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# TABLE OF CONTENTS

## LIST OF EXHIBITS

## LIST OF APPENDICES

### 1 INTRODUCTION

- Area of Investigation ................................................................................. 1
- Organisation Context .................................................................................. 1
- Strategic significance of the issue under investigation .............................. 3
- Research Objectives .................................................................................... 4

### 2 LITERATURE REVIEW & CONCEPTUAL FRAMEWORK

- History .......................................................................................................... 5
- Models of Organisational Culture ............................................................... 6
- Typologies of Organisational Culture ......................................................... 6
- Models of Culture Change .......................................................................... 8
- Culture Change Diagnostic Tools (1) .......................................................... 10
- Culture Change Diagnostic Tools (2) .......................................................... 12
- Development of a Conceptual Framework ................................................... 14

### 3 RESEARCH METHODOLOGY

- Research Philosophy ..................................................................................... 16
- Positivism ...................................................................................................... 16
- Interpretivism ................................................................................................ 17
- Realism .......................................................................................................... 18
- Philosophical Position .................................................................................. 19
- Research Strategy .......................................................................................... 20
- Research Methodology .................................................................................. 21
- Data Line Analysis ......................................................................................... 23
- Self-completed Intranet Questionnaires ....................................................... 23
- Semi-structured Interviews ......................................................................... 25
- Overall Research Design .............................................................................. 26

## APPENDICES

## BIBLIOGRAPHY
LIST OF EXHIBITS

Exhibit 2.1  Charles Handy’s four types of culture
Exhibit 2.2  Deal and Kennedy’s four types of culture
Exhibit 2.3  Dyer’s model
Exhibit 2.4  Gagliardi’s model
Exhibit 2.5  Cultural Web
Exhibit 2.6  Process Iceberg Change model
Exhibit 2.7  EOD Iceberg
Exhibit 2.8  Conceptual Framework
Exhibit 3.1  Fundamental differences between quantitative and qualitative research strategies
LIST OF APPENDICES

Appendix 1  The Billion Dollar Business Big Picture
Appendix 2  New Trelleborg Offshore Organisation Structure
Appendix 3  Trelleborg Group Sales by Business Area
Appendix 4  Trelleborg Group Business Model
Appendix 5  Trelleborg Offshore’s Key Market Areas
Appendix 6  What Trelleborg Offshore Offers?
Moving from a product-focussed to a customer-focussed business. Critically evaluate the ability of Trelleborg Offshore to ensure its organisational culture is aligned with its vision, strategies and structure.

1 INTRODUCTION

Area of Investigation

At the beginning of 2010, the Executive Leadership Team of Trelleborg Offshore (TO) agreed that, to achieve its Billion Dollar Business vision, the business needed to become more customer-focussed and began reviewing its organisation structure. A change consultancy firm was employed to validate and detail this concept by engaging people from across the whole business in a conversation about change and the future of the business. This resulted in the Billion Dollar Business Big Picture (Appendix 1) which was created as the centrepiece of a process called Visual Dialogue, and was rolled out across TO to invite people to explore;

- Our strategic vision for the future
- What we’re doing and what we need to do to make the most of the opportunities before us
- The part we can each play in leading those changes

By June 2010 the findings confirmed that the company needed to change from a traditionally product-focussed business to one that is customer-focussed. In April 2011 the organisation structure changed from traditional legal entities to a hybrid structure of customer groups and functional areas across TO. (Appendix 2) Each customer group consists of multi-disciplined employees from throughout TO to maximise their sales focus and competitive advantage. A further objective is to overcome the limiting and perceived silo mentality of the legal entities, which are considered to be too insular, and
either unwilling or unable to move from the comfort zones of their current products and markets.

This investigation will critically evaluate the ability of TO to ensure that the organisation’s culture is aligned with its new customer-focussed structure and is complimentary to its vision and strategies.

**Organisation Context**

In January 2006 TO was acquired by Trelleborg Group, a Swedish publicly listed company and a global engineering group with sales of £2.9bn and over 20,000 employees worldwide in 44 countries. Trelleborg Group develops high performance engineered solutions that seal, damp and protect in extremely demanding environments. Trelleborg Group is split into 4 business areas and TO forms part of the Engineered Systems business area. (Appendix 3)

Trelleborg Group’s business model is available to all its stakeholders via the internet and outlines the organisation’s vision, business concept, strategies, leadership culture, activities, and values, codes of conduct and corporate governance. (Appendix 4) The business model is sufficiently generic to allow TO a good deal of flexibility and independence to determine its own vision, business concept and strategies within a designated framework.

TO designs and manufactures composite components primarily for the oil and gas industry but also in a number of other market areas. (Appendix 5) TO currently have production facilities in the UK, US and Norway, with a turnover of £250m and 1,300 employees. Historically TO has been seen as the market leader in materials science and its products have been best in class. (Appendix 6) However times are changing! Competitors are catching up and undermining our market leading position. In some cases the markets are literally moving away to different geographies and towards different technologies, whilst customers are demanding localised manufacturing.
In October 2010 a green field investment in Brazil was approved and will commence manufacturing in Q4 2011. Brazil is forecast to become the largest subsea market in the world by 2014. The discovery of the Tupi oilfield in 2006 was the Americas largest discovery in more than 30 years but has since been eclipsed by the Libra oilfield discovery that is estimated to be twice as big with reserves of up to 15 billion barrels. (Millard, 2010) The relatively sudden emergence of the Brazilian deepwater fields highlights the dramatic nature of changes currently taking place in the oil and gas industry and the fresh challenges facing TO.

It is intended that the new structure will allow greater flexibility to adapt to the rapidly changing global market and improve its competitive advantage and business performance. However simply changing structures, processes and systems is no guarantee of success. Businesses are social systems and it is therefore essential that the organisational culture is also in alignment.

**Strategic significance of the issue under investigation**

The reorientation of the organisation clearly involves a substantial risk, which must be managed through an effective change programme. The new global structure will bring together different cultures and different working practices and policies that must be quickly aligned. Reporting lines will suddenly become more horizontal across wide geographical areas and time zones.

The strategic significance of the challenge is to ensure the existing culture supports the strategy and structure of the business moving forwards. Any gaps or barriers should be quickly diagnosed and the agreed values and behaviours must be addressed through cultural changes. Simply hoping the organisational culture will automatically adapt to a compelling vision is a high risk strategy and should not be underestimated. If the customer-focussed structure is not supported by a customer-focussed culture then TO is unlikely to improve its business performance and it may even lead to its decline.
Research Objectives

TO already embrace a Billion Dollar Business vision and a decision has been taken to change the organisation structure to one that is more customer-focussed. A further challenge for TO is to ensure the organisational culture is both supportive and complimentary to its vision, strategies and structure.

The research objectives for this project are:

- To identify potential barriers to cultural change in moving from a product-focussed to a customer-focussed organisation
- To assess whether leaders’ behaviours and values are aligned with the development of TO’s organisational culture
- To provide recommendations to ensure the cultural changes are sustainable in order to achieve the Billion Dollar Business vision
History

The study of organisational culture comes from diverse origins ranging from anthropologists to management theorists and business writers. As a result of this the definitions of organisational culture are not universal and it still remains an emergent discipline.

"Culture is the deeper level of basic assumptions and beliefs that are shared by members of an organisation, that operates unconsciously and define in a basic ‘taken for granted’ fashion an organisation’s view of its self and its environment." (Schein, 1997, p.6)

"Culture is the collective programming of the human mind that distinguishes the members of one human group from those of another. Culture in this sense is a system of collectively held values.” (Hofstede, 1980, p.25)

“Organisational culture is not just another piece of the puzzle, it is the puzzle. From our point of view, a culture is not something an organisation has; a culture is something an organisation is.” Pacanowsky and O’Donnell-Trujillo (1982) cited in (Brown, 1998, p.7)

One of the earliest writers to discover key cultural factors was anthropologist Hall (1959) cited in Changing Minds.org (2010). Business writers on organisational culture first started appearing in the 1970s with Harrison (1972) on organisational character, that was later popularised by Handy (1976) and Pettigrew (1979). It was not however until the 1980s that saw a movement away from the ‘hard S’s’ of structure, systems and strategy to a focus on the ‘soft S’s’ of skill, staff, style and superordinate goals. The emergence of new management theorists included; Ouchi (1981), Pascale and Athos (1981),

Much of this early writing was fragmented and lacked coherence until 1985 when Schein (1997) published his seminal work, *Organizational Culture and Leadership* and brought the subject to prominence in the academic world. Schein (1997) espouses culture as assumptions and beliefs whereas writers, such as Hofstede (1980), see culture as a system of values. The two opposing schools of thought (and disciplines) argue whether culture should be seen as a deep or shallow phenomenon.

**Models of Organisational Culture**

Schein (1997) believes culture is the most difficult aspect of an organisation to change, in the sense that it transcends other parts of the business, such as structure and strategies. It may be easy to recognise artefacts that are symbolic of an organisational culture but it is not so easy to understand the deeper levels of assumptions and beliefs of an organisation, or whether they are even shared by all of its members.

It seems logical if you are able to understand the organisational culture then it must be possible to change it. However this is extremely difficult to do as much is unspoken and can be highly transient. Unlike strategy and structure, changing organisational culture can take years, except in extreme circumstances. Consequently this has resulted in a broad mix of models of organisational culture.

**Typologies of Organisational Culture**

Many labels are used to classify organisational culture by typology, as noted below in exhibits 2.1 and 2.2.
A major flaw of typologies is that they are reductionist and typically wish to compartmentalise cultures into (usually four) neat boxes and list the associated characteristics in each case. The models are also unitarist as there is no recognition of any sub-cultures. Any model that assumes a single dominant culture is unrealistic in large, international businesses. Arguably the biggest shortcoming is that whilst you may be able to recognise which type of culture you are, the models do not provide any indication or methodology to change from one type to another. Nor do they suggest which the ideal culture to aspire to is. Overall the cultural typology models are too simplistic and little more than lists of characteristics in boxes. They are not meaningful models with which to manage cultural change.
Models of Culture Change

The models of Dyer (1985) and Gagliardi (1986) each take the perspective that leadership culture is a major influence on shaping and managing organisational culture change. See exhibits 2.3 and 2.4. This is a view shared by Schein (1997) and Aitken (2007) who advocate cultural change mechanisms, such as role-modelling by leaders, to influence organisational culture.

Dyer’s Model.

If a perceived Crisis calls into Question the leaders abilities Or practices
And this is accompanied by a breakdown of pattern maintenance symbols, beliefs or structures and:
If a new leadership emerges with a new set of assumptions to resolve the crisis
Then there will be conflict between the old and the new leadership
If the crisis is resolved and the new leaders are given credit for resolving it, they become established as the new cultural elite
The culture of the new leadership is sustained with new power symbols, beliefs, structures.

Exhibit 2.3: Dyer’s model
Source: Adapted from Dyer (1985)
Both models are clearly more complex than the typology models but the underlying assumption that organisational culture change is shaped by leadership culture is prescriptive. Not all organisations are 'lead', such as charities and universities, and it would be naive to accept that organisational culture is only influenced by a top-down approach rather than from within.

Block (2003) cited in (Aitken, 2007, p.18), “demonstrated, immediate supervisors can have a greater influence on employee perception of culture than all other leadership levels.”

Dyer’s (1985) model is uni-directional although cyclical and is rather vague with too many ‘if’ statements. It is only focussed internally and does not show any external influences. Gagliardi’s (1986) model is more complex but more aspirational. It presupposes new values can be inserted within the existing hierarchy but does not suggest how this mechanism works. Any organisation that found itself within the centre of the model could find itself in a paradigm
loop leading to cultural imprisonment and finally stagnation. Overall the fact that the models rely on a causal relationship with leadership culture narrows their focus and applicability.

**Culture Change Diagnostic Tools (1)**

Johnson et al (2009) have created a cultural web model that can be used as a diagnostic tool to help understand an organisation’s culture. See exhibit 2.5. Unlike the previous types of models, the cultural web provides an analytical tool to help identify the scope of cultural change to be undertaken. By first completing the outer circles of the web you can consider what these circles say about the organisation and you can then use this to complete the paradigm in the centre, which reflects the organisation’s values. The paradigm in the centre represents what the ‘taken for granted’ assumptions and beliefs of the business are. This in essence makes it difficult to ensure the strategies are aligned with the beliefs of its employees as much of this is unspoken. It is therefore understandable why culture can be very slow to adapt to change.

The paradigm equates to the 3rd level in Schein’s (1997) model that reflects the tacit assumptions and deeply subconscious elements within the organisation. By definition this provides a dilemma. If you cannot identify what you don’t know then how can you propose to change it? Undoubtedly this is why so many cultural change initiatives fail, as change agents underestimate the significance of the 3rd level and focus solely on changing the organisation’s artefacts and values. Nevertheless this is more a problem for the change agents rather than a deficiency in the model.
Another benefit of the model is to reverse the process by completing the paradigm first and then filling in the outer circles to support the required future state. By undertaking both processes you can use the model to help identify the existing culture as well as provide a framework for the desired culture. Any gaps or potential barriers between the two states can be diagnosed to assess the level of change required. Similarly the control systems would highlight what is important to the business, such as rewards and recognition and training and development.

As with the Gagliardi (1986) model there is the possibility that the paradigm may form a cultural prison, particularly if the organisation has been successful in the past.

“Managers, faced with a changing business environment, are more likely to attempt to deal with the situation by searching for what they can understand and cope with in terms of the existing culture.”

(Johnson et al., 2009 p.132)
Arguably one of the main criticisms is that it is internally focussed. It does not show the impact of any external drivers but is nevertheless a very useful tool within a toolkit.

**Culture Change Diagnostic Tools (2)**

Created by Kruger (1996) and adapted by Mann (2010), the Process Iceberg Change model helps to understand and analyse organisational culture change. See exhibit 2.6.

Exhibit 2.6: Process Iceberg Change model
Source: Mann (2010) p.47

One advantage over the Cultural Web is that it recognises the influence of external key drivers at the tip of the iceberg and provides a comprehensive framework at all levels of an organisation. Culture permeates throughout and the model acknowledges, using the iceberg metaphor, the importance of looking below the surface. Nonetheless;
“The biggest impact on culture comes from focusing on the strategy, values, structures and (high-level) processes.” (Mann. 2010, p. 48)

One striking feature at the top of the iceberg is strategic focus and values. Most organisations and models tend to focus on strategy alone, which Mann (2010) contends may result in a disjointed and unbalanced culture if values are ignored. Mann (2010) stresses values must be embedded and in harmony with the organisation at every level. For example, an organisation that recognises employee welfare as a core value may acknowledge this through an employee of the month award (system) and make them feel recognised.

Mann (2010) went on to enhance the Process Iceberg Change model by differentiating between strategy and values and splitting the Iceberg in two to form the Economic and Organisational Development (EOD) Iceberg. Only once both sides of the Iceberg are in harmony will the organisation have a stable culture. See exhibit 2.7.

Whilst the EOD Iceberg model does not have the detailed level of focus on the informal aspects of the organisation, as the Cultural Web, it is far more comprehensive and ensures all levels are incorporated.
Development of a Conceptual Framework

The conceptual framework will be developed using Mann’s (2010) EOD Iceberg and supplemented by the elements of the Johnson et al. (2009) Cultural Web. See exhibit 2.8. This will provide the framework by which the research can critically evaluate whether TO’s organisational culture is in alignment with its vision, strategies and structure.

In line with the iceberg metaphor the lowest level is unseen and represents the taken for granted and deeply subconscious elements within the organisation. However culture permeates at each level of the iceberg. To reinforce this, the background of the iceberg is shadowed by the informal aspects of the organisation and touches each level just as the paradigm in the Cultural Web.
Exhibit 2.8: Conceptual Framework

The 5 levels of strategy, structure, systems, skills and the positive buy-in provide the conceptual framework with a sequential process by which to ensure each of the research objectives are addressed at each level and both sides of the Iceberg are in balance. It is essential that all levels of the conceptual framework are investigated in attempting to identify the potential barriers to cultural change, or assessing whether the leaders’ behaviours and values are aligned with the development of TO’s organisational culture.
3 RESEARCH METHODOLOGY

Research Philosophy

Saunders et al (2009) advocate the importance and understanding of research philosophy to support the assumptions of how you view the world. Subsequently this determines both the research strategy and the methods chosen to undertake this. The philosophy adopted is largely influenced by the context of the research and what is being investigated, and no single philosophical approach can be said to be better than another.

A further consideration of how you think about research philosophy is by bearing in mind the epistemological and ontological issues. Epistemological issues deal with;

“...what is regarded as appropriate knowledge about the social world; one of the most crucial aspects is the question of whether or not a natural science model of the research process is suitable for the social world.” (Bryman and Bell, 2007 p.4)

Ontological issues deal with;

“...ones to do with whether the social world is regarded as something external to social actors or as something that people are in the process of fashioning.” (Bryman and Bell, 2007 p.4)

The major views on research philosophy are positivism, interpretivism and realism.

Positivism

Positivism is an epistemological position and is typically associated with the natural scientist. Positivism is associated with observable social reality which
provides data that supports existing theories and scientific laws. Alternatively to develop new hypotheses that can be further tested and confirmed as scientific law or refuted. It is also acknowledged that research is undertaken in a value-free way to the extent that the researcher is totally independent and objective.

The positivist methodology is highly structured to facilitate replication and uses quantifiable observations to allow statistical analysis. Gill and Johnson (2002) cited in Saunders et al. (2009). Nonetheless Bryman and Bell (2007) indicate that positivism and the natural sciences should not be treated as synonymous with each other and there is still a long-standing debate as to whether the natural science model is appropriate for the study of society.

**Interpretivism**

In contrast to positivists, interpretivists believe the social sciences cannot be defined by scientific laws as the business world is too complex. (Saunders et al., 2009) Interpretivists believe the study of the social world requires a different logic of research procedures that reflects the uniqueness of human interaction. (Bryman and Bell, 2007) The main distinction is, whilst positivism attempts to explain human behaviours, interpretivism attempts to understand these behaviours rather than the external forces that act upon them. In other words reality is socially constructed by individuals in order to make sense of their own world.

A strand of interpretivism called phenomenology refers to the way humans make sense of the world around them, whilst another strand, symbolic interactionism, suggests that individuals are continually making adjustments to their actions and behaviours in response to stimuli around them. Saunders et al. (2009) have implied that interpretivism may therefore be better suited to business research, which is unique and context specific.
Realism

On the ontological spectrum the philosophical position of realism falls between positivism and interpretivism. Like positivism, realism is another branch of epistemology and philosophy that relates to scientific enquiry and the development of knowledge.

“The essence of realism is that what the senses show us as reality is the truth: that objects have an existence independent of the human mind.” (Saunders et al., 2009, p.114)

However realism also shares some aspects of interpretivism insofar that people are not objects to be studied as in the natural sciences. One type of realism is critical realism.

“Critical realists argue that what we experience are sensations, the images of the things in the real world, not the things directly.” (Saunders et al., 2009, p.115).

In other words critical realists believe there are two aspects to experiencing the world. First is the object itself and secondly is the sensation it expresses. Furthermore the critical realist also recognises the importance of multi-level study at the individual, group and organisation levels. Each level studied has the capacity to change the researcher’s understanding of the research under investigation. Saunders et al (2009) p.115 argues that;

“...the critical realist’s position that the social world is constantly changing is much more in line with the purpose of business and management research which is too often to understand the reason for phenomena as a precursor to recommending change.”
Philosophical Position

The primary research objective is to critically evaluate the ability of TO to ensure its organisational culture is aligned with its vision, strategies and structures. The literature review highlighted the difficulties in both understanding organisational culture as well as attempting to change it. Whilst symbols and artefacts of organisational culture may be tangible, values and beliefs are clearly not, and this has a profound influence on the type of research philosophy to adopt.

Due to the nature of culture, a positivist philosophy was deemed inappropriate as it relied upon observable data that could be translated into law-like generalisations and this could not be achieved. Similarly it was unrealistic to assume that any research in a social context could be totally objective and undertaken in a value-free way.

Advocates of interpretivist philosophy believe that the business and social world is too complex to be governed by defined laws. However due to the subjective and typically unique nature of the research undertaken the findings lack generalisability and only internal validity can be claimed at best. Although an interpretivist philosophy was considered more appropriate than a positivist philosophy its subjective and empathetic approach would inevitably lead to the research becoming value-bound and consequently less reliable.

Overall a realist research philosophy gave a more balanced approach in attempting to understand TO’s organisational culture. Organisational culture contains observable and credible data although a critical realist accepts that some sensations are open to misinterpretation, which would not be tolerated under a positivist philosophy. A critical realist is also pragmatic enough to accept that the researcher is going to be influenced by their background and cultural experiences.
Despite its clear shortcomings the realist philosophy attempts to remain objective, whilst acknowledging the inevitable bias in any research undertaken and the likelihood of gaps in the available data. This is particularly relevant where taken for granted assumptions and deeply subconscious elements within the organisation are unspoken. However by using the multi-level study approach the realist philosopher will attempt to triangulate these phenomena to extract credible data. The realist research philosophy was therefore considered the most appropriate philosophy to adopt.

**Research Strategy**

Saunders et al (2009) identified 7 major research strategies; experiment, survey, case study, action research, grounded theory, ethnography and archival research. Although these research strategies should not be seen as mutually exclusive, the case study appears the most appropriate;

“...if you wish to gain a rich understanding of the context of the research and the processes being enacted.” Morris and Wood (1991) cited in (Saunders et al, 2009, p.146)

Case studies are most commonly associated with organisations where the emphasis is upon an intensive examination of the setting. (Bryman and Bell, 2007) Any strategy that is context specific is likely to have limitations to both external validity and generalisability and is only likely to have internal validity to TO. To counter this it is therefore necessary to use multiple data collection techniques and to triangulate this data to lead to more reliable and valid conclusions.

Quantitative and qualitative are terms used to differentiate between both data collection techniques and data analysis procedures. (Saunders et al., 2009) Exhibit 3.1 below highlights the fundamental differences between quantitative and qualitative research strategies.
Exhibit 3.1: Fundamental differences between quantitative and qualitative research strategies
Source: Bryman and Bell (2007) p.28

The realist research philosophy is an intermediate position between positivism and interpretivism that can take advantage of both quantitative and qualitative methods and is complimentary to a case study research strategy. Although there is still much academic debate regarding their precise distinction, many writers argue that the two can be combined within an overall research project. (Bryman and Bell, 2007)

**Research Methodology**

As noted above the case study strategy is the most appropriate strategy to gain a rich insight into a unique business context but it typically requires triangulation of data methods to ensure the results are meaningful. Triangulation is achieved by using multiple research methods whereby the inherent weaknesses of one method is suppressed by the combined methods of the others. Triangulation should also help to minimise the potential bias of the researcher and enhance reliability.

Bryman and Bell (2007) claim that replication, reliability and validity are the three most important criteria for evaluating business research. However there is only a low level of probability that the results of a unique business study could be replicable elsewhere and the researcher is unlikely to be able to claim anything other than internal validity. Reliability is particularly concerned with how accurately the results are repeatable within the same business
environment. This is particularly difficult in the case of cultural change or leaders’ behaviours and values where there is a high degree of subjectivity. The results are likely to be inconsistent across different parts of the business and are often transient. Internal validity is mainly linked to establishing causality between two or more variables. Ensuring that the relationship between two variables is genuine is fraught with difficulty and merely emphasises the importance of triangulation.

To achieve triangulation three research methods were chosen including; data line analysis, self-completed intranet questionnaires and semi-structured interviews. This provided a contrast of both quantitative and qualitative data. The research methods will be completed sequentially and flow logically to be increasingly expansive and focussed. Each subsequent method will be tailored to confirm the previous results and gain further insight into achieving the research objectives.

Other research methods such as secondary data and focus groups were also considered but were excluded as being less relevant or less applicable. Secondary data was available and included employee survey questionnaires and semi-structured interviews. However the information was over a year old and focussed mainly upon employee engagement rather than the research objectives of cultural change and leaders’ behaviours and values.

Focus groups appeared to have a number of positive advantages, particularly in providing additional supporting qualitative data to the semi-structured interviews. Unfortunately time constraints on the research project due to the global nature of TO and the associated difficulties with coordination made this impractical. Other potential issues such as the prohibitively huge volumes of data analysis this could generate, and the possibly reduced levels of control of the researcher, also meant this method was dismissed.
Data Line Analysis

Data line analysis (DLA) offers an effective but rudimentary quantitative feedback through the ranking of a number of prescribed statements. (Douglas, 1995) It can be used to provide a very quick and simple technique to draw out any salient themes or high level issues within an organisation. Comparing the ranking of leaders’ behaviours and values with those desired by the organisation can quickly be assessed and may also highlight any potential barriers to cultural change if these are out of alignment.

The researcher must ensure there are sufficient numbers of statements to make the analysis meaningful. Too many could make the exercise onerous for the respondents, whilst too few could lead to the research becoming too narrow and unrepresentative. An additional option is to allow each respondent to add their own statements and thereby introduce open statements rather than only closed statements. Whilst this could highlight issues missed from the initial exercise the time required to analyse the data collected will increase exponentially.

DLA should not be used in isolation as a single research method due to its lack of sophistication, but it will help to focus the subsequent research methods.

Self-completed Intranet Questionnaires

Self-completed intranet questionnaires are typically used in case study research strategies for descriptive or explanatory research. Descriptive research is mainly associated with attitude and opinion and is therefore more applicable to understanding organisational culture. Arguably the most important aspect of any questionnaire is that it provides the precise data to fulfil the research objectives. (Saunders et al., 2009) Where information is provided anonymously you may only get one opportunity to get this right but
Saunders et al. (2009), p.362 noted that response rates, validity and reliability can be maximised by;

- Careful design of individual questions;
- Clear and pleasing layout of the questionnaire;
- Lucid explanation of the purposes of the questionnaire;
- Pilot testing;
- Carefully planned and executed administration.

Dillman (2007) cited in Saunders et al. (2009), p.368 distinguishes between three types of data variable that can be collected through questionnaires;

- Opinion;
- Behaviour;
- Attribute.

Each data variable will influence the way questions are worded. Opinion variables are linked to what a respondent believes is true or false, whereas behavioural variables contain data on what people do, either in the past, present or future. Attribute variables enable the researcher to assimilate the data by using different characteristics of the sample population to assess differences in opinions and behaviours.

For TO it is vitally important that the questions differentiate clearly between opinion and behaviour and can be focussed upon specific workgroups. The research objective relating to the potential barriers to cultural change focus upon opinion variables, as the structural changes is yet to take place. In contrast, the research objective concerned with leaders’ behaviours and attitudes being aligned with the organisational culture already exist and will be more focussed on behavioural variables. The additional dimension of attribute variables should enable a better understanding of the data collected and the ability to take appropriate corrective action where necessary.
One major disadvantage of questionnaires is that they contain mainly closed questions and this gives respondents very little opportunity to articulate their responses. The DLA is little more than a ranked questionnaire but other types of questionnaire should consider the style of answers provided in relation to the data required. For example category questions that provide a mutually exclusive list of categories are ideal for collating data linked to behaviours and attributes. In contrast a rating or a scale may be applied for collating opinion data. Under these circumstances it is often prudent to use a Likert-style rating to limit uninformed responses, guesswork or respondents trying to avoid commitment to one view or another.

Questionnaires are often seen as an easy option as a research method but should not be underestimated. The more effort that goes into the design stage will ensure the results produced are more valid and reliable. The time to set up self-completed intranet questionnaires tend to be front-loaded and can be distributed to large samples at little cost. Electronic data can be analysed very cheaply and quickly but clearly this approach can only be used if the respondents have intranet access. One inherent problem with self-completed intranet questionnaires is that there is no interviewer present. Without clear instructions for completion the data collected may vary widely in quality or be positively misleading through a lack of understanding on the part of the respondent.

**Semi-structured Interviews**

A semi-structured interview allows a researcher the ability to gain a much greater richness of detail than that contained in a questionnaire. As its name implies this type of interview falls between structured and unstructured. Whilst a structured interviewer will follow a rigid set of pre-determined and mainly quantitative questions, the semi-structured interviewer will be much more flexible and qualitative in nature, although still retaining the same theme.
Unlike a questionnaire the interviewer has the ability to probe and ask more open questions from which he can seek further clarification. It is also a very useful research method for providing perspective and uncovering stories and myths that may reveal previously unknown aspects of the organisational culture. However this is a much more time consuming and costly exercise to undertake. In a global business there are also the logistical problems of overseas travel and coordinating the interviews. In addition the work involved in transcribing the data is substantial compared to the questionnaire. If the numbers of interviews are constrained then the sample could become unrepresentative.

Another important consideration is the possibility of interviewer bias. Whilst a skilful interviewer will attempt to create a good rapport with the interviewee they will also have to remain detached and objective. A lack of trust between the interviewer and interviewee may raise doubts about the value of the information gathered and hence its reliability and validity. (Saunders et al., 2009) This could be magnified even further due to cultural differences in a global business such as TO.

Similarly bias may also be on the part of the interviewee. Respondents may wish to please the interviewer by providing the answers they think the respondent requires or there may be problems of overfamiliarity. Both types of response could lead to contaminated data.

**Overall Research Design**

Despite the clear flaws with each research method, the triangulation of the three methods maintains the credibility of the overall research design. Whilst DLA may only provide relatively crude road signs in the direction of the research objectives, the sequential use of the self-completed intranet questionnaires and the semi-structured interviews are complimentary to each other and should minimise any gaps in the data collected.
In critically evaluating the overall research design it is clear there are a number of limitations in the approaches chosen and these may impact upon the research objectives. Both research objectives deal with organisational culture and change, and as the conceptual framework in Exhibit 2.8 highlights, culture permeates throughout the whole organisation from top to bottom.

As every employee in TO will be affected by the organisational design changes the total sample population equates to the total workforce. The major challenge is therefore to ensure the sample sizes are sufficiently large enough across TO without compromising its representativeness.

This is further exacerbated due to the global nature of TO. Whilst the business language of Trelleborg Group is English many of the TO shop floor employees in US and Norway are unable to speak English. To totally eliminate them from the sample population could impact on its representativeness. The only alternative is to translate the DLA and questionnaire into Spanish and Norwegian and to arrange translators for the semi-structured interviews. Both solutions are clearly more time-consuming and expensive, as well as increasing the associated difficulties of interpretation.

In addition to the issue of language are the further constraints of national cultures and sub-cultures within these. Common mistakes can often be made by using the wrong terminology or language and result in collecting useless data. (Saunders et al., 2009)

Language and cultural issues aside, the collation of data through the DLA and self-completed intranet questionnaire will be relatively straightforward as this will be processed through the TO intranet. This a tried and tested method that has been used for previous employment engagement surveys and for communicating details to all levels of the organisation. Whilst response rates and sample sizes cannot be guaranteed, the simplicity of completion should help to mitigate this. For shop floor employees who do not have direct access to the intranet, employee kiosks are available in every location.
Although none of the above constraints are insurmountable the greatest limitation on the research project is time. As culture permeates throughout every part of TO eliminating any representative area or group could potentially compromise the research objectives.
APPENDIX 2  NEW TRELLEBORG OFFSHORE ORGANISATION STRUCTURE
APPENDIX 3  TRELLEBORG GROUP SALES BY BUSINESS AREA

Sales by business area

Trelleborg Group

Trelleborg Engineered Systems 41%
Trelleborg Automotive 31%
Trelleborg Sealing Solutions 17%
Trelleborg Wheel Systems 11%
APPENDIX 4  TRELLEBORG GROUP BUSINESS MODEL


[15 November 2010]
<table>
<thead>
<tr>
<th>Key Market Areas</th>
<th>Offshore</th>
<th>Other Markets</th>
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<td>Thermal Insulation</td>
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What Do We Do?

Engineering materials for the most demanding current and future applications

Our Performance
- Proven track record
- Highest technical expertise
- Superior quality products
- Broadest range of products
- Good delivery
- Value for money
- Customer driven solutions
- Proactive Innovation

We are
- Knowledgeable
- Professional
- Approachable
- Responsive
- Trustworthy
- Passionate
- Smart
- Dynamic

Source: Independent Market Research by IAS Marketing
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