGIC BUSINESS PLANNING

- ○ No seat at the business table
- ○ Business process enabler
- ○ Business process driver
- ○ Business strategy enabler/driver
- ○ IT enables Business to adapt and change - responsively and effectively

SHARED GOALS, RISK, REWARDS/PENALTIES

- ○ IT takes risk with little reward
- ○ IT takes most of the risk with little reward
- ○ IT and Business Risk tolerant; IT some reward
- ○ Risk acceptance and rewards shared
- ○ Risk and rewards shared

IT PROGRAM / PROJECT MANAGEMENT

- ○ No management process
- ○ Managed on an ad-hoc basis – as required
- ○ Process / Standards defined but always followed
- ○ Process / Standards defined and are adhered to
- ○ Process / Standards evolved - Continuous improvement

RELATIONSHIP/TRUST STYLE BETWEEN IT AND BUSINESS

- ○ Conflict and mis-trust - no relationship
- ○ Primarily transactional relationship
- ○ IT emerging as valued service provider
- ○ Valued service provider - long term partner
- ○ Valued partner, trusted IT services provider

BUSINESS SPONSOR/CHAMPION

- ○ Usually None
- ○ Often have a senior IT sponsor
- ○ IT and Business sponsor at the departmental level
- ○ Business sponsor at corporate level
- ○ Managing Director is the business sponsor

PLEASE SELECT THE TOP TWO IDEAS YOU BELIEVE WOULD IMPROVE THE LEVELS OF PARTNERSHIP BETWEEN THE BUSINESS AND IT:

- ☐ Business and IT committees to oversee IT projects, processes, applications and operational issues at strategic, management and team leader level
- ☐ An IT representative seat on Business strategy formulation and implementation
- ☐ Sharing of risk and reward by Business and IT in relation to Programme and Project Management, and implementation of projects
- ☐ Quarterly Business-IT feedback briefings on strategy, core processes and applications, prioritisation, service deliver and issues
- ☐ Undertake joint Business Process Re-engineering reviews and projects to identify opportunities to utilise IT technology to enable sustainable business strategies
- ☐ Business-IT management to review quarterly, IT funding and solutions to ensure alignment with and for sustainable business strategies
- ☐ Business-IT management to organise IT's financial, technical, and human resources around business value and they must provide oversight of IT-related activities to manage Business-IT related risks
- ☐ None of the above

DO YOU PERHAPS HAVE YOUR OWN IMPROVEMENT IDEA OR COMMENT?

5. ALIGNMENT MATURITY CRITERIA 5 – TECHNOLOGY

This refers to the organisation's infrastructure, IT ability to enable or drive business process change and readiness, IT flexibility in structure, IT's management and application of emerging innovations and implementation of valuable IT solutions.

Please select only one option per question.
Indicate your choice by 'X' in the circle next to the statement that best reflects your understanding for each question.

HOW HAS THE PRIMARY IT SYSTEMS EVOLVED - TRADITIONAL, ENABLER/DRIVER, EXTERNAL

- ○ Traditional Office support systems (e.g. accounting, email)
- ○ Transaction based (e.g. Shop Floor tracking, ESS, DSS)
- ○ Business process enabler (MRP – SAP, WM, Web)
- ○ Business process driver – redefined scope
- ○ Business strategy driver/enabler

STANDARDS – HOW WELL DEFINED ARE THE IT STANDARDS FOR HARDWARE, SOFTWARE AND SYSTEMS

- ○ None or ad-hoc
- ○ Standards defined
- ○ Emerging Group or Corporate standards
- ○ Group or Corporate standards
- ○ Inter-enterprise - extended to external partners (e.g. customers and suppliers)

ARCHITECTURAL INTEGRATION:
THE LEVEL OF INTEGRATION OF IT SYSTEMS AT A DEPARTMENTAL LEVEL

- ○ No formal integration
- ○ Early attempts at integration
- ○ Integrated with specific functional departments
- ○ Integrated across the organisation
- ○ Integrated with partners (e.g. customers and suppliers)

THE LEVEL OF INTEGRATION OF IT SYSTEMS AT AN ENTERPRISE LEVEL

- ○ No formal integration
- ○ Early attempts at integration
- ○ Integrated between specific functional departments
- ○ Integrated with partners (e.g. customers and suppliers)
- ○ Evolved with partners

THE LEVEL OF INTEGRATION OF IT SYSTEMS WITH EXTERNAL PARTNERS (e.g. Customers and Suppliers)

- ○ No formal integration
- ○ Early concept testing
- ○ Emerging with key partners
- ○ Integrated with key partners
- ○ Evolved with all partners

IT SYSTEMS FLEXIBILITY AND TRANSPARENCY - PERCEIVED

- ○ Utility ran at minimum cost
- ○ Becoming driven by business strategy
- ○ Driven by business strategy
- ○ Effective emerging technology management – assisting Business manage change
- ○ Enables fast response to changing conditions

PLEASE SELECT THE TOP TWO IDEAS YOU BELIEVE WOULD IMPROVE TECHNOLOGY INTEGRATION BETWEEN THE BUSINESS AND IT:

- ☐ Business and IT committees to oversee IT projects, processes, applications and operational issues at strategic, management and team leader level
- ☐ An IT representative seat on Business strategy formulation and implementation
- ☐ Undertake joint Business Process Re-engineering reviews and projects to identify opportunities to utilise IT technology to enable sustainable business strategies
- ☐ Quarterly Business-IT feedback briefings on strategy, core processes and applications, prioritisation, service deliver and issues
- ☐ Business Process Mapping to corresponding IT Technologies local and VW Group to support, align and enable sustainable business strategies
- ☐ Business-IT management to review quarterly, IT funding and solutions to ensure alignment with sustainable business strategies
- ☐ None of the above

DO YOU PERHAPS HAVE YOUR OWN IMPROVEMENT IDEA OR COMMENT?

6. ALIGNMENT MATURITY CRITERIA 6 – SKILLS

This refers to skills considerations of the organisation including practices such as training, performance feedback, encouraging innovation and providing career opportunities, as well as the IT organisation's readiness for change, capability for learning and ability to leverage new ideas.

Please select only one option per question.
Indicate your choice by 'X' in the circle next to the statement that best reflects your understanding for each question.

CREATING AND WORKING WITHIN AN INNOVATIVE AND ENTREPRENEURIAL ENVIRONMENT

- ○ Discouraged
- ○ Somewhat encouraged at functional departmental level
- ○ Risk tolerant
- ○ Encouraged at organisational level
- ○ The norm

LOCUS OF POWER – WHO MAKES IT DECISIONS

- ○ Top Business and IT management at corporate level
- ○ Top Business and IT management with departmental influence
- ○ Top Business and departmental management, IT advisory role
- ○ Top Business and IT management across the organisation
- ○ All executives, including CIO and partners

WHAT IS THE ORGANISATION'S MANAGEMENT STYLE

- ○ Command and control
- ○ Consensus-based
- ○ Results based
- ○ Profit/value based
- ○ Relationship based

WHAT IS THE ORGANISATION'S ATTITUDE TO CHANGE

- ○ Resistant to change
- ○ Dependent on functional level
- ○ Recognise need for change
- ○ Recognise and accept need for change
- ○ High, focused

ARE THERE CAREER CROSSOVER OPPORTUNITIES BETWEEN FUNCTIONS

- ○ None, rarely
- ○ Occasionally within departmental levels
- ○ Regularly occur for departmental management level
- ○ Regularly occur across departmental management levels
- ○ Across the organisation

WHAT ARE THE OPPORTUNITIES FOR CROSS FUNCTIONAL TRAINING AND JOB ROTATION

- ○ None
- ○ Minimum
- ○ Dependent on functional department
- ○ Across the functional area
- ○ Across the organisation

THE LEVEL AND QUALITY OF SOCIAL INTERACTION BETWEEN BUSINESS AND IT

- ○ Minimum
- ○ Strictly a business only relationship
- ○ Trust and confidence is emerging
- ○ Valued service provider
- ○ Valued partnership

PLEASE SELECT THE TOP TWO IDEAS YOU BELIEVE WOULD IMPROVE HUMAN RESOURCE SKILLS BETWEEN THE BUSINESS AND IT:

- ☐ Cross training of IT staff in key business processes with 'super' users
- ☐ IT to create knowledge sharing opportunities with Business to establish business process 'super' users
- ☐ Rotate Business-IT staff into Business and IT roles
- ☐ Key staff to cross train to be familiar with processes of Business, Customers and Suppliers
- ☐ Knowledge sharing to understand and improve IT project management, processes, applications and operational issues
- ☐ Undertake inter-departmental Business Process Re-engineering projects to identify opportunities to industrialise processes for operational excellence and efficiency
- ☐ Business-IT must align its maturity with the needs of the organisation to improve the compatibility of technology and processes, as well as to adequately leverage its people skills and attitudes
- ☐ None of the above

DO YOU PERHAPS HAVE YOUR OWN IMPROVEMENT IDEA OR COMMENT?

Appendix 3

An Update on Business-IT Alignment

Industry Maturity Levels by the Six Criteria – ranked highest to lowest

Industry Name	# of Companies	Communication	Competency	Governance	Partnership	Scope of IT Architecture	Skills	Overall Average
Retail	7	3.65	3.57	3.52	3.9	3.81	3.51	3.7
Transportation	3	3.1	3.8	3.57	3.53	3.63	3.6	3.54
Hotel / Entertainment	6	3.46	3.46	3.53	3.44	3.62	3.45	3.49
Services	27	3.18	3.21	3.28	3.32	3.28	3.22	3.2
Insurance	6	3.16	3.15	3.3	3.17	3.24	2.9	3.15
Manufacturing	46	3.22	3.1	3.15	3.3	3.17	2.9	3.15
Health	5	3.06	2.79	3.34	3.06	3.24	3.17	3.11
Chemical	7	2.78	2.84	2.93	2.87	3.28	2.84	2.93
Financial	57	2.83	2.92	2.98	2.86	3.03	2.7	2.9
Government	6	2.94	2.7	3.07	3.07	2.99	2.67	2.9
Oil / Gas / Mining	3	2.96	2.86	2.92	2.84	3.22	2.64	2.9
Utilities	7	2.96	2.94	2.81	2.84	3.13	2.6	2.88
Pharmaceutical	14	2.74	2.58	2.71	2.64	2.85	2.71	2.7
Educational	3	1.86	1.74	1.66	1.41	1.78	1.833	1.17

Overall Alignment Average Score : 3.04

Reference: Luftman and Kempaiah (2007)

Appendix 4 – Recommendations by Criteria

Recommendations to improve Communication

Recommendation options	Response
Business and IT committees to oversee IT projects, processes, applications and operational issues at strategic, management and team leader level	27 %
Quarterly feedback sessions from IT Business Manager on IT strategy local and VW Group, core processes and applications	10 %
IT representative to attend monthly Divisional meetings	10 %
Quarterly feedback sessions from IT Business Manager on their IT processes, Incident and Problem logging, prioritisation, escalations and support of IT issues	20 %
Bi-annual / Annual Business-IT reviews – 'health check' to identify opportunities for improvement and requirements	13 %
Create an IT Balanced Scorecard with Business which reflects and measures the Business and User needs	13 %
Annual User Satisfaction Survey	3 %
None of the above	3 %

Recommendations to improve levels of competency / value measurements

Recommendation options	Response
Publish Monthly Reports on IT Helpdesk and Client Support Performance, Application Management Services and IT Systems Availability on the VWSA Intranet (VIKI)	0 %
Publish Incident and Problem Reports for IT Systems and Applications failures and corrective actions on VWSA Intranet (VIKI)	3 %
IT representative to attend monthly Divisional meetings	7 %
3rd Party Review and Benchmarking Report of current IT performance	3 %
Publish IT Project Status Reports on the VWSA Intranet (VIKI)	7 %
Formal Project Post implementation review and Project Sign-off process	37 %
Create an IT Balanced Scorecard with Business which reflects and measures the Business and User needs	30 %
Business Review of IT Key Performance Indicators (KPI's)	13 %
None of the above	0 %

Recommendations to improve Governance

Recommendation options	Response
Business and IT committees to oversee IT projects, processes, applications and operational issues at strategic, management and team leader level	13 %
A seat on Business Projects for an IT representative, either functional departmental or divisionally	17 %
Programme and Project Management – to manage and publish information on all across organisation	7 %
Quarterly Business-IT feedback briefings on strategy, core processes and applications, prioritisation, service deliver and issues	20 %
Undertake joint Business Process Re-engineering reviews and projects to identify opportunities to utilise IT technology	33 %
Quarterly communiqué to all stakeholders reflecting status and information on key projects	10 %
None of the above	0 %

Recommendations to improve Partnership

Recommendation options	Response
Business and IT committees to oversee IT projects, processes, applications and operational issues at strategic, management and team leader level	10 %
An IT representative seat on Business strategy formulation and implementation	7 %
Sharing of risk and reward by Business and IT in relation to Programme and Project Management, and implementation of projects	17 %
Quarterly Business-IT feedback briefings on strategy, core processes and applications, prioritisation, service deliver and issues	13 %
Undertake joint Business Process Re-engineering reviews and projects to identify opportunities to utilise IT technology to enable sustainable business strategies	27 %
Business-IT management to review quarterly, IT funding and solutions to ensure alignment with and for sustainable business strategies	10 %
Business-IT management to organise IT's financial, technical, and human resources around business value and they must provide oversight of IT-related activities to manage Business-IT related risks	17 %
None of the above	0 %

Recommendations to improve Technology integration

Recommendation options	Response
Business and IT committees to oversee IT projects, processes, applications and operational issues at strategic, management and team leader level	10 %
An IT representative seat on Business strategy formulation and implementation	7 %
Undertake joint Business Process Re-engineering reviews and projects to identify opportunities to utilise IT technology to enable sustainable business	10 %
Quarterly Business-IT feedback briefings on strategy, core processes and applications, prioritisation, service deliver and issues	20 %
Business Process Mapping to corresponding IT Technologies local and VW Group to support, align and enable sustainable business strategies	37 %
Business-IT management to review quarterly, IT funding and solutions to ensure alignment with sustainable business strategies	17 %
None of the above	0 %

Recommendations to improve Skills

Recommendation options	Response
Cross training of IT staff in key business processes with 'super' users	10 %
IT to create knowledge sharing opportunities with Business to establish business process 'super' users	17 %
Rotate Business-IT staff into Business and IT roles	10 %
Key staff to cross train to be familiar with processes of Business, Customers and Suppliers	13 %
Knowledge sharing to understand and improve IT project management, processes, applications and operational issues	17 %
Undertake inter-departmental Business Process Re-engineering projects to identify opportunities to industrialise processes for operational excellence and efficiency	17 %
Business-IT must align its maturity with the needs of the organisation to improve the compatibility of technology and processes, as well as to adequately leverage its people skills and attitudes	17 %
None of the above	0 %

Appendix 6 – Alignment Criteria Rating Summary

CRITERIA	ATTRIBUTE	RATING
Communications	Understanding of Business by IT	4.00
	Understanding of IT by Business	2.91
	Inter/Intra-organisational learning	2.18
	Protocol Rigidity	3.00
	Knowledge Sharing	2.73
	Liaison(s) Breadth/Effectiveness	2.55
Value Measurements		
	IT Metrics	3.36
	Business Metrics	2.73
	Balanced Metrics	2.55
	Service Level Agreements	1.82
	Benchmarking	1.82
	Formal Assessments/Reviews	2.64
	Continuous Improvement	2.73
Governance		
	Business Strategic Planning	2.73
	IT Strategic Planning	3.27
	Reporting/Organisation Structure	1.36
	Budgetary Control	2.18
	IT Investment Management	3.27
	Steering Committee(s)	2.73
	Prioritisation Process	3.36
Partnership		
	Business Perception of IT Value	2.45
	Role of IT in Strategic Business Planning	2.45
	Shared Goals, Risk, Rewards/Penalties	2.45
	IT Program Management	3.36
	Relationship/Trust Style	2.55
	Business Sponsor/Champion	3.27
Technology	Traditional. Enabler/Driver, External	2.91
	Standards Articulation	3.36
	Architectural Integration Departmental	3.36
	Architectural Integration Enterprise	3.09
	Architectural Integration External	3.64
	Architectural Transparency, Flexibility	3.00
Skills		2.64
	Innovation, Entrepreneurship	2.82
	Locus of Power	2.45
	Management Style	3.73
	Change Readiness	2.64
	Career crossover	
	Education, Cross-Training	2.82
	Social, Political, Trusting Environment	2.82