Quality Management in Korea, and its Motivating Aspects.

The thesis was undertaken in South Korea,

by

Fredrik Johansson & Dag Kroslid

Linköping, Februari 1996

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Title

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Abstract

The project’s primary objective is to make a survey of quality management in Korea, with an in-depth study of how management motivates employees to work for quality. A secondary objective is to make proposals on how Scandinavian and Korean industry can learn and improve in quality management areas. The main focus was on the automobile, electronics and shipbuilding industries.

Our survey revealed that the Korean conglomerates have extensively implemented and applied quality management in their operations, and deserve more international respect and recognition in this area. Regarding motivation for total quality, we found that Korean workers are not so much involved in quality related work, but management is now succeeding in enhancing everybody’s awareness, in essence through materialistic incentives.

We reckon that Scandinavia can learn something when it comes to building employees’ company pride, using TPM, and making decisions. Likewise, Korea can learn from Scandinavian industry in terms of service quality, capability-based human resource management and employee involvement. Further, we stress the importance of principles in the adoption process.

Keyword

TQM, Motivation, Korea, Adoption Techniques, Korean Management Style, Chaebol, TPM, ISO-9000
Background
Observing Korea raising its level of productivity, improving its reputation and prosperity, made us interested in finding the keys behind the success story. Contacts with Scandinavian industry confirmed that competition from Korean companies was growing stronger, but that there was a lack of understanding on just how it had been achieved. Together with our professor, Bo Bergman at Linköping University, we therefore decided to undertake this research.

Objectives
The project's primary objective is to make a survey of the quality management concept in Korea, with an in-depth study of how management motivates employees to work for quality. A secondary objective is to make proposals on how Scandinavian and Korean industry can learn and prosper from each other in quality management areas.

Boundaries
Throughout the research, our studies have centred upon the big Korean conglomerates, and three of their main industrial areas: shipbuilding, automobiles and electronics. Due to communication problems, the vast majority of interviews have been with managerial representatives from Korean and Western companies. The role of blue collar workers was covered through observation, literature, managerial interviews and occasionally directly through interpreters.

Proceedings
The research was undertaken as a co-operation project between Linköping University and Seoul National University, for five months in Korea 1995. It embraced numerous meetings with Korea companies, as well as Scandinavian companies with subsidiaries in the country.

Conclusions
From our survey of quality management in Korea, with an emphasis on motivation, we reckon that Scandinavia can learn something when it comes to building employees' company pride, using TPM, and making decisions. Likewise, Korea can learn from Scandinavian industry in terms of service quality, capability-based human resource management and employee involvement. Further, we stress the importance of principles in the adoption process.
FOREWORD

This thesis is the final phase of our M.Sc. degree in Industrial Engineering and Management, at Linköping University in Sweden.

We have found this project extremely rewarding, and we have gained a tremendous amount of experience and knowledge for our careers. The emphasis has been on a subject that we have found most interesting throughout our studies, that is total quality management. By having the opportunity to study this subject in industry, as well as to broaden our cultural horizons, we feel that we have been able to catch two birds with one stone. Our hope is that the report can serve as a guide on Korean management and business for Scandinavian industry.

Our thesis was successfully accomplished through our fruitful and constructive co-operation with the project’s supervisors, Professor Bo Bergman, Linköping University, and Sung H. Park, Seoul National University. We would also like to forward our sincere regards to the following companies for their support and valuable advice: Det Norske Veritas in Korea, IKEA Trading in Korea and the University of Technology in Sydney. Furthermore, we would like to thank those fine Scandinavian companies that encouraged us to undertake this research, through their enthusiasm and financial contributions, namely ABB Traction, Kværner, Siemens Elema and the Swedish Institute of Quality. Finally, this project would not have been possible without the hospitality and kind co-operation from Western and Korean companies, especially Daewoo, Hyundai and LG Electronics.

Linköping, February 1996.

Fredrik Johansson  Dag Kroslid
ABSTRACTS

The report’s primary objective is to make a survey of the quality management concept in Korea, with an in-depth study of how management motivates employees to work for quality. A secondary objective is to make proposals on how Scandinavian and Korean industry can learn and improve in quality management areas. The main focus was on the automobile, electronics and shipbuilding industries, together with the four largest conglomerates, namely Daewoo, Hyundai, LG and Samsung.

Simultaneously with Korea’s rapid industrial growth, the conglomerates have, determinedly and extensively, implemented and applied quality management in their operations. The Korean quality management concept is a mix of quality control, quality assurance management and total quality management, and in recent years the two latter have been focused on. They are still expanding heavily, and quality management will increase in importance as they go along. Regarding motivation for total quality, we found that Korean workers are not so much involved in quality related work, but management is now succeeding in enhancing everybody’s awareness, in essence through materialistic incentives.

This report also emphasises three areas where Korean and Scandinavian industry can benefit from each other’s experience. We found that Scandinavian industry can learn from Korea when it comes to
- making the staff identify themselves with their company
- total productivity maintenance (TPM)
- goal conscious decision making process

Korea, on the other hand, should look to Scandinavia in
- service quality
- The Scandinavian management style, and in particular human resource management (HRM)
- empowerment and involvement of employees
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# List of Abbreviations

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<table>
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<tr>
<th>Abbreviation</th>
<th>Full Form</th>
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<tbody>
<tr>
<td>CWQC</td>
<td>Company Wide Quality Control</td>
</tr>
<tr>
<td>HRM</td>
<td>Human Resource Management</td>
</tr>
<tr>
<td>ISO</td>
<td>International Organisation for Standardisation</td>
</tr>
<tr>
<td>PCL</td>
<td>Principle Centred Leadership</td>
</tr>
<tr>
<td>PDSA</td>
<td>Plan-Do-Study-Act</td>
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<tr>
<td>QMS</td>
<td>Quality Management System</td>
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<tr>
<td>SMEs</td>
<td>Small and Medium sized Enterprises</td>
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<tr>
<td>TPM</td>
<td>Total Productivity Maintenance</td>
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<tr>
<td>TQC</td>
<td>Total Quality Control</td>
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<td>TQM</td>
<td>Total Quality Management</td>
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REPORT STRUCTURE

Depending on who the reader is, and what he or she is looking for, there are different ways of reading the report.

1. A reader that has not got much time, but wants to read more than the abstract, should read the objective (Chapter 1.2) and the conclusions (Chapter 8).
2. To get an understanding of the cause of the results, the descriptions of Korean quality management and motivation for quality in Korea (Chapters 6 & 7), should also be read.
3. The research environment (Chapter 5) will be a good help for readers not completely updated with the republic of Korea, and the theoretical framework on quality management and motivation for quality (Chapters 3 & 4) gives a thorough background to the report’s main topics.
4. The reader who wants to get a fair understanding of the whole project and a deeper understanding of the conclusions, should add the entire introduction (Chapter 1), the course of action (Chapter 2.6) and further read reflections on our research (Chapter 9).
5. The interested reader can complete the report by reading methodology (Chapter 2).
PART I

BACKGROUND

This part outlines the project's background and its scope. Fundamental reflections on social science, accompanied by the methodologies applied in the research are also included.
1. INTRODUCTION

1.1 Background

In the area of quality management the world has long focused on Japan. For the last twenty years, however, the Republic of Korea (hereafter called Korea), one of the Asian tiger economies, has raised its level of productivity, and improved its reputation and level of prosperity. The question we asked ourselves was "how did they accomplish this, and what kind of quality management concepts have been incorporated in their vast mass-production systems, which has facilitated such rapid expansion?". It was very hard to find an answer. There were many varied books and articles written about quality management and practices in Japan, but scarcely anything about those in Korea.

Our personal interest in Korea developed over the last couple of years, especially regarding cultural, industrial and managerial aspects. Through the media we perceived Korea as one of Asia’s new powerhouses, with a blend of student riots and political unrest. As with so many other Westerners we were to some extent aware of the powerful and extensive launch of Korean products, but felt that the products often lacked a Korean identity in Western markets. Friends and mentors also encouraged us to proceed with our preliminary plans, giving us the impression that "Korea is where it is happening". With a specialisation in Total Quality Management at Linköping University it was obvious to us that this particular area of management provided a suitable project field, bearing in mind the non-confidential nature of TQM-related information.

Preliminary contacts with Scandinavian industry confirmed that the competition from Korean companies was growing stronger, but that there was a lack of understanding about just how it had been achieved. Some Scandinavian companies attributed the rapid growth to such factors as cheap labour, low product quality and a large domestic market. However,
the improvement in growth over recent years was widely recognised to have resulted from improvements in both quality and flexibility accompanied by a globalisation of the Korean economy.

As the subject was of interest to both ourselves and Scandinavian industry, we decided together with our professor, Bo Bergman at Linköping University, to carry out a research study on Quality Management in Korea. In our discussions it became apparent that Korea’s industrial strengths in the areas of quality and global competition, are in the automobile, electronic and shipbuilding industries. It was within these industries that we decided to concentrate our research.

1.2 Objectives

The project’s primary objective is to make a survey of the quality management concept in Korea, with an in-depth study into how management motivates employees to work for quality. A secondary objective is to make proposals on how Scandinavian and Korean industry can learn and prosper from each other in quality management areas.

1.3 Boundaries

Throughout the research, our studies have centred upon the big Korean conglomerates, called chaebols, with high export figures and increasing market shares throughout the world. Their quality concepts are generally a lot more developed and functional than the average Korean company, and are therefore not representative for small and medium sized ones. Furthermore, the emphasis was put on three main industrial areas, shipbuilding, automobile manufacturing and electronics. Other industries are not covered in-depth by this report.

Due to communication problems, the vast majority of interviews have been with managerial representatives from Korean and Western companies. Even though it has been possible to communicate, it is notable that neither
parties have English as their mother tongue, and that nuances can have been misunderstood or diluted. The role of blue collar workers was covered through observation, literature, managerial interviews and occasionally directly through interpreters.
2. METHODOLOGY

2.1 The nature of social science and research

Wadel (1989) argues that social scientists and researchers are influenced by their own sources of information in a way, which is different to that of natural scientists. This implies the fact that any social research is exposed to other experts, namely the individual or group that are researched. Moreover Wadel emphasises that what society regards as reality has been constructed by humanity, and that social science is a constructed reality based on this. It is therefore wrong to say that the public's construction of reality is not based on theory, whereas social science is. The difference lies in the fact that theory is often an implicit factor in public explanations, as opposed to social scientists who endeavour to clarify the theoretical perspective in their constructions of reality. In addition, he states that theories are statements that put facts into order, and serve as constructions of reality that are more broad and far-reaching than the facts they are based upon.

In contrast to explanations, Wadel states, in academic settings and elsewhere, that descriptions are regarded as straightforward and real, directly based on facts. Descriptions are concerned with aspects and events that are evident, and not influenced by paradigms - the way individuals see the world. However, even the smallest description does, inevitably embrace generalisations and abstractions. Wadel finds that this results in a frequent grouping of individuals, events and things although in reality they are distinct. By doing this social scientists are “raping” reality, since their generalisations are made by emphasising some aspects and ignoring others. On the other hand it is impossible to avoid generalisations in research, since categories of things, individuals and events are pre-defined in our language and culture. We cannot decide ourselves what we want to classify, since such classifications are accepted in the society and a part of our culture.
2. Methodology

When it comes to analysing techniques concerning work-related social science, Asplund (1970), emphasises that a social phenomenon should be examined by asking questions like: is it systematic and applied everywhere, is it related to a special category of people or throughout the organisation, has it changed, who is taking advantage of it, and what is the reason for it?

Another relevant issue is the relationships between management paradigms, principles, culture, values and behaviour. Covey (1989 and 1991) explains that a paradigm is used to mean a model, concept, theory, perception, assumption, or frame of reference. In a more general sense he says that a paradigm is the way managers and others “see” the world, and management paradigms are, whether correct or incorrect, the sources of managers’ attitudes and behaviours. On the contrary Covey states that principles are neither invented by managers or society, they are the laws of human life that pertain to human relationships, management and human organisations. He emphasises that they operate regardless of people’s awareness of them or obedience to them. Covey also underlines that principles are not practices, since a practice is a situational specific activity or action, and that habits are the intersection of knowledge, skill and desire.

Elaborating on cultural aspects of social science, Chen (1995) defines culture as the collective programming of the mind which distinguishes the members of one human group from another and the interactive aggregate of common characteristics that influences a human group’s response to its environment. He maintains that the dynamics of cultural influence on the behavioural dimension are like a cycle. Firstly, individuals express culture through the values they hold, and these values again influence their attitude about the form of behaviour considered most appropriate in given situations. Attitudes, in turn, provide the basis for daily behaviour, and finally the continually changing pattern of behaviour affects an organisation’s culture - a new cycle begins.
Chen also presents his views on comparative management science. He says that comparative management represents a shift away from the traditional focus on a universal organisation and management, towards seeking patterns of relationships in various settings. In his model he focuses on organisation, strategy, and environment. Chen believes that these three combined focuses help us to understand the major differences, trends and transferability of management systems world-wide.

![Figure 1](image)

2.2 Our relation to the research

The nature of social science research, as outlined above, was followed rigorously, and served as guidelines throughout the project. As the project proceeded we became increasingly aware of the significance and role of principles in our field of study, and this allowed us greater clarity. In order to give an overall description of quality management in Korea, generalisations were inevitable, but these have been limited by the outlining of various characteristics in the different industries covered by this project. In our analytical evaluation of observations and phenomena, emphasis has been placed on specific behaviour patterns and concepts. Cultural aspects have also been accounted for through this project’s case-studies, which would have been impossible to carry out successfully without a general understanding of Korean lifestyle and society, and their influence on working life. Later on, we endeavoured to clearly distinguish between principles and habits in order to identify the characteristics and development of quality management in Korea.
2. Methodology

As qualitative research can only be expressed in words as the researcher evaluates results and observations, it is important for the researcher to remain both impartial and objective. The researcher should therefore be aware of the foundation of the evaluations made. This study is based on What Starrin (1994) entitles as a hermeneutic paradigm, where hermeneutic means to interpret, explain and clarify. The three basic hermeneutic principles are firstly that understanding always happens in a context, since observations of activities and phenomena happen in their real contexts. Secondly, that every interpretation of parts depends and interacts on the whole system or concept and vice versa. Thirdly, that every interpretation is preceded by a prejudice or a prejudgment, since researchers often have predisposed thoughts concerned with the observation or evaluation.

2.3 Research strategy

The main research strategy has been to combine literature, interviews and case studies into a dissertation meeting the research’s objective, with the ultimate ambition to compose a report highly relevant to Scandinavian and Korean industry.

Most pertinent literature concerned with quality management in Korea has been thoroughly studied, and referred to in order to present a broad and unbiased picture of the Korean quality concept. Literature of European, American, Japanese and Australian origins has also been scrutinised and referred to. It has enabled us to give a more comprehensive presentation of quality management and its motivational aspects, as well as putting the Korean quality management concept into perspective.

This report’s case studies and interviews should corroborate the theoretical framework, and additionally nuance and complement it to present a contemporary and updated picture. The case studies and interviews, carried out between Korean and Western companies, had both a multiple and single nature in so much as lengthy studies were combined with short visits. Gummeson (1991) regards multiple case studies as the most
appropriate means to reach a general conclusion, whereas the single case study approach should be applied when a specific conclusion is required. The case studies, varying from 1 day to 2 weeks, enabled us to reach some general conclusions on quality management in Korea, as well as draw specific conclusions in this project’s more in-depth area, management’s motivation of employees in quality areas. Additionally, discussions and seminars with professors and post-graduate students were undertaken, essentially providing us with a wider academic opinion on the various topics.

According to Yin (1989), three types of methods are applied in case study research, namely descriptive, explanatory and exploratory. A major aim of this assignment was to describe and map out a concept, and therefore our case studies tend to show a predominantly descriptive character. Some explanatory and exploratory cases are however included, being concentrated towards the latter part of this report.

In summarising our research strategies, it can also be mentioned that the project embraces comparative studies in the USA, Taiwan, Japan and Australia. When evaluating quality management over a sustained period of time in one country, the focus and objectives so crucial to this type of research can easily dissipate. Our comparative studies in other countries hence gave us a varied outlook, and has undoubtedly enabled us to keep a more unbiased view throughout the research. They were rewarding in themselves, and pinpointed interesting industrial and cultural differences in the countries concerned. However, these comparative studies have not been extensively referred to throughout this report, since we want to focus on Korea. They were hence mainly used to broaden our horizons and put our Korean research in perspective.
2. Methodology

2.4 Selection of case studies and interview objects

Initially all the Korean companies operating in the fields of shipbuilding, automobile and electronics were of interest to the project. To maximise the project's interest for Scandinavian industry, primarily the large export-oriented companies were approached to assist in our research. Besides, from a quality point of view, these companies were also the most interesting and advanced.

Western companies included in the research are mainly Korean branches of Scandinavian enterprises, and they were often contacted through already established contacts with their mother companies. The reasons for involving these companies were to gain a nuanced appreciation of the dissertation's issues, as well as to get access to years of Korean experience, from a Western viewpoint. Typically, our contact person introduced us to the company and arranged meetings with representatives, who were of interest to the research. Due to communication problems, representatives fluent in English were mainly chosen, with a majority of them being managers. Regarding our academic contacts, professors and Ph.D.-students were mainly selected through Linköping University's connections in Korea.

2.5 Data collection

This research comprises several data acquisition methods, of both a qualitative and quantitative nature. Literature was used as background and provided basic information on the Korean quality management concept. Unfortunately, articles and books covering the topic in Korea were rare, and had to be complemented with literature covering quality management in Japan and the Western world in order to comprehensively cover all our subjects.

Interviews were our most significant method of data collection. Accordingly, a question-scheme was developed, and it served as reference
and gave interviews the required structure. By addressing the same kind of questions to most interviewees, distinctions were identified and scrutinised. Moreover, interviews were used as a forum, in which to discuss specific areas and future trends. Open ended and informal dialogue was commonly conducted in discussing specific area and future trends, and as a result a greater quality of information was gleaned from our sources.

During our five months in Korea, a vast amount of qualitative data has been compiled through observations of people, culture, habits, behaviour, daily working life and management characteristics. These kinds of data often lead to subjectivity, since they depend so much on the receiver's perception, understanding and prior experience. However, it enhanced our colourful perception of Korea, and enabled us to use books and articles as a source of confirmation, and not so much as a source of new information.

2.6 Course of action

2.6.1 Project preparations

The project was initiated in October 1994. After developing a suitable project framework together with Professor Bo Bergman at Linköping University, contact with Professor Park at Seoul National University was established. The winter and spring were used to approach relevant Korean and Scandinavian companies to arrange visits and finances. In the early summer the practical issues were solved, and relevant literature concerning Korea and Korean quality management was studied. Further on, a study trip to the US was made in June, embracing visits to Chrysler, GM, AT&T and American Management Association.

2.6.2 Research in Korea

During the first month of our stay in Korea, we visited some Western companies active in Korea. Our aim here was, firstly, to get their views on the project's main issues, and secondly to get an introduction to the Korean culture and way of life. In addition to the Norwegian and the Swedish
2. Methodology

Embassies, visits to ABB, DNV Certification (Det Norske Veritas), IKEA Trading and Siemens were undertaken.

After the initial period the majority of research was carried out in Korea’s shipbuilding, automobile and electronic industries. In close co-operation with DNV Classification, visits to the shipbuilders Daewoo Heavy Industries, Hyundai Heavy Industries and Samsung Heavy Industries were undertaken. Our research into the automobile industry was conducted in co-operation with Hyundai Motors, SsangYong and Daewoo Motors. And within the electronic sector we mainly co-operated with LG Electronics, with just a brief visit to Samsung Electronics. These studies were supplemented by visits to such varied national organisations as Industrial Advancement Administration, Korean Standard Association, Korean Management Association, Federation of Korean Trade Unions and Korea Employers Federation.

Not only has research been concentrated exclusively in Korea, but we also engaged ourselves in week long comparative studies in Japan and Taiwan. The same research strategy was applied here, with similar case studies and interviews together with both domestic and Western companies. These comparative studies also included meetings with internationally renowned professors who contributed their knowledge and insight to this project’s main topics. Towards the end of our field studies in Korea, we verified and got some comments on our findings, through visits to ABB, Alfa Laval, Ericsson, Sandvik and Volvo.

Throughout the project the role of Professor Park at Seoul National University was to supervise and monitor the work being done on the report, and to help us with his comprehensive knowledge. We also co-operated on a keynote speech that we gave about “TQM around the world” at a Korean-Chinese quality management symposium in Seoul. IKEA Trading Korea willingly became another major co-operation partner, and they provided us with terrific insight into Korean small and medium sized
enterprises (SMEs) and gave us the opportunity to observe and be involved in their implementation of quality management.

2.6.3 Research in Australia

The project’s field-research was completed in Australia, with a visit to Dr. Tom Fisher, University of Technology in Sydney. He arranged numerous meetings and company visits, and we met key representatives from both the Australian Quality movement, Australian Quality Award and leading enterprises in the quality management area. The reason for visiting Australia was to confirm information indicating that many companies have been particularly successful in adopting Asian manufacturing and quality concepts. Naturally, this was applicable and rewarding when it came to adoption techniques, and our proposals on how Scandinavian companies can prosper using the Korean quality model, and vice versa. Our research in Australia was conducted primarily via an in-depth interview nature, accompanied by some observations.

2.6.4 Final phase

In the final phase, the report was composed and edited, and it will be published in connection with the compulsory project presentation at Linköping University. Likewise, the main findings are going to be summarised in a brochure and distributed to some 800 Scandinavian companies. Finally, an oral presentation will be given to those Scandinavian companies and universities that have shown interest in the research.
PART II

THEORETICAL FRAMEWORK

Comprehensive theories concerning the project's main areas are presented here. Chapter 3 provides an overview of quality management's development, accompanied by theories concerning TQM's building blocks, principles and foundation. Chapter 4 is concerned with some motivating aspects in management's attempt to involve everybody and create a total quality organisation. In these two chapters focus is applied on the Western and Japanese quality management concepts. They constitute an important knowledge-base for the description and evaluation of quality management in Korea and its motivating aspects that follows in Chapter 6 and 7 respectively. Notably, most of the theories referred to were available prior to our departure, and served as a foundation for our field research.
Quality management in Korea, and its motivating aspects

3. QUALITY MANAGEMENT (QM)

3.1 Development

Kondo (1995) states that quality has a much longer history than concepts like cost and productivity. He finds that our ancestors certainly had a strong interest in quality, at least as far as the tools, pots and weapons they used were concerned. Likewise, Bergman & Klefsjö (1993) believe that remains of ancient buildings and constructions, like Egyptian pyramids and Roman bridges, show that quality has been a concern for centuries. In this historical context they also mention that acceptance sampling has been undertaken at the Royal Mint in Great Britain from the 12th century onwards.

However, Kondo emphasises that it was the Industrial Revolution's technological progress with its development of mass production that led to a higher demand for competitive products with little variation in quality. The most obvious means of meeting this demand and assuring quality was by inspecting products and parts to screen out and eliminate any item that fell short of standards or specifications laid down. He narrates that some industrialists realised in the 1920's, that final inspection was not necessarily the best way to assure quality. Scientists, like the American Shewhart, began to apply various statistical techniques in controlling quality in up-stream processes, implying that controls should be undertaken during the process as well. According to Kondo, these techniques later evolved into statistical process control.

According to Kondo, Shewhart's quality control (QC) concept became widely adopted by manufacturing companies throughout America, being supplemented during World War II when quality was strictly controlled under the direction of the military. After the War, QC spread to most industrial countries and enhanced the establishment of national quality control associations and standards. Simultaneously American scientists like Deming, Juran, Feigenbaum and Crosby called for a broader QC
3. Quality Management

approach, with management involvement and customer focus. This did not appeal to mainstream industrialists, and Kikuchi (1994) finds that Western industry in general continued its defensive and control dominated quality approach from the 1950s until the mid 1980s.

Kondo argues that Japan brought QC from its American birthplace and shaped it into a form appropriate to Japan’s culture and customs. He regards QC as having been an important tool in improving product quality, as well as a core factor in the rebuilding and prosperity of Japanese industry. Elaborating on this, Bergman & Klefsjö state that Deming and Juran triggered the development of QC in Japan in the 1950s. Besides, Japanese managers acted on the challenge to take managerial responsibility for quality improvements, applied QC to their own sphere of management and implemented QC in all departments - so called company wide quality control (CWQC). Kondo claims that the Deming Prize, initiated in 1951, both enhanced this development and recognised the vital role of front-line employees. This resulted in extensive education and training schemes that were to evolve into QC circles. Another of quality management’s milestones was passed when Japanese non-manufacturing industry successfully started adopting QC in the 1970s.

Whereas Japan developed and improved their CWQC- and QC-concept, Favre (1994) finds that the Western world headed in another direction in the late 70s when so called quality management standards were introduced in many European countries. In 1986 the International Organisation for Standardisation (ISO) launched an international standard relating to quality assurance, namely the ISO 9000 series standard, based on existing standards around the world. It was adopted in most industrial countries, more than 70 to this date, and third party certification according to ISO 9000 series became a requirement for doing public business with some EU countries and large enterprises.

Facing severe corporate problems, vast nonconformity losses and increasing Japanese competition, American and other Western companies
boldly started increasing their awareness on QM issues in the mid 1980s, belatedly looking at Japan for guidance and ideas. In 1986 Deming published his notable book “Out of the Crisis”, that explains the areas in which management must transform itself and pinpoints this in his famous 14 points. Subsequently, in 1989, Oakland (1989) explained the need for a total quality management (TQM) approach, what it meant and how it should be implemented. Covey (1991) sums up their efforts as being the fulcrum of America’s economic survival and success. Kondo states that this transformation also was facilitated through the establishment of national quality award systems similar to Japan’s Deming Prize, like America’s Malcolm Baldrige National Quality Award (1987) and the European Quality Award (1992).

In 1991, in his book “Principle-centred Leadership”, Covey launched a principle-centred quality movement, in which he promotes a principle-centred approach towards total quality. Covey, regarded by Mills (1995, oral) as the 1990’s quality guru, basically states that the best approach to TQM is through its principles, accompanied by an alignment of corporate culture, systems and values to these principles. Partly as a result of this philosophy, Mills reckons that Australia has transformed its Quality Awards and TQM paradigms into a much more principle-centred approach in recent years.

Bergman & Klefsjö conclude that Quality has become an increasingly important means of competition on the world market. A strategy based on management commitment to continuous quality improvement has therefore been applied in more and more organisations, enabling them to maintain or improve market positions. Covey adds that Total Quality represents the century’s most profound, comprehensive alternative in management theory and practice, and that the number of companies moving toward TQM as their operating model for business is increasing at an exponential rate.
3. Quality Management

According to Kondo traditional QC can be defined as being the act of comparing the actual quality of a product or service with pre-set quality objectives or standards. He emphasises that QC advocates quantifying deficiencies relating to quality, quantity and cost, as well as expressing them in the form of hard data, and hence QC is central to improving processes. Even if "what to make", "how to make it" and "how to check it" are highly standardised, Kondo maintains that there are still many factors beyond a company’s control, resulting in discrepancies in product quality around a central target value. Modern QC takes an interest in this kind of data dispersion and actively tries to apply it to the control of industrial manufacturing processes. Kondo thus defines modern QC as a method of assuring quality in which upstream processes are controlled through the use of control charts in order to stabilise the process.

According to Kondo the focus of QC activities gradually shifted from production into design, planning, and marketing. Hence the rise of CWQC, being the activity of economically designing, producing, and supplying products and services of the quality demanded by customers, based on customer-focused principles and with full consideration of the public welfare. Ishikawa (1985) claims that Feigenbaum’s total quality control
(TQC), launched in 1951, is not the same as Japanese CWQC, in so much as total quality control was built on a centralised QC organisation with specialists in a steering committee. CWQC is, on the contrary, applied throughout the organisation, and all employees in all departments are involved in QC activities through their studies and application of QC.

Kondo maintains that in order to involve all employees in their CWQC activities, Japan has used QC circles for years. A QC circle is a group of company workers and a supervisor who meet voluntarily to undertake various activities with the aim of solving quality problems relating to the circle members' work. He describes the following three principles of QC circle activities carried out as part of a CWQC programme.

- To allow people to make use of their full capabilities and develop their unlimited potential.
- To show respect for the individual and create cheerful, positive, purposeful working environment.
- To contribute to the improvement and development of the enterprise.

Kondo finds that some of the notable benefits of QC circle activities are that they increase front-line workers' motivation, improve their productivity and broaden their perspectives. QC circle members also help to create a nucleus of people who will maintain and propel QC activities both on and off the production floor.

As explained by Kondo (1995, oral), it has been widely acknowledged that CWQC is basically the same as TQM nowadays, and that many Japanese companies now change the notation, CWQC, to TQM. This in order to emphasise service and management, as opposed to control activities and product focus.

### 3.3 Quality Management Systems (QMS)

According to Kruithof & Ryall (1994), any organisation is composed of a number of systems, where a quality system provides a systematic way for finding out what the customer really wants in the supplied goods and
services. They find that increasingly, many customers are likely to know which quality management system their suppliers follow, and this is greatly eased by the wide approbation of certificates indicating conformity with a known, agreed standard. One standard, namely the ISO 9000 series, has been accepted as the national standard in over 70 countries, including all industrialised countries.

According to the ISO 9000 series standard, a quality system can be defined as the organisational structure, responsibilities, procedures, processes and resources for implementing quality management. On its own background and role, the ISO 9000 series standard (1994) states that technical specifications may not in themselves guarantee that a customer's requirements will be consistently met. More specifically, the ISO 9000 series standards is a specification of the quality system requirements for use where a contract between two parties requires the demonstration of a supplier's capability to control the process that determines the acceptability of the product or service supplied. Notably, Kruithof & Ryall emphasise that ISO 9001, 9002 and 9003 only focus their guidance and requirements on satisfying the customer. They explain that the series embodies ISO 9004, that is intended to be the starting point of developing a quality system modelled upon the principles contained in the ISO 9000 series standard and compatible with principles in TQM. The first of the two following figures outlines the different standards in ISO 9000 series, and the second sets it in perspective to TQM’s assessment criteria, so called national quality awards.

Figure 3 ISO 9000 series standards. See Bergman & Klefsjö (1994)
Even though successful around the world in terms of certified companies, quality assurance system standards are often heavily criticised. Kondo addresses this issue of standardisation versus motivation, and concludes that it is demotivating for employees to be given a task and then have to use the methods and solutions in a quality manual or working instructions. Bergman & Klefsjö add that the ISO 9000 series standard tends to promote a defensive, product focused, bureaucratic and non-holistic QM approach.

![Graph comparing ISO9001, ISO9004, and Quality Awards Criteria](image)

*Figure 4 Comparison. See Kruithof & Ryall (1994)*

### 3.4 Total Quality Management (TQM)

With reference to Deming, Covey argues that total quality resides effectively in the eye of the beholder, and that it does not necessarily require QC Circles, QMS nor statistical process control. He perceives the paradigm of total quality to be continuous improvement, beginning with an understanding of all stakeholders’ (customers, employees, community, suppliers, distributors and other interactive partners) needs and expectations, and ultimately meeting or exceeding such. Again referring to Deming, Coveys states that total quality is achieved through an implementation of essential principles and practices, and that any organisation can meet these objectives.
According to Dahlgaard, Kristensen & Kanji (1994) it is a widely accepted that TQM performances vary widely throughout the world. In Europe they find that the following definition usually applies: “TQM is the culture of an organisation committed to customer satisfaction through continuous improvement”. Japan, on the other hand, regards: “TQM as a management philosophy which is characterised by being scientific, systematic, and company-wide”. Dahlgaard et al. maintain that both have strengths and weaknesses, but that the most widely respected attempted definition of TQM can be made only through an extensive examination of the principles related directly to TQM.

3.4.1 Principles of TQM

Bergman & Klefsjö (1994) describe the principles of TQM in their cornerstone model.

**Top Management Commitment**

Base decisions on facts

Focus on processes

Focus on customers

Improve continuously

Let everybody be committed

*Figure 5 Principles of TQM. See Bergman & Klefsjö (1994).*

**Top management commitment.**

Bergman & Klefsjö emphasise that any quality strategy must be based on top-management’s commitment to quality. They should support quality related activities economically, practically and morally. From Covey’s point of view, leadership is integral to successful TQM. He refers to Deming who said that “the job of management is not supervision, but leadership”. Total quality calls for an inside-out approach, meaning that top management should start first with themselves and use TQM’s principles as their “true north compass”. He therefore concludes that top management should initiate change.
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Focus on customers
According to the cornerstone model, all activities in a company must aim at serving the customer. Quality has to be put in relation to the customers’ needs and expectations, and it is essential to understand this since it will be a lot easier to satisfy or even delight them. It is further very important not just to focus on the external customers, but also on all the internal relationships of suppliers and customers. Bergman & Klefsjö sums this up by stating that attempts to reach high external quality with low internal quality is bound to be unsuccessful in the long run.

Base decisions on facts
According to Bergman & Klefsjö, a company should always make decisions based on facts, and avoid the influence of random factors. They argue that shortening product life cycles in essence rules out any successive improvements after product launch, they have to be right first time. A thorough examination of what the customers want and what they are willing to pay for, should therefore be a part of the strategy for making decisions based on facts.

Covey, in this respect, states that real quality improvements occur when management begins to solve problems concerning stakeholder information. Elaborating on this he implies that everything should be guided by feedback from customers, both internal and external, and from other stakeholders. The key to total quality is therefore to listen to your stakeholders, to seek first to understand and then to be understood. If done right - if done systematically, scientifically, anonymously, using random sampling of the population - this information will have the same accuracy and objectivity as financial accounting.

Focus on processes
Hammer & Champy (1993) define a process as a group of activities that uses one or more inputs in the creation of an output that is of value to the customer. Companies should think in terms of “processes”, since the customer is more easily identified as the driving factor throughout.
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Bergman & Klefsjö identify a process as being the starting point of any improvement, and that improvements must be carried out on processes due to their repetitive nature. By using statistical methods and tools like statistical process control, 7QC and design of experiments, they find that companies can compile data reflecting a process’ performance and obtain a sound and accurate basis for improvements and follow up. They also reckon that both process management and re-engineering have evolved around the principle of process focus.

Improve continuously
In today’s constantly changing macro environment, Bergman & Klefsjö think that continuous improvements are a prerequisite for any company’s survival. They argue that defects and non-quality contributions compile huge losses and must be minimised. To be successful, they regard it as crucial that the traditional model for quality is rejected, namely the belief in an optimum quality level, and rather assert the fact that decreased costs and quality improvements are intrinsically related. They suggest the use of the 7QC tools and the PDSA cycle in daily continuous improvement efforts. Imai (1986) explains that kaizen, a management concept often regarded as the key to Japan’s competitive success, is extensively based on small step continuous improvements.

Kruithof & Ryall urge quality-committed companies not to overlook the importance of innovation. In the same respect, the Australian Quality Award Assessment Criteria and Guidelines (1996), states that innovation must be recognised as an essential driving factor behind continuous improvements. It considers an organisation’s use of innovative approaches to improve core processes, creation of a learning and innovation culture, as well as commitment to building-in quality through design.

Let everybody be involved
Bergman & Klefsjö state that the complete workforce needs to be involved in the striving for TQM if the company shall succeed. Accordingly, they also urge management to emphasise the importance of quality and how it
Quality management in Korea, and its motivating aspects

also urge management to emphasise the importance of quality and how it allows employees opportunity to take pride in their work. Imai suggests QC-circles, suggestion systems, TPM and teamwork as means of promoting an increased involvement amongst employees with their variety of knowledge and experience. Under this cornerstone Bergman & Klefsjö also include suppliers, and call for management to fulfil their responsibility and quality consciousness through a greater interaction with their suppliers.

Figure 6 The big picture. See Kruithof & Ryall (1994).

3.4.2 Foundation for TQM

Quality awards and PDSA-cycle

According to Bergman & Klefsjö national quality awards stimulate and guide companies in their work with TQM. They maintain that the three most recognised awards are the Japanese Deming Prize, European Quality Award and the American Malcolm Baldrige National Quality Award, but that similar ones are found in most industrialised countries. Bergman & Klefsjö explain that the main purpose of national quality awards is to increase quality awareness, emphasise successful ventures and enhance self-assessments. Applicant companies are scrutinised by a group of people from the examiners board, that assess the company according to the award’s criteria.

Bergman & Klefsjö maintain that the assessment given is very important in a companies’ work with continuous improvement. However, they
3. Quality Management

emphasise that only a fraction of the companies using the award criteria for self assessment apply for the award, but that the criteria give sound and effective guidelines on TQM. The key criteria, common in most awards, are leadership, quality strategy, process improvements, employee involvement and customer satisfaction.

On a daily basis, Bergman & Klefsjö recommend Deming’s PDSA-cycle as the most common way to achieve systematic and effective improvements in an organisation’s processes.

![Diagram of the PDSA-cycle](image)

*Figure 7 The PDSA-cycle. See Deming (1986).*

They explain that PDSA means Plan - Do - Study - Act, and it describes the different stages in an improvement cycle. In the Plan phase the problem is described and its underlying causes are mapped out. Further, decisions are made on how to solve the problem, what tools to apply and what timescale to work on. The Do stage is then concerned with how to solve the problem, clarify it and work it out, a task commonly undertaken by an improvement team. Study means to check both that the implementation was successful and that a higher quality level is retained, which can be checked using the 7QC tools. They finally conclude that before starting on a new cycle, the Act phase is a learning stage, in which the company learns from the experience gained in prior phases, to avoid the same type of problems recurring.

**Learning organisations**

According to Peter Senge (1994), the author of “the Fifth Discipline”, it is difficult to create a quality organisation without building a learning organisation. He criticises the quality movement for concentrating too
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much on immense mental models, that prompt managers and executives to behave in particular ways. He promotes the learning organisation approach as a necessity, since TQM is transformative and total quality is an ongoing set of disciplines which gradually affect the way people think and interact. Senge defines learning in organisations as the means of continuously testing experience, and the transformation of that experience into knowledge, making it accessible to the whole organisation and relevant to its core purpose. To be credible, the management must lead by example to develop personnel and business. They should ask, support and cajole employees to improve as they take risks and learn.

Tjosvold (1995) believes that before a coherent and proficient learning organisation can be established it is first necessary to assess psychological abilities and sensitivities in relation to teamwork. More specifically, learning organisations, through their teams, put ideas to work to improve their performance. They dig into issues and collect valid data, generate solutions, implement a high quality solution, gather data on its effects, revise and re-implement. They reach out beyond their boundaries to benchmark how successful organisations accomplish objectives and identify how they can develop even more effective procedures and processes. Ultimately, organisations take advantage of their mistakes, through analysis and identification of the problem’s core.

Elaborating on this issue, Tjosvold maintains that organisations and teams, even those founded on sound TQM principles, inevitably hit obstacles. He argues that leaders and employees can choose either to manage conflicts or to have conflicts managing them, and explains that chaos management is concerned with how to handle fear related to conflicts. The goal is to create a co-operative and constructive controversy environment, in which people argue their position, question and seek to understand, combine contrasting ideas, and reach a mutually beneficial agreement. Accordingly, Covey (1991) considers that people, when involved, become significantly and sincerely committed to coming up with solutions to the problem.
Principle-centred Leadership (PCL)
Covey (1991) states that quality management techniques and methods are secondary to that of TQM’s principles. He argues that PCL supplies the missing “how to do it” component of TQM, the glue that holds TQM together and the infrastructure on which to build TQM. In applying PCL, personnel are managed by a set of shared principles in the organisation, and that corporate culture and values should be aligned accordingly. Covey says that since PCL focuses on basic, fundamental principles and applicable processes, which can evolve into a deep genuine transformation of thinking and character. Profound, sustainable cultural change can only take place within an organisation when the individuals apply these principles to themselves and change from the inside-out.

From Covey’s viewpoint TQM is sequential, that is, if quality is not applied personally, it will not be applied organisationally. He emphasises that top management must start with their paradigms, character and motives first, from inside-out, and subsequently expand it to other parts of the organisation. Moreover, he refers to the saying: “Give a man a fish and you feed him for a day. Teach him how to fish and you feed him for a lifetime.” His main message is that when you give personnel principles, you empower them to govern themselves. They then have a sense of stewardship, and can be entrusted with principles to work with, guidelines to work within, resources to draw upon and win-win performance criteria to be measured against.

3.4.3 Related management paradigms

Human Resource Management (HRM)
Dessler (1994) states that HRM embodies concepts and techniques used to undertake recruiting, training, rewarding and appraising employees. Torrington & Hall (1991) clarify that in recent years personnel management has almost merged with HRM, but upon HRM’s introduction in the 1980s it was a unique concept in so much as it looked upon the
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workers as the company’s most important asset and was only concerned with planning and managing this resource in the best way for the company.

Coucke (1994) argues that people who do not feel like quality do not produce quality either. In a TQM environment the human factor should therefore be considered as an opportunity, and as a source of efficiency and creativity. Likewise, he maintains that TQM and HRM share many common functions and principles, in so much as they are company wide concepts, concerned with organisational structure, training, education and motivation. Considering the Human Resources’ key role in TQM, he therefore finds it strange that most HRM departments, indeed very sensitive to these issues, are ignored in the quality process.

Total Productivity Maintenance (TPM)
According to Willmott (1994), TPM combines the conventional practice of preventive maintenance with the concept of total employee involvement. Moreover, it is an enabling tool to maximise the effectiveness of a company’s equipment by maintaining and continuously improving the optimum relationship between people and machines. In relation to TQM, Willmott perceives TPM as a practical application of total quality and empowerment working at the sharp end of the business, namely on machines and processes. He maintains that the TPM process therefore essentially embodies the achievement of total quality, and is the logical outcome of these developments in the maintenance function over the years.

TPM was, according to Willmott, pioneered by Nakajima in the 1970s and has its root in Japanese manufacturing industry. He finds, however, that in the last few years a growing number of Western companies have adopted the philosophy. In more practical terms Willmott explains that TPM firstly aims at attacking big and common losses related to manufacturing equipment. Secondly, TPM comprises planned, preventive maintenance, and lastly autonomous maintenance, or self determined asset care. Following this route the operators will be equipped to maintain their own equipment, including cleaning, checking, lubrication, attending to fixtures
and precision checking on a daily basis. The ultimate enabling factor of TPM is, according to Willmott, training and education.

**Process management**
Awareness of the significance of process thinking is, as already stated, essential in modern leadership for quality, and it has evolved as an individual management concept in the 90s. According to Loinder & Rentzhog (1994) process management is applied in order to focus on customers and how to satisfy their needs and wants. Hammer & Champy define a process as a number of value added activities that are used to create an output to the customer. It is the process that ferms the products, and Bergman & Klefsjö therefore recommend companies to improve processes in order to enjoy continuous and wide ranging improvements.

![Business Process Diagram](image)

*Figure 8 A business process, cuts horizontally through the organisation. See Bergman & Klefsjö (1994).*

In conjunction with process management, the business re-engineering concept is relevant. Widely regarded as the re-engineering gurus, Hammer and Champy urge Western companies to reconsider their activities and achieve this by concentrating upon their main processes. They heavily criticise the functional structure found in most companies and suggest the implementation of a process oriented structure, accompanied by an establishment of cross-functional teams. Through such teams, with an awareness of stewardship from team members, the customers will always be identified as a driving factor in each process step.
4. MOTIVATION FOR QUALITY

4.1 What is motivation?

Motivation can, according to Robbins (1993), be defined as the willingness to exert high levels of effort toward organisational goals, like quality, conditioned by the effort’s capacity to satisfy some individual need. He emphasises that while general motivation is concerned with effort toward a goal, this definition narrowly focuses on organisational goals, in order to reflect a singular interest in work-related behaviour.

Robbins also states that many people incorrectly view motivation as a personal trait - some have it and others do not. In practice, some managers label seemingly unmotivated employees as lazy, whereas applicable research and theories tell us that motivation is the result of both interaction between individuals and the situation. He emphasises that the definition implies that efforts are compatible and consistent with an organisation’s goals. As an example, chatting with colleagues about non-work related issues might require a high level of effort but it is being unproductively directed, and are hence disadvantageous for the organisation.

4.2 Basic motivation aspects

Covey (1989) accuses post-war management literature of over-emphasising personality, image, attitude, behaviours, skills and techniques as success factors, which in essence lubricate the process of human interaction. On the other hand, his theories and principles are prolonging the basic and pre-war ideas by linking integrity, humility, fidelity, courage, justice, patience, industry, simplicity and modesty to the success of an organisation. His main message is that change - real change - comes from the inside out, and not from hacking at superficial attitudes and behaviour with quick fix personality ethic techniques. As regards quality and motivation, both very much human interrelation issues, he states that trust is the foundation of all effective relationships and organisations. Managers
must, according to Covey, be aware that there is a gap between stimuli and response. Employees are not programmed robots, but people that are constantly evaluating stimuli and responding to them in a way they feel appropriate.

Principle-centred leadership suggests that the highest level of human motivation is a sense of personal contribution. More specifically, Covey states that next to physical survival, the greatest need of a human being is psychological survival, namely being understood, affirmed, validated, and appreciated. Since a constructive interaction between personnel is so necessary in the motivational areas of QM, managers should apply the following three habits: think win/win, seek first to understand and synergise. These habits comprise the principles, or fixed natural laws, of interrelation like; seeking mutual benefit, empathic communication and creative co-operation. Other motivating incentives that target behaviour and attitudes are only of secondary importance and should only be applied when the primary principles are securely established in the whole organisation.

In the socio-psychology area, Wadel (1989) states that motivation must be looked upon as an interaction between two parts. The prerequisite of motivation is that the sender has to get some response, and be motivated by the receiver, in order to supply more motivation. Looking at motivation from this point of view, it is made clear that managers cannot motivate without being motivated in return. Further on, he states that it takes a long time for managers to build up such an environment, and that a schism in the relationship takes even longer to re-establish. Andreassen & Wadel (1989) think that organisations and groups should be more aware of interrelated skills, that is, how effective personnel are in co-operation with others.
When it comes to motivation theories, Maslow’s hierarchy of needs is, according to Robbins, the most well-known theory of motivation. Maslow hypothesised that within every human being there is a hierarchy of five needs, classified as physiological, safety, social, esteem and self-actualisation. Robbins explains that from Maslow’s classification it can be concluded that in times of economic plenty, almost all permanently employed workers have their lower-order needs substantially met, whereas they strive for high-order needs. He does however refer to some research that do not generally validate Maslow’s theory, and criticises the structures in which the needs are organised.

Robbins also presents the Motivation-Hygiene theory introduced by psychologist Frederick Herzberg who asked people to describe, in detail, situations when they felt exceptionally good and bad about their jobs. The data suggests that the opposite of satisfaction is not dissatisfaction, but no satisfaction, and vice versa. According to Robbins, Herzberg holds that the factors leading to job satisfaction are separate and distinct from those that lead to job dissatisfaction. Moreover he has termed such characteristics as company policy, administration, supervision, interpersonal relations, working conditions, and salary as “hygiene factors”. When these factors are adequate, people will not be dissatisfied, however, neither will they be satisfied. Again referring to Herzberg, Robbins explains that if we want to motivate people on their jobs, achievement, recognition, the work itself, responsibility and growth should be emphasised. These are the characteristics that people find intrinsically rewarding.
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Factors characterising 1,884 events on the job that led to extreme dissatisfaction
Factors characterising 1,753 events on the job that led to extreme satisfaction

Achievement

Recognition

Work itself & Responsibility

Advancement

Growth

Policy & administration

Supervision

Work conditions

Salary

Relationships

Own life

Status

Security

all factors contributing to job dissatisfaction

69%

Hygiene

19%

31%

Motivators

81%

all factors contributing to job satisfaction

50% 40% 30% 20% 10% 0% 10% 20% 30% 40% 50%

Figure 9 Herzberg's motivation model. See Robbins (1993)

4.3 Motivating environment

Covey (1991) emphasises that when managers have established basic motivation traits like interpersonal trust, respect, seeking of mutual benefit and empathic communication in the organisation, it makes all the difference to manage the motivating environment and its factors well.

In the article “The top 20 ways to motivate employees”, Caudron (1995) refers to a panel of motivation experts giving inputs on how to create the right environment for motivation using what they consider the most successful motivation factors. The first 13 are for the individual manager himself to decide upon, whereas the last seven concern corporate culture.

1. Give employees the information they need to do a good job
2. Provide regular feedback
3. Ask employees for their input. Involve them in decisions that affect their jobs
4. Establish easy-to-use channels of communication
5. Learn from the employees themselves what it is that motivates them
6. Learn what on-the-job activities employees choose to do when they have free time
Quality management in Korea, and its motivating aspects

The first six points promote the necessity of effective communication, and make sure that the employees are aware of organisational goals, intentions and structures. Caudron stresses the importance of providing working instructions and making it easy for employees to find whatever information needed, in order to avoid mistakes. By giving continuous information throughout a project or task instead of just instructions in the beginning, the employees are given the chance to reconsider or change their way of working, before it is too late. Furthermore, keep asking the employees questions to involve them in the continuous work and to find out what parts of their jobs that they like the most and prefer to do. Also find out how the employees want to be motivated, since nobody else knows better. To succeed, an open two-way communication, through different channels, is said to be crucial. Once it is established and working, an understanding of the why’s, wherefore’s and who’s in the continuous business will be ensured.

7. Personally congratulate employees for a job well done
8. Recognise the power of physical presence
9. Write personal notes to employees about their performance
10. Publicly recognise employees for good work
11. Include morale-building meetings that celebrate group success
12. Give employees good jobs to do
13. Have the tools available for the employees to do their best work

By praising jobs well done immediately and also specifying why it was good, preferable behaviour patterns are encouraged. Show that successful execution of working tasks is important by personally congratulating the people involved, as well as letting their colleagues know. Managers’ presence show that the employees’ efforts are really recognised and that the management is prepared to spend time on appreciation. Caudron states that physical presence is the best motivator and should have the highest priority, but that written statements or notes must not be neglected and should also be used. Furthermore, help teams celebrate their success together, by continuously letting them know how they are doing. Boring,
routine and unchallenging work rapidly bores people, so in order to make use of people's full potential, they must be given good jobs, where they can believe in the importance of their contribution. By providing them with the right tools, you ensure that no unnecessary effort has to be put in.

14. Recognise employees’ personal needs
15. Use performance as the basis for promotion
16. Establish a comprehensive, promote-from-within policy
17. Emphasise the company’s commitment to long-term employment
18. Foster a sense of community
19. Pay people competitively, based on what they are worth
20. Give the employees a financial reason to excel by offering them a share of the profit

Caudron points out that corporate culture and right management practices are crucial for the success of creating the motivation environment. "You have to create an environment where people want to do good work and not one where people do good work because they have to." Besides, Caudron suggests how to create the right corporate culture:

- Recognise and make arrangements for people’s personal needs, like childcare, flexible working schedules and special equipment for disabled. Also recognise and use internal skills, as it is demotivating when outsiders get jobs that existing employees are qualified for. Furthermore, by promoting on the basis of performance instead of seniority, people will be encouraged to excel instead of sitting and waiting. Job security must also be emphasised, for instance with the support of a "lifetime employment without guarantees" policy where it is stressed that a good performance ensures a stable employment. By fostering a sense of community that prevents backstabbing, office politics and low morale, an organisation that people want to work for is created. Furthermore, in addition to organising the workforce into teams, they should be encouraged to recognise each other’s work. Money is normally said not to have an essential impact on motivation, but if the financial programs are correctly structured, they can, according to Caudron, be extremely efficient. The basic point is that the
employees must feel that their payment is fair, so that they do not have to be preoccupied with their pay cheques. For high performers it is very demotivating if low performers receive the same bonuses. The wrong signals are sent and they will not find any reasons for keeping up their good job. When payments are competitive, it is possible to improve performance even more by profit-sharing. The amounts will then have to be significant, and it must be clarified exactly what should be done and reached to receive a share.

The importance of a continuous motivational environment is expressed by Caudron as: “At the end of every working day, people leave either more motivated to come back and do their jobs again tomorrow or less motivated as a result of what happens to them that day. Performance is about what happens every day.”

4.4 Rewards

Once the management has made sure that there is a satisfying motivation environment, rewards can be used as motivation factors to keep or increase the performance of individuals, groups or the entire company.

In his book “1001 ways to reward employees”, Bob Nelson (1994) divides rewards, or motivation factors, into three categories.

• Informal rewards
• Awards for specific achievements and activities
• Formal rewards

Informal rewards

These awards should be up to each manager to decide upon, whenever found suitable. They are normally low-cost rewards that show recognition and appreciation to employees in a way that is easily organised and does not require a lot of time. Still, they can have a great impact on motivation. Literature and surveys show the numerous amount of rewards being successfully used, and we have chosen to mention the ones most applicable
4. Motivation for quality

to Scandinavia. Seemingly there are, however, no limits for what can be offered as motivation factors.

- Invite an employee for lunch
- Give away lunch coupons
- Recognition lunch
- Team dinner or event
- Dinner or a night on the town with spouse
- Give away a magazine subscription
- A copy of the latest best-selling management or business book
- When someone works a lot of overtime or travels extensively, send a note or flowers to the family thanking them for their support
- Tickets to events
- Flowers or a bouquet
- Bottle of wine or champagne
- Gift certificates or gifts
- Articles about staff in company newsletters
- Time off
- Pay for house-cleaning service for an employee’s home

Awards for specific achievements
An award normally based on recognition, sometimes with money and other material gifts as backup. The honour is strongly emphasised, in so much as a top executive announces the award and the information is widely spread at the company. Common phenomena and activities to reward are outstanding employees, productivity, production quality, suggestions, customer service, sales goals, safety and attendance.

Formal awards
A useful award for formally acknowledging significant accomplishments, especially as they span a long period. They are company-initiated and should be used as a standard compliment to the more spontaneous informal
Quality management in Korea, and its motivating aspects

rewards. The scope is wide, but there are some reward-programs used in many firms:

- Collecting points in competitions to be used for prizes or cash
- Offering employees discounts at company holiday resorts
- Providing management training and education
- Handing out shares
- Celebrating anniversaries together
- Offering health care at the company
- Giving annual bonuses
PART III

OVERVIEW AND ANALYSIS

This part describes the project's main environment, the Republic of Korea, with focus on industry, management and human resources. Chapters 6 and 7 include descriptions and analysis of quality management in Korea, and its motivating aspects, based on Chapter 3 and 4. The findings presented here were compiled during our research in Korea, and are a mixture of literature, interviews, observations and experiences.
5. RESEARCH ENVIRONMENT, REPUBLIC OF KOREA

5.1 History

Korean folk legends say that the nation’s birth was around 2333 BC, when tribes from Central and Northern Asia came here. The language, that belongs to the Ural-Altaic group, which also includes Finnish, Hungarian and Turkish, was brought with them and has been written with the script han’gul since the 15th century.

The third century was the start of a time called the Three Kingdoms period, Koguryo, Paekche and Shilla, which lasted for four centuries. Buddhism was then flourishing and since then has had an enormous influence on Korean culture. From the 7th century, there was a series of dynasties until the Japanese invaded in 1592. Then Manchus, French, British and Japaese gave Korea a hard time until the atomic bomb was dropped on Japan ending World War 2. A deal was then struck where USSR was to occupy the Korean peninsula north of the 38th parallel, and the USA the southern part. When the super powers pulled out, North Korea invaded the south in 1950. The Korean war, that has officially never even ended, followed. Suddenly, Korea was divided in two parts and the De-Militarised Zone (DMZ) was established between the two Koreas, which is constantly referred to as a reminder of the harm done to the Korean people by outside powers.

5.2 Geography

The Republic of Korea (South Korea) is divided from the People's Democratic Republic of Korea (North Korea) in the north, along the 38th parallel, and faces China in the west across the Yellow Sea and Japan in
the east across the Sea of Japan. The land area is 99,022 km², about 45% of the Korean peninsula, which is equivalent to 22% of Sweden's area.

Korea has got four distinct seasons, a summer with monsoon rains, winter with temperatures hovering around zero degrees centigrade, and with a picturesque spring and autumn. The respective times for the seasons are about the same as in Scandinavia.

5.3 Political constitution and Government

The Government consists of three major divisions, namely the executive, the legislative and the judicial. The executive authority in Korea is in the hands of the President, who is elected for a five-year term but may not be re-elected. He is also the chair of the state cabinet, which consists of the Prime Minister and the heads of the executive ministries. By order of the President, the Prime Minister is responsible for the overall co-ordination of the various ministries and agencies. Legislative power is exercised by a unicameral national assembly under a multiparty system, in which the 299 members are elected by popular vote. The judiciary is independent and carries out its duties without interference from other government or legislative authorities.

5.4 Population

Korea's population was approximately 44 million at the end of 1994, of which 71% were between 15 and 64 years of age. 19.4 million, i.e. about 44% of the population, were in the workforce, and 47% of them were women. The average population density is about 438 persons per square kilometre, but industrialisation has caused an extensive migration with the urban population reaching 76% of the total population. More than 45% of the population live in six major cities, with Seoul’s population exceeding 10 million. Life expectancy is 67 years for men and 75 years for women, and the population growth rate has stabilised during the nineties to around 0.9%.
5.5 Economy and Government-Business relations

The Korean War, ending in 1953, left a dispirited country, with almost total chaos economically, politically, industrially and socially. In the 50s the Korean economy lived therefore on American military and economic aid, under the US-educated President Rhee. The military government of Park, that seized power in 1961 and held a firm grip on the country until the assassination of Park in 1979, built up a state and industry heavily inspired by the Japanese system and thinking. Park and his government virtually told big business what to do and which industry they should go into. Additionally, he centralised economic planning and information agencies, and made five-year economic development plans. Business firms loyal to Park received strong support in developing their business according to the government plans. Under Park’s reign, Korea also moved away from a strongly agriculturally oriented society and economy, through the so-called Saemaul Undong movement that raised living standards in rural areas and spurred villagers to become more self-reliant.

Korea’s growth in GNP has averaged 9% since 1962, being the world’s strongest growing economy in this era. The reason is said to be fivefold:

- Strong and consistent government intervention and support
- Well-educated population, with a strong work ethic
- Eager industrial entrepreneurs, with outstanding leadership and determination
- Favourable international economic environment throughout the 60s and 70s
- Constantly growing export figures

Until the late 1980s all the post-war governments fully controlled bank credit, with dictating price and quantity. For government-favoured chaebols this meant real interest rates averaging a negative number in the 1950s and 1970s, leading to a chronic excess demand for bank credit. Some of the chaebols, over-dependent on these external sources of funds,
5. Research environment, Republic of Korea

had to be rescued by the Government during the second oil crisis. In this
economic downturn the government started releasing some of its grip on
the private sector, devaluated the currency (KRW), gradually reduced soft-
loans, and kept focusing on price stability.

Throughout the 1980's and early 1990's, Korea's international
competitiveness was, however, steadily declining due to closed markets,
rising wages, protectionism and sluggish foreign investment. Kim Young
Sam, the current president, who was elected in the country's first
democratic election in 1993, hence focused on globalising the Korean
economy. Some of the measures taken were to abolished governmental
backed soft loans to industry, limit the expansion of chaebols and crack
down on corporate tax loopholes. He has also recently had to deal with his
predecessors, who allegedly received huge amounts of money in bribes
from the industry.

Despite these worrying aspects, Korea's exports soared to US$ 125.000m
in 1995, and chaebols are investing heavily into capacity expansions and
new facilities. In fact, Samsung's sales are predicted to be over US$ 200.000m
worth of goods by 2001, more than the entire output of a
country like Sweden. Moreover, thanks to the strengths of its large firms,
Korea's economy will probably remain among the world's top performers
for the rest of this decade.

Figure 11 Export figures / Prospects of Korean economy. See The Korean Economic
Regarding the future of the Korean economy, the Government has recently designed a 25 year economy plan aimed at propelling the nation into the ranks of the affluent and stable industrialised countries. According to Government projections Korea will overtake the United Kingdom by the year 2010 to become a G-7 industrialised country. In addition to the fact that Korea can no longer base high economic growth on low wages, three major economical problems are lurking on the horizon. Firstly, a possible unification of the divided Korea, that in essence will have to be financed by South Korea. Secondly, the ownership and ethical issues raised by the dominant chaebols has to be solved. Thirdly, Koreans must be induced to shed their narrow nationalism, parochialism or closed attitude to the outside world.

5.6 Industry

5.6.1 General

From an historic perspective it is often said that since Korean intellectuals in the 15th and 16th century promulgated han’gul, Korea’s unique alphabet, and built “turtle ships”, the world’s first iron clads, they have invented, engineered or created virtually nothing original. However, Koreans had the same mind-set for value adding and waste reduction as the Japanese, much due to these countries’ lack of natural resources. The basic solution was hence to start mass production of imported technology from Japan, the US and Europe through joint ventures, licensing, original equipment manufacturing and direct copying.

Based on its five-year economic development plans, the government typically chose a select group of companies in targeted industries and supported those businesses by providing them with financial and tax incentives, plus information services. In 1967 shipbuilding and chemical sectors were targeted in the second economic development plan, followed by the automobile and electronic industries in successive plans. These industries rocketed as a result. The companies chosen were typically large
export-orientated chaebols, that willingly collaborated with the government because of the relationship’s material benefits. It is widely reckoned that the chaebols contributed significantly to the government’s drive for rapid industrialisation by applying their renowned “can-do” spirit and venturing into many large risky projects with relatively insufficient technological and financial capabilities. Characteristically Porter, the marketing guru, has stated that Korean companies rushed into industries and were prepared to make huge investments in equipment and plants prior to any substantial orders.

In recent years, most chaebols have started transforming themselves into modern, professional and international conglomerates, mainly due to the following factors:

- The opening and deregulation of Korean markets in 1996, making it impossible to subsidise exports through high prices in the protected domestic market
- The days of soft loans and subsidising are over
- Rising demands from workers after the Declaration of Democratisation in 1987
- Price gap between Korean and Japanese or Western products is diminishing, forcing Korean chaebols to provide markets with high quality products and services
- Globalisation, through the establishment of production plants and sales divisions abroad - outward investments up 88% from last year
- Increase in R&D expenditures, in top three Korean electronic firms 5.9% of sales

In order to understand Korean industry it is essential to know the power, role and structure of chaebols. Chaebols can be characterised as a large business group vertically controlled by family members, with a diversified business operation and powerful influence in the national and regional economics of Korea. Supporting figures show that the ten largest chaebol groups have a total turnover equal to 77.3% of Korea’s GNP. The founding families own 60% of the equity and 95% of their assets are located in
Korea. Moreover, the chaebol groups are immensely diversified, and family members hold over 75% of all chief executive and managing director positions. Notably the major chaebols are among the fastest-growing conglomerates in the world, yet much smaller than the likes of Mitsubishi and other Japanese counterparts.

<table>
<thead>
<tr>
<th>Chaebol</th>
<th>Rank</th>
<th>Firms</th>
<th>Assets</th>
</tr>
</thead>
<tbody>
<tr>
<td>Hyundai</td>
<td>1</td>
<td>45</td>
<td>US$ 36,39b</td>
</tr>
<tr>
<td>Samsung</td>
<td>2</td>
<td>55</td>
<td>US$ 28,16b</td>
</tr>
<tr>
<td>Daewoo</td>
<td>3</td>
<td>22</td>
<td>US$ 26,24b</td>
</tr>
<tr>
<td>LG</td>
<td>4</td>
<td>54</td>
<td>US$ 25,29b</td>
</tr>
<tr>
<td>Sunkyong</td>
<td>5</td>
<td>32</td>
<td>US$ 13,18b</td>
</tr>
<tr>
<td>Hanjin</td>
<td>6</td>
<td>24</td>
<td>US$ 11,47b</td>
</tr>
</tbody>
</table>

Figure 12 A big chunk. See The Economist (1995) and Business Korea (1993).

Figure 13 The diversified structure of a chaebol. See Kirk (1995).

On an operational basis, Korean industry, and in particular the chaebols, are very much geared to mass production. Their imperative business mission in overseas markets is volume and through this policy, they are hoping for profits in the long term. Moreover, chaebols have made their products and brands known world-wide through aggressive marketing campaigns, and Lucky Goldstar, Daewoo and Samsung are all among the 25 brand names most likely to lead the global business community in the 21st century, according to Advertising Age International.
Another recognised feature of the industry is its place at that glorious stage of development, when it is brimming with learning and ideas but has not yet become complacent. Koreans constantly fret that they have not yet caught up with Japan, or that they may be overtaken by the next pack of tigers in Southeast Asia. This mix of sophistication and anxiety drives Korea, and especially the top chaebols, forward at a cracking pace.

![Graph of Export by Industry](image)

*Figure 14 Export by industry. See Korean Economic Weekly (1995).*

**5.6.2 Shipbuilding**

As previously mentioned, shipbuilding took a leading industrial position in the 70s, much because of the Shipbuilding- and Chemical Industry Promotion Act enacted in 1967. This development program encouraged certain government appointed chaebols to make big investments in new production facilities and technology, backed up with soft loans and subsidies. Hyundai Heavy Industries was established in 1973, Daewoo Heavy Industries in 1978 and Samsung Heavy Industries in 1979. Delivery of the first Korean made Very Large Crude Carrier (VLCC) took place in 1974, very much thanks to Western and Japanese technology and know-how.

Dramatic productivity and technological improvements were made continuously throughout the 80s, as the yards got experience, and their international market shares increased steadily for ship types like tankers, bulk carriers and container ships. Nowadays, Korean yards are claiming over a quarter of the world’s total newbuilding market. In 1993 Korea
clocked up a big shipbuilding triumph, by overtaking Japan to win the largest share of the world’s orders.

Korean shipbuilding companies distinguish themselves by their so called “new shipbuilding system”. It started some years ago with a re-engineering of their production process around what is both their chief advantage and biggest bottleneck, namely the giant dry docks which can measure up to 700x150m. Traditionally, the docks had been flooded as soon as all ships in a dock were completed, but in order to balance the workflow they started flooding the dock twice as often and simply re-docked hulls not fully completed. Another process re-engineering was to build sections of ships outside the dry dock, and then use monster cranes, able to lift up to 900 tonnes, to put these pre-assembled superblocks into the dry dock to be welded together. On average, 85% of the ship is built in the vast pre-assembly areas, resulting in a more efficient utilisation of labour and halved lead times. Today it takes less than 8 months to build a VLCC, whereas in 1989 it took 15 months.

Over the last couple of years the Korean shipbuilding industry has almost doubled its capacity. Halla Engineering & Heavy Industries has opened a completely new yard, and Hyundai Heavy Industries and Samsung Heavy Industries has just constructed two and one large dry docks respectively. They also prosper due to large process “friendly” manufacturing shops, and strategically located suppliers. It is worthwhile noticing that Korean yards are very scared of competition, and that they are determined to remain world leaders. The whole Korean shipbuilding industry can in fact
characteristically be looked upon as a group of herd animals, in so much as the group always follows the one taking the lead. Nobody wants to miss the train.

5.6.3 Automobile

A survey by the Korean Trade Promotion Corp. reveals that, among Korea's export items, passenger automobiles are the most well known to foreign buyers. The country has four auto-makers, namely Hyundai Motor, Kia Motors, Daewoo Motor and SsangYong Motor. In 1994 production totalled 1,81 million units, a 13,4% increase, and early forecasts for 1995 show a 12,4% increase totalling 2,6 million units. Korea moved from being the ninth largest automobile manufacturer in the world in 1991 to the fifth position in 1994, with a third place in terms of export.

Some 63% of Korean made automobiles are sold in the domestic market, due to high domestic demand. This reflects the automobile's transition in Korea from a luxury to a necessity of life. The rapid increase of the number of automobiles in use, however, has fuelled growing public concerns over traffic and environmental deterioration. Korean automobile exports also continued their upward trend in 1994, posting a 15,6% increase. This was mainly due to the economic recovery in the USA and the appreciation of Japanese Yen, as well as the industry's efforts to diversify export markets and models, enhance marketing activities and improve product quality. By region, North America stands forward as the biggest export market with 31,8%, tailed by Western Europe and Central & South America.

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<tbody>
<tr>
<td>Domestic sales</td>
<td>156.000</td>
<td>323.000</td>
<td>626.000</td>
<td>876.000</td>
<td>1,140.000</td>
</tr>
<tr>
<td>Exports</td>
<td>299.000</td>
<td>564.000</td>
<td>340.000</td>
<td>427.000</td>
<td>648.000</td>
</tr>
</tbody>
</table>

*Table 1 Sales development of automobiles in units. See KAMA (1995)*
The auto-industry was initiated by President Park through a five-year plan for motor vehicles in 1962 followed by a more specific Automobile Industry Protection Law under which the government promoted the construction of automobile plants. Park’s economists lifted the tariffs on the import of key components and offered tax breaks for assemblers, as well as restricting automobile imports - a move that predated the complete protection afforded by tariffs and quotas in later years. Kia started assembling knock down sets for Honda in 1967, followed by Hyundai’s assembly of Cortinas for Ford in 1968. It is frequently quoted that the Korean penchant for hard work and study turned quickly - more quickly than any co-operation partner imagined - into a yearning to go it alone. The solution lay in technological licensing agreements that were signed in the early 70s, best exemplified by Hyundai’s agreement with Mitsubishi, and Daewoo’s agreement with GM. Simultaneously, the government issued a directive to develop the automobile industry, calling on manufacturers to build citizen’s automobiles made almost entirely of Korean parts.

Characteristically, the chairman of Hyundai Motors, Mr. Chung’s, vision was that if we can build a ship, we can build an automobile. By contrast his British advisor, a former British Leyland vice president, told him that you can fix a ship, but when you press the button and the automobiles come off wrong, you have to start all over again. The first Korean made automobile, was a typical Chung/Park endeavour. Nobody did any marketing testing, no sampling of control groups, no scientific research into consumer tastes. The two, tycoon and dictator, simply went ahead and decided to build the
thing. The Pony began rolling off the line in December 1975, a manageable 1.2-litre, rear-wheel-driven subcompact with guaranteed funding and a guaranteed market. Since then Hyundai Motors has been the leading Korean auto-maker in terms of production, domestic and overseas sales, range of models, and R&D expenditure.

![Diagram showing international co-operation, 1994. See KAMA (1995)](image)

Overseas investments by Korean auto-makers continued to grow in 1995, reflecting the industry's efforts to improve its competitive edge internationally through overseas production. Daewoo Motor is the most aggressive in this respect, setting up manufacturing plants in Algeria, China, Indonesia, Iran, Philippines, Rumania, Uzbekistan and Vietnam. Notably Daewoo's strategy is to target developing countries and capture vast market shares, whereas Kia, Hyundai and SsangYong concentrate more on industrialised countries.

Interestingly, another chaebol group, namely Samsung, was recently given the green light to enter the automobile business. Samsung aims to turn out about 500,000 mid-sized automobiles from 2002, by investing more than US$ 4b in the project. This is despite sharp protests from other Korean auto-makers, that forecast fierce competition for market shares, human resources and autoparts. Altogether, the Korean automobile industry seeks to double its annual auto production capacity to six million units by the next century. However, the essential questions are whether the domestic auto market will grow fast enough and if growing protectionism in advanced and developing nations will choke off Korean automobile exports.
5.6.4 Electronics

By the early 1980's Koreans had proved that they could produce steel, ships, and automobiles of adequate quality at competitive prices. But the emergence of LG Electronics, Samsung Electronics, and to a lesser extent others, narrowing the gap with world-wide leaders in high technology fields signalled a new level of sophistication in the Korean industry and economy. LG Electronics, formerly Goldstar, was the first Korean company to launch a transistor radio and black-and-white television sets. This took place in 1959 and 1966 respectively, and the company established itself as the sole domestic market leader.

Samsung Electronics joined the race in 1969, followed by the two other main parties in the electronics industry, Hyundai Electronics Industries and Daewoo Electronics. From the establishment of Hyundai Electronics it is reported that Chairman Chung could see his main rivals reaping fortunes from electronics, and decided it was high time that Hyundai exploited the boom. The speed with which Hyundai took the plunge and the money that Chung used was stunning. Characteristically, the chaebol groups' chairmen had some problems in accustoming themselves to the new industry. They could easily see a ship being built, and an automobile coming off the production line. But, as they toured their electronics factories, and looked in the microscope, they only saw a lot of lines and shiny stuff, and did not know what was going on.

In addition to continuous development in the consumer electronics' sector, the big electronics companies also successfully diversified themselves into the industrial electronics area in the 1980s, with mobile telecommunication equipment and computers. Simultaneously export started to grow, mainly due to limitations in the domestic market and a competitive cost-structure. The major American electronics companies were loosing market shares to Japanese competitors world-wide, and naturally they started looking around for lower-cost sources like Korea. For example, in 1983, it cost General Electronics US$ 218 to make a microwave oven, whereas Samsung Electronics could do it for US$ 155. In essence this stemmed
from a significant difference in labour costs, US$ 8 to 63 cents, and overhead costs, US$ 30 to 73 cents. Korean electronics companies hence exported to overseas department stores and manufacturers on an original equipment manufacturing (OEM) basis. This meant that the industry was producing goods under brand names owned by others, a co-operation that gave them both knowledge and technology. The strong Korean instinct to go it alone, however, soon resulted in the manufacturing of similar products under their own brand names.

By the late 1980’s Samsung Electronics gained the first place as Korea’s leading electronics manufacturer, stemming from their success in the DRAM semiconductor business. In this niche of the so called electronic parts and components sector, Samsung Electronics was charging ahead, confident that it could give the Japanese competition. Its confidence was well-placed, and in 1991 the company finished in a dead heat with Japan’s Toshiba in the race to design the world’s first 64Mb DRAM semiconductor. Two years later it became the world’s biggest DRAM manufacturer. The three other mentioned electronics companies has also followed the development, but have been overshadowed by Samsung’s success. In quantity the 1M and 4M are the most produced, whereas 16M is increasing. In 1994, semiconductors alone counted for 28,8 % of the industry’s total production, and 39,6% of exports. Semiconductors also have a positive affect on the bottom line, and it constitutes a major cash-cow for all the four companies and their chaebol groups.

Over 450.000 employees work in the industry, which is 10% of all the people engaged in manufacturing industries. In terms of production and exports the industry gained 26% and 30,4% respectively, from 1993 to 1993. Korea is now the world’s fourth largest electronic goods producer, only trailing the United States, Japan and Germany. In the last few years the industry has made bold efforts in areas of semiconductors, multimedia, computer peripherals and business globalisation.
5.7 Management and Human Resources

5.7.1 Industrial relations

In the four last decades industrial relations have gone through major changes and turmoil. Human resources were, until the declaration of democratisation in 1988, managed with absolute authority. Both salary and promotion were related to age, so called seniority-based human resource management, and workers were not allowed to organise independent unions or strike. During the democratisation and unionisation processes, years of suppressed distrust and conflict between labour and management erupted, often taking the form of violent action. These labour disputes had a severe effect on Korean industry, and wages were raised in order to please workers and secure production.

Most chaebol groups are nowadays trying to shift from seniority- to capability-based human resource management. Working conditions are being put on the agenda in collective bargaining, but wages are still very much at the core. Central agreement on wage increases was reached by the Korea Employers Federation and Federation of Korean Trade Unions in 1993 and 1994, and industrial relations seem to have stabilised.

The labour force is organised in enterprise unions, regardless of the employees' occupations. These enterprise unions are banded together in
groupings by industry, all of them being represented nationally by the Federation of Korean Trade Unions. Its main goal is to improve the real social and economic status of its members’ workers. The percentage of organised workers is relatively low however, and the rate is showing a declining trend, very much due to formation of other union groupings. Top managers and owners are represented through the Korea Employers Federation, founded in 1970. It is a nationwide umbrella organisation embracing 4,000 major enterprises, endeavouring to achieve industrial peace. Nowadays the organisation acts as an information resource, advisor, instructor and a channel for international co-operation in labour relations fields.

Figure 19 Labour statistics. See Korea Employers Federation (1995).

The Korean wage system is based on seniority, despite recent trends in making promotion capability based. Wages are paid monthly and are made up of basic wages and various allowances. Most companies pay allowances for commuting, family, meals and position. Besides, most give bonuses in addition to regular monthly wages, averaging five months additional payment this year. These bonuses reflect a company’s business performance and productivity, and have an element of profit-sharing. Another feature is the retirement pay system, in which employees are given an average wage of 30 days for each year of service, when they leave the company.

During the period from 1987 to 1994 average wages in manufacturing industry soared by 15.5%, and in the big chaebols over 20%. Non-cash
compensation also increased, mainly due to the provision of more fringe benefits, legally mandatory as well as company-voluntary.

<table>
<thead>
<tr>
<th></th>
<th>1987</th>
<th>1989</th>
<th>1991</th>
<th>1993</th>
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</thead>
<tbody>
<tr>
<td>Total labour cost</td>
<td>597</td>
<td>840</td>
<td>1276</td>
<td>1.703</td>
</tr>
<tr>
<td>Non-cash (%)</td>
<td>96 (16.1)</td>
<td>134 (15.9)</td>
<td>293 (22.8)</td>
<td>443 (26.0)</td>
</tr>
</tbody>
</table>

Table 2 Labour cost, in US$ per month. See Korea Employers Federation (1995)

Nowadays there is a severe labour shortage amongst blue-collar workers, especially in SMEs. This phenomenon is not only due to the relatively low level of wages and welfare benefits in those companies, but the tendency, with the growth of income levels, to avoid hard manual work. Besides, there is a clear gap between production workers and managerial staff in the rank and position system. It is almost impossible for production workers to jump the social chasm to become managers, reinforcing a sense of distinction, elite and alienation. The typical rule is that graduates enter management, whereas non-graduates become production workers. The latter group can only be promoted to team leader or deputy team leader.

5.7.2 Management and its style

The Korean management system has three major sources of influence, notably Confucianism, Japan and America. Based on these three sources Korean companies have developed their own management system, known by some as K-type management. This includes top-down decision-making, paternalistic leadership, clan management, flexible lifetime employment, seniority based compensation and merit rating, high mobility of workers and expansion through conglomeration.

The organisational structure of many Korean companies is characterised by a high degree of centralisation and formalisation, with a concentration of authority in the senior levels of managerial hierarchies. Most chaebol groups resemble organisations similar to that in military, in their rigid hierarchical structure and management, with a clear “top-down” philosophy. Another salient organisational feature is that vertical and
hierarchical control is supported by strong functional control departments. The large companies also depend heavily on autonomous or temporary organisations like task teams and special committees, in order to help overcome departmental divisions and enhance organisational flexibility.

Regarding the decision making process, any major or even minor decision usually goes to the chairman for his authorisation, and a lot of managers want, and can indeed, have power and authority without any responsibility. Usually, 80 percent of the authority lies in the upper management level, with middle or lower level management having very limited authority. Accordingly, the vast group of middle managers found in Korean chaebols, are often perceived as a colourless mass of university graduates who were not promoted to the top level.

In the seniority based promotion system, managers are normally promoted every five years. Chaebols traditionally have used up to 40 different management titles in order to nurture such a promotion system.

![Organisational structure diagram](image)

*Figure 20 Organisational structure. Source Own.*

**5.7.3 Human resources**

It is often quoted that Korea has no resources, except for labour. This is based on the fact that the country has a large pool of well educated and loyal employees. From a historical perspective, Korean industry blossomed on cheap labour willing to work hard in an infamous 3D (dirty, dangerous and difficult) working environment in order to cover their living expenses.
Korea hence has a reputation of being one of the most hazardous working places, and still in 1994 over 90,000 injured workers needed more than 4 days of medical treatment, a 16% decrease from 1992.

One interesting trait of Korean workers is their military-like behaviour in organisations. The reasons for this are mainly adapting to organisational structure, their belief in Confucianism principles and the fact that Korean men have to undertake 3 year compulsory military service. One result is that blue collar workers are task oriented and obey orders, and are not so much concerned with corporate goals and visions, because their superiors will guide them.

<table>
<thead>
<tr>
<th></th>
<th>Korea</th>
<th>Japan</th>
<th>USA</th>
<th>Germany</th>
</tr>
</thead>
<tbody>
<tr>
<td>1986</td>
<td>54,7</td>
<td>41,1</td>
<td>40,7</td>
<td>40,4</td>
</tr>
<tr>
<td>1992</td>
<td>48,7</td>
<td>38,8</td>
<td>41,0</td>
<td>38,9</td>
</tr>
</tbody>
</table>

Table 3 Weekly working hours in manufacturing. See Ministry of Labour (1995)

The decreasing trend in working hours indicates that Korean workers increasingly want to divide their time between work and leisure, and no longer wish to devote their entire lives to the company. They also tend to have higher standards of education and technical knowledge than their predecessors, as well as a tendency towards individualism, with an increasing tendency to reject an employer's authority or unilateral orders.

5.7.4 Religion and its impact

Even though Buddhism and Christianity are the two main religions in Korea, it is widely accepted that Confucianism constitutes a core in society, whatever a person's religion or political belief may be. Likewise, it is firmly believed that the Korean management system has been influenced by Confucianism, and that it has contributed to Korea's spectacular rise. Confucius is assumed to have lived during the sixth century B.C, credited with setting up an ideal ethical-moral system intended to govern relationships within the family and the state in harmonious unity. It was basically a system of subordination, with strong
emphasis on decorum, rites and ceremony. Confucianism spread from China to Korea around 2000 years ago, greatly influencing education, civil administration, and together with Buddhism made up the social functions of religion in Korea. Nowadays, it is most evident in education, and still a major factor in the way Koreans think and act, with a deeply ingrained Confucian mode of manners and social relations.

Korea is influenced by Confucianism as are Japan and China, and scientists reckon that its ethics have a number of positive influences, including the leadership of government, an emphasis on education, a strong work ethic and an entrepreneurial spirit. Regarding Confucianism's impact on organisational traits in Korea, the following have been suggested.

- Respect and obedience towards seniority and authority
- More emphasis on values and ideals than pragmatic activities
- Hierarchical and top-down, almost military style
- Elitist, with more favours to white-collar than blue-collar staff
- Mutual trust, camaraderie

5.8 Notes and references

Book discussing Korean management styles and characteristics are Chen (1995), Kirk (1994) and Clifford (1994). The first gives a comparative presentation of management styles in China, Korea and Japan, whereas the latter two concentrate on Korea and includes reflections on the society as well. Kirk gives a detailed description of chairman Chung in Hyundai, the biggest chaebol group, and makes references to other main industrial players. Clifford has a more general approach and describes post war development, as far as industry, the military and government is concerned.

Korea's economy has been comprehensively covered by an Economist survey (1994), with reflections on history, the present and the future. In the HRM areas, reports by the Korea Employers Federation and the Federation of Korean Trade Unions have been referred to extensively. They contain
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facts and information that give a nuanced basis for understanding the
history and the present of this field.

In the shipbuilding and automobile industry reports from the Korean
Shipbuilders' Association and the Korea Automobile Manufacturers
Association have been used as a basis. Regarding the electronics industry,
the annual report of the Electronic Industries Association of Korea (1995)
and book by the LG Chairman, Koo (1993) have been referred to.
Additionally, some characteristic features are taken from Kirk (1994) and
Clifford (1994). Relevant information can also be found in some of the
articles mentioned in the reference list. In the last few years, Korea has
been in the international media's focus, and a lot of information can be
obtained from magazines such as Newsweek, Asian Business Review and
the Economist.
6. KOREAN QUALITY MANAGEMENT

6.1 Development

Korea is rarely mentioned in the international development of quality management, and we find that this must be due to the fact that Korea has mostly adopted Japanese and Western quality concepts. Recently, though, Korea has attracted media’s attention world-wide for its notorious explosions in subway stations and ships, as well as a collapsed department store and bridges. We think that these incidents have significantly influenced most Westerners’ concept of quality management in Korea, and that they spoil the prospering strong quality movement found in Korea.

According to Park (1993) the QC movement was initiated in 1961 with the announcement of the Industrial Standardisation Act, and was run simultaneously with the Saemaul Undong-movement. This preliminary period lasted until the early 1970s, with the establishment of the Korean Standards Association and the Korean Society for Quality Control as significant events. More specifically statistical quality control was introduced and its concept was spread, much due to the establishment of a Korean Standard (KS) mark, awarded to products that met the government set standards. The main concern for Korean companies regarding quality was hence to comply with the KS standards, and QC departments were established in order to maintain contact with the Government and undertake necessary inspections and controls.

Lim (1994) states that the 70s can best be described as an introductory development stage. QC activities spread rapidly, company-wide quality control (CWQC) was adopted from Japan, and QC-circles were established. In 1973 the Industrial Advancement Administration was founded, and it started a national contest for QC-circles, followed two years later by a Korean Quality Award. Park states that CWQC introduced a new concept into the QC movement, where focus was put on producing standardised and zero-defect goods. Moreover companies endeavoured to
decentralise the QC responsibility to the workers, and established QC-circles in order to enhance quality improvements. Notably, Shin (1994) states that Korea simply copied Japan and failed to find its own way of adopting to CWQC, resulting in a concept that did not fit in well with Korea’s business environment and cultural background.

In the absence of a unique Korean CWQC concept, the QC movement lost momentum in the 1980s, and the enthusiasm for QC disappeared in the vortex of violent labour disputes. Besides, Korean industry’s focus on product standardisation and zero-defect could not meet the individual needs of various consumers. The price of Korean products also rose, and the price gap between Korean companies and other market leaders started to decrease world-wide. A genuine Korean interest in quality management, particularly QMS and TQM, therefore evolved in the early 90s.

The first ISO 9000 certificate for a Korean company was issued in 1992, and some 500 companies have hitherto achieved certification. Lim explains that the following QM issues were addressed in the latest five-year Economic Plan issued in 1992, and are to be accomplished within 1997.

- Major implementation programs for spreading QM in all industries
- All manufacturing firms with more than 50 employees should have a QMS
- Establishment of Korean Quality Management Grand Prize in 1994
- Defective product ratio lowered to parts per million level in 1995
- Introduce a Quality Management Stimulation Law
- Establish 208 civil QM headquarters to conduct regular surveys and give guidance
- “Privatise” the QM movement

Some of these points have already been achieved whereas others are under implementation. However, Lim concludes that if Korea reaches the goal and can convince the industry to drive the QM movement themselves, Korea will join the group of industrialised countries. He explains this by
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referring to the fact that QM is a civilian-initiated voluntary activity in most industrialised countries, and that the respective governments typically are facilitators, not initiators.

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**Figure 21 Development of quality management in Korea. See Lim (1994).**

We would like to comment on three aspects related to this development. First of all the high degree of governmental interaction, that we became aware of through our research and in meetings with company representatives, Industrial Advancement Administration and Korean Standards Association. They opined that, while governmental initiatives, responsibilities and supports ensured a steady development of quality management in an “exploding” industrial environment where mass production and schedules were always top priority, top chaebols must now be allowed to proceed alone. Quality managers representing the most developed enterprises in the quality management area, felt that governmental policies, rules and regulations were lagging some 10 years behind their own programmes. Further, they told us that the government was promoting TQM programs best suited for medium sized companies.
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We therefore find the current privatisation plan appropriate, and it contains many sound measures for ensuring such a transformation.

Secondly, we found it interesting that heavy industries, and partly the automobile industry, led the way in the QC movement, whereas the electronic industry seemingly paved the way in QM, and particularly in TQM. As we will discuss in more detail later, it is a widely held perception that TQM has barely taken root in the shipbuilding and automobile industry, and often substituted with TPM. Another interesting aspect was pointed out to us by a quality manager at LG Electronics, who maintained that the electronic industry in recent years had genuinely endeavoured to learn the concepts they were adopting, and that this process was supported by a committed top management.

Finally, the adoption method of overseas quality concept should be analysed. Our research clearly revealed that the Korean industry has not developed any significant QM concept themselves, but has imported the ideas and techniques from leading industrial nations. When it comes to production, it is often said that Korean industry can make better copies than the original. We cannot find that this applies to the development of Korean QM. On the contrary, we found that most concepts have been copied directly, and implemented without being shaped into a Korean context. This has largely hampered the functionality of quality related work in organisations, and hindered self driven quality projects. Representatives from the Industrial Advancement Administration explained that much of the copying has taken place due to the “rocketing” expansions and development in industry, and that there was no time for a real understanding of different quality management principles and practices. Instead, the industry relied on government organisations like themselves and Korean Standards Association to supply them with quick fix programmes ready for implementation.
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6.2 Quality Control (QC)

As development reveals, QC has, until recently, constituted the core of Korea's quality management. Our company visits showed that, QC still holds a key position, and QC practices, activities and schemes were applied extensively in the companies we visited. It seemed like QC fitted well in Korean organisations, with its military influenced, top-down approach and emphasise on production and production schedules. In Korea's mass manufacturing industry, QC was mainly conducted through final inspection and testing, a fact much related to the industries' strivings towards higher product quality and fewer deficiencies. Characteristically, it was outlined in a company presentation at one of the major auto-maker, that they applied a more thorough and comprehensive inspection and test program on export goods, in comparison to domestic articles.

Our field studies also revealed that company commonly divided QC and QMS-related work into the quality control- and quality assurance department respectively, and that a substantial number of staff were assigned to both areas. The QC department were in essence responsible for carrying out inspections and tests independently from those undertaken in production, and also to compile, analyse and report QC data. In an interview with our supervisor, Professor Park, he explained that QC departments were fairly good at decentralising and co-ordinating QC activities. Moreover, due to the enterprises' enduring efforts in QC education and training, he maintained that workers knew how to apply and use basic QC techniques, like the 7QC tools. More sophisticated statistical methods, like Statistical Process Control, Design of Experiment, Reliability and Robust Design were however not widespread, and such competence was, according to Park, merely confined to specialists in the QC department.

Quite notably, we learnt that QC is a profession on its own in Korea, with training and qualification schemes for the certification of QC engineers. Statistics from Korean Standards Association reveal that Korea had 15,853 certified first class QC engineers in 1990, and 10,687 certified second class
QC engineers, the latter a program for high school graduates. These QC engineers form the backbone of QC specialists in factories, and they carry out inspection, tests, statistical process control, reliability and production control. In an article (1992), professor Park does, however, refer to the fact that this group have been accused of being too defensive in their work, and not actively trying to use some of the advanced and modern scientific QC methods. He finds that as a result QC is rarely applied up-stream in processes. Nevertheless, we identified some improvements, and a representative from LG Electronics explained to us, in a meeting, how the company had adopted Motorola's 6σ system through benchmarking, and applied it throughout the company.

On the shopfloor, we found that QC activities merely constituted final control and QC-circles. Figures from Korean Standards Association revealed that in 1994 over 7,200 companies had QC circles and the overall number of QC circles was 108,840. In a meeting they stressed that the unofficial figures were significantly higher, and reported that the focus in QC circles has shifted from visible effects to invisible and diversified effects such as self-development and improvement of human relationships. It was also explained to us that there was an annual Quality Circle Contest aimed at activating quality circle activities and making a positive quality environment by focusing on excellent QC circles. Notably, we found that many QC-circles, in recent years had been replaced by task-teams or TPM teams at the auto-makers and shipyards we visited. The reason for this was said to be that such groups, from an overall business viewpoint, were more malleable and concerned with productivity, cost-reduction and safety measures. Another industry-wide perception, was that QC-circles were often struggling, due to its bottom-up nature, meaning that management did not have the opportunity to show clear commitment. A Korean Standard Association representative found that Korean QC-circles significantly distinguished themselves from Japanese QC-circles, in that Korean QC-circles had to be activated through incentives, like gifts and extra bonuses.
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Regarding the average production worker’s concern for QC, we had the perception from our shop-floor tours, that focus was put on final control and workers were seemingly to a less extent concerned with doing the task right from the beginning. Our perception was reinforced by the fact that final inspections often were undertaken later in the process, and that staff from the QC department carried out additional and independent controls. We therefore felt that despite workers’ familiarisation with QC and its basic practises, they were not encouraged to apply them in their daily work.

We consider that Korean universities, governmental QC promotion organisations and industry have been highly successful in training and teaching QC to Koreans in general. The thoroughness of the overall training system is, from our point of view, best exemplified through one of Korea’s leading TV channels screening lectures on statistics, sampling methods and control charts during Saturday’s prime-time. This reinforces our perception of Korean workers and managers as mature and knowledgeable in scientific areas.

Reflecting on what we observed and learnt in our research, we feel that QC departments and activities in Korea are somewhat overproportioned. In stead of decentralising QC and making employees responsible for the quality of their work, they try to inspect quality into products. The main problem, from our viewpoint, is, however, that QC related work is merely used to detect discrepancies, and not as a foundation and database for improvements. We find that such a fact-based approach, in Korea’s vast mass producing industry, would give significant spin-offs and better utilise the potential in already existing functions and activities.

6.3 Quality Management System (QMS)

In order to contribute to a continuous supply of high-quality Korean products, a Korean Standard (KS) grading scheme for factories was instituted in 1981, by the Industrial Advancement Administration. From
the start factories were graded according to their implementation of QC, but it late migrated to QM. In addition, a special quality mark was introduced, and awarded graded factories that displayed excellent quality management. At present 3,700 factories are authorised to use the KS mark, while 2,000 factories have been awarded the special quality mark. The certificates awarded under these schemes follow assessment of quality management systems in relation to products. A quality system assessment has hence been operating in Korea in advance of the national ISO 9000 certification scheme. The assessment criteria employed in the quality mark scheme are said to be similar to those of ISO 9000 requirements, but much more product oriented.

In 1992 when the ISO 9000 series standard was adopted as a national standard in Korea, the government strongly encouraged firms to become certified. Up to this date over 500 Korean companies have been certified according to the ISO 9000 series standard, and it is expected that this number could increase to 5,000 companies within a few years. A vast number of certified companies are operating in export oriented industries, and are chaebol subsidiaries. There are currently about 10 foreign and 7 domestic certification bodies active, and Industrial Advancement Administration accredits certification bodies and training organisations.

Industrial Advancement Administration, DNV Certification and the certified companies that we were in contact with, all found that the Korean industries’ adoption of QMS went relatively smoothly, and attributed much of this to the already existing KS grading scheme. Statistics, provided to us by DNV Certification, showed that purchasing and document control distinguished themselves as the two areas in which Korean companies have most non-compliance against the ISO 9000 series standard. On the other hand the survey revealed that they easily confirm to criteria such as process control, inspection, quality records, statistical techniques, corrective action and contract specified service.
In our discussions with the above mentioned parties and Western companies in Korea, we got the perception that QMS has fulfilled three significant roles in certified companies. Firstly it has improved the quality image of these companies overseas, particularly in Europe. Many would argue here that the Western World wrongly has forced countries like Korea to adopt the ISO standard, but in Korea’s case we personally find that the advantages outweigh the disadvantages. Secondly, it has documented and systematised internal operations, functions and processes throughout the companies. For the relatively young Korea enterprises, the ISO 9000 series standard series was reckoned to have provided some sound guidelines on a total system approach. Finally, it was also recognised that the attainment of ISO 9000 series certification had helped to overcome technology protectionism in Western countries.

Regarding QMS’s influence on daily internal operations, we did however observe that it was somewhat limited. After the spin-offs gained from the certification process of their QMS, it seemed like the QMS were merely maintained by a quality assurance department and of little concern for other personnel. On a long term basis, we therefore found that the QMS was merely used externally, for the customers’ benefit. Another very interesting aspect, was that QMS was rarely mentioned as a basis for TQM and TPM in our meetings, and seemingly most Korean companies had not used their QMS to its full potential in this respect. From our observations of the phenomena, we concluded that this phenomenon stemmed from the fact that QMS were often functionally divided from work related to TQM or TPM.

6.4 Total Quality Management (TQM)

6.4.1 Principles of TQM

Top management commitment
From our point of view, top management commitment is normally strong in Korea. They thoroughly believe in the concepts being implemented, but
lack the skills to transfer the enthusiasm and belief to the people executing their orders as well as to the personnel being directly affected. According to Advancement Administration, the president, as well as other leaders of governmental organisations, are also heavily involved in encouraging the industry to adopt TQM. During our stay in Korea, we had the opportunity to observe how important this type of attention from the very top was, and the effect is undoubtedly important for the quality management concept.

Focus on customers
Most indicators in our research showed that the overall customer focus was rather low in mass-production Korea. The philosophy: “We produce adequate products and if you want to buy them you are welcome”, might be a harsh description, but it was confirmed in most cases. Seemingly, the focus was on the product instead of on the customer’s needs. We found this especially true in the service quality area, like after sales service. From our point of view, the customer focus here has, for a long time, been totally absent. A Western businessman expressed that typically once the customer has bought the product and transferred the money, the deal is over. In an interview with Professor Dahlgaard, he referred to one of his surveys indicating that only 60% of Korean companies had a system to check customer satisfaction, which is way behind Japan’s 90%.

One of the underlying reasons might be that Korean industry has been selling products and not concepts for a long time. This was indicated by representatives from GM, which told us that hunger and humble are prerequisites for success but that Korea is just hungry, and therefore not really a threat. However, corporate representatives that we were in contact with said that a general trend towards a more customer friendly atmosphere was evolving, and Western businessmen mostly acknowledged recent changes. As examples SsangYong had recently introduced a two year guarantee to repair their automobiles within 24 hours, and LG gave all customers a call to hear if they are satisfied with repairs. Internal customers were normally not considered as customers, but as part of the company or community. External customers therefore enjoy a higher
priority, and accordingly, service. When it comes to major shareholders and owners, there is however an extremely good customer focus. Their wishes are rapidly executed without any hassle.

**Base decisions on facts**
We believe that fact based decisions are a weak point in Korea. Decisions are often made because of a feeling or status. Korean businessmen have, however, often shown that their feelings for business can be very successful and bad investments are not talked about. If complete facts had had to be present at each and every decision made in Korea, they would probably not have reached this far. It is a widely held perception that the feeling for business is one of the keys to success. Status is, nevertheless, said to be a driving force for the largest chaebols. They want products in the entire range, even though their is no need for it. Critics say that too many automobiles and ships are already produced in Korea, but still enormous investments are currently being made in these areas by chaebols not yet in the business.

**Focus on processes**
Korean industry is very much process oriented and is quick at adopting new ideas in this area. The results they present are better than those in the average Scandinavian company, at least when it comes to running the process. In an interview with Napier he said that the lack of resources in Korea automatically leads to process thinking and value adding. However, customer focus and follow-up of data from the process are lagging behind, and we think this prevents Korean industry from taking a leading position in developing instead of following the process concept.

**Improve continuously**
Due to poor communication in the organisations, a lot of important information from lower levels reportedly never reaches top management, which has hindered improvements. A underlying problem, that we identified, was that the managers between the person complaining and top management tended to add a positive side to the complaint. The Confucian
system was said to reinforce the struggle for continuous improvements, as seniority partly could prevent rational decision-making. We learnt that the lower levels traditionally did not have the authority to change, and this often culminated in a situation where they kept on working in a way that they realised was wrong. The companies we visited, did however refer to a managerial transformation in which responsibility is devolved and the gap between white- and blue-collar workers has decreased. We reckon that this eventually will facilitate continuous improvements on all levels. Once information about possible improvements reach authorised personnel, the changes will come quickly. It is interesting to notice that whereas Japan has the kaizen philosophy, stressing continuous improvements, Korea has its concept of “koenchanayo”, meaning good enough, urging everyone to be satisfied.

Regarding innovation, Korean industry is often regarded as “the great copier” in the respect that they improve and mass-produce old products instead of presenting new solutions. It is certainly hard to judge if that is a fair statement, but a glance at R&D in relation to turnover shows low figures for Korea. LG Electronics, one of the Korean top R&D investors allowed 7% in 1994, whereas for instance Ericsson invested approximately 20%. Another preventive factor in Korea is top-down organisations, already mentioned, with a lack of effective communication, which made it very hard for employees to get response on innovative ideas.

Let everybody be committed
Management is absolutely committed to quality, but employees are often not given a proper chance to understand concepts and principles before they should be fully implemented and in use. We think it would be a lot easier to get the employees’ support if decisions were less top-down and the personnel affected were involved. A sufficiently effective type of communication would also make a big difference. Furthermore, quality in manufacturing is emphasised, whereas quality in service, after sales and planning is not stressed. The extensive use of QC circles throughout
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companies work very well and contributes a lot to the commitment achieved.

6.4.2 Foundation for TQM

Quality Award and PDSA
Interestingly enough, we found that the Korean national award scheme was a bit different to that of its Japanese and Western counterparts. The most significant distinction was that only companies appointed a place amongst the “Top 100 in QM” were eligible to apply for the award. The “Top 100 in QM” is a new program initiated by the Industrial Advancement Administration in 1994, aimed at encouraging a “quality first” psychology to take root in all industries. Such companies have typically distinguished themselves in quality management with high levels of productivity, growth, technological developments, quality improvements and staff training.

The selection is made from among recommended companies by a screening committee, and the companies included in the “Top 100 in QM” gain recognition and numerous advantages. The criteria are divided into two parts, that is to say achievements in QM and QMS. Achievements in QM are evaluated on quantitative data, like growth in turnover, number of suggestions per employee, ratio of team organisation, defect ratio, overall efficiency of facilities, and prizes in the past five years. On the other hand, the QMS is assessed on the basis of records submitted in the application.

Only the “Top 100 in QM” companies are allowed to apply for the Korean Quality Management Award, that is similar to other national quality awards world wide. Its scope is to give recognition to companies that excel in quality and QMS, and foreign companies are encouraged to apply. The application serves as a basis for the evaluation, and an on-site assessment is also included. Winners are announced in connection with the annual National Quality Management Contest, that attracts both celebrities and media. At this event, winners of the Korean Quality Grand Award are also
announced. The Grand Award can only be awarded to companies that have already received the Quality Management Award. Even though these two awards are almost identical, some more emphasis is put on criteria concerning quality in design, quality management results and customer focus in the former.

We have some difficulties in understanding the objectives behind the “Top 100 in QM” as a qualification scheme for the two National Quality Awards. From our point of view, this could discourage main stream companies from using the Quality Award for self-assessment. On the other hand, the “Top 100 in QM” criteria contain some very interesting quantitative measurements indirectly related to quality management, that undoubtedly suit the result-oriented Korean industry. Looking at the overall award process, we found that TQM in Korea probably would thrive if both the “Top 100 in QM” scheme and the National Quality Award were integrated.

When it comes to the application of Deming’s PDSA cycle, we would categorically state that it is not applied in Korean industry. A shared perception amongst Western businessmen in Korea, was that Korean companies often failed to see the continuous improvement potential in their processes, rarely learnt from previous mistakes and wasted energy on recurring problems. In the companies working with TPM we did however observe the improvement cycle, that embraced the plan, do and study phases.
Learning organisations

It is a difficult task assessing the existence of learning organisations in Korea, since the concept is wide reaching. Our research showed that the term, learning organisations, was rarely used, and none of our companies asserted that they had made any considerable efforts in that field. What clouded our picture, however, was the extensive use of QC-circles and other means of teamwork, that contain some of learning organisation's principles. It was apparent that Korean workers were very knowledgeable, with an openness towards new technology and theories. Likewise, managers were endeavouring to lead by a good example, and were concerned with the development and well-being of their subordinates.

At the other hand, we saw many examples of Korean organisations' failure to continuously test their experiences, and such knowledge was rarely spread throughout the company. Empowerment was another area where we found the companies fell short of the learning organisation philosophy. From our point of view this is best exemplification because QC-circles and other improvement teams always needed approval from above. Another argument that we find relevant, is that Korean organisations appeared relatively poor at foreseeing problems and taking advantage of their mistakes. In brief, therefore we find it fair to conclude that learning organisations are rare in Korea, but that the industry has a significant potential in some of their existing traits.

In the field of chaos management, we discovered from our company visits, that there was a general lack of fear for change. A seemingly well-rooted attitude was that in order to catch up with the leading industrial nations Koreans had got accustomed to the habit of learning and adapting themselves. Another interesting facet that was often aired in our interviews with Scandinavian business men, was the apparent consensus to be found in Korean companies. In more metaphorical terms, their impression was that if the chairman told his organisation to jump - it jumped. They related this to the incredible authority and respect that the top men in chaebols possess, and blue collar workers' willingness to accept authority.
In this respect, we find Korean management’s decision making process relevant and distinctive, as we observed a very goal conscious and determined organisational behaviour. One of the more characteristic examples that we learnt about, was that of tycoons when deciding to bring his chaebol into a market, or industry. Then they jump in all the way, and there is no room for doubters, second-guessers, arguers or questioners. This is very much our experience, in that both goal and strategy are supreme once the decision has been taken. One significant reason is believed to be the importance of face value in the Korean culture, it is better to follow the original strategies and to reach the goal, than to make adjustments as they go along.

![Figure 23 Decision making process. Source Own.](image)

The outcome, however, was apparently that employees were involved in the problem solving process in a very slight way, and that major problems are handled by top-managers. From our point of view, an organisation-wide constructive controversy environment is hence non-existent. In this respect we find it appropriate to question to what extent problems can be attacked at their core, when only solved at the top.

**Principle Centred Leadership (PCL)**

It was a widely held perception in Korean industry that the strong chairman and owners of chaebols exercised strong leadership with a tendency to manage on the basis of principles governing the family or clan system. This was reinforced in our company visits, and the principles were recognised throughout the organisation, and had reportedly contributed immensely in the development of chaebols. Nevertheless, we found that the existing principles merely aimed at holding the organisation together and making it more goal-directed. A specific principle centred approach in TQM was not found to be rooted in Korean industry, and with a reference to QM’s history in Korea it is clear that concepts have been adopted...
to QM's history in Korea it is clear that concepts have been adopted wholeheartedly from overseas, without any focus on principles. Bearing this in mind, it is relevant to refer to a quality manager, who acknowledged that Korean industries throughout history had adopted concepts without understanding their principles and background. He did however add, that in recent years there had been a shift in the electronic and electrical industry, as those industries now first sought to understand and later to implement. Another aspect that our studies revealed was that QM in practical terms appeared to focus almost exclusively on methods, practices and quality tools, and not so much on principles. A central Industrial Advancement Administration representative explained that in the past the pace of industrial development had been so fast that the private sector only had had time to adopt the techniques, provided by Industrial Advancement Administration and Korean Standard Association.

6.4.3 Related management paradigms

Human Resource Management (HRM)
Here it may be relevant to discuss to what extent Korean companies are aware of the similarities of TQM and HRM and if any significant moves have been made that support such a philosophy. Looking at the majority of Korean chaebols, it is evident that TQM and HRM are still looked upon as two separate functions, very much due to the fact that HRM has had to attend to many more pressing matters, such as severe labour conflicts and its seniority-based nature. In recent years, however, HRM has gradually become more based on capability, and the following example reveals some of the interesting breakthroughs and trends that we came across.

After major reforms in the early 1990s, LG Electronics has earned itself a reputation amongst Koreans as their “softest” company, meaning that the company has come a long way in satisfying their employees. It has largely succeeded in establishing a constructive labour-management relationship, based on the company’s own human-respect management ideology and its focus on a management culture based on esteem for human dignity.
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Company representatives also gave the impression that only the employees can make LG Electronics a world top company. Questioning one of LG Electronics’ quality managers about the interrelation of TQM and HRM, he maintained that employee satisfaction is the basis of LG’s TQM effort. Accordingly, he referred to the fact that his own department, rather than the human resource department, nowadays was conducting employee surveys.

Total Productivity Maintenance (TPM)

In the last two years, TPM has, according to industrial representatives, been promoted as a key maintenance quality and production concept in most Korean manufacturing and construction companies. Without exceptions, all the companies we visited in the automobile and shipbuilding industries were implementing TPM. So far these companies had experienced significant rises in productivity and machine availability measures, as well as substantial reductions in machine trouble rate and mean time to repair. The visual results we would like to mention are the impressively clean shop-floors, and that every important machine had a photo of its “owner” attached to it. All our interviewees reckoned that so far TPM, in every facet, had been very successful, and that this was a sound approach to TQM.

Our sources attributed most of TPM’s popularity in Korea, to the main industry’s capital intensive plant equipment and high automation. In order to tackle the soaring demand for competence, the Korean Standard Association, the main Korean quality management training body, offers 27 different courses in TPM for both top-management, middle-management and blue-collar workers. Our studies also revealed that two supporting concepts, Industrial Engineering (IE) and Value Engineering (VE), had gained recognition in the wake of TPM’s success. These are mainly concerned with eliminating impediments that affect productivity, and reducing costs through the elimination of unnecessary functions in business activities. The importance of TPM, IE and VE is shown through
the fact that recently a national contest has been set up in these categories within the framework of the National Quality Management Citation.

We find it interesting, and to some extent typical, that the Korean industry chose the most production oriented approach towards TQM, notably TPM. With Korean companies’ sharp focus on production and processes, we also regard TPM as a sound alternative for the automobile and shipbuilding industry. Sometimes, however, we felt that too much emphasis was being put on TPM. From our point of view, there needs to be a greater awareness of the fact that TPM is only concerned with in-house issues, and does not address the interests of external customers other than certain spin-offs such as shorter lead-times and fewer defects. Likewise, regarding the employees, TPM puts a lot of emphasis on how to utilise them in the most effective way, but often fails to make sure that they are satisfied. In conclusion, we have identified a high degree of applicability and potential for TPM in mass-production Korean companies, but it should be put into a wider context, namely that of TQM.

**Process management**

One of the first characteristics that we learnt and observed, was the industry’s immense focus on the production processes. Accordingly, the location of production facilities and equipment were well aligned to the flow of material, and our Western sources all praised the industry as highly efficient mass-producers. This does not, however indicate that a process management paradigm has been adopted and implemented. Despite the immense production process focus, we found that Korean organisations were mostly functionally formalised, centralised and vertical structured. We could often identify significant barriers between departments, often stemming from poor horizontal communication.

We were nevertheless convinced that Korean companies are becoming increasingly interested in the process management concept, but so far have merely concentrated their efforts on business process re-engineering. The Korean Management Association told us that business process re-
engineering was a buzz word in 1994, but that there had not been any particularly successful cases. The main problems reportedly stemmed from a strict hierarchy and a large group of middle managers. Another negative facet was that business process re-engineering in most cases had been applied in downsizing operations, and was therefore associated with such things.

6.5 Differences in quality management between industries

Our research showed that chaebols are a lot more advanced than SMEs when it comes to implementing, using and developing quality management. SMEs are often criticised for focusing too much on producing, and not at all on the quality of the process. Western companies attribute many of the problems to SMEs’ lack of planning and immature negotiators. Related problems are addressed in a part of the five-year-plan 1992-97, mentioned in Chapter 6.1. The government is in the process of enhancing SMEs to adopt the ideas of quality management according to the Quality Management Stimulation Law, by 1997.

Implementation programmes and their approaches vary immensely from industry to industry. The electronics industry has largely extent adopted the ideas of TQM, whereas the automobile- and shipbuilding industries use TPM. QC is further very strong in shipbuilding, mostly due to the fact that representatives from the classification company and the owners carry out additional checks.

Some years ago, the quality approach was very uniform throughout the industry, and what we have seen in Korea is the result of QM's privatisation where the chaebols took the lead.
6.6 Notes and references

In addition to this chapter's many references to own observations and experience gained from our field research, it also contains some references. They are not systematically referred to, but have been used to give a thorough introduction to the issue about which we have related many of our thoughts and findings. For those interested, however, it should be mentioned that we found two issues in a publication called "Policy Series" by the Industrial Advancement Administration very useful. They contain articles and statistics on the Top 100 in QM and ISO 9000 in Korea respectively, and give a broad and thorough explanation to these issues and other closely related issues.
7. MOTIVATION FOR QUALITY IN KOREA

7.1 Why motivate for quality in Korea

We found that Korean workers were not so different from their colleagues in the Western world, in so much as quality related issues and organisational change in themselves were not perceived as a motivating factor by the majority. Korean managers therefore needed to facilitate QM and make its implementation feasible, by establishing a motivation environment and appraising performance through awards. In Korea these questions were reinforced by the relatively tense labour-management relations, that evolved during the country’s democratisation process.

7.2 Motivation environment

First of all, we would like to make it clear that there was a large emphasis on team work in Korean industry and that this affected the motivation environment in a very positive way. Professor Dahlgaard explained in our discussions that approximately 85% of Korean companies regarded motivation as the greatest motivator for quality. Team leaders that we were in contact with explained that they had the main responsibility when it came to developing and maintaining the motivating environment for the team, whereas top management was concerned with issues regarding corporate culture. Our general perception confirmed that team leaders fulfilled the role of a traditional foreman and manager regarding the motivation environment on the shop floor. With reference to the theory on motivating environment (Chapter 4.3), this means that team leaders handle the first 13 ways of motivating employees, whereas top management does not interfere any more than necessary.

Within each team, all the information necessary for executing the daily tasks was apparently provided. Detailed working instructions also existed, but were normally not consulted. Facts about a company’s goals and
mission statement were regularly seen displayed throughout the factories and offices. As far as feedback was concerned, it was continuously given by the team leader and everybody was involved in discussions regarding the team’s job and structure. LG Electronics reported that all this had proven to be both appreciated and worked well for the people involved. Smaller decisions could be made by the team without any further authorisation. It was also explained to us that the team leaders also were responsible for distributing the work assignments to the team members, and had the opportunity to let the workers rotate within the team. Often, a team’s assignments were quite similar and the alternate jobs do not differ a lot. From our interviews and observations we found out that job rotation was not frequently used and the most common way to change jobs was to be promoted and thereby get new assignments.

In some of the companies that we visited, public recognition was sometimes expressed by selecting an employee of the month and putting the person’s picture in a public place in the company. However, this was not very common, and, as far as we were concerned, probably not a very suitable way of motivating Korean workers.

Even though the team leaders apparently were doing a very good job, the total motivational environment was lagging behind on many of the areas concerning corporate culture. As already stated, such issues were the top management’s responsibility, and we think that most of the motivational environment’s shortcomings can be identified here. The communication channels appeared natural and efficient in the team, but it was more or less impossible for a worker to get a chance to speak with a high ranking manager. Apart from LG Electronics, we have neither seen nor heard about anything like an “open-door” policy, an employee hotline or an open discussion between the top management and the workers. Suggestion boxes were gaining popularity, but so far they were only working upwards, as a one way communication forum and should be radically improved. In the hierarchical Korean organisation, each layer communicated with another level directly above or underneath. Western businessmen
Quality management in Korea, and its motivating aspects

explained to us, that this meant that suggestions or questions from the bottom to the top normally had to go through all the levels in between, which made communication very slow and inefficient. We did not notice any examples where the managers clearly knew how their subordinates actually wanted to be motivated. Standardised motivation factors were used, but improvisation seemed absent. Apparently the gap between the different levels also resulted in managers being unable to respond to signals from employees about what they preferred working with.

We found that team leaders, who always naturally were present, were good at appraising their team mates, whereas managers were seemingly poor at this. Firstly, managers did not visit the shop floor regularly and, secondly, they took it for granted that the workers’ performance was always splendid. In characteristic style the former LG chairman, Koo, gave a speech to his 80,000 employees via satellite TV, upon his retirement in February 1995, where he confessed that “I never thanked you before”, and had just pushed for better performance. Reportedly, his son Bon-Moo, who took over, promised drastic changes in the group’s management and corporate strategies, and to promote a capability based HRM. Reflecting on this issue, we think that the top management has started to realised that, in the long run, it is not possible for people to be fully motivated simply by wanting to beat the Japanese in every field. For world class quality, a well functioning motivation environment must be provided.

On the managerial level, we were informed that the top managers have declared that they intend to hand over more responsibility to competent managers. In recent years Hyundai, LG, Samsung and Daewoo have all been trying to give more authority to professional managers and move the top management’s focus to more strategic concerns. In this matter we were shown LG’s new plans, which aimed at ending the Confucian-based personnel management under which seniority was important and that job performance will now be of high priority. From our point of view this shift towards capability-based HRM, will make it easier to motivate young high performers, as they will not have to miss a promotion step just because
there are old low performers around. Our experience was that seniority based promotion system encouraged a sit-and-wait attitude instead of motivating people to excel.

On our shop-floor tours we observed that the chaebol groups had a high degree of automatisation and were using modern manufacturing equipment. Many of them were producing sophisticated products and components, and were, naturally enough, among the first companies to use them. As people identify themselves with their company, state of the art production facilities make them proud and these are therefore good also from a motivational point of view. We got the impression that Hyundai, SsangYong, Daewoo and Kia workers usually had an automobile with their company’s logo on the grill.

As regards the relationship between the size of organisation and motivation, we reckon that the vast size of chaebols can be somewhat demotivating. Among Western businessmen and also many insiders, chaebol groups were seen as inflexible, and this was frustrating for some employees. Nevertheless we found that companies were good at recognising individual needs, at least materially. Examples frequently referred to in our meetings, were paid studies for children, free or subsidised housing and company automobiles. These are all commonly used to support and motivate high performers. More soft needs like, on-site day care, flexible working hours and special equipment for disabled were rarely mentioned, and probably very uncommon. Over all, we learnt that chaebol groups had made bold efforts to improve working conditions over the last years.

From our sources we gleaned that the renowned lifetime employment systems in Japan was not formally applied in Korea, but still very much practised, based on the fact that Korean workers were loyal. A chaebol recently had to lay off workers, and that was regarded as a “scandal” in Korea. A company is supposed to take care of its work force, no matter what happens. From a motivational point of view, it is favourable that the
workforce has understood that their jobs are safe as long as the company’s growth is steady, which implicitly means that workers doing a good job will be able to keep it. A Western businessman called the Korean system a “lifetime employment without guarantees”.

From our interviews and observations, it became apparent that the chaebol groups had been highly successful in creating a company profile, which people wanted to work for and identify themselves with. Besides, it is obvious that Koreans did prefer the chaebols to SMEs. Quite notably we learnt, a law has been passed preventing companies recruiting from other domestic competitors to similar positions. The shipbuilding sector has nevertheless experienced severe problems when losing workers to other shipyards, indicating that the law is not yet completely being followed. The idea to educate employees about the importance of appreciating each other’s work has recently been brought up in order to build a stronger group feeling.

Korean managers often brought to our notice the fact that they had identified a trend, that indicated a disappearing sense of loyalty and commitment amongst younger workers. From their point of view, loyalty used to be very basic to Korea, but in recent years money has had such a great impact on people that some companies have had problems keeping their information secret as well as keeping their personnel. A Scandinavian businessman said that even though people had been working in the company for years, they were prepared to leave for a SEK 100 raise a month”. Another Western enterprise had to fire a senior salesman when it was discovered that he was representing two more companies and always handed out business cards from three different companies when meeting customers. The problem shows that Western companies and SMEs in Korea sometimes are struggling with problems fostering a sense of community in the organisation so that people would want to work for it. As far as we are concerned, it was a lot harder for a Western enterprise to be successful in this field compared to domestic companies.
In our research we found the extensive internal promotion policy was a notable success in the motivating area. Once you started as a blue collar worker, the chances of getting promoted to a white collar worker were strictly limited. Besides, most companies informed us that a vast majority of their vacancies were filled through internal promotions. From our point of view, the positive side of the promote-from-within policy was that the employees did not have to worry about losing jobs to outsiders, as internal skills were recognised and favoured. The negative aspect, that we identified, was that the new, fresh ideas that could be brought into a company by outsiders were absent.

Our studies revealed that salaries were rather high in Korea and statistics showed that the workers’ earnings were competitive with some Western countries. There was, however, a huge difference between salaries for men and women. A chaebol representative revealed that the minimum salary for a man was about 2.6 times a woman’s. He explained that they traditionally had different assignments to do, and that women did not seem to care too much, since most of them were expected to leave work once they got married.

Profit sharing did not seem to be the usual practice in Korea, but the bonus system was well developed and extensively used. Here, we learnt that many companies paid 18 salaries a year as a start, with the option for high performers of getting another three salaries. As the chaebols were investing huge amounts of their turnover in capacity expansions annually, there is normally not too much profit left and there was no sense using profit sharing as a motivational tool.

7.3 Rewards

Informal rewards
The chaebol groups, informed us that each leader could typically give his members a free lunch, drinks, hair cut checks or something like that to show appreciation. Instead of encouraging individual- or group-
performance, we perceived it as a so-called jelly-bean reward, in so much as high performers were not treated differently from low performers. Occasionally, we saw that informal rewards were used to motivate group performance, for instance by a team event or recognition lunch, but top management tended to stick to its general incentive-scheme. A common explanation was that managers were there to harmonise the groups and should not interfere with the normal order regarding formal awards. Others explained this phenomenon with the fact that the conservative Korean managers lacked initiative.

It should be noted that there we identified a large difference in the utilisation of informal rewards for blue- and white-collar workers. Many managers got subsidised apartments, cheap loans, extra vacations and individual bonuses. We also found that smaller companies, that normally did not pay as well as the chaebols, more commonly used drinking-nights, dinners, hiking trips, bowling and parties as rewards for individuals, groups or the entire company. In conclusion it could be seen that managers used informal rewards extensively, but not to its full potential.

**Awards for specific achievements and activities**

In our company visits, people frequently referred to a myriad of existing internal and external competitions, that were important for motivation in the quality area. As an example, Hyundai Heavy Industries, selected the best team, best worker, best leader and the 10 best welders every month, SsangYong Motors chose 30-50 excellent workers annually and so on. Reportedly, the ceremonies were completely devoted to giving recognition and honour, and the employees sometimes got their photos on the wall in the entrance. With the exception of awarding good suggestions from employees, we found that money, for once, played a very modest role. Individual attendance was awarded through extra vacations, regulated by Korean legislation. For every month without any absences, one extra day’s vacation was added. Awards for productivity, production quality or sales goals are not commonly the case.
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**Formal awards**

We found that formal awards were used to some extent, especially when it came to compulsory annual bonuses, and that were a part of the Korean salary system. Most of the bonus was reportedly not related to performance and assignment execution. A small part of it could be regarded as a bonus for high performers. The chaebol groups normally offered their employees discounts on company products and company resorts. We found that training and education were the most frequently used formal awards in Korea. As an example, SsangYong was one of the chaebol groups that filed and followed up the education and training provided to the entire staff on a yearly basis.

Company anniversaries were often celebrated, for instance by extra holidays, parties, extra bonuses, articles and speeches. Representatives gave us the impression, that chaebol groups were very good at giving their employees reasons to be proud of the company, which, from a motivational point of view, is excellent. This trait enhanced the employees’ commitment by asserting that they were the best, and also that they were contributing to the society. As already discussed, the new generation was however, a bit harder to keep loyal than just by ensuring a feeling of belonging, as they are more materialistic and demand higher compensation for loyalty. Health care was to some extent provided by the company, in so much as they pay an insurance, covering accidents at work, for the employees. As the chaebol groups were mainly family-owned, shares were never distributed to the employees.
PART IV

CONCLUSIONS AND REFLECTIONS.

In this part we draw some conclusions from our project, and try to outline the ways Scandinavian and Korean industry can learn from each other. There are also some reflections on our research, regarding methodology and practicalities.
8. CONCLUSIONS

8.1 Quality management in Korea and its motivating aspects

We would like to start by rejecting the myth that collapsed department stores and bridges are characteristic of quality management in Korean industry. After having studied Korean industry intensively for five months, we find that such incidents are one-offs, specifically in the construction industry and an unfortunate side effect of a development rate that has outpaced any Western country. Except for the department store accident, we tend to think that the Western media blows Korean cases up out of proportion, because it reaffirms Westerners superior attitude towards such successful countries.

Reflecting on our overall impressions from our research in the shipbuilding, automobile and electronics industries, we are still very impressed by the extensiveness and thoroughness of the quality management movement that we observed. In an historical perspective, we reckon that quality management has partly facilitated Korea’s rapid growth, since it has ensured that the ever increasing number of products rolling off the lines have been of adequate quality. Today, however, this is not good enough, and the industry is fully aware of this. Quality management in Korea is hence currently standing at one of the crucial cross-roads, where they can put the habit of copying turn-key solutions from overseas and extreme product focus behind them.

Even though the QC movement has lost some momentum, it still holds a key position in the industry, and we found that quality is still very much controlled into products. However, QMS added a systematic and broader touch to quality management in the country, and we predict that the strong emphasis on this type of quality assurance management will grow. All the companies we visited had also adopted TQM or TPM, two quality management concepts with a more proactive nature. As opposed to
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previous phases some of the industries are now seeking first to understand and then adopt as well as adapt TQM or TPM. We think that this shift in approach towards learning from others, is the key to a more genuine and adapted quality management concept in Korea. In our evaluation of TQM's principles, we found the industry to be strong in top management commitment and production process focus. However, we identified some shortcomings related to the principles of customer focus, basing decisions on facts and continuous improvements.

Regarding motivation for total quality, we found that Korean workers are not so much involved in quality related work, but management is now succeeding in enhancing everybody's awareness, in essence through materialistic incentives. As a result companies have to expand their incentives continuously, and our question is whether or not it would be wiser to invest some more managerial efforts into enhancing a more deeply rooted individual motivation. Moreover, we identified that team leaders were currently holding the key responsibility for motivating employees in the total quality area. Here we found that in general managers were too distant and defensive, and they did not engage themselves wholeheartedly in motivating employees for total quality.

In conclusion we think that Korea deserves respect and recognition for its achievements in the quality management area. They are still expanding heavily, and quality management will increase in importance as they go along. As most western businessmen usually told us: “What they do not have today, they will have tomorrow.”

8.2 What can Scandinavia learn

In our research we found three areas in which Scandinavian industry can learn from Korean industry, namely the employees' identification with employer, TPM and goal consciousness. Firstly, we were impressed by the chaebols' way of making their employees proud of their company. From our viewpoint it was clear that the staff identified themselves with the
employer, a perception that became increasingly apparent with company size and reputation. As examples, LG and Samsung employees wore their respective pins with pride, and Hyundai staff looked more than willing to take a stroll in the city centre wearing their company jacket. We found Koreans’ loyalty towards the company, to be even deeper rooted, in that employees were prepared to defend their company’s business matters in almost any circumstances. This unison feeling and behaviour was also identified in the workers’ family, who took great pride in their son’s, daughter’s, wife’s, husband’s, father’s or mother’s employer and career. We find that this high degree of basic commitment is less evident in Scandinavia, in that Scandinavians often are less enthusiastic about their employer, and the top management is commonly the company’s face towards society.

Secondly, we suggest that TPM should be adopted by the majority of Scandinavia’s manufacturing and construction companies. All major Korean auto-makers and shipyards are currently implementing TPM, and have enjoyed significant gains from it. We are confident that Scandinavian industry could learn a lot from their experiences in adopting and implementing this Japanese concept. In their work with TQM we think that many Scandinavian companies would appreciate this more practical approach towards becoming a total quality organisation. We would however like to remind both Scandinavian and Korean industry that TPM is an internal concept and that it only implicitly focuses on external customers. Regarding the adoption of yet another Japanese concept, TPM distinguishes itself through its applicability and set of clearly stated principles.

Thirdly, we were impressed by the high degree of efficiency and goal consciousness in the Korean decision making process. They make very few adjustments once underway, and seem to reach their original goals no matter what. This is valid for any business area, and we regard the financial area as an outstanding example behind Korea’s success. From our point of view, the cascade of resistance and adjustments attached to major
financial projects in Scandinavia, is inferior to the goal determined behaviour of Korean companies dealing with similar projects. One could rightly argue that chaebols have the financial capabilities to do this, but our emphasis is mainly on how companies achieve their goal. Often we Scandinavians do not have the capability to respect a decision and endeavour to influence the path towards the goal so much that the company ends up somewhere in-between the original goal and that of its opponents.

**8.3 What can Korea learn**

It is a mountainous task to make suggestions for areas, where Korea can learn from Scandinavia, because it is so easy to address deeply rooted culture aspects that we do not fully understand. Bearing this in mind, we do however feel that Korea should look to Scandinavia in areas like service quality, human resource management and employee involvement. Firstly, we would like to return to the Korean industries' problems with service quality. In this area Scandinavian companies are recognised for its selling of a total concept, in which the delivery of a product only is an event in a customer focused process starting from the initial customer contact and following the product throughout its life. The product-guarantee might not be life-long, but the company still feels responsibility and treats its customers accordingly. In brief we think that Korean companies concentrate too much on the core product, and fall short in providing associated services that especially customers in industrial countries are accustomed to and expect.

Secondly, we still reckon that Korea could learn a lot from Scandinavia in capability based HRM. In fact, important representative organisations such as the Korea Employers Federation and the Federation of Korean Trade Unions both informed us that they had contacts in their Scandinavian sister organisations and wanted to learn from industrial relations in Scandinavia. Representatives from the Korea Employers Federation also acknowledge that the Korean seniority system has some weaknesses regarding flexibility.
and capability. We think that the capability based HRM found in Scandinavian companies strongly influences organisational structure and behaviour. As opposed to a seniority approach, capability based HRM tends to result in flatter organisations with less hierarchy, and it is evidently easier to place skillful and capable candidates in the right positions. Instead of merely looking abroad, the more conservative Korean companies, could also learn from companies like LG and Samsung that both have come a long way in reforming their HRM philosophy. We find it likely that such a learning process will start soon, but that Scandinavian industry still could act as a role-model.

Thirdly, we reckon that Korean industry needs to increase its involvement of employees in quality related work, and that they should facilitate this transition through empowerment and communication. Our perception of Scandinavian companies is that they have identified the interrelationships between involvement, empowerment and communication, and apply them in a more balanced way than their Korean counterparts. Regarding communication, one significant difference between the two parties is that Scandinavian management gives employees the opportunity to air their views with confidence. In Korea, we found that communication was merely directed from above, and employees dared not speak up, unless they were certain that they held a common thought. Regarding empowerment Korea managers typically hold the power, and employees execute the tasks assigned. In comparison to Scandinavian firms, we think that these aspects of the Korean management style are hampering the involvement of employees in quality management. A relevant example here, is Korean QC circles that lack authority, and need to have improvement suggestions approved by a manager. On the contrary, in Scandinavia there is a trend towards autonomous work teams.

Our two latter suggestions are both concerned with managerial style, and differences are obvious between the two parties. The Scandinavian management style is renowned worldwide for its level of democracy,
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involvement, flat structure and flexibility. These are all areas, in which we believe that the Korean industry ultimately will learn and transform.

8.4 Advice on adoption techniques

Our research in Australia convinced us that Scandinavia, Korea and most other industrialised countries can learn a lot from Australia when it comes to techniques for adopting overseas quality management concepts. In an interview, Irwine, one of Australia for Quality’s founders, explained that in the early 1980s his organisation started studying Japanese quality management, or CWQC. The underlying reason was that Australian industry was lagging very much behind Japan and the West, and hoped to get some fast remedial methods or concepts from overseas. However, the group concluded that CWQC would not work in Australia, very much based on the fact that Australian business leaders did not fancy statistics. Some years later they reconsidered their concept-conscious approach, and found that in the case of Japanese quality management there had to be more to it, than merely CWQC. Australia for Quality thought that their country was much better off with something that focused on leadership and culture, and they hence started analysing which Japanese CWQC principles and practices suited Australia. One of the outcomes, was the Australian Quality Award, simultaneously as the Malcolm Baldrige National Quality Award was brought in. In our discussion with Dr. Fisher, he emphasised that Australia had contributed significantly to the development and introduction of TQM. Irwine also explained in our interview, that the Australian Quality Award was genuine, in that leadership and culture were addressed, with less emphasis on statistics. Irwine and his fellows looked upon the Award as a model, and told the industry to worry less about Japan, because the criteria contained a set of principles that would work in Australia.

In Australian industry, we found CSR and Sydney Electricity to be two fine examples of companies that decided to apply the Australian Quality Award model and its principles, starting with better customer focus and
8. Conclusions

process improvements. In our meetings with the two companies, it became clear that they were fairly similar cases. In their respective self-assessments vis-à-vis the criteria, they found that they had to become more responsive to employees’ and customers’ needs. The two enterprises’ respective top management groups then went overseas, just to the USA, where they visited recognised quality companies. They came back very much inspired and committed, and from there total quality soon became a corporate culture. Sydney Electricity won the Australian Quality Award only two years after having started from scratch.

From our point of view this clearly reveals that quality management principles can easily cross over country borders, whereas methods, concepts and practises are more difficult to adopt. This does not mean that we can only learn principles, but we should learn principles first, and then adopt or develop the methods needed in order to align a quality management programme to principles. In short, principles should be primary to methods when learning from other countries. We think that the implicit consequence is that companies or industries, by following our advice, will learn with an intention of really understanding, instead of copying concepts that appears as quick fix solutions.
9. REFLECTIONS ON OUR RESEARCH

9.1 Reflections on methodology

The mixture of literature and fieldwork that we built the research on, feels satisfying and is strongly recommended. Without the strong interaction with Korean and Western industries in Korea, it would not have been possible to come up with the findings in this report. We found the question scheme as a good help, as we managed to get a similar structure on all interviews.

In the early stages of our project we tried to use a questionnaire, in order to collect some data on trends and opinions. The outcome did not indicate any significant or relevant trends, and we hence decided to neglect the questionnaires. Nevertheless, we reckon that a good questionnaire would have added value to our survey.

Another approach, that we find interesting and attractive, would have been to work in a Korean company as part of the project. This would probably have given us a more thorough understanding of daily routines. Besides, such an approach would probably have allowed a closer contact with blue collar workers. Prior to our departure, however, we did not consider this possibility as a realistic approach, since our contacts were scarce.

9.2 Advice on practicalities regarding this type of research

After a project, there are always a lot of things that you would do differently if you were to do a similar job. This probably especially applies when an assignment is carried out in a foreign, unfamiliar culture. In the spring of 1995, we were putting a lot of emphasis on arranging the entire program for our five months’ visit to Korea, by telefax. Even though this sounds very naive today, some companies gave us an instant reply and
offered co-operation for up to four weeks. Most of them did, however, not even react.

Available sources in Sweden and our own previous experience from the Far East, told us to be extremely polite and cautious when approaching Korean companies and authorities. If they lose face, they are gone forever, was our strategy. As we hardly got any answers from Korean companies before our departure, we had to leave for Korea without a full schedule.

In order to get a quick overview of the quality situation and to have time to contact more companies, we had decided to meet Western companies during our first weeks in Korea. This was a fortunate decision, as we got an excellent introduction to the country by IKEA and DNV. When calling the people at Korean companies, recommended by the Norwegian and Swedish embassies, they were very hard to get hold of. Moreover, they did rarely return our requests and we had to take the initiative repeatedly. The best approach however, was to get introductory meetings with the PR-departments at the chaebols. They were fluent in English, very helpful and therefore served as excellent door-openers.

At one of our meetings, we were told that we had to be more aggressive and demanding when asking for help or a meeting. Thinking about this we rephrased our requests as giving them the opportunity to influence the outcome of the report, instead of helping us find interesting aspects. We further said that if you do not have time, we will ask somebody else. Suddenly we were able to arrange most of the meetings we needed for the project.

The conclusion is that, from the beginning, we should have

- insisted that we would call back, instead of waiting for a reply
- talked to the PR-departments directly
- been more demanding in our requests
From our point of view, it would have been worthwhile to put some more emphasis on establishing contact with the chaebols' subsidiaries in Scandinavia. Our study of LG Electronics was, largely, already booked by LG Electronics in Sweden, and as many Korean companies are growing in our region, there will probably be more offices with the authority and interest to support research soon.

It must be mentioned that we had no difficulties in arranging meetings with Western companies. They were extremely helpful, and their valuable input was of great importance to the report.

We would also like to emphasise the importance of being backed-up by a university in the host country. Firstly, access to valuable information sources, like libraries, students and professors, is very helpful. Secondly, by representing a Korean university, it is easier to get respect, and thereby co-operation, in industry.

Our comparison studies in Japan and Taiwan helped us to put Korea in perspective, and were most helpful in the in-depth study. The understanding of development and influence in the region was another result of the trips.

Finally, we definitely chose the right industries. Some others could have been added in terms of advancement and performance, but from a Scandinavian competitive point of view, we studied the best chaebols.
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UNIVERSITY OF TECHNOLOGY, SYDNEY
UNIVERSITY OF TECHNOLOGY, SYDNEY
VOLVO KOREA LTD., SEOUL
APPENDIX A

Hyundai Heavy Industries Company., Ltd.
Hyundai Heavy Industries Company., Ltd (HHI) had its groundbreaking ceremony in March 1992. Hyundai shipyard, located at Mipo Bay, Ulsan, on the south-eastern coast of Korea, is spread over a 7.2 million square meters area with its main production plants and the auxiliary facilities covering over 1.4 million square meters.

Since its successful construction of two 260,000 DWT Very Large Crude Carriers (supertanker) in 1974, HHI has delivered more than 6,000 vessels to customers all over the world. The ship types that have been built encompass almost everything from conventional bulk carriers, crude/product oil tankers, container ships to highly sophisticated LNG/LPG carriers, chemical tankers, Ro-Ro ships and semi-submersible offshore drilling rigs.

HHI has diversified its business activities from shipbuilding to offshore & engineering, engine & machinery, industrial plant, electrical engineering, construction equipment and construction fields.

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We made two visits to Hyundai Heavy Industries. The first visit was a 3 day study of the company, in close co-operation with DNV Classification, Ulsan. Here we had lengthy interviews with DNV’s district manager at the yard. Additionally, meetings with Hyundai Heavy Industries’ assistant quality manger, and representatives from Smedvig, a Norwegian shipping company, were carried out. The second visit was a tour arranged by
Hyundai’s PR-department, and included a brief presentation of the yard and a yard-tour.

**Daewoo Heavy Industries LTD.**

Since 1980 when the Daewoo Okpo Shipyard commenced operations, it has earned a solid reputation and confidence from clients all over the world. Daewoo has built and delivered more than 170 large cargo ships including VLCCs, 26 naval ships including submarines, 12 offshore drilling rigs and 20 units of offshore platform as well as several kinds of industrial plants and heavy machinery.

It has also been engaged in various ship-repairs and conversion business, and is renowned for its accumulated skill, expert engineers and efficient services. By the merger and change of name to Daewoo Heavy Industries Ltd. in October 1994, the business of shipbuilding and off-shore constructions will be continued in a rather expanded scale and with enhanced competitiveness and capability to serve clients.

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Our research at Daewoo Heavy Industries lasted for nearly one week, and was arranged for by DNV Classification, Koje. DNV’s district manager introduced us to the yard and its quality management system. Two surveyors from the company took us on extensive yard tours, including a meeting with representatives from the yard’s union. A meeting with quality assurance manager and his deputy was also undertaken. It should also be noted that these visits were followed by a 4 days visit to DNV Classification, Pusan, where a number of representatives imparted their comprehensive knowledge.
Samsung Heavy Industries Co. Ltd.

Since 1977, when it entered the shipbuilding business, Samsung Heavy Industries (SHI) has been successfully meeting shipowners’ challenging demands for tankers, OBOs, product carriers, bulk carriers, container vessels, and oil chemical tankers. As a result, SHI is now recognised by the world’s leading shipowners as a builder of quality vessels. In particular, the company has established its reputation as a leader in building container vessels for the world’s leading shipping companies.

Such world-wide recognition can be attributed to SHI’s dedication to upgrading its shipbuilding technology, in design and production automation. To be able to satisfy the changing needs of the world’s shipowners, SHI will continue to develop technology and automate production. In particular the company will concentrate on the construction of high value added, sophisticated vessels such as gas carriers and passenger automobile ferries.

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Hyundai Motor Company

Founded in 1967, Hyundai Motor Company (HMC) has grown to be Korea’s largest auto-maker, and has pioneered the development of the industry as a whole. HMC began to export automobiles in 1976, beginning with PONY. Since then the company has been relentless in introducing independent and highly acclaimed models, including the Scoupe, Sonata, Elantra, Accent, Marcia and Avante.

HMC’s Ulsan Plant is the world’s largest single auto production facility. More than 1.35 million vehicles are manufactured there yearly, and HMC are investing heavily into new plants in Korea and worldwide. By the year 2000, the company is estimated to have a manufacturing capacity of over 2
million automobiles per annum. In doing so, the company will join the ranks of the world’s top ten auto-makers.

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Our co-operation with Hyundai Motors included a visit to the company’s plant in Ulsan, and a meeting at the headquarters in Seoul. In the latter meetings we met representatives from the PR department, who introduced us to the company and provided us with general information on the company’s quality management philosophy and system. The plant visit included a presentations by corporate representatives and a comprehensive tour.

**Daewoo Motor Company**

In 1965 Shinjin Motor Co., later to be given the name Daewoo Motor Co., was established. In 1965 this company made Korea’s first sedans, in a technical co-operation with Toyota. Following Toyota’s withdrawal from Korea, Daewoo entered a joint venture with GM, thus building a firm basis from which to make worldwide expansions. The joint venture with GM was terminated in 1992, and Daewoo Motor proceeded with its independent technology and system.

With an annual production of 500,000 units, Daewoo was ranked 3rd in 1994, trailing Hyundai and Kia. However, with its strong globalisation strategies, it is expected that its production level will increase substantially before the turn of the millennium. New manufacturing plants are set up in Algeria, China, Indonesia, Iran, Philippines, Romania, Uzbekistan and Vietnam. Chairman Kim’s philosophy is to go into developing countries, and capture vast market shares. Not many other auto-makers in the world are interested in this type of high-risk markets, and Kim firmly believes that the dominant market shares will be more and more beneficial as these countries develop.
Regarding our co-operation with Daewoo Motor, we firstly visited the Pupyong Plant, on a study trip together with other participants in an international quality symposium in Seoul. Here the quality manager gave a presentation, and showed the participants around in the production. On a later occasion, we arranged a meeting with the quality assurance manager, followed by meetings with representatives from the PR department.

**LG Electronics.**
The company was established in Korea as a manufacturer of electric and electronic products under the name Goldstar Co, in 1958. In 1995, Goldstar Co changed its corporate name to LG Electronics as part of the LG Group’s globalisation efforts. Since its establishment, the company has been a leader in the development of Korean electronics industry.

The company became the first producer of transistor radios in Korea in 1959. Since then, LG Electronics has grown to be the domestic market leader in consumer electronics fields, taking a 41.6% market share in 1994. In 1982, LG Electronics developed Korea’s first microcomputer and video camera, and today a wide range of advanced electronics products like compact disc players, VCRs, camcorders, CD-ROM drives and thin film transistor liquid crystal displays (TFT-LCD) are the company’s major business lines.

Following the establishment of its first overseas sales subsidiary in the United States in 1978, the company has devoted itself to expanding in business scope. Consumers from 150 countries are now using Goldstar products, and the company’s exports soared at US$ 3.700m last year.

<table>
<thead>
<tr>
<th></th>
<th>1990</th>
<th>1994</th>
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<tbody>
<tr>
<td>Sales</td>
<td>US$ 3.801m</td>
<td>US$ 6.559m</td>
</tr>
<tr>
<td>Gross income</td>
<td>US$ 8.007m</td>
<td>US$ 1.445m</td>
</tr>
<tr>
<td>Total assets</td>
<td>US$ 3.330m</td>
<td>US$ 5.641m</td>
</tr>
<tr>
<td>Shareholders’ equity ratio</td>
<td>22.5</td>
<td>28.2</td>
</tr>
<tr>
<td>Employees</td>
<td></td>
<td>14.000</td>
</tr>
</tbody>
</table>
We spent one week at LG Electronics, including over 10 meetings with representatives from the quality and human resource related departments. Most notably we were introduced to the company’s quality management concept by the deputy general manager of a production plant, and later got the opportunity to discuss it in detail with him. In the human resource management area we met assistant managers from the global human resources development team and also labour relations culture institute. Besides, we had a meeting with the executive director of LG Electronics’ learning centre and were also introduced to this part of the organisation. A visit to the Kumi Plant was further included, with an extensive tour at the VCR line. The visit was arranged by the PR department, and we had the opportunity to meet the department’s senior general manager twice.
TIME SCHEDULE

<table>
<thead>
<tr>
<th>Assignment / Week</th>
<th>Literature</th>
<th>The United States</th>
<th>Scandinavian companies</th>
<th>Shipbuilding industry</th>
<th>Automobile industry</th>
<th>Electronics industry</th>
<th>Governmental bodies</th>
<th>Trade organisations</th>
<th>Quality conferences</th>
<th>Taiwan</th>
<th>Japan</th>
<th>Australia</th>
<th>Report writing</th>
</tr>
</thead>
<tbody>
<tr>
<td>24 25 26 27 28 29 30 31 32 33 34 35 36 37 38 39 40 41 42 43 44 45 46 47 48 49 50</td>
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</tbody>
</table>
July in brief.

We arrived in Seoul on July 4. During the first week we visited IKEA Trading where they are currently working on a quality assurance management system. We will monitor the implementation process and also meet some of their suppliers. Further on we visited the Norwegians- and the Swedish embassy, where they presented valuable and useful information on Korean quality and economy.

The following week our co-operation with Seoul National University was initiated, and our supervisor, professor Sung H. Park, presented some of his ideas and introduced us to some of his PhD students. DNV Certification, Det Norske Veritas, presented the role of quality assurance systems in Korea to us. We even attended an ISO-certification ceremony of one of their clients, Tong Yang Cement Corp.

One of the project's main areas, shipbuilding, was covered in close co-operation with DNV Classification in Pasan. They arranged our visits to the Daewoo-, Samsung- and Hyundai shipyards, and introduced us to the shipyards' quality departments. Meetings with a labour union, Norwegian shipowners and Korean Shipbuilding Association have also been undertaken.

After our return to Seoul, we had an introductory meeting with ABB, that is working in close co-operation with Hyundai Precision & Industry on the production of subway trains. Further on, we have initiated contact with Siemens, that has experiences from sales and joint ventures in Korea. Conclusively we have studied relevant books and articles concerning motivation, Korean quality management and comparison studies between Korea and Japan.

Coming up this month.

♦ Quality conference, ICSQP '95
♦ Professor Bergman, our supervisor at University of Linköping, visits Seoul
♦ Preliminary Report to be completed
♦ Professor Park, Seoul National University
♦ Norwegian Trade Council
... we are also working on our visits to the car- and electronic industries in September and October.

Acquired areas of experiences.

♦ Basic understanding of motivation factors in quality management
♦ Korean shipbuilding, both quality management and production
♦ Working conditions and salaries
♦ The role of quality assurance systems
♦ Korean economy
♦ Structure and organisation of Korean conglomerates, named chaebols

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Fax: + 82 2 795 6913
(For practical reasons it is most convenient to contact us through IKEA's address and telefax.)
August in brief.

During the two first weeks we spent a lot of time on literature studies, and completing the report’s theoretical framework. In order to gain insight into Korea’s history, culture and industrialisation, we joined an international study trip for students embracing visits to Kyung-ju, the ancient capital of the Shilla empire, as well as Taejon where the Expo’93 pavilion is located. Rewarding discussions on quality management issues with students representing the entire Asia-Pacific region were also undertaken during this trip.

The following week we attended the “International Conference on Statistical Methods and Statistical Computing for Quality and Productivity Improvement 1995” (ICSQP ’95). The seminars were mainly concerned with statistical topics, but the agenda also comprised some total quality management issues. We got the opportunity to get some feedback on our project’s main areas from Professor Dahlgaard, Denmark, who has undertaken a cultural comparative study in the field of quality management. Moreover, we spent some time discussing the project with our professor and supervisor from Sweden, Bo Bergman, who was a guest speaker at the conference. Additionally we also got the chance to meet and listen to Dr. Taguchi, Japan, world-wide known for his quality models.

In the latter part of August we have concentrated our research to the car-manufacturing industry. To this end we have visited Daewoo Motor Company’s plant outside Seoul, and Hyundai Motor Company’s plant is Ulsan. We have also had meeting at these companies’ respective headquarters in Seoul, where arrangements for further studies have been finalised. Finally we have spent some time on initiating a quality project at IKEA Trading Ltd in Seoul, in which we are to gain practical experience when it comes to motivating aspects of quality management.

Coming up this month.

♦ Hyundai Motor Company, in-dept studies of their quality- and human resource management.
♦ Daewoo Motor Company, in-dept studies of their quality- and human resource management
♦ Seoul National University, quality management seminar
♦ Brief introductory meetings with representatives from the electronic industry
♦ Guest speakers at Swedish Businessmen’s dinner
♦ Governmental labour- and industrial organisations
♦ Brief comparison study in Japan

Acquired areas of experiences.

♦ Korea’s history, culture and industrialisation
♦ Basic understanding of cultures’ impact on quality management
♦ Korean car-manufacturing, both quality management and production
♦ How to initiate and run a quality project in a foreign culture

Fredrik Johansson       Dag Kroslid
September in brief.
The first week was partly spent at Daewoo, where we carried out an in-dept study at their car-manufacturing plant in Inchon, a Seoul suburb. As well as meeting management representatives, we made thorough observations of the assembly line, final inspection and test track.

As guest-speakers at the monthly Swedish Businessmen's Dinner, we got the opportunity to present some of our research's findings and have them evaluated in the subsequent discussion. Further on, this week embraced a quality assurance seminar at IKEA Trading, and an introductory meeting with LG, Lucky Goldstar, in which the schedule for our co-operation with them in November was finalised.

One week was then spent in Taiwan, where we undertook a comparison study on Taiwanese quality management. Meetings with the Swedish Trade Council, IKEA Trading Taiwan, Chamt & Co (a typical Taiwanese trading and manufacturing company) and Academia Sinica (a governmental research institute) made up the core of this study.

During the last week we have devoted a lot of our time scheduling numerous meetings in October. Additionally we visited IAA, Industrial Advancement Administration, the governmental body responsible for developing and enhancing the Korean quality management movement.

Throughout the month we have been spending a considerable amount of time reading literature concerning motivation, as well as writing on our report's overview and analysis of Korean quality management.

Coming up this month.
♦ Introductory meeting with Samsung Electronics
♦ Ssangyong Business Group
♦ Korean Employers' Federation
♦ Korean Management Association
♦ Western companies; ABB, Ericsson, Sandvik, Volvo
♦ Hyundai Motor Company, in-dept studies of their quality- and human resource management.
♦ Seoul National University, quality management seminar
♦ Japan, brief comparison study

Acquired areas of experiences.
♦ The role of Total Productivity Maintenance, TPM, in Korean industry
♦ Taiwan's industry and its structure
♦ Trends and future of Korean quality management
♦ The significance of principle centred management and how it affects motivation
♦ Running a quality seminar in a foreign culture

Fredrik Johansson
Dag Kroslid
Questions to managers in Korean and Western companies.

Korean quality, A
1. What is Korean quality?
2. Where does it come from and how did it develop?
3. From where were quality philosophies and techniques adopted?

Quality management, B
1. Describe how top management personally is involved and take initiatives in the company's quality management?
2. How is a culture for customer focus and continuous improvement created?
3. How is management on all levels involved and effected by the common quality values and visions in the organisation?
4. Describe how data about customer satisfaction, product and processes are analysed and used?
5. How are the corporate quality goals and visions set?
6. Who sets them, and does the workforce follow them devotedly no matter what?
7. How does management follow up plans, procedures and decisions?
8. How does management look upon their employees with regards to training and personal development?
9. How are the employees a part of the continuous improvement and how are their contributions enhanced?
10. How is a good quality performance appraised?
11. How are the companies' relationship with their suppliers, and is it improved on a continuous basis?
12. How is the environmental policy?
13. Is Korean management neglecting the workers' equipment and safety, based on it's believe in company spirit, discipline and loyalty?
14. Role of management, power, authorities and responsibilities?
15. Is planning an important part of Korean management’s tasks?
16. How is the 2 way communication with regard to quality management?
17. What quality tools are being used, and what part does they play in the overall quality concept?
18. Quality Function Deployment, is it applied?
19. Is benchmarking commonly applied in Korean companies and how is it carried out?
20. Quality circles?
21. Process management (reengineering)?
22. Customer focus?

Quality Assurance, C
1. What role does QMS play in Korea?
2. Do you think that the certification activities will increase, like in the West?
3. What QMS standards are used?
4. What are the most common problems with respect to ISO-9000 certification?
5. What cultural differences have you experienced throughout your co-operation with Korean companies?
6. QAMS VS. TQM in Korea?
Organisation and organisational behaviour, D

1. What is the structure of the typical Korean organisation, and how many management levels does it have?
2. What role do the unions play in Korean industry, and how are they connected to the corporation?
3. Organisational structure?
4. Is the organisational structure efficient?
5. Have there been any changes lately, reengineering, future?

Motivation, E

1. How do they appraise their employees’ quality performances?
2. Wages, appraisals?
3. How does the management motivate continuous quality efforts and improvements by the employees?
4. To what extent is the Korean success based upon Koreans natural eagerness and self esteem?
5. Korean management creates a positive image of project/work in order to motivate employees, rather than emphasising negative aspects?
6. In what way does loyalty affect quality in Korean companies?
7. To what extent is lifetime employment used in Korea?

Comparisons, F

1. Strengths and weaknesses compared with the Scandinavian quality concept?
2. From what particular areas could Western companies prosper if they were to adapt Korean concepts?
3. What are the differences and similarities between the Korean and the Japanese quality concepts?

Miscellaneous, G

1. Are Korean companies good at segmenting their export markets and satisfy them individually?
2. What role does the government play in Korean industry, and how is it connected to the corporation?
3. Soft loans, subsidies, import/export restrictions, open market in Korea?
4. Are Korean manufacturing plants abroad managed in a Korean way?
5. What characterises a Korean executive, background and education?
6. Korean quality history, future?
Quality Management in Korea, and its Motivating Aspects.

This report gives an outline of our survey into Quality Management in Korea and how managers motivate employees to work for quality. Besides, the research environment is described, and it aims to give the reader an understanding of Korean industry, economics and culture.

Korea, one of the world’s fastest growing economies, has over the last years attracted media’s focus world-wide for its infamous explosions in subway stations and ships, as well as a collapsed department store and bridges. Our survey revealed that these accidents are not representative for quality management in Korea, they are domestic one-offs and stem from the rapid expansions. In fact, we found that Scandinavian companies could learn from Korean counterparts in some quality management areas, and vice versa.

The project was carried out in connection with our thesis, the final phase of our M.Sc. degree in Industrial Engineering and Management, at Linköping University in Sweden.

En satsning på kvalitet ingick redan i de första planerna för Tekniska Högskolan i Linköping. Utbildning i kvalitetsstyrning har givits sedan 1976. I samband med utnämningen av Bo Bergman till landets första professur inom kvalitets-teknik 1983, inleddes också forskarutbildning inom avdelningen för kvalitetsteknik. Arbetet på kvalitetsteknik är indelat i sju programområden:

- Processutveckling
- Ledarskap
- Systemtillförlitlighet och säkerhet
- Komplexa system
- Produktutveckling
- Programvarukvalitet
- Industriell försöksplanering och robust konstruktion

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