

ORGANISATION STRUCTURE:

A STUDY OF HOW THE ORGANISATION STRUCTURE OF ENGINEERING
CONSULTANTS RESPONDS TO CHANGE?

By

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Abstract

Organisational structure is frequently changing within engineering consultant organisations due to the frequent changes in the business environment. These changes that organisations face today have no precedent. Therefore, organisations must keep up with these changes. The organisation must offer extraordinary modifications in their services to ensure survival in the competitive marketplace. One of the ways that organisations have responded with, to deal with these changes is by changing and modifying its organisation structure.

A lot of research has been conducted on change or a relatively specific form of organisational structure, especially for main stream business, but very little study has been done on how the organisation structure of engineering consultants responds to change. Therefore it was decided early to keep research broad in order to give a greater understanding and holistic view of organisation structure and change, and at the same time concentrate on engineering consultants to pave the way for future study and research.

The organisation structure and change is detailed and discussed using PB Ltd engineering consultant as a case study. Interviews with key members of the organisation structure provided the background for the investigation and the problems of restructuring.

In this report, there is no theoretical advancement; rather an attempt to provide a better understanding of organisation structure within engineering consultants and to try to guide engineering consultant organisations when responding to change by modifying its structure in an ever changing business environment, as organisations might be forced to be more effective & efficient. The identification of the organisational structure of engineering consultants of that of a 'Hybrid structure', the restructuring within the case study engineering consultant organisation is no more than a slight modification of the same basic design and the dark side of restructuring is downsizing are some of the main finding of the research.

Key Words: Organisation Structure, Change and Restructuring

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¹ Allah-subhanhu wa ta'ala - is the name of God in Islam.

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List of Abbreviations

CEO	Chief Executive Officer
Inc	Incorporated
Ltd	Limited
MD	Managing Director
PB	Parsons Brinckerhoff
RT	Rapid Transit
UCL	University College London
UK	United Kingdom

Introduction

Since organisational structure was first tackled in the early 1900's, with the emergence of large organisations. The form organisation structure within engineering consultant organisations has continuously been changed and modified and continues today, as a response to the rapidly changing business environment. The impact of frequent restructuring and especially within the last decade due to the rapidly changing business environment has had a negative effect on the organisation, and especially the workforce.

In 2003 PB Ltd, had undergone major modification to their UK structure and in the process around 80 employees at all levels had been laid off. The modification was a response to the rapidly changing business environment in order to be more effective & efficient. However, the affects of restructuring were not only on productivity and economic efficiency but also on the morale and motivation of the workforce.

The objectives of this report are to provide a better understanding of organisation structure within engineering consultants. Also as organisations are forced to be more effective & efficient in an ever changing business environment, to try to guide these organisations when responding to change by modifying its structure, so as to avoid some of the problems that arises from restructuring.

Chapter 1 begins by describing organisation structure and change. It then goes on to shed some light on the problems of organisation structure and the research objectives, scope and method. Then goes on to highlight the importance of organisation structure

Chapter 2 identifies and clearly defines the different forms of existing organisational structure, the different theories behind organisational structure and to clearly identify and define engineering consultants. So as to give a greater understanding and holistic view of organisation structure and engineering consultants, to pave the way for the case study analysis in the following chapter.

Chapters 3 discuss and analysis data collected from the engineering consultant cases study organisation, PB Ltd. That had undergone major modification to their UK organisation structure as a response to the rapidly changing business environment. This chapter identifies the organisational structural form of the large civil engineering consultant and the problems that occur due to the modification in structure, highlighting and identifying the effects on the work force.

Chapter 4 the research concludes with this chapter, where the main findings of the research are presented with recommendations and suggestions for future research.

This report is based on relevant text books, reports, articles from journals and business magazines, Case study of an engineering consultant organisation and Interviews conducted with personnel within the case study organisation.

1 Background

This chapter begins by defining organisation structure and the definition of change and relation to organisations structure. It then goes on to shed some light on the problems that arise when restructuring if not done correctly and the research objectives, scope and method.

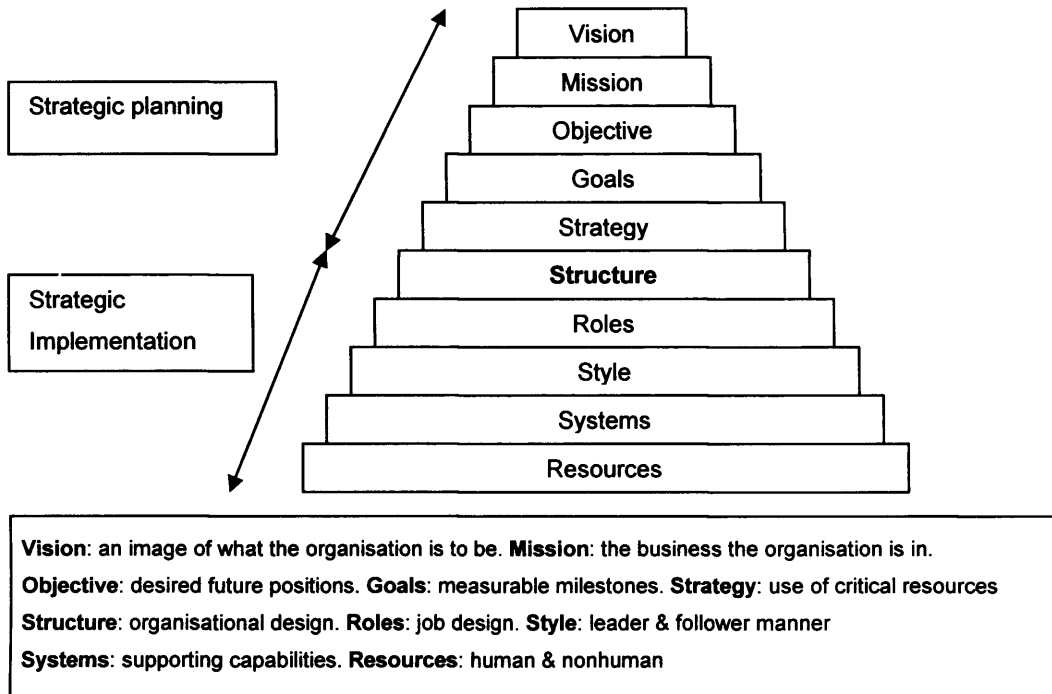
1.1 Organisation Structure

There are many definitions that define the organisation structure; here are just a few of these definitions, that together give a greater and more complete definition of organisation structure. By definition organisation structure is "how human resources are aligned" (Cleland, 1998), "the formal framework by which job tasks are divided, grouped and co-ordinated" (Robins and Coulter, 2002) and "structure is the pattern of relationships among positions in the organisation and among members of the organisation, making possible the application of the process of management and creates a framework of order and command through which the activities of the organisation can be planned, organised, directed and controlled" (Mullins, 2005).

Structure is the first step of implementing the strategy, which is the organisation of people within the organisation, and is shown in the following figure in the strategic context of organisation planning & implementation (Figure 1).

Figure 1: Structure in Strategic context

(Source: Cleland, 1998, Field Guide to Project Management)



Organisation structure began with the emergence of large organisations, the army, businesses, and government civil services. It was first tackled in France in the 1900's, by Henri Fayol (1841-1925) who published his book in 1916. However it was World War One that made clear the need for a formal structure. Immediately after World War One, first Pier S. Du Pont (1870-1954) and then Alfred Sloan (1875-1966) developed Decentralisation, showing that Foyol's functional structure was not the one right structure. From the beginning more than a century ago, the study of organisation has rested on one assumption, "There is – or there must be – one right organisation." What is presented as the "one right organisation" has changed more than once. But the search for it has continued and continues today. And now, in the last few years, the 'Team' is considered as the one right organisation for everything according to the management consultants.

1.2 Change

By definition change is basically the difference between two measures of the same variable. (D.Bergh and .Fairbank, 2002), defined change from an operational perspective, as $C_x = X_1 - X_2$, whereby C_x is called a 'change score' and variable X is measured at a time period 1 (X_1) and time period 2 (X_2). It also requires attention to two fundamental issues: (1) Satisfying reliability assumption and (2) Removing the correlation between the change score and its initial component measure. This approach can only be used when the component variables have high reliability, low correlation and when variances are unequal. Fortunately, there are alternative techniques that have been developed for when this approach can not be used i.e. Residual Scores, Component Scores and Growth Curves. The measuring and testing of change is complex process, and most strategy researchers/executives do not incorporate the critical requirements associated with change.

Organisational structure is frequently changing within engineering consultant organisations due to the frequent changes in the business environment. These changes that organisations face today have no precedent. Therefore, organisations must keep up with legal, social, economic, and technological changes, as well as changes brought about by competitor's advances and new needs of clients. The organisation must offer extraordinary modifications in their services to ensure survival in the competitive marketplace. One of the ways that organisations have responded with, to deal with these changes is by modifying its organisation structure.

(Cleland, 1998) discussed why projects fail, which I believe to be similar to why organisation structures fail as it is one of the organisational structural forms. There were three main reasons, but the most relevant to this study is the surrounding environment is continuously changing and too quickly.

1.3 The Research Problem

During the last twenty-five years, the business environment has been changing rapidly, marking the end of post-war economic stability. Due to the change, engineering consultant organisations have been forced to be more effective and efficient. And one of the ways that these organisations have responded to these changes is by continuously modifying and changing their structure from one form to another to fit their business environment. However, since economic and market forecasts provided the foundation for strategic planning and structure. Therefore, it is very difficult for organisations when the future is not known and changing rapidly to continuously change and modify their structure. It is this continuous change and modification to the structure, which in some cases can be wrong, that has led to a number of problems within the organisation, and will be discussed within this report. It was (Child, 1984) who compiled a list of things that can be wrong if the work of the organisation is not properly designed and structured. Here is just a few, which this report has highlighted and will be discussed in this report.

1. Motivation and Morale is depressed or low.

Table 1: Link between Restructuring & Motivation and Morale

Managers say their Organisation have carried out restructuring in the past year	61%
Managers in these organisations say this has led to job insecurity	65%
Lower morale	65%
Erosion of motivation & loyalty	49%
Source: Report 1990 (worrel, I and cooper.c.I, the quality of working life, the institute of management (1997)	

2. Decisions are delayed and lack quality.
3. Conflict and lack of co-ordination.
4. Cost rising rapidly, particularly in the administrative area.

1.4 The Research Objectives

The research objective is to provide a better understanding of organisation structure within engineering consultants. Also as organisations are forced to be more effective & efficient in an ever changing business environment, to try to guide these organisations when responding to change by modifying its structure, so as to avoid some of the problems that arises from restructuring.

By investigating the following:

- Investigate existing organisational structural forms, and how effective and efficient they are in relation to change and engineering consultants.
- Investigate how relevant is the existing concepts and theories of organisation structure to engineering consultants.
- Investigate the organisation structure of an engineering consultant organisation (case study, PB Ltd), how its structure responds to change and the impact of restructuring on the organisation.
- Investigate what Influences the organisational structure.

1.5 Scope of Research

To facilitate the investigation of the problem the research will focus its searchlight on an organisational structure in a civil engineering consultant, with that of a certain age (at least 100 years), size and environment (detailed in Table 2) and with specific attention to the response of the organisation due to restructure and change.

PB Ltd was chosen for the case study for three main reasons; (1) it had recently undergone restructuring, (2) PB Ltd is one of the seven largest engineering consultants in the world and is within the top 20 ranking in the fields detailed in (Table 2), and (3) the ease and willingness to provide as much information as possible for the study.

Table 2: Size & Environment of PB LTD

(Source: New Civil Engineer, Consultants File March 2004)

		Order 2004	Order 2003	Details 2004
1	Top Firms In Rail: Global 2004	1	-	Fees Rendered (£145.9M)
2	Top Firms In Roads: Global 2004	1	-	Fees Rendered (£215.9M)
3	Top Firms by Total No of Staff : Global 2004	6	5	No of Staff (9,018)
4	Top Firms In Civil & Structural Staff : Global 2004	14	11	No of Civil & Structural Staff (2,150)
5	Top Firms In Power 2004	2	2	Fees Rendered (£40.6M)
6	Top Firms in Transport: Rail/Rail Bridges 2004	4	4	Fees Rendered (£37.5M)
7	Staff working on overseas projects 2004	10	11	No. of technical staff (553)
8	Overseas Turnover 2004	11	10	Fees Rendered (£42.09M)
9	Overseas Technical Staff 2004	12	14	No. of technical staff (449)
10	Top Firms by Fees Rendered 2004	13	10	Fees Rendered (£124.4M)
11	Top Firms in Transport: Roads/Road Bridges 2004	13	15	Fees Rendered (£16.0M)
12	UK Technical Staff 2004	14	14	No. of technical staff (1209)
13	Firms ranked by the total number staff 2004	15	13	Total number of staff (2002)
14	Top Firms in Ports/Harbours/Airports/Canals 2004	17	14	Fees Rendered (£2.00M)
15	Top Firms In Environment 2004	17	17	Fees Rendered (£6.50M)
16	Top Firms In Tunnelling 2004	17	16	Fees Rendered (£0.500M)
17	Top Firms In Construction/Project Management 2004	18	17	Fees Rendered (£2.50M)
18	Top Firms Building 2004	19	17	Fees Rendered (£11.50M)
19	Firms ranked by the number of Civil & Structural staff 2004	20	21	No of Civil & Structural staff (573)
Fees Rendered: Turnover less fees paid to sub-consultants and disbursements recovered at cost				

1.6 Research Methodology

- Literature review to arrive at propositions and derive models for examining organisational structures and change. The source of research articles is from ISI Web of Knowledge, which includes the largest electronic source of business publications, academic journals and business magazines.
- Case study and review of a large leading engineering consultant organisation that offers a wide range of services, of large size company, mature age (over 100years) and stable environment (developed economies).
 1. Identify engineering consultant organisation using NCE (New Civil Engineer), Consultants File 2005.
- Interviews conducted with the following personnel within the case study organisation (Table 3). Questions adapted from (Howard and Frink., 1996), "The effects of organisational restructure on Employee Satisfaction", developed to measure the employees perception about reorganisation and to measure employees' ability to adjust to the reorganisation, detailed in (Appendix B)

Table 3: Table showing interviews

Organisation	Personnel Interviewed	No.
Parsons Brinckerhoff	Strategic Manager	1
	Associates(Middle Line Manager)	1
	Engineers (Operating Core)	2

1.7 Why organisation structure

The importance of structure is emphasised by (Child, 1998), *‘The allocation of responsibilities, the grouping of functions, decision making, co-ordination, control and reward – all these are fundamental requirements for the continued operation of an organisation. The quality of an organisation’s structure will affect how well these requirements are met’*.

In 1989, Peter Drucker predicted that the business of the future would be modelled on a symphony like Mahler’s Eighth, where a single conductor leads more than 1,000 musicians and singers without any intermediaries or assistants. However this is not the case in engineering consultant organisations and even (Leavitt, 2003) argues that today, about every large organisation remain hierarchical, with no more than modification of the same basic design or blue print. Subordinates continue to report to superiors, department heads report to division managers, who report to their superiors, and so on, as they have done in the past. (Leavitt, 2003), also argues that these large organisations have been capable of change and demonstrate adaptability.

However during and after, the modification or change of organisational structure from one form to another due the changes in the business environment. This has a number of affects, and especially if it is not implemented correctly. These effects are as follow:

1. Decision may be delayed and lack quality due to:
 - Necessary information not being transmitted on time to the appropriate people
 - Decision makers are too segmented into separate units and there is inadequate provision to co-ordinate them.
 - There are no adequate procedures for evaluating the results of similar decisions in the past.
2. Conflict and lack of co-ordination due to:
 - There are conflicting goals that have not been structured into a single set of objectives and priorities. People are acting at cross-purposes. They may, for example be put under pressure to follow departmental priorities at the expense of the project goals.
 - People are working out of step with each other because they are not brought together into teams or because mechanisms for liaison have not been laid down.
 - The people involved in the operations are not involved in the planning.

3. Cost may be rising rapidly, particularly in the administrative area, due to:
 - There being an excess of procedures and paperwork distracting people's attention away from productive work and requiring additional staff personnel to administer.

However, the structure of an organisation does not only affect productivity and economic efficiency but also the workforce. As "**motivation and morale**" may be depressed or low due to, decisions appearing to be inconsistent and arbitrary in the absence of standardized rules, people being subject to competing pressures from different parts of the organisation due to an absence of clearly defined priorities, decision rules or work programmes and people are being overloaded because their support systems are not adequate.

Summary

In this chapter we have defined the organisation structure basically as the formal framework by which job tasks are divided, grouped and co-ordinated and its context within strategic planning and implementation as the first step of implementing strategy. Also, we defined change in a basic and operational perspective, in relation to organisational structure. Then discussing the problems within the organisation that arise due to the modification of the structure as a response to the rapidly changing business environment, highlighting the problem of depressed motivation and morale within the organisation. Also we have detailed the research objectives, scope, methodology and the importance of organisation structure.

2 Organisation Structure in Civil Engineering Consultants

A lot of research has been conducted on change or a relatively specific form of organisational structure, especially for main stream business, but very little research and study has been conducted specifically for civil engineering consultants. Therefore, a great amount of the literature review is from main stream business. The aim of this chapter is to identify and clearly define the different forms of existing organisational structure, the different theories behind organisational structure and to clearly identify and define the organisation structure within engineering consultants. Also to identify who is responsible for organisation restructure within engineering consultants and the effects of restructure within the engineering consultant organisation. So as to give a greater understanding and holistic view of organisation structure and engineering consultants, to pave the way for the case study analysis in the following chapter.

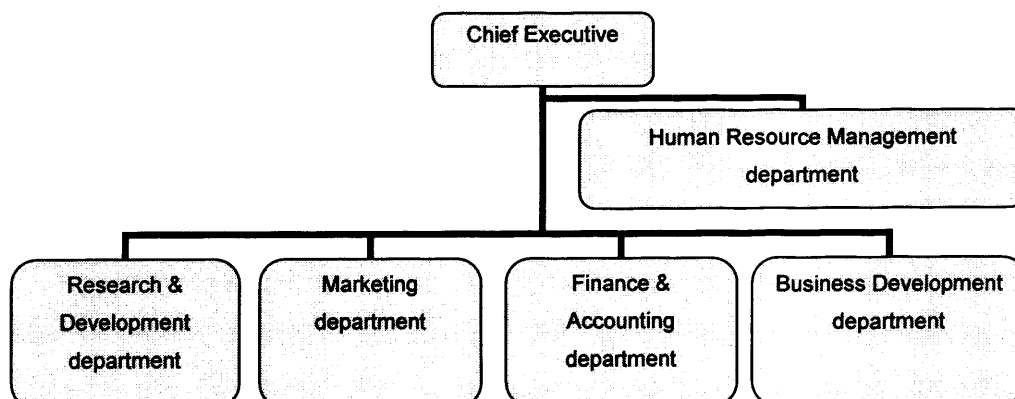
2.1 Organisation Structure 'Forms'

In almost all management literature, they agree that there are 7 basic structural types: Functional, Multidivisional, Holding, Matrix, Trans-national, Project and Team.

The "*Functional structure*", is based on the primary activities that have to be undertaken by an organisation such as design, finance, accounting, marketing, human resources and research and development. This structure is usually found in smaller companies, or those with narrow, rather than diverse, product ranges (Figure 2).

Figure 2: Functional Structure

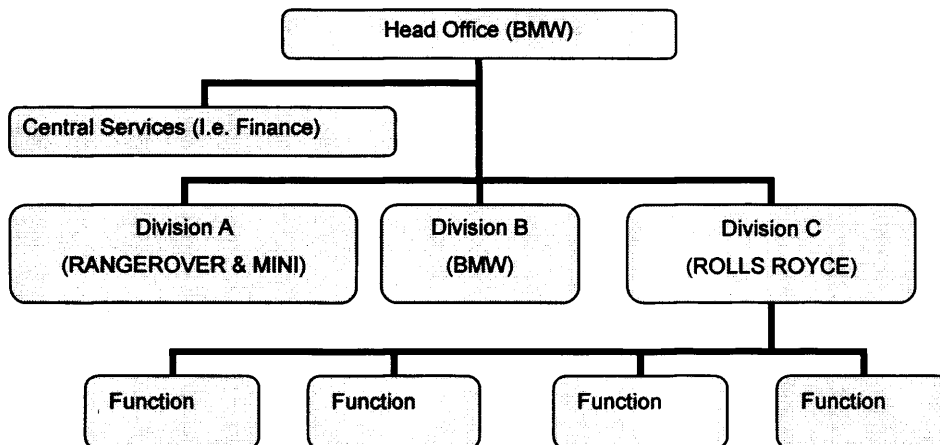
(Source: Johnson, G. and Scholes, K. Whittington, R. 2005)



The “*Multidivisional structure*” is built up of separate divisions on the basis of products, services or geographical areas (Figure 3). Also within a multidivisional structure, the divisions themselves may be split up into functional departments. It was adopted as a response to the increasing complex administrative problems encountered within centralised functional structure as firm size and diversity increased.

Figure 3: Multidivisional structure

(Source: Johnson, G. and Scholes, K. Whittington, R. 2005)



The “*matrix structure*” is a combination of structures which could take the form of product/service and geographical divisions or functional and divisional structures operating in tandem. Generally multinational organisations have this type of structure incorporated within their own structure (Figure 4).

Figure 4: Multinational organisation

(Source: Johnson, G. and Scholes, K. Whittington, R. 2005)

		geographical divisions		
		Europe	USA	Far East
Service divisions	Service A			
	Service B			
	Service C			

The "*Holding company structure*" is an investment company consisting of shareholdings in a variety of separate business operations. These subsidiary businesses may operate independently, have other shareholders and retain their original company names where the parent company limits decisions to the buying and selling of subsidiaries with little involvement in their product or market strategy.

The "*Trans-national structure*" combines the local responsiveness of the international subsidiary with the coordination advantages found in global product companies.

The "*Project-based structure*" is one where teams are created, undertake the work and are then dissolved. For organisations that deliver large expensive and durable goods/services i.e. Civil Engineering organisations. The main advantage of these organisations is they are very flexible.

The "*Team-based structure*" attempts to combine both horizontal and vertical coordination through structuring people into cross-functional teams. For example Engineering firms have development teams responsible for the development of a new product. The team will have a mix of specialist together particularly so they are able to see things holistically (benefiting knowledge sharing and knowledge development).

2.2 Organisation Structure 'Theory'

Organisation structure began with the emergence of large organisations, the army, businesses, and government civil services. It was first tackled in France in the 1900's, by Henri Fayol (1841-1925) who published his book in 1916. However it was World War One that made clear the need for a formal structure. Immediately after World War One, first Pier S. Du Pont (1870-1954) and then Alfred Sloan (1875-1966) developed decentralisation, showing that Foyol's functional structure was not the one right structure. From the beginning more than a century ago, the study of organisation has rested on one assumption, "There is – or there must be – one right organisation.". What is presented as the "one right organisation" has changed more than once. But the search for it has continued and continues today. And now, in the last few years, the 'Team' is considered as the one right organisation for everything according to recent management literature and practicing management consultants.

From the existing management literature, there appears to be three main theories for the 'organisation structure' design. They are as follow:

1. The 'one right structure' for the organisation that suits every environment.
2. There is no 'one right structure' but 'many right structures', each of these structures suits and adapts better than the other to a particular environment.
3. The third theory basically combines the first two theories together. The 'Hybrid structure', this is a 'mix and match' structure from the existing different structural forms to suit and adapt to as many different environment as possible.

The majority of the older literature appears to support the first theory 'One Right Structure' and the current or more recent literature appears to support the second and third theories. This also appears to be confirmed by (Mintzberg, 2002), as he argues that since the turn of the century, the "one best way" approach has dominated our thinking about organisational structure. And due to a variety of failures, recent management theory has moved away from the "one best way" or "one right structure" approach and the approach that organisations have taken is an 'it all depends" approach or "contingency

theory". Where by this structure reflect the organisations situation (age, size, type of production and the extent to which its environment is complex and dynamic). Also that "it all depends' approach does not go far enough, that structures are designed on the basis of a third approach, which is called "getting it all together" or "configuration" approach. Spans of control, decentralisation and matrix structures should not be picked and chosen independently. Rather, these and other elements of organisational design should logically configure into internally consistent grouping. Also, (Day, 1999) argues that there is no perfect design for all seasons and any design is the unsatisfying result of many trade-offs and compromises, by adding to one side of the balance can detract from the other, for example: (maintain flexibility with small units **Versus** achieve economies of scale), (develop deep functional expertise **Versus** subordinate functions to process teams) and (facilitate co-ordination and information sharing **Versus** eliminate overhead and unproductive activities). Therefore, organisations are not willing or able to shift to a pure structure. Instead, they are creating a hybrid organisation that combines elements of many structures.

2.3 Engineering Consulting Organisations

It has been shown by (Kreidl and Oberndorfer, 2004), that engineering consulting organisations are a sub-sector of the professional service sector. They are unique, one which is based on personnel, rather than equipment and machinery, for example; law firms, architectural service firms, management consultants and engineering consulting firms. One of the main characteristics of the service of these firms is the orientation towards projects, due to the complexity and uniqueness of the work required. That requires a high degree of customisation and interaction with the client's representatives.

The nature of work is mainly project-based; therefore, a temporary organisation has to be set up with people who have the required know-how to perform different project tasks. Those temporary project organizations also require a flexible and lean permanent organization of the firm, thus a small number of hierarchical levels. Therefore, the organization develops a way of simplifying communication as well as information flow, thus leading to a corporate culture quite different to traditional manufacturing organizations. There is also an inherent uncertainty in the supply of the service; due to proposals for projects to

client being primarily a 'promise' in that the firm will perform the tasks as required.

The tasks are delivered by people who have a higher level of education, for example professionals, thus the success of a professional service firm depends on how its professional staff fulfils those promises and, as a result, how it manages to build up a reputation for expertise and reliability in a certain field of knowledge. The professional firm's reputation is seen as the firm's major asset. With regard to engineering consulting firms, services are performed by engineers and scientists and have to be delivered in the context of professional norms of conduct that are usually set up by a professional body. Even though there has been some 'relaxing' of professional associations' standards especially in the EU, those norms and standards constitute a barrier for new entrants. Budgeting for the firm's highly labour intensive activities is commonly done by time allocations to personnel for the performance of the prescribed project tasks.

Engineering consulting firms can be found at different stages of an engineering or construction project, such as in pre-investment services (e.g. feasibility studies), the actual design services (e.g. structural analysis and drawings) or even in delivering services during the realisation phase (e.g. cost and quality control). As much of the work undertaken are large infrastructure projects, such as the construction of high-speed railways, dams/water supply systems and highways. Therefore, generally engineering consulting firms are usually not involved in carrying out the physical implementation of the project, as in engineering or construction companies. In addition, clients frequently demand one-stop-shopping from their suppliers, thus asking them to offer a wide range of services. Being unable to provide all the required services might be a triggering circumstance to team up with or even acquire another engineering consulting firm that has the required skills and the relevant previous work experience.

Due to the size and complexity of the projects, they are particularly stringent in the award of projects by applying a time- and cost-efficient two-step process (first step: pre-qualification for short-list; second step: invitation for tendering). Therefore, Engineering consulting firms are often employed under standard contracts with the client and operate on a fee system that has been developed by the relevant professional body. However, in today's commercial environment with clients more cost-conscious, engineering consulting firms usually have to compete for their work through fee bids and frequently, professional institutions even abandoned fee scales all together. In addition, the relaxation of marketing constraints is another example for the erosion of control of the professional bodies. Most contracts are won on the basis of long bidding processes where several competing firms participate. At variance with other sub-sectors of the professional service sector, e.g. the auditing and accounting sector (big four); the engineering consulting sector is far less concentrated with a lot of small and medium size firms. This leaves a lot of scope for future consolidation in this sub-sector of the professional service sector.

2.4 Stakeholders

Identifying who is responsible for the organisation structure:

(Turner, 1995), “an organisation’s stakeholders can be defined as all the people or groups whose lives or environment are affected by the organisation or have an opinion on the organisation or the changes that the organisation will create”. The stakeholders are divided into two main groups, internal and external. The internal stakeholders are those that are directly responsible for the organisation. The external stakeholders are those that “are affected by the organisation or have an interest but are not part of the main organisation team” (i.e. clients, shareholders, government, public, environmentalists and archaeologists). The reason for this section is to identify who is responsible for the organisation restructure.

Mintzberg, et al (2002), argues that there are six basic parts of the organisation. Which I believe to be the internal stakeholders and they are defined below:

1. **Ideology:** The traditions and beliefs of an organisation that distinguishes it from other organisations and infuses a certain life into the skeleton of the structure and surrounds the entire organisation
2. **The Strategic Apex (CE, MD):** The managers that oversees the whole system.
3. **Middle Line (Heads of Divisions & Business units):** As organisations grow. These people are the managers of the operators and managers of managers.
4. **The operating Core (Engineers):** These are the people who perform the basic work of producing the products and rendering the services.
5. **The Analysts (staff) (part of the techno-structure):** As the organisation becomes more complex, these people perform administrative duties (to plan & control formally the work of others), and are outside the hierarchy line of authority
6. **The support staff:** These people provide various internal services (mailroom, cafeteria, legal council and public relations office, are also outside the hierarchy line of authority.

From Mintzberg, et al (2002), six basic parts of the organisation, it becomes apparent that the responsibility of the structure lies with the organisations "**Strategic Apex**", as defined by Mintzberg, et al (2002) as it is the brains of the organisation.

2.5 Organisation structure and change

As organisations are forced to be more effective & efficient in an ever changing business environment, engineering consultant organisations have responded to change by modifying and changing its structure, so as to avoid some of the problems that arises from restructuring. Therefore it is essential to identify the advantages and disadvantages of each of the existing organisational structural forms, detailed in (Appendix C). The organisation structure has to be chosen according to the particular strategic challenge that the organisation faces. Since the strategic challenge that is discussed in this report is change. (Johnson. and Scholes, 2002), have created a table indicating the typical capacities of each structure to cope with a particular strategic challenge and change is highlighted in the second column of (Table 4).

Table 4: Choosing the appropriate structure

(Source: Johnson, G. and Scholes, K 2002)

Challenge	Control	Change	Knowledge	Globalisation
Functional	3*	1*	2*	1*
Multidivisional	2*	2*	1*	2*
Holding	1*	3*	1*	2*
Matrix	1*	3*	3*	3*
Trans-national	2*	3*	3*	3*
Team	1*	2*	3*	1*
Project	2*	3*	2*	2*

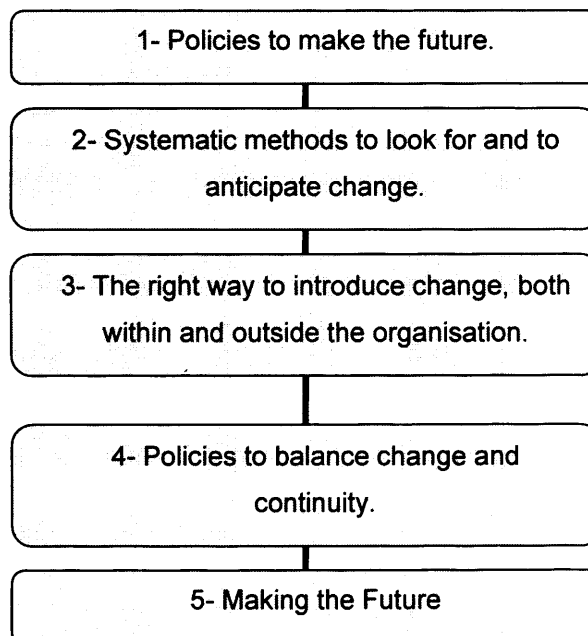
Stars(*) indicate typical capacities to cope with each challenge, with 3 stars indicating high, 2 stars medium and 1 star indicating poor.

No structure scores high across all four challenges. Organisational designers have to choose depending on the strategic challenges the organisation faces. In our case the strategic challenge is change and is highlighted in (Table 4) above. From the table above the Holding, Matrix and Trans-national structures all score high. In reality, few organisations adopt a structure that is just like one of the pure structural types. Structures often blend different types and have to be tailor made to the particular mix of challenges facing the organisation.

'One cannot manage change. One can only be ahead of it" (Drucker, 2002). In the past most organisations including engineering consultants used to resist change. However, now every body has accepted Change and the fact that it is unavoidable. The environment we live in today, change is the norm. Change is risky and difficult, and requires a great deal of hard work. But unless the organisation realises that to 'lead change' is the responsibility of the business organisation, it will not survive. Therefore, the only organisations who will survive are the one's who create and lead change; these organisations are called 'change leaders'. These organisations see change as an opportunity, looking for change, knows how to find the right changes and know how to make them effective both outside & inside the organisation. This requires the following process developed by (Drucker, 2002) and detailed in (Figure 5).

Figure 5: Creating Change process

(Source: Drucker 2002)



2.6 The Effects of Organisational Restructure on Employees

Downsizing is the dark side of restructuring. Whereby in many cases during restructuring employees are laid off so that organisations become more lean. (Howard and Frink, 1996), argue that as a result organisations restructuring by changing its current structure. This may not only influence where the tasks of the workers jobs directly but may also influence where the worker is located within the organisation, in addition to social interaction of the individuals. Furthermore, restructuring might influence changes in internal work motivation and general job satisfaction.

1. Motivation and Morale is depressed/low due to:
 - Decisions appear to be inconsistent and arbitrary in the absence of standardized rules.
 - People are subject to competing pressures from different parts of the organisation due to an absence of clearly defined priorities, decision rules or work programmes.
 - People are overloaded because there support systems are not adequate.
2. Decision may be delayed and lack quality due to:
 - Necessary information is not transmitted on time to the appropriate people
 - Decision makers are too segmented into separate units and there is inadequate provision to co-ordinate them.
 - There are no adequate procedures for evaluating the results of similar decisions in the past.
3. Conflict and lack of co-ordination
 - There are conflicting goals that have not been structured into a single set of objectives and priorities. People are acting at cross-purposes. They may, for example be put under pressure to follow departmental priorities at the expense of the project goals.
 - People are working out of step with each other because they are not brought together into teams or because mechanisms for liaison have not been laid down.
 - The people involved in the operations are not involved in the planning.

Summary

In this chapter we have identified and reviewed the existing basic structural forms, the history and theories behind organisational structure. The identification of who is responsible for the organisation restructure and the impact of restructure on the organisation. Also a detailed description of engineering consultant organisations, as they are unique from other organisations.

3 Case study “PB Ltd”

3.1 Introduction

In 2003 PB Ltd, had undergone major modification to their UK structure and in the process 83 employees at all levels had been laid off. The modification was a response to the rapidly changing business environment in order to be more effective & efficient. However, the affects of restructuring were not only on productivity and economic efficiency but also on the morale and motivation of the workforce. The main reason why PB Ltd was chosen for the case study was due the willingness to provide as much information as possible for the study. The aim of this chapter is to identify and understand the organisational structural form of a large civil engineering consultant and also to try to identify the problems that arise during and after restructuring.

3.2 General details of the organisation

²Parsons Brinckerhoff was founded in 1885 in the USA. By William Barclay Parsons, who designed New York City’s First subway line, the IRT. Completed in 1904, this line—extending from lower Manhattan to Harlem—which remains the worlds most heavily used rapid transit system. Parsons' second major project was to chart a 1,000-mile railroad in China, from Hankow to Canton, a line that is also still in use today. In 1906, Henry M. Brinckerhoff—a pioneering highway engineer—brought his expertise in electric railways to the firm. Known for his co-invention of the third rail, which revolutionized rapid transit, Brinckerhoff designed the network of roads at the 1939 World's Fair in New York.

Today Parsons Brinckerhoff has evolved and expanded, to be recognised as one of the world’s leading planning, engineering, programme & construction management, and operations & maintenance firms. It provides comprehensive infrastructure services for all types of infrastructure projects including power, buildings, environment and telecommunications on six continents. From Boston's Central Artery/Tunnel to Britain's rail system Network Rail; the Sabiya power plant in Kuwait, Cairo's Metro and the Deep Tunnel Sewerage System in Singapore. Its mission is to be the preferred

²<http://www.pbworld.com>

provider of infrastructure services worldwide, meeting this goal through core promises; provide best total value to clients, build superior client satisfaction, respect employees as the most valuable asset, demonstrate good corporate citizenship and grow into a truly global company.

3.3 Profile of PB Ltd

'*Profile of the Engineering Firm*': (Smyth, 2002) using the Super-Positioning Matrix questionnaire the organisation type was identified to be of a strong service/business centered engineering firm (Figure 7). The firm has a strong business orientation and well developed corporate hierarchical structure. It does particularly well with clients who appreciate a well managed delivery process from a well managed organisation. In many respects it tends to be a mirror image of the client organisation it serves. Typical clients of the firm include large public agencies, Highway Agency, and industrial clients with large manufacturing facilities.

Figure 6: Superpositioning Matrix of PB Ltd

(Source: Smyth, 2002)

Design Technologies

Strong Delivery Routinised - tried & tested solutions	A		B	
Strong Service Analytical - problem solving approach	C		D	
Strong Idea Innovative -pioneering approach	E		F	
	Practice Centered Business		<i>Business Centered Practice</i>	
	15%	85%		
	Engineering Firms (PB Ltd)			

Organisational Values

3.4 Existing Organisation Structure

Parsons Brinckerhoff Ltd has an Intermediate or hybrid structure, which is built up of not any one of the pure structural types but of a mixture between the pure types of structures. Therefore, confirming that the case study engineering consultant structure follows the 3rd theory of organisational structure mentioned in (section 2.2). The types of organisation structures mixed together in PB Ltd that were identified from the information provided by PB Ltd (detailed in Appendix A) are as follows:

1. The ' *Holding Company* ' Structure. PB Ltd is owned by a holding company. Which is an investment company consisting of shareholdings in a variety of separate business operations. The role that the parent company takes is limited to decisions about the buying and selling of subsidiaries with little involvement in their services or market strategy. The process and relationship between the corporate centre and the separate business is confined to financial issues such as investment and financial performance. The advantages and disadvantages are detailed in (Appendix C).
2. The '*Multidivisional*' structure. PB Ltd is built up of separate divisions on the basis of services, such as Civil & Structural Bridges, Highways, Signalling and Transport Planning. Within each of these divisions, there are separate businesses, which have their own divisional structure. At this level of the organisation, a division has a functionally based structure of departments dealing with the specialist's tasks of that division. The advantages and disadvantages are detailed in (Appendix C).
3. The '*Matrix*' Structure. That is common in professional service organisations such as PB Ltd. Within PB Ltd there is a combination of structures taking the form of services and geographical divisions and functional and multidivisional structures operating in tandem. The reason why the matrix structure may be adopted in PB Ltd is due to that there is more than one factor around which knowledge needs to be built whilst ensuring that these separate areas of knowledge can be integrated.
4. The '*Team based*' Structures. PB Ltd Combines both horizontal & vertical co-ordination through structuring people into cross-functional teams often built around the business process. Each of these teams will have a mix of specialist within it, so they are able to see the issues holistically.

5. Five, Project based Structures. Within PB Ltd teams are created to undertake the work and then dissolved once the work is completed. That is appropriate for PB Ltd when delivering large, expensive and durable services, such as work for the Highways Agency & Network Rail.

Also as mentioned earlier in (section 2.5), regarding choosing the appropriate structure according to the particular strategic challenge that the organisation faces. The Holding, Matrix and Trans-national structures all scored high in being the appropriate structure to respond to change. Two of these structures, the Holding and Matrix structure exist within the case study engineering consultant organisation 'Hybrid structure', PB Ltd.

3.5 Interview data & analysis

The Subjects were employees of a UK engineering consultant organisation, PB Ltd. The organisation was in the range of 9000 employees world wide, and approximately 2000 employees UK based. The sample included an executive manager, middle-line manager and two engineers, from the UK structure. The subjects were employees of one of the divisions of the organisation which had undergone restructure to include nine other divisions, which had resulted in changes in the work relationships within the resulting division. The changes in the various divisions occurred between 12 months and 18months before this study. The sample consisted of four full time male employees within the organisation, with an average age of 39.5years.

The interviews were conducted with employees within one of the divisions that had been restructured. At the beginning of the interviews it was indicated to the participants that the information was being collected independent of their organisation, that participation was voluntary, and their responses would be kept confidential. Although time consuming, to arrange suitable times for interview the response within the organisation was good.

Subjects were asked questions adapted from (Howard and Frink, 1996), to indicate how they felt about the organisation restructure before and after restructuring within the organisation, on a likert 7 item scale, with 1 as 'strongly disagree' and 7 as 'strongly agree'.

The results of the interviews conducted within the case study organisation indicate the following, detailed in Appendix B:

- 50% disagree, 25 % neutral and 25% agrees, that since the workplace has been reorganised, is it easier to accomplish the work that is to be performed.
- 75% neutral and 25% agree that the clients are better served by the current structure.
- 75% agree and 25% slightly agree that the reorganisation of the workplace increased the number of individuals that employees work with.
- 75% disagree and 25% agree that since the reorganisation of the workplace, work done more effectively.
- 50% disagree and 50% agree that employees find it very difficult to work under the new organisational structure.
- 75% disagree and 25% agree that the new organisational structure made it easier to work with those people that employees need to work with to effectively perform their job.
- 50% disagree, 25 % strongly disagrees and 25% agrees that since the restructuring, employees feel that they have more job security.
- 50% Neutral, 25 % agree and 25% slightly disagree that since the restructuring, co-workers are better suited for their positions.
- 75% disagree and 25% agree that Supervisors skills are put to better use since restructuring.

Also, the interviewee's were asked how they felt about changes on a 7 item likert scale, with 1 as 'no changes' and 7 as 'cannot adjust'.

- 75% agreed that there were moderate changes and 25% said there were no changes.

3.5.1 Stakeholders Analysis

From Mintzberg, et al (2002), six basic parts of the organisation mentioned in (section 2.4), it becomes apparent that the responsibility of the structure lies with the organisations "**Strategic Apex**", as defined by Mintzberg, et al (2002) as it is the brains of the organisation. Also from the interviews conducted with personnel within the case study organisation, PB Ltd. It becomes apparent that the responsibility of the structure also lies with the organisations "**Strategic Apex**", and called it the "strategic development team" consisting of a number of executives and consultants. The reason why the responsibility lies with the '**Strategic Apex**' is that no one within the organisation can provide the information that 'executives' need to create the appropriate organisation structure except 'executives'. This is because major changes always start outside the organisation. However these changes are only data to everyone. But individual executives can convert this data into information and it is this that is the key resource of executives. Executives then can decide how to organise information so that it becomes their key effective action. It is this Information that creates the link between the workers, the organisation and their 'environment'. Also from this information they must develop the ability to assess opportunities, evaluate risk and uncertainty, and make informal decisions concerning which strategies and structure best prepare the organisation for its future. Therefore to produce the information executives need for restructuring of the organisation, they have to begin with answering two questions listed in the (Figure 6) below:

Figure 7: Information questions

(Source: adapted from Drucker, 2002)

- | |
|---|
| 1) What information do I owe to the people with whom I work and depend? In what form? And in what time frame? |
| 2) What Information do I need myself? From whom? In what form? And in what time frame? |

The first part of the question one 'what I owe' establishes communication, so that information flow back to the executive. The second part is 'To whom do I owe the information', so that they can do the work.

Only after the first question has been asked can the second question be asked and answered fully. Executives who ask these questions will soon find that little of the information they need comes out of their own company's

information system. But a good deal of the information required will come from outside and will have to be organised separately and distinctly from the inside information system. Both questions take a lot of thought, experimentation, and hard work to answer. These answers are not forever and have to be asked again every year or so or every time there is real change. If these questions are answered seriously, it will be easier to understand 'what we need' and 'what we owe'. Therefore set about organising both including the organisation structure.

3.5.2 Problem with PB Ltd existing structure

As discussed earlier in (section 2.6), the consequences of restructure. From the information available and the interviews conducted. Four main deficiencies were identified within the engineering consultant case study organisation, PB Ltd. Therefore, confirming the negative impact of restructuring on the organisation.

Motivation & Morale appears to be depressed because:

Decisions appear to be inconsistent and arbitrary due to absence of standardised rules. People are subject to competing pressures from different parts of the organisation due to an absence of clearly defined priorities, decision rules or work programmes. Also, People are overloaded because their support systems are not adequate.

Decision making appears to be delayed and lacking in quality because:

Necessary information is not transmitted on time to the appropriate people. Decision makers are too segmented into separate units and there is inadequate provision to co-ordinate them. Also, there are no adequate procedures for evaluating the results of similar decisions in the past.

There appears to be conflict & lack of coordination because:

There are conflicting goals, which have not been structured into a single set of objectives and priorities. People are acting at cross-purposes. They may, for example be put under pressure to follow departmental priorities at the expense of the project goals. People are working out of step with each other because they are not brought together into teams or because mechanisms for liaison have not been laid down. The people involved in the operations are not involved in the planning.

The organisation appears to not be responding innovatively to the changing circumstances because:

There is inadequate co-ordination between the part of the organization identifying changing markets needs and the operational area working on the projects.

Costs appear to be rising rapidly, particularly in the administrative area, because:

There is an excess of procedures and paperwork distracting people's attention away from productive work and requiring additional staff personnel to administer

3.5.3 Situational Factors

There are a number of situational factors which may have influenced the choice of organisation structure within PB Ltd. Below are a few of them:

'Age & Size': As PB Ltd is an old & large organization. It tends to formalize what it has seen before and what it sees often. Therefore, to behave in a more formalized manor. Also, the larger the organization the elaborate its structure (the more specialized its jobs & units and the more developed its administrative components). As PB Ltd is a large organization; they are able to specialise their jobs more finely. Also they are able specialise the work of the units more extensively. Therefore requiring greater coordination and enlarging its hierarchy to effect direct supervision and to make greater use of its techno-structure to achieve coordination by standardization.

'Technical System': As PB Ltd operates in a more complex technical system; therefore there are elaborate and professional support staffs. For example if PB Ltd is designing a bridge, it must hire staff that can understand the design process. Who have the capability to design and modify. Thus, must be given considerable power to make decisions.

'Environment': The more dynamic an organisations environment, the more organic its structure. For example when the political conditions are unstable, the organisation cannot standardize but must instead remain flexible. Since PB Ltd operates in a more stable environment, where nothing dramatically changes and it can predict its future conditions to a certain extent, it can easily rely on standardization for coordination. Also, the more complex an organisations environment, the more decentralized its structure. Since the operations of PB Ltd are based on a complex body of knowledge and decisions cannot be made by one person. Therefore there is a need to decentralize decision-making power. And, the more diversified an organizations markets, the greater the propensity to split it into divisions. Since PB Ltd identifies markets, geographical regions, clients and services. It has split itself into high-level units on these bases and gives each division a good deal of control over its operations. Four, since PB Ltd operates in an ever-growing hostile environment due to competition. Therefore there is a drive to centralize its structure in order to respond to competition.

'Power': The greater the external control of an organisation, the more centralized and formalized its structure. Since PB Ltd is owned by a holding company. The process and relationship between the corporate centre and the separate business is confined to financial issues such as investment and financial performance. However the parent company has centralized power at the strategic apex and to formalize its behaviour. The reason is that the two most effective ways to control an organisation from the outside are to hold its chief executive officer for its actions and to impose clearly defined standards on it and, forcing the organisation to be especially careful about its actions.

Summary

This chapter is a presentation of the data gathered from the interviews conducted of the engineering consultant cases study and its analysis and relation to literature discussed in chapter 2. So that appropriate conclusion and recommendations are made in the following chapter.

4 Conclusion and Recommendations

4.1 Overview of research

Organisation restructure in engineering consultants is frequently changing within engineering consultant organisations due to the rapidly changing business environment. One of the ways that engineering consultant organisations have responded with to deal with these changes is by changing and modifying its structure (restructure). However, from the engineering consultant case study these changes to the structure appear to be no more than slight modifications of the same basic design and have alternative hidden motives like downsizing and appear to have a negative impact on the organisation structure.

4.2 Conclusions

- The case study engineering consultant organisation does not follow any one of the seven basic structural forms. But has a structural form similar to that of large main stream business organisation. This structure that exists within the engineering consultant organisation is a 'Hybrid structure', which is a 'mix and match' structure from the existing basic structural forms.
- The organisation structure of the engineering consultant case study can not be any one of the pure structural forms and must be a 'Hybrid structure'. This is because of the profile of the engineering consultant organisation that tends to be a mirror image of the many different client organisations.
- The restructuring within the case study engineering consultant organisation is no more than a slight modification of the same basic design. This is confirmed from the response of the interviews conducted with the employees within the organisation. Also, confirming (Leavitt, 2003) argument that nearly every large organisation remains hierarchical, with no more than slight modification of the same basic blue print.
- The case study engineering consultant organisation has responded to change by not only restructuring but also by downsizing hidden by

restructuring. The main objective behind restructuring within the case study engineering consultant organisation was not only to improve the formal framework by which job tasks are divided grouped and co-ordinated, as the modifications to the structure were slight and also from the response of the interviews conducted there was very little influence from the new structure. However, the main objective behind restructuring was probably economic efficiency by downsizing, confirmed by the fact that around 80 employees had been laid off due to restructuring, saving the organisation close to one million pounds a year in salaries.

- Also, the reason why it appeared that large modifications had been made to the structure was due to the large number of employees that were being laid off at different levels within the organisation as remaining employees were given more or less job tasks.
- There is no existing structural form and not even the 'Hybrid structure' that can respond to all the changes in the business environment, but there are structural forms that respond better to particular changes. Also due to the business environment continuously changing and the structure responding by continuously adjusting to suite this changing environments. Therefore, Engineering Consultants need to move away from the general idea of organisational restructuring and to respond by concentrating their efforts on the changing environment it self by leading change or creating the change that suits the organisation strategy and structure.

4.3 Recommendation

- The “Strategic Apex”, the managers responsible for organisation restructure must encourage sufficient interaction between themselves, middle-line managers and engineers, and motivate a willingness to participate in the restructuring process of the organisation
- Restructuring within organisation should be done only when necessary by testing to evaluate existing organisation structure and revealing whether the restructuring supports the strategy.
- Implement systematic methods to for and anticipate changes in the business environment
- Establish a right way to introduce restructuring within the organisation. This can be done through a ‘champion’, somebody who really wants the new, works on its success and is respected within the organisation.
- Implement policies to balance restructuring and continuity. The whole organisation must make special efforts to be receptive to restructuring and be able to change. Restructuring within organisation means change, and this explains why restructuring faces resistance. People within the organisation need to know where they stand, with whom they work, what they can expect, values and rules of the organisation otherwise they do not function if the environment is not predictable, not understandable and not known.
- If downsizing is evitable when restructuring, it should be labelled as downsizing. The main objective is to avoid destroying employees trust, morale and motivation during the process. A well developed process by (Mishra K, .Spreitzer G, and Mishra A, 1998), detailed in (Appendix D) that can be integrated within the restructuring process.

4.4 Research Limitations

This study, like all studies, has limitations and they are as follow:

- Organisation structure was studied in only one engineering consultant. It could be that organisation structure is different in other engineering consultants. It could also be that employees in other engineering consultants are different. This indicates that a larger sample needs to be studied in the future.
- The interviews conducted, was only one or two interviews for each hierarchy level within the organisation case study. It could be that employees within the organisation case study are different. This indicates that a larger sample of employees within the organisation needs to be studied in the future.
- Another limitation is that restructuring could not be studied while it was being implemented. We asked subjects to recall how the structure was before the modifications. It would have been ideal to study the structure as changes were implemented, producing time series data.

4.5 Future Research

Suggestions for future research on related issues are

- Research into the organisation structure of a large number of engineering consultants.
- Research into the shortage of research and study of organisation structure in engineering consulting organisations.
- How organisation structure can endure future change in engineering consultants.

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APPENDIX A:

Figure 1A: PB Organisation

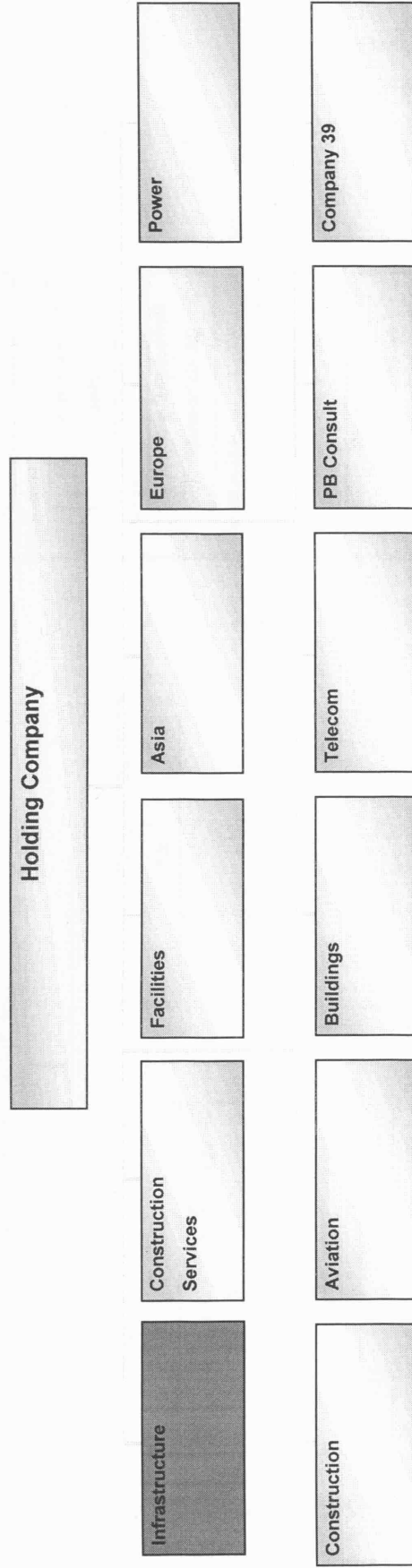


Figure2A: Parsons Brinckerhoff Ltd EAME Region Organisation

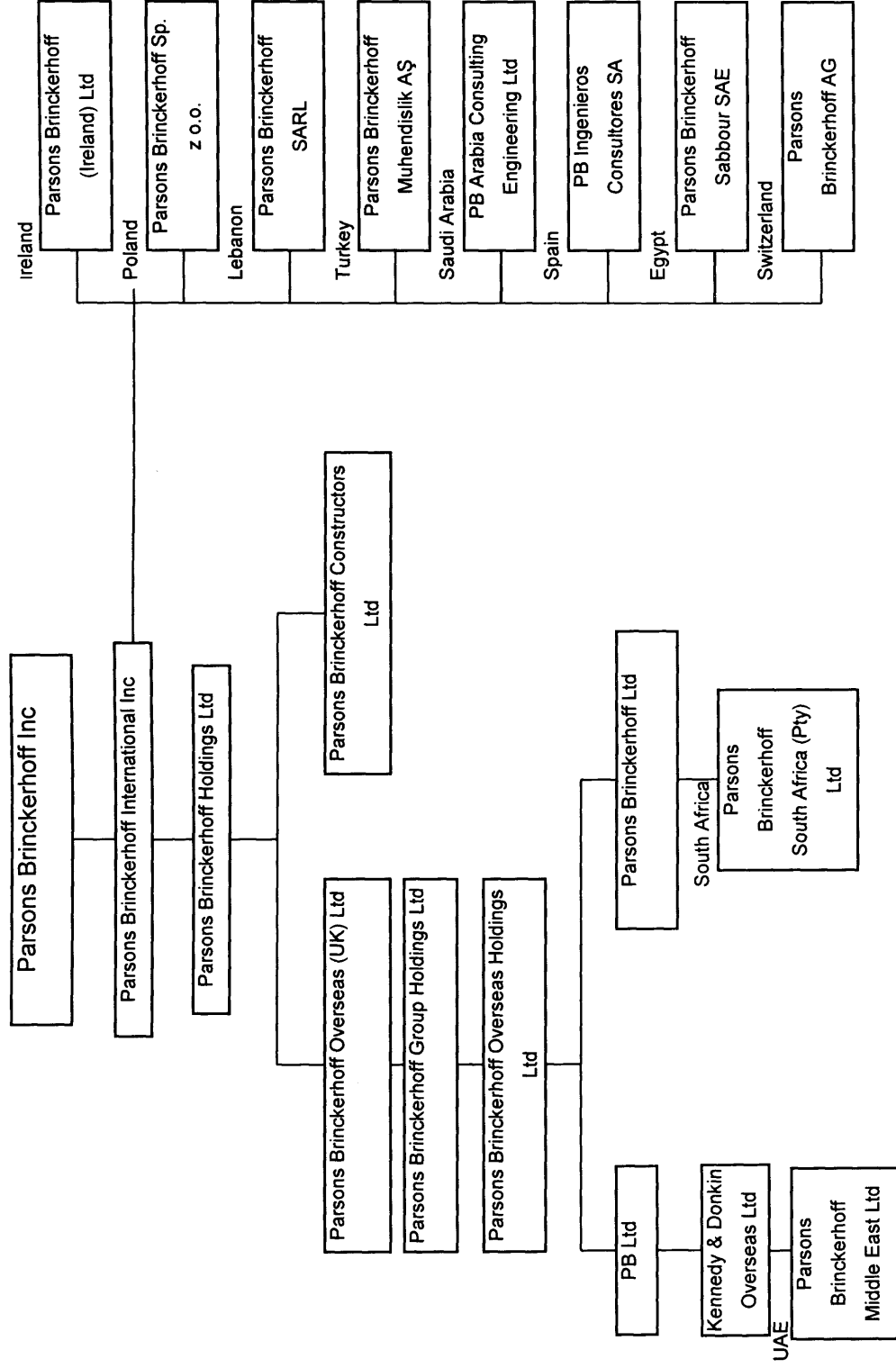


Figure 3A: Parsons Brinckerhoff Ltd EAME Region Organisation

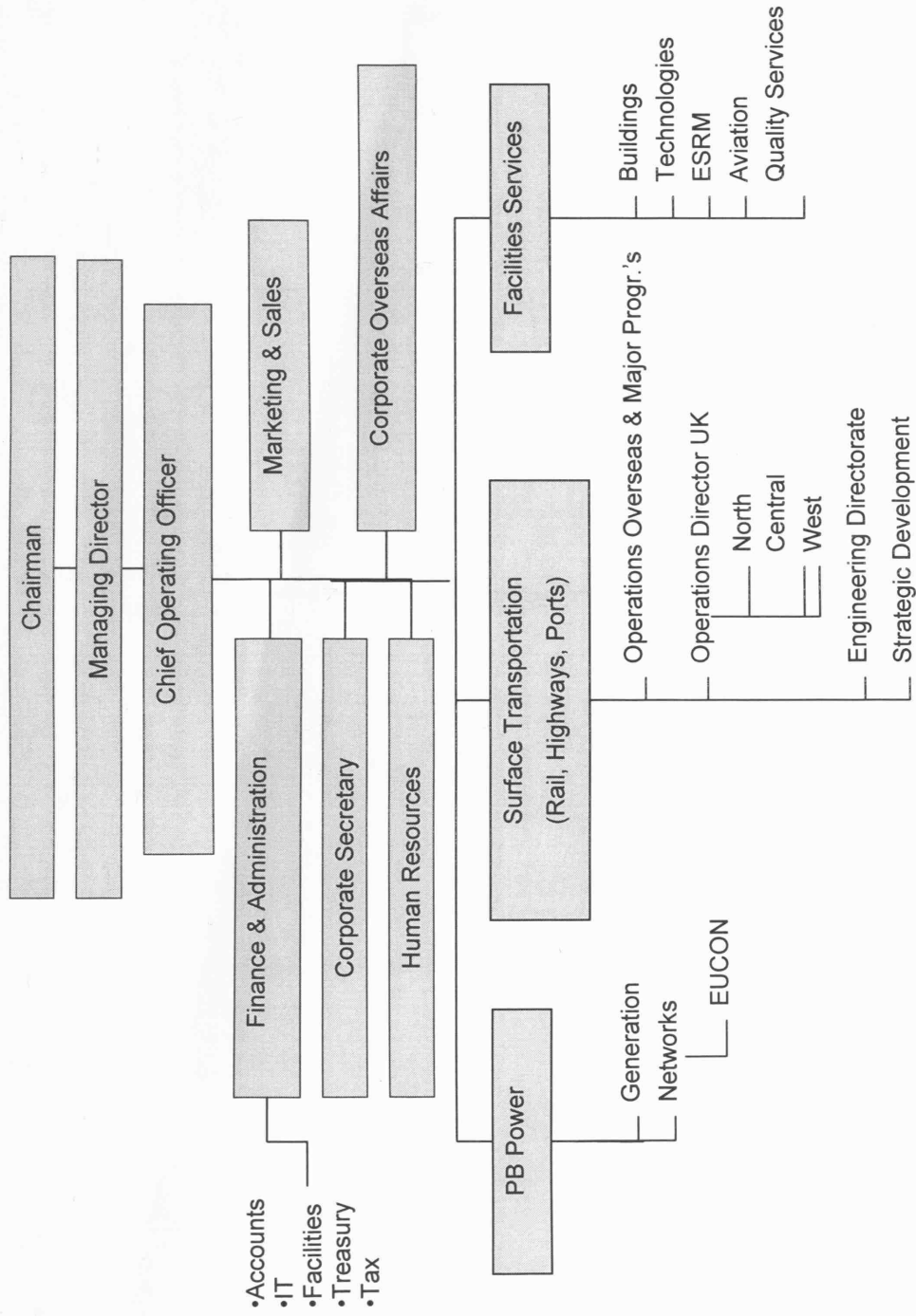


Figure 4A: European Operations

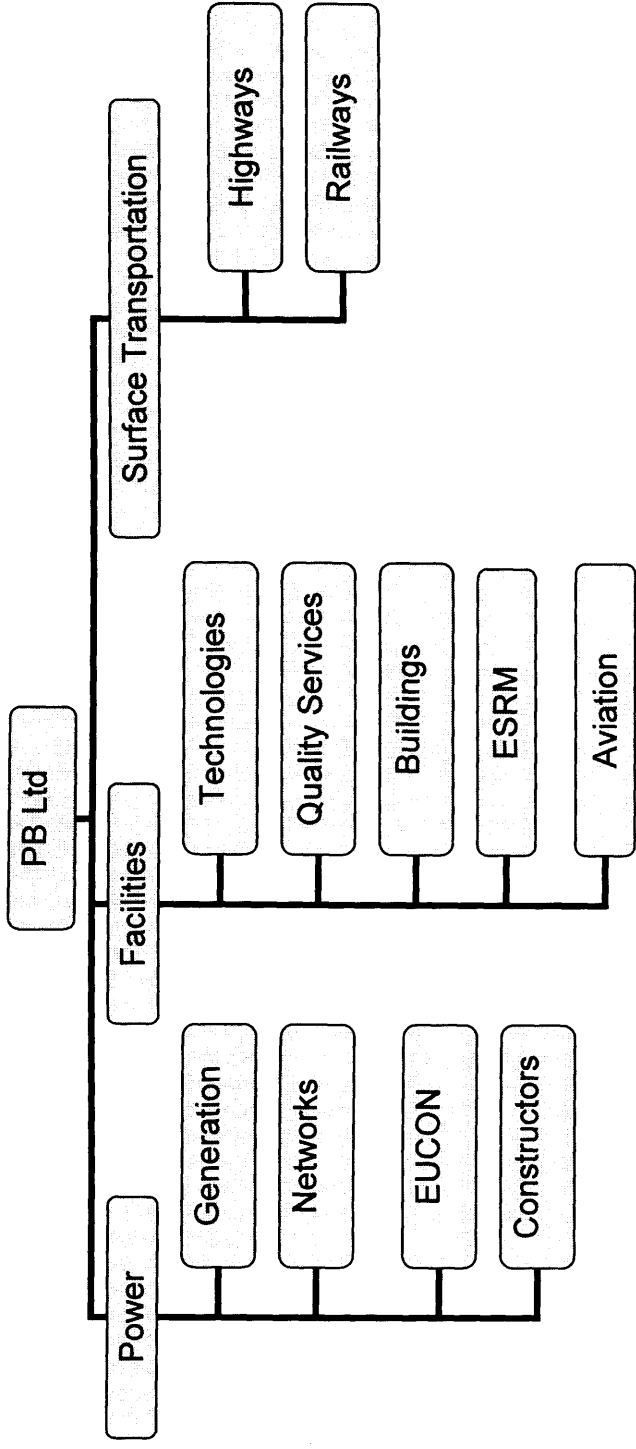


Figure 5A: Surface Transportation Structure

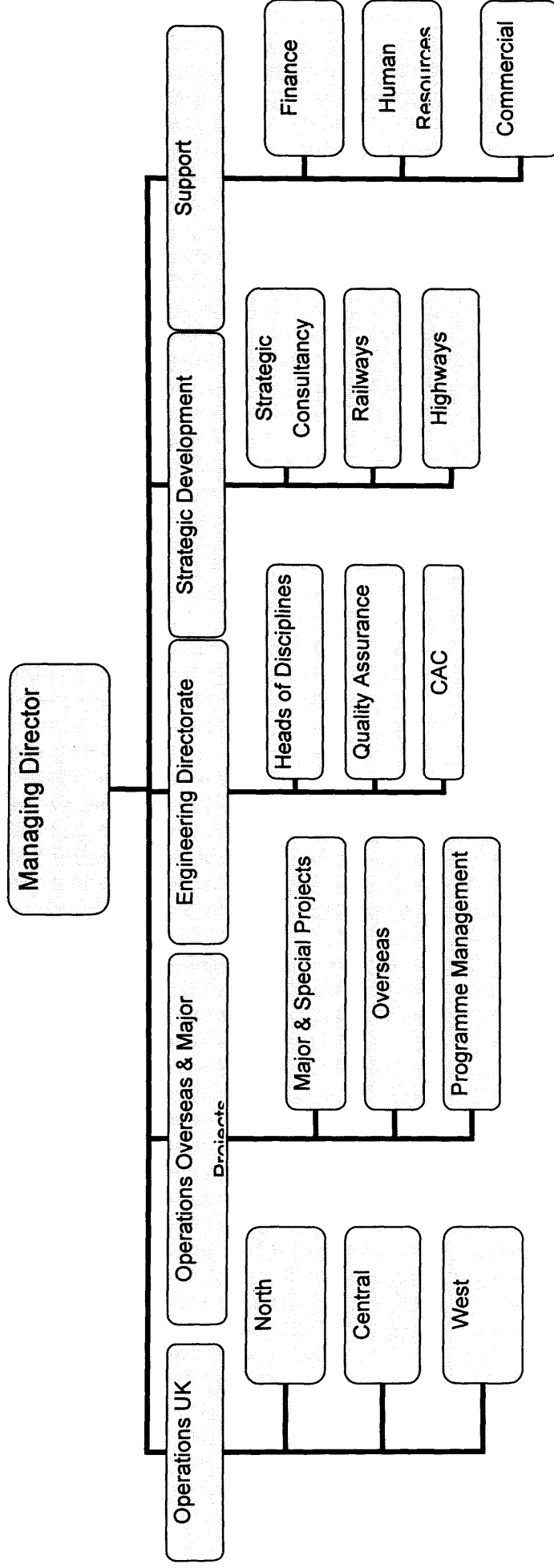


Figure 6A: Operations Structure

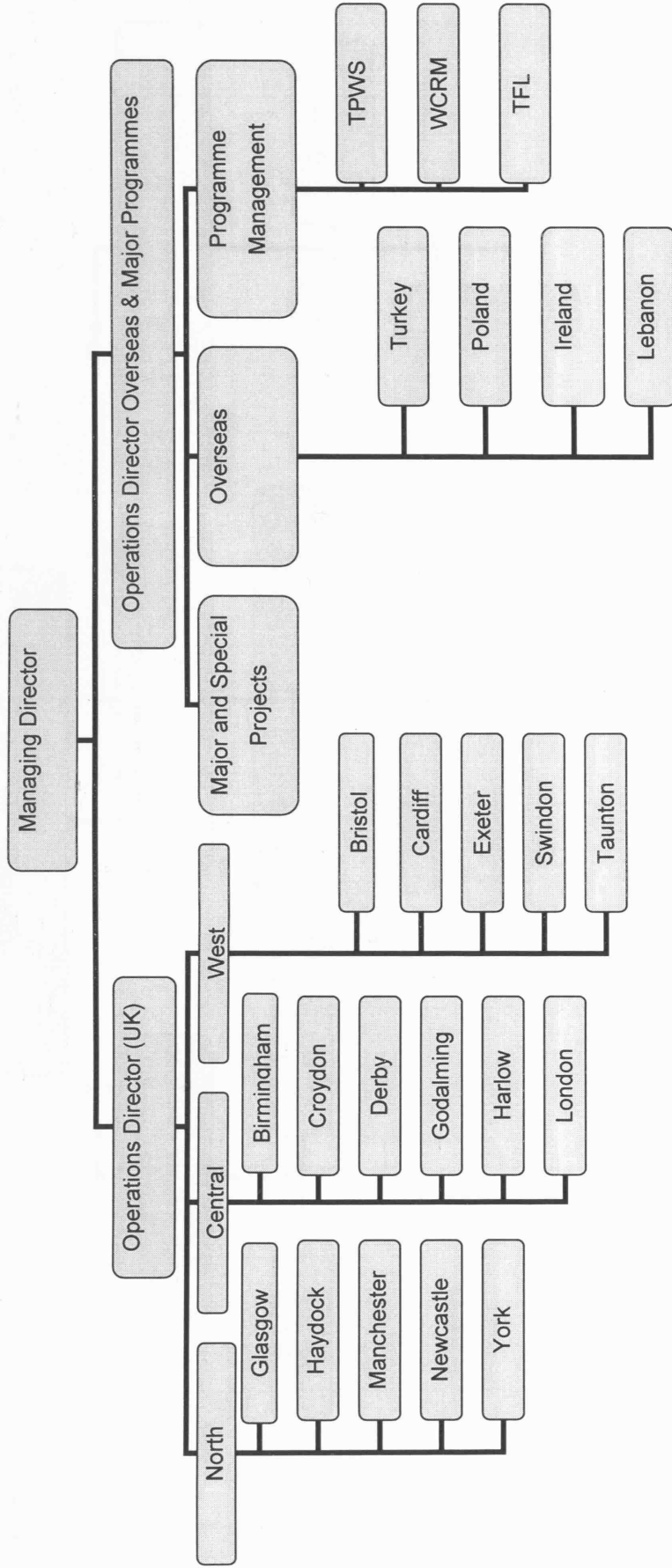


Figure 7A: Operations UK

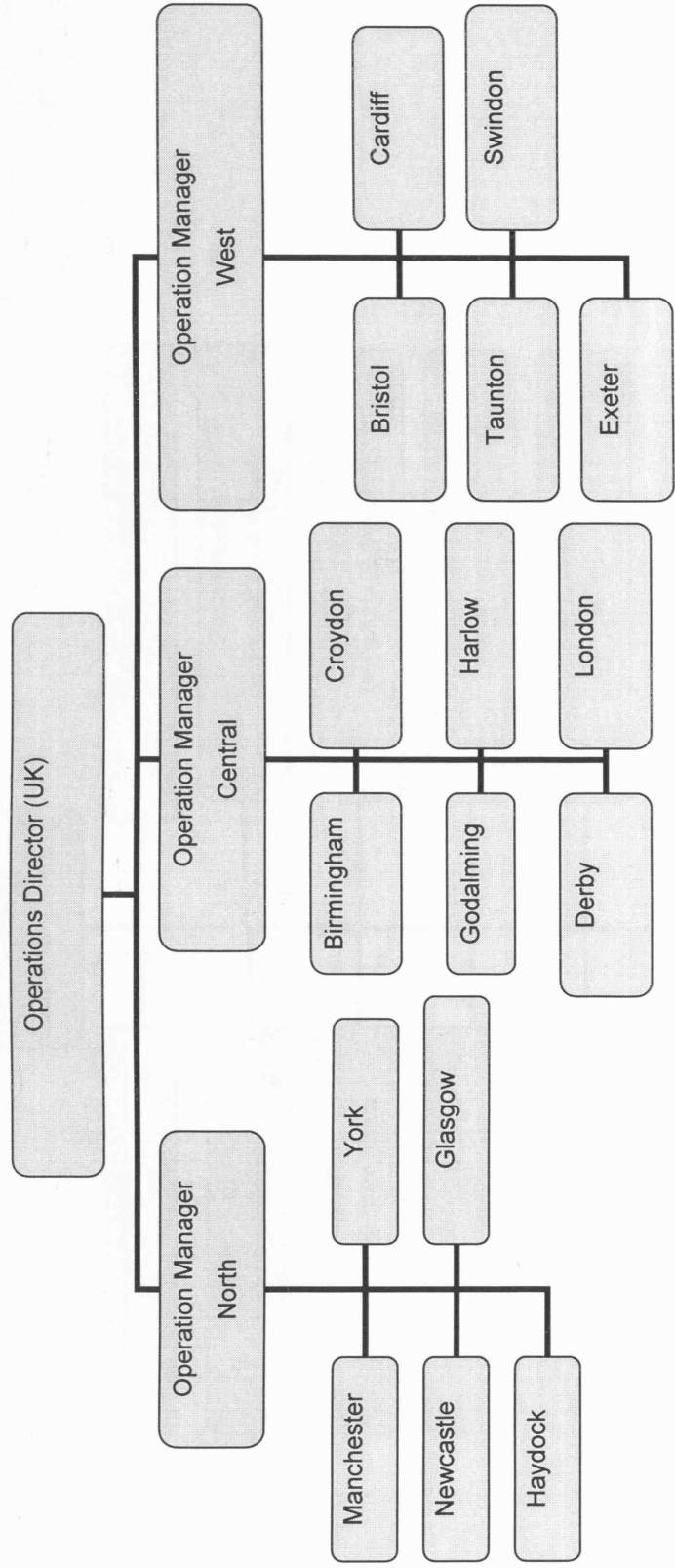


Figure 8A: Engineering Directorate

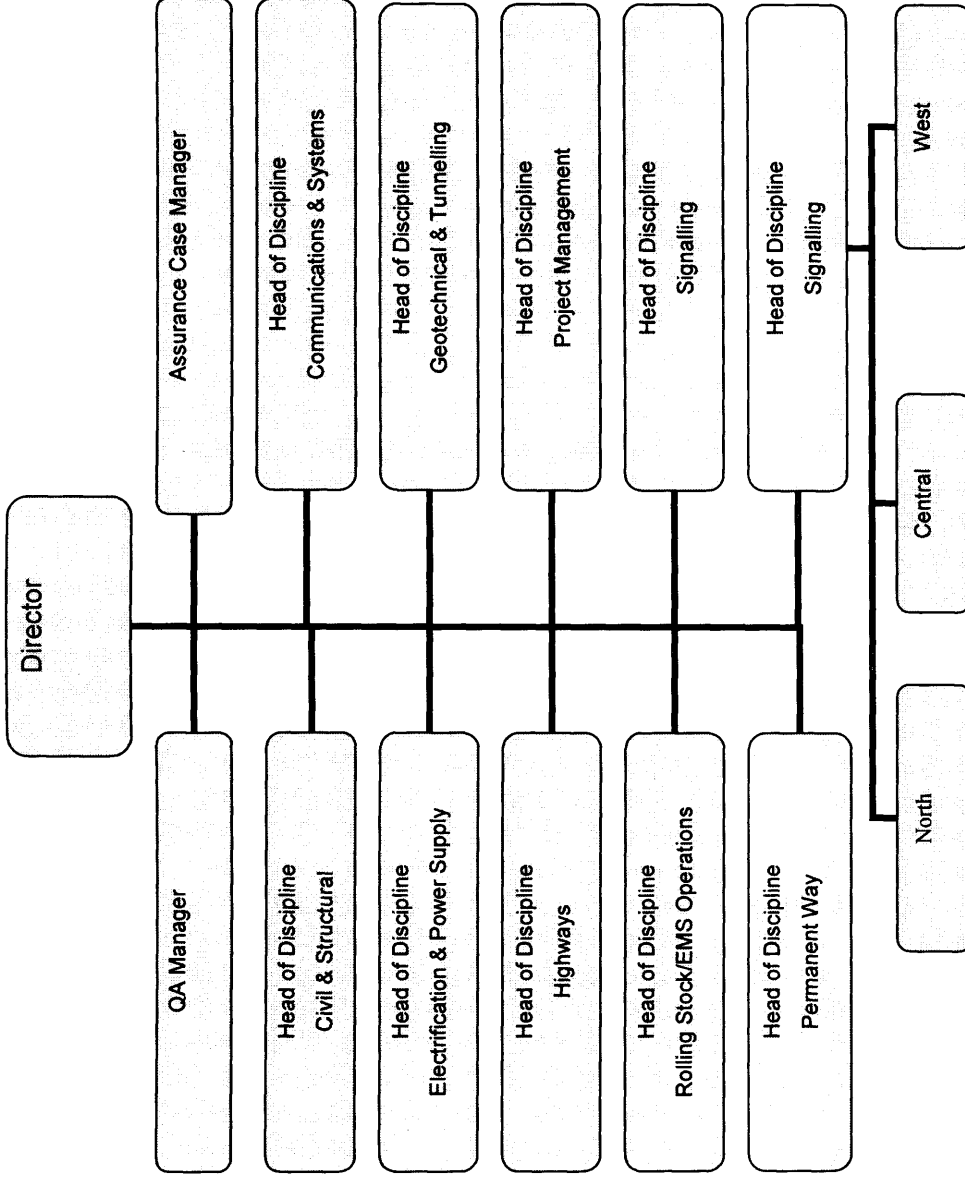


Figure 9A: Strategic Development

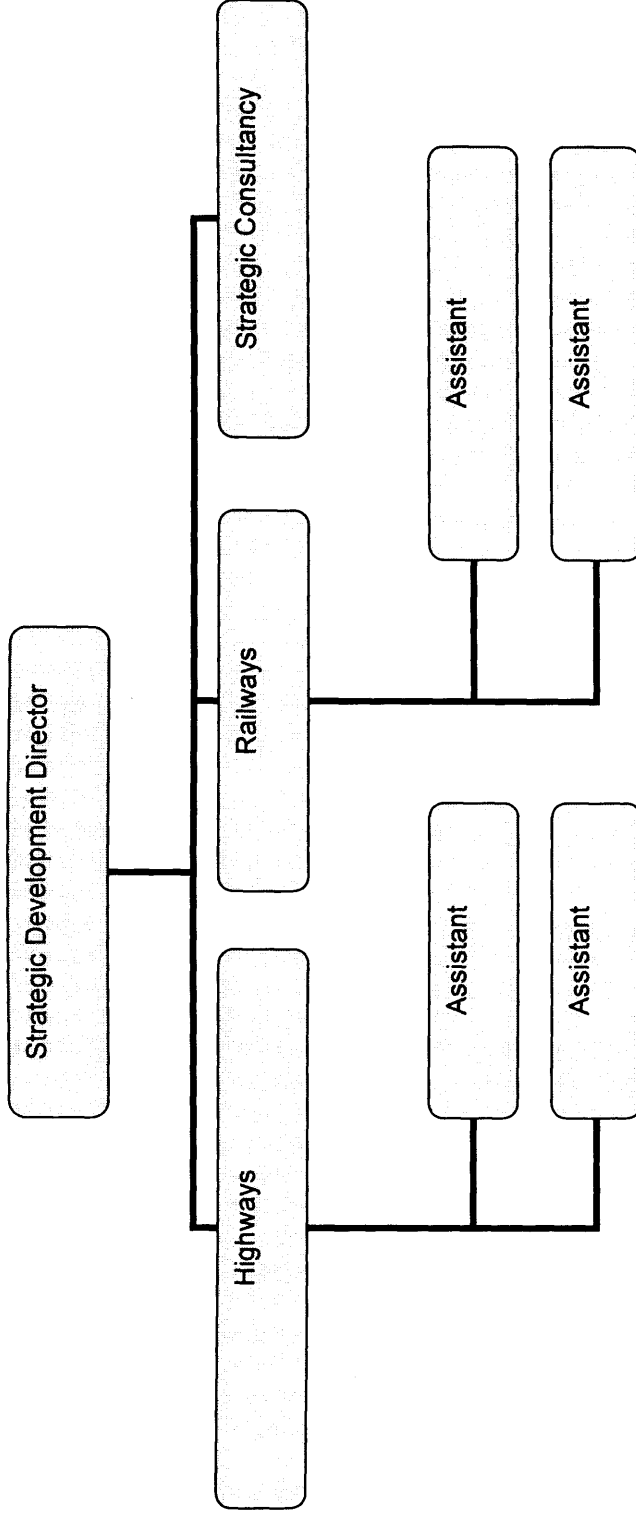


Figure 10A: Support

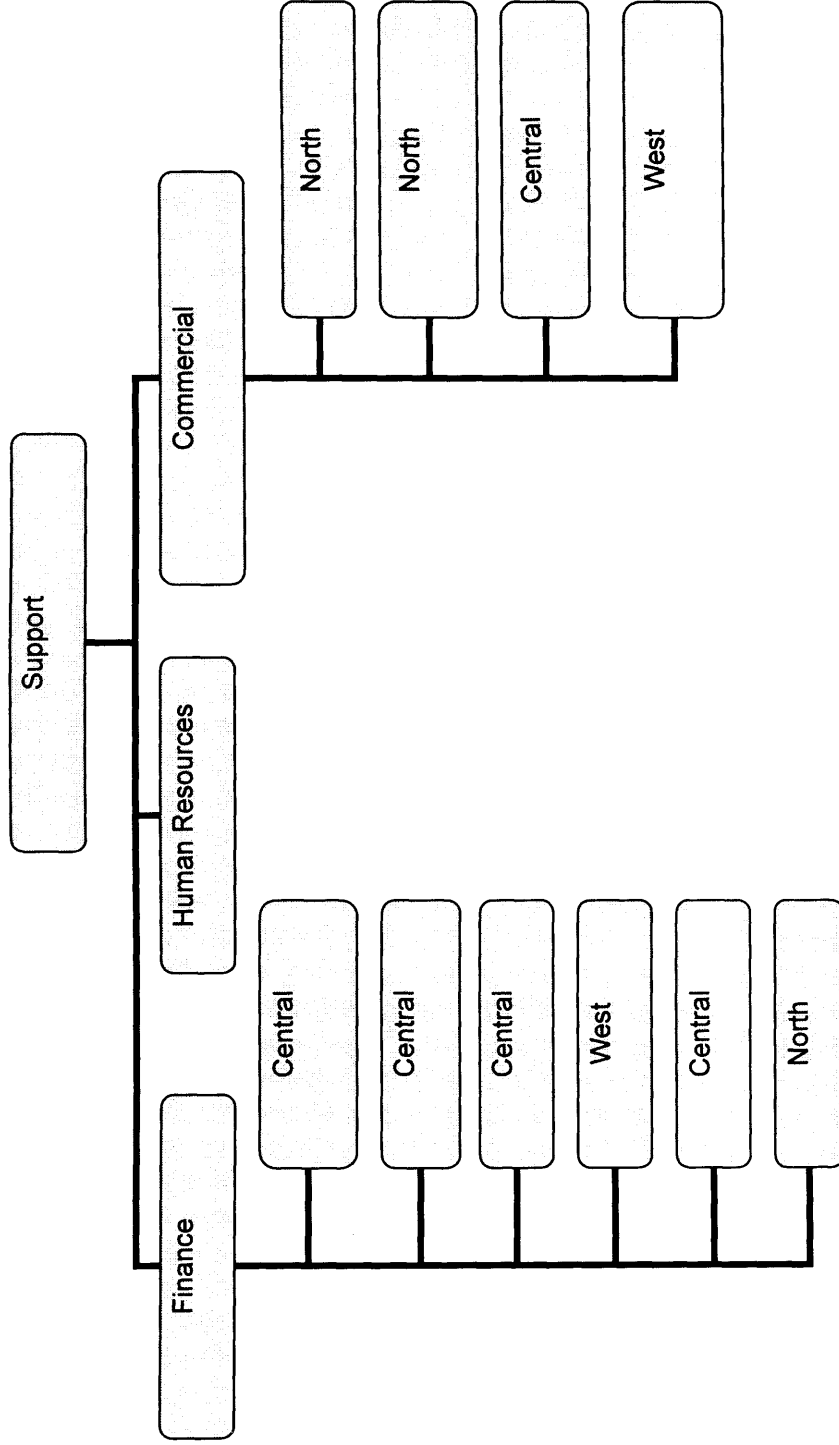
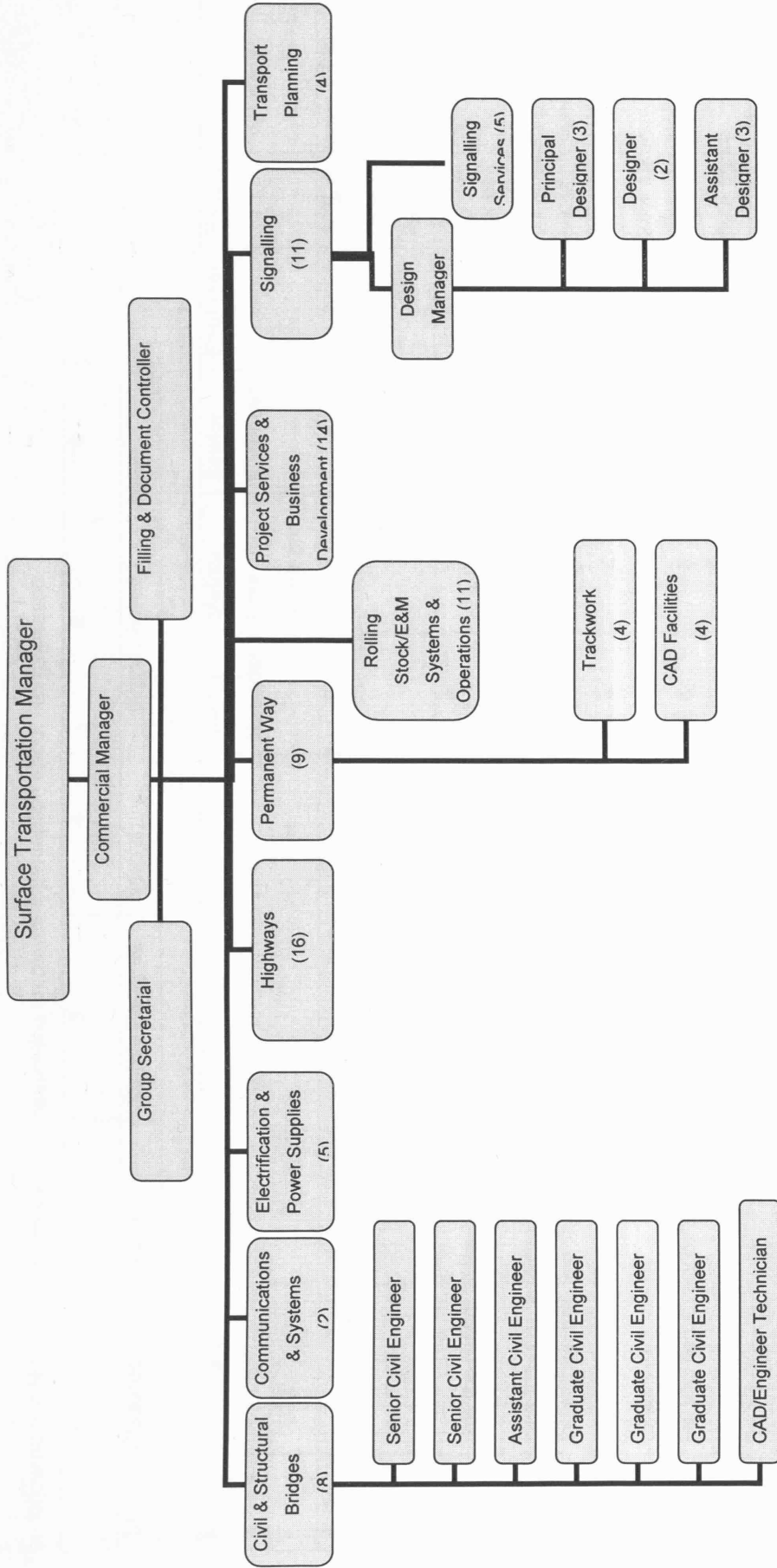


Figure 11A: Godalming Office



APPENDIX B:

The following is a likert scale developed to measure the employee's perception about reorganisation

1	2	3	4	5	6
Strongly Disagree	Disagree	Slightly Disagree	Neutral	Slightly Agree	Agree

No.	Questions	Senior Manager	Middle-Line Manager	Senior Engineer	Engineer	Results
1	Since the workplace has been reorganised, is it easier to accomplish the work that you perform?	6	2	4	2	50% disagree, 25 % Neutral and 25% agrees
2	Are the clients better served by the current structure	6	4	4	4	75% Neutral and 25% agree
3	Has the reorganisation of the workplace increased the number of individuals that you work with?	6	6	5	6	75% agree and 25% slightly agree
4	Since the reorganisation of the workplace, is work done more effectively?	6	2	2	2	75% disagree and 25% agree
5	Do you find it very difficult to work under the new organisational structure?	6	6	2	2	50% disagree and 50% agree

The following is a likert scale developed to measure the employee's perception about reorganisation (continued)

1	2	3	4	5	6
Strongly Disagree	Disagree	Slightly Disagree	Neutral	Slightly Agree	Agree

No.	Questions	Senior Manager	Middle-Line Manager	Senior Engineer	Engineer	Results
6	Has the new organisational structure made it easier to work with those people that you need to work with to effectively perform your job?	6	2	2	2	75% disagree and 25% agree
7	Since the restructuring, do you feel that you have more job security?	6	1	2	2	50% disagree, 25 % strongly disagrees and 25% agrees
8	Since the restructuring, are co-workers better suited for their positions?	6	3	4	4	50% Neutral, 25 % agree and 25% slightly disagree
9	Are Supervisors skills put to better use since restructuring?	6	2	2	2	75% disagree and 25% agree

The following is a likert scale developed to measure the employee's perception about reorganisation

1	2	3	4	5	6
Strongly disagree	Disagree	Slightly disagree	Neutral	Slightly agree	Agree

	Senior Manager	Middle-Line Manager	Senior Engineer	Engineer	Results
Item was used to measure employees' ability to adjust to the reorganisation	3	3	3	1	-
	Moderate changes	Moderate changes	Moderate changes	No Changes	75% Moderate changes and 25% No Changes

Position	Senior Manager	Associate (Middle-Line Manager)	Senior Engineer	Engineer	Average (years)
Age (years)	55	38	29	24	39.5
Experiences (years)	33	14	7	2	17.5

Source: Adapted from Howard and Frink, 'The effects of Organisational restructure on Employee Satisfaction' questionnaire, 1996

APPENDIX C:

C1: Advantages & Disadvantages of the different structural forms

(Source: Johnson, G. and Scholes, K. Whittington, R. 2005)

Functional structure		Multidivisional structure		Holding company		Multinational organisation	
Advantages	Disadvantages	Advantages	Disadvantages	Advantages	Disadvantages	Advantages	Disadvantages
<ol style="list-style-type: none"> Chief executive in touch with all operations. Reduces simplifies control mechanism Clear definition of responsibilities at Specialists at senior and middle management levels 	<ol style="list-style-type: none"> Senior managers overburdened with routine matters Senior managers neglect strategic issues Difficult to cope with diversity, because they are centralised around a particular function Co-ordination between functions difficult Failure to adapt 	<ol style="list-style-type: none"> Flexible (add or divest divisions) Control by performance ownership of strategy specialisation of competences training in strategic view 	<ol style="list-style-type: none"> Additional costs of the centre Duplication of work at the divisional level Fragmentation and non-co-operation 	<ol style="list-style-type: none"> Extremely flexible, with the ability to bring in outside shareholder partners and to buy and sell their subsidiaries as conditions change. 	<ol style="list-style-type: none"> Hard to control, due to management style and the rights of outside shareholders. Sharing knowledge between autonomous subsidiaries is very difficult (often unrelated. Not popular in western economies, however emerging economies India, Russia still play a prominent role. 	<ol style="list-style-type: none"> Integrate knowledge Flexible dimensions 	<ol style="list-style-type: none"> Length of time to take decisions Unclear job and task responsibilities Unclear cost and profit responsibilities High degree of conflict

APPENDIX D:

D1: 4 Stage Downsizing Process

(Source: Mishra K, .Spreitzer G, and Mishra A, 1998)

<p>Stage 1 Making the decision to downsize</p>	<ul style="list-style-type: none"> • Use downsizing as the last resort • Craft a credible vision
<p>Stage 2 Planning the downsize</p>	<ul style="list-style-type: none"> • Form a cross functional team • Identify all constitutes • Use experts to smooth transition • Provide training to manager • Supply information on the state of the business
<p>Stage 3 Making the announcement</p>	<ul style="list-style-type: none"> • Explain business rationale • Announce the decision • Notify in advance • Be specific and time the announcement appropriately • Offer employees the day off
<p>Stage 4 Implementing the downsizing</p>	<ul style="list-style-type: none"> • Tell the truth & over communicate • Help departing employees find other jobs • Announce subsequent separations as planned Be fair in implementing separation & generous to laid off workers • Allow for voluntary separation • Involve employees in downsizing implementation • Provide career counselling • Train survivors