RELATIONSHIP MARKETING AND ORGANISATIONAL CULTURE IN THE SHIPBUILDING INDUSTRY

- A COMPARATIVE ANALYSIS OF THE REPUBLIC OF KOREA, JAPAN AND THE PEOPLE'S REPUBLIC OF CHINA -

by

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APPROVAL PAGE

This dissertation which is an original work undertaken by Ian George Pringle in partial fulfillment of the requirements for the degree of Doctor of Philosophy in Business Administration is in accordance with the regulations governing the preparation and presentation of dissertation at the Graduate School in Korea Maritime University, Republic of Korea

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Abstract

The purpose of this thesis is for industry insiders to identify in their own words, the major relationship marketing issues confronting the maturity of the shipbuilding industry in North East Asia.

The research design consisted of an open ended questionnaire (Appendix 2) based on Larson's research (1994) to identify the major issues in the shipbuilding industry and this was then further refined in a benchmarking questionnaire comparing relationship marketing issues for the shipbuilding industry in the Republic of Korea, Japan and the People's Republic of China.

36 shipbuying agents from the following countries were surveyed; Denmark (5), France (4), Germany (5), Nigeria (1), Norway (6), Saudi Arabia (1), Spain (1), the Netherlands (1), United Kingdom (10) and the USA (2).

Following Lawrence (1977) a model was built to interpret relationship marketing behaviour with an intervening theory. In this paper, the intervening theory was the different organizational cultures of the shipbuilding industry clusters in the Republic of Korea, Japan and the People's Republic of China. Using MANOVA, evidence was found that supports the hypothesis that organizational culture affects relationship marketing outcomes.

Evidence was also found to support the hypothesis that higher levels of customer service have higher levels of customer commitment.

Although Japan and Korea did not have significant differences in customer service levels, Korea was perceived by foreign shipbuyers as providing superior customer service compared to China.

This has led to the three shipbuilding industry clusters developing different relationship marketing strategies in response to their competitive environment and their resource constraints.

Although, the Korean and Japanese shipbuilding industries have a similar competitive environment of supplying foreign shipbuyers they have a different set of human resources following the divestment of experienced Japanese staff in the last two decades.

The Japanese Shipbuilding Industry Cluster has moved into a strategy of upstream integration due to its loss, through retrenchments, of substantial numbers of engineers.

Chinese shipbuilders have both a different competitive environment, mostly supplying the domestic Chinese buyers and a different set of human resources, lacking an experienced labour force.

Consequently, for Chinese shipbuilders to effectively supply foreign shipbuilders, customer service levels need to be significantly improved beyond the satisfying the less demanding Chinese domestic market if they are to compete effectively with Korean shipbuilders. Currently, Chinese shipbuilders are only competing as low cost suppliers.

The strong relationships that companies in the Korean Shipbuilding Industry Cluster have developed with foreign shipbuyers have influenced the organizational culture of Korean shipbuilding companies to allow for product differentiation of complex ships that require high levels of communication with foreign buyers.

This has led to the development of strategies of western style participatory communication methods of communicating to their workforce to combat the traditional Korean style of top-down management prevalent in other Korean industry clusters.

This has enhanced worker identification and fidelity to companies within the Korean Shipbuilding Industry Cluster and consequently lower rates of industrial unrest and higher rates of productivity than other Korean industry clusters.

Other Korean industry clusters may benefit from learning the lessons of internal and external relationship marketing that exist in the Korean shipbuilding industry cluster.

국문초록

본 논문은 동북아시아지역 조선산업이 성숙기에 들어서면서 대두된 관계마케팅과 관련된 주요 현안을 파악하고자 한다.

조사방법은 우선 Larson의 연구(1994)에 기초한(첨부 2)의 설문조사를 실시하였으며, 이를 통하여 조선산업 내의 주요 현안에 대해서 살펴보았다. 그리고 한국, 일본, 중국의 조선산업의 관계마케팅 전략을 비교하는 설문조사에서 더욱 심도있게 분석하였다.

설문대상자는 선박매매중개업에 종사하는 36개사를 대상으로 하였으며, 국가별로는 덴마크(5개사), 프랑스(4개사), 독일(5개사), 나이지리아(1개사), 노르웨이(5개사), 사우디아라비아(1개사), 스페인(1개사), 네덜란드(1개사), 영국(10개사), 미국(2개사)로 분포되어있다.

관계마케팅 행동을 분석하기 위해서 Lawrence(1977)의 연구에 기초한 연구모형을 구축하였으며, 한중일 삼국의 조직문화를 매개변수로 두었다. 다변량분산분석(MANOVA)을 실시한 결과, 조직문화가 관계마케팅 결과에 영향을 미친다는 첫 번째 가설은 채택되었다. 그리고 두 번째 가설인 고객서비스 수준이 높을수록 고객충성도도 높아진다는 가설도 채택되었다.

따라서 한국 조선업체들에 대해 선주들이 지각하는 고객서비스 수준은 일본과 비교해서는 큰 차이가 없었지만, 중국에 비해서는 매우 높은 것으로 나타났다.

그리고 각국의 조선업체들은 경쟁환경과 인력자원의 부족에 대응하기 위해 각기 다른 관계마케팅 전략을 구사해 왔다.

한국과 일본의 조선업체들은 해외시장에 주력한다는 점에서 경쟁환경은 비슷하지만 인적자원 구조는 차이가 있는 것으로 나타났는데, 이는 지난 20년간 일본의 조선숙련공의 이탈에 기인한 것이다. 일본 조선업계는 이와 같은 인력유출로 인하

여 수직통합 방식으로 전략을 변경해왔다. 중국의 조선업체들은 대부분의 선주가 자국에 있는 관계로 경쟁환경이 다르며, 또한 숙련공의 부족으로 인적구성에도 많은 차이가 있었다.

해외 선주들과의 친밀한 고객관계는 한국 조선업체들의 조직문화에도 영향을 미쳤으며, 이러한 관계는 고객과 높은 수준의 의사소통을 필요로 하는 다양한 종류의 고부가가치 선박개발도 가능케 하였다.

또한 한국내 다른 산업군에 팽배해 있는 상명하달식 의사소통이 아니라 서양식의 참여적인 조직 의사소통 문화도 발전하게 되었다. 이러한 문화는 직원들의 자아성취와 조직에 대한 충성도를 높였으며, 그 결과 한국의 조선업체들은 다른 산업군보다 상대적으로 낮은 노사분규와 높은 생산성을 누리게 되었다.

따라서 한국 조선업체들의 대·내외적 관계마케팅은 기타 산업에 많은 시사점을 주고 있다.

CHAPTER 1: INTRODUCTION

1.1 Research background

According to research by the World Economic Forum, the Republic of Korea has the world's 3rd most competitive industry cluster development as shown in Table 1.

<Table 1> Global Competitiveness Index 2007-2008

	ROK	Japan	China
Global Competitiveness Index 2007-2008	5.40	5.43	3.48
Subindex A: Basic requirements	5.67	5.41	3.83
1st pillar: Institutions	5.05	5.06	3.14
2nd pillar: Infrastructure	5.55	5.98	2.05
3rd pillar: Macroeconomic stability	6.00	4.45	4.69
4th pillar: Health and primary education	6.08	6.14	5.46
Subindex B: Efficiency enhancers	5.28	5.27	3.33
5th pillar: Higher education and training	5.65	5.21	3.15
6th pillar: Goods market efficiency	5.23	5.22	3.51
7th pillar: Labor market efficiency	4.79	5.11	4.12
8th pillar: Financial market sophistication	5.15	4.94	3.66
9th pillar: Technological readiness	5.46	5.06	3.00
10th pillar: Market size	5.37	6.08	2.53
Subindex C: Innovation and sophistication factors	5.42	5.70	2.72
11th pillar: Business sophistication	5.47	5.76	3.35
12th pillar: Innovation	5.36	5.64	2.10
State of cluster development	3	12	29

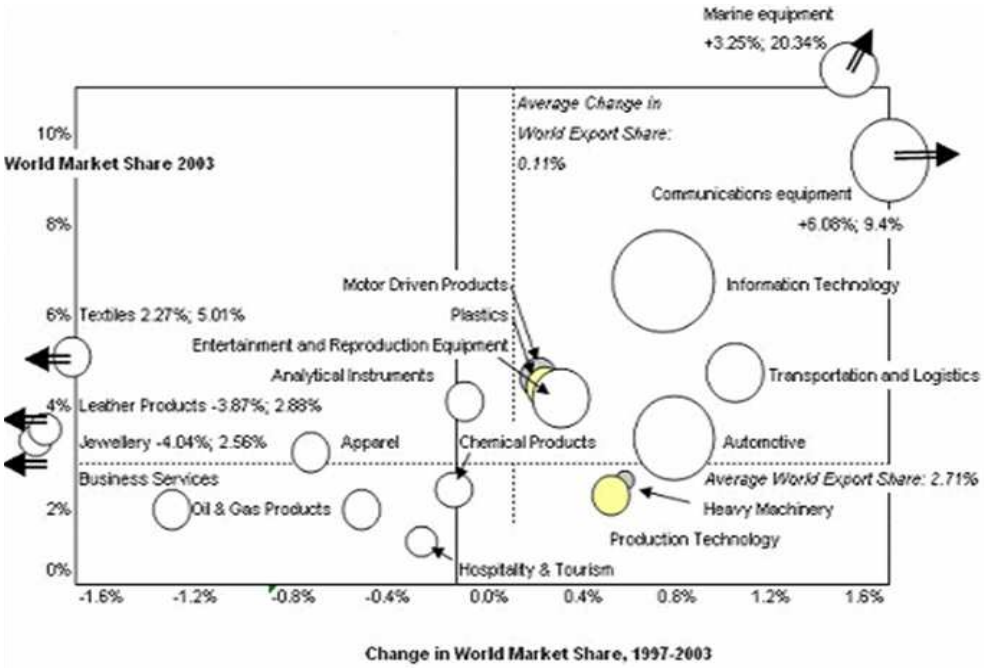
Source: *The Global Competitiveness Report 2007-2008*

In the period 1997 to 2003 the Korean shipbuilding industry cluster increased its share of the global market from 17.09% to 20.34%, a proportional increase of 19%. Other Korean industry clusters to show rapid growth in the same period were the Communications Equipment, Information Technology and Transportation and Logistics clusters.

Details of growth rates can be seen in Figure 1. The Republic of Korea's

neighbours, Japan and the People's Republic of China, had less globally competitive clusters over the period 1997 to 2003 being ranked 9th and 29th respectively.

<Figure 1> Korea's Export Performance by Cluseter



Source: *International Cluster Competitiveness Project, Institute for Strategy and Competitiveness, Harvard Business School.*

The People's Republic of China, however, is showing rapid development in terms of its knowledge economy as can be seen in Table 2, almost doubling its composite Knowledge Economy Index score from 2.61 to 4.42 in the period 1995 to 2007.

<Table 2> Knowledge Economy Index 1995-2007

Country	KEI		Economic Incentive & Institutional Regime		Innovation		Education		ICT	
	2007	1995	2007	1995	2007	1995	2007	1995	2007	1995
ROK	7.74	7.82	6.16	6.89	8.44	8.07	7.70	8.18	8.67	8.12
Japan	8.46	8.60	7.99	8.08	9.17	9.16	8.20	8.54	8.47	8.62
China	4.42	2.61	4.27	2.32	5.09	2.8	4.09	3.59	4.21	1.75

ICT Information and Communications Technology
KEI Knowledge Economy Indicators

Source: *World Bank, Knowledge for Development, August, 2007.*

In the same time period, the Republic of Korea only managed to improve its composite Knowledge Economy Index score from 7.74 to 7.82. The driving force for cluster development growth by the Republic of Korea is may therefore be not attributable to technically based innovation but to market based innovation.

Table 3, based on Michael Porter's National Diamond framework, shows the Republic of Korea's factors of comparative advantage that are relevant to an analysis of the cluster development from the point of view of market based innovation.

<Table 3> Comparative Ranking of Microvariables Affecting Korea's National Diamond

Competitive Advantages Relative to GDP %		Competitive Disadvantages Relative to GDP %	
Factor Conditions			
University-industry research collaboration	10	Venture capital availability	30
Railroad infrastructure development	12	Financial market sophistication	35
Port infrastructure quality	19	Efficiency of legal framework	37
Quality of science research institutions	19	Quality of management schools	38
Overall infrastructure quality	22	Extent of bureaucratic red tape	41
		Judicial independence	44
		Local equity market access	48
Demand Conditions			
Buyer sophistication	16	Presence of demanding	29
Degree of customer orientation	16	regulatory standards	
Value chain presence	17		
Capacity for innovation	14		
Context for Firm Strategy and Rivalry			
Effectiveness of antitrust policy	27	Prevalence of trade barriers	41
Favoritism in decisions of gov't officials	25	Efficacy of corp. boards	51
Intellectual property protection	26		
Intensity of local competition	29		
Related and Supporting Industries			
Local Supplier quality	24		
Local supplier quantity	22		
Production process sophistication	20		

Source: World Economic Forum, Global Competitiveness Database, 2005.

The Republic of Korea has comparative advantages in buyer sophistication, degree of customer orientation, value chain presence and capacity for innovation.

But it has comparative disadvantages in the areas of quality of management

schools and presence of demanding regulatory standards.

How can these advantages and disadvantages be reconciled to explain the Republic of Korea's strong cluster development?

Consistent with research on firm-level data on productivity in other transitional economies (Javorcik, p. 605, 2004) there is evidence of positive spillover effects from foreign companies operating in the Korean shipbuilding industry on both Korean shipbuilders and associated Korean companies.

Demanding foreign buyers have brought a new management culture of relationship marketing to the Korean Shipbuilding Industry and the presence of buyer representative teams that overseer the quality of shipbuilding in the Republic of Korea have overcome the disadvantages of the poor quality of management schools and lax regulatory standards.

Self monitoring within the Korean shipbuilding industry has raised the quality of staff, staff management and has created value for the individual shipbuilding companies.

The Korean shipbuilding industry cluster is dominated by foreign buyers as can be seen from its focus on building on ultra large ships (ULS) for the demanding foreign market.

116 of the 149 (Liquid Natural Gas Carriers) LNG ships from 2004 to the first half of 2006 and 40% of the global market for Very Large Container Carriers (VLCC) were supplied from Korean shipyards (Korea Shipbuilders' Association, 2 March, 2007).

This paper explores the organisational culture of Korean shipbuilders which is a relationship marketing culture.

This is done by measuring the impact of Korean shipbuilders' customer service levels on foreign buyers against Japanese and Chinese shipbuilders' customer service levels.

The data obtained can be used as a benchmark for other Korean industry clusters to see how they compare against the Republic of Korea's most globally competitive industry cluster.

The People's Republic of China has yet to launch a Chinese built LNG carrier and has concentrated on satisfying its less demanding domestic market with medium sized ships.

As can be seen in Table 4, China had domestic orders for 18 container ships with an average DWT of 63 772 tonnes and export orders for 12 container ships with an average DWT of 58 581 tonnes in 2005.

In the same year, China had domestic orders for 114 container ships with an average DWT of 8 028 tonnes and export orders for 46 container ships with an average DWT of 14 464 tonnes (Japan Ship Centre, 2007).

<Table 4> China Ship Orders 2005

	Oil Tanker			Container Carrier			LNG Carrier	
	Domestic	Export	Total	Domestic	Export	Total	Domestic	Export
Number	18	12	30	114	46	160	0	0
DWT	1147900	702969	1850869	915140	665340	1580480	0	0
Avge DWT	63772	58581	61696	8028	14464	9878	0	0

Source: 2007 Japan Ship Centre (JETRO)

Although China is rapidly catching up in terms of technology with the Republic of Korea the lack of orders for LNG carriers has been anecdotally relatedby foreign buyers as an undeveloped relationship marketing culture in

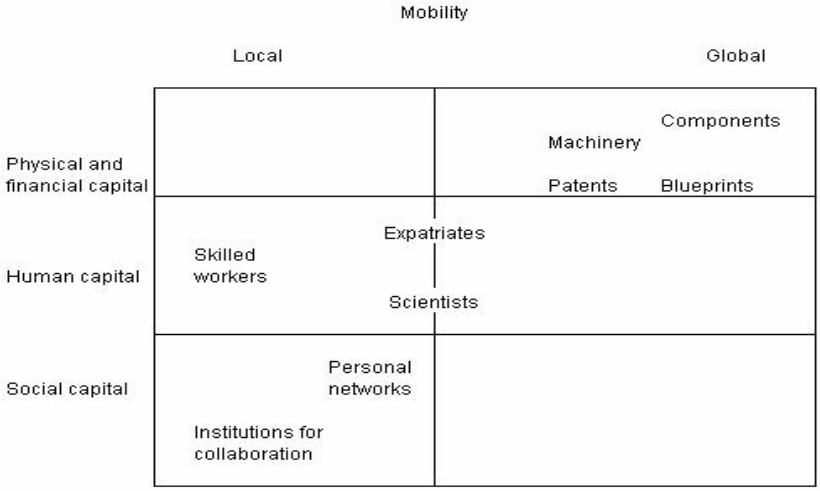
Chinese shipyards, especially with respect to foreign buyers. As LNG carriers are expensive, complex and potentially dangerous ships, foreign buyers like to site foreign buyer representative teams in shipyards to monitor quality control and assist shipyards in developing more efficient techniques.

This presence of foreign buyer representative teams has been resisted by Chinese shipyards which have recently used another technique to acquire modern shipbuilding technology.

In late 2007, the National Intelligence Service of Korea referred a case to the Korean Prosecutors' Office of a former head of the technology planning team at Daewoo Shipbuilding & Marine Engineering who had been allegedly passing on blueprints of ship designs and a shipyard to Chinese organizations(Chosun Ilbo, 2007).

As can be seen in Table 1, the Japanese economy generally ranks higher than the Republic of Korea on most indices of global competitiveness, however, it is ranked much lower than the Republic of Korea in terms of cluster development.

<Figure 2> Three types of capital and their mobility



Source: *Solvell O., Lindqvist G. and Ketels C. (2003) The Cluster Initiative Greenbook*

As noted by Solvell, Lindqvist and Ketels (2003 p. 13), "Important clusters are … less prone to exclude foreign companies", as shown in the item "expatriates"in Figure 2.

Like their Chinese counterparts, Japanese shipbuilders have resisted the presence of foreign buyer representative teams in Japanese shipyards.

The source of this resistance is often attributed to the concept of Japanese uniqueness propagated in Japan.

Japanese management structures consistently remould human associations in terms of an archaic family or household model characterized by vertical relations (Dale, 1986 P.100).

Consequently, foreign buyer representative teams, which emphasise relationship marketing, have clustered in the Republic of Korea and make regular trips to both China and Japan.

The more frequent contact over long periods of time with foreign buyer representative teams by Korean shipbuilding staff has thus had a singular influence on the development of the Republic of Korea's shipbuilding industry cluster.

Individual foreign buyers thus have multiple orders of large ships from Korean shipbuilders and occasionally make one-off purchases from Japanese and Chinese shipyards.

Multiple orders thus provide a longer period of time to develop relationships between Korean shipbuilders and their foreign buyers, an opportunity that does not currently exist for Japanese and Chinese shipbuilders.

Dyer and Singh(1998) have suggested, "that a firm's critical resources may

span firm boundaries and may be embedded in interfirm resources and routines." Thus the competitive advantage of a firm may rely on its understanding of the industry cluster in which it operates.

The relationship of particular firms to their cluster requires a qualitative research design to identify the most important issues as perceived by industry participants (Smith 1995).

The critical issue of how reputation, trust, reciprocity and mutual interdependence are formed helps firms to improve their competitive advantage (Larson 1992 p. 94).

1.2 Purpose of the Thesis

The purpose of this thesis is for industry insiders to identify in their own words, the major relationship marketing issues confronting the maturity of the Korean shipbuilding industry.

From an embeddedness perspective (Baum and Dutton, 1996, Dacin, Ventresca and Beal, 1999, Granovetter, 1985) the companies within the Korean Shipbuilding Industry Cluster are not free agents able to engage any competitive behaviour within their own resource constraints but are embedded within a network of relationships that influence their behaviour.

Although the literature on strategy (Barney, 1991, Mahoney and Pandian, 1992) places most emphasis on a firm's internal resources, in particular the competitive dynamics of strategy (Grimm and Smith, 1997), resources are also situated in a company's external network, which are valuable to firms

(Gnyawali and Madhavan, 2001).

Firstly, relationships in a cluster are important pathways to internal resources held by connected actors (Nohria, 1992) and these are used extensively by participants within the Korean Shipbuilding Industry Cluster.

Secondly, external economies that is, capabilities developed within a cluster of competing and cooperating firms - often complement companies' internal resources(Langlois, 1992: 4) for example autonomous team contractors that are used by competing shipbuilding companies.

Thirdly, the rate of return on internal resources is affected by the quality of the structure of the company's network (Burt, 1992) and many interviewees considered that the Korean Shipbuilding Industry Cluster was better networked than the comparable automotive industry in Korea.

Fourthly, a firm's position in a cluster contributes to its acquisition of new competitive capabilities (McEvily & Zaheer, 1999), which, in turn, enhances its ability to attract new ties (Powell, Koput, & Smith-Doerr, 1996) and the leading shipbuilding companies in Korea have been major beneficiaries of this effect, attracting major German and Scandinavian companies to locate in Korea, even though much of these foreign companies' work is carried out in Japan and China.

In addition to the access logic of the above four arguments, Korean shipbuilding companies' control over their flow of resources from themselves to connected actors and between members of the latter group (Burt, 1992) also influences competitive behaviour.

The Korean shipbuilding cluster has a keystone position in the edifice of the Korean economy. If it falls the surrounding edifice will also fall. There is

substantial evidence of how the Korean shipbuilding industry supports other industries in the Republic of Korea, especially the steel and automotive industries.

For example, in 2007, POSCO, Korea's largest steel manufacturer, spent US$373 million to buy a 1.9 percent stake in Hyundai Heavy Industries held by Hyundai Mipo Dockyard Co., the Pohang-based steelmaker whilst Hyundai Mipo bought about 872,000 POSCO shares.

POSCO, and Dongkuk Steel Mill Co., Korea's third-largest steelmaker, also have mutual shareholdings in associated subsidiaries. POSCO owns a 9.8 percent stake in Dongkuk Steel's subsidiary, Union Steel and Dongkuk Steel has a similar sized stake in Pohang Coated Steel Co. (POSCO (B) 2007)

A loss of market share by the Korean shipbuilding industry will thereby have a major impact on Korea's steel industry, which is also a major supplier to south-east Korea's other major employer the motor vehicle industry.

More than 27,000 people work in the Hyundai Motors plant in Ulsan and tens of thousands of more people are employed in the automotive components industry in south-east Korea.

China's rapidly growing construction industry has allowed Chinese steelmakers to develop large economies of scale and to put downward pressure on steel prices. Imported steel plates from China were being sold at around 10 percent less than products from POSCO and Dongkuk Steel in 2005.

Dongkuk responded to this challenge in December 2005 by lowering the price of ship plates from 685,000 won per ton to 635,000 won and POSCO also lowered its price to 615,000 won, compared to 645,000 won. (POSCO (A)).

Financial and tax incentives from the Balanced National Development Policy

of Korea's central government has encouraged Hyundai Motor Group to build a steel mill in South Chungchong Province by 2010.

Transporting shipbuilding plates for the more than 300 kilometres between South Chungchong Province and Ulsan will be severely hampered by Korea's currently inadequate road and rail infrastructure between these two regions.

The opportunity for the economies of scale enjoyed by Korea's steel producing competitors, thus enhancing the competitiveness of Korea's shipbuilding industry, has been lost.

1.3 Scope & Methodology of the Thesis

The strongest naturally competitive region should be supported by government policies that address these issues.

Interviewees noted that the Korean Shipbuilding Industry Cluster was much more densely connected with foreign companies and customers than the Chinese and Japanese Shipbuilding Industry Clusters as a result of protectionist policies by the government of the PRC and cultural resistance within Japan.

The culture of the Korean Shipbuilding Industry Cluster has encouraged greater interaction between contractors both Korean and non-Korean thereby increasing the speed and density of information flows.

Being better and more quickly informed about changes in the competitive environment, has led flagship companies in the Korean Shipbuilding Industry Cluster to engage in less competitive behaviour against each other and, to prefer greater cooperation, has accelerated the dissemination of innovative technology

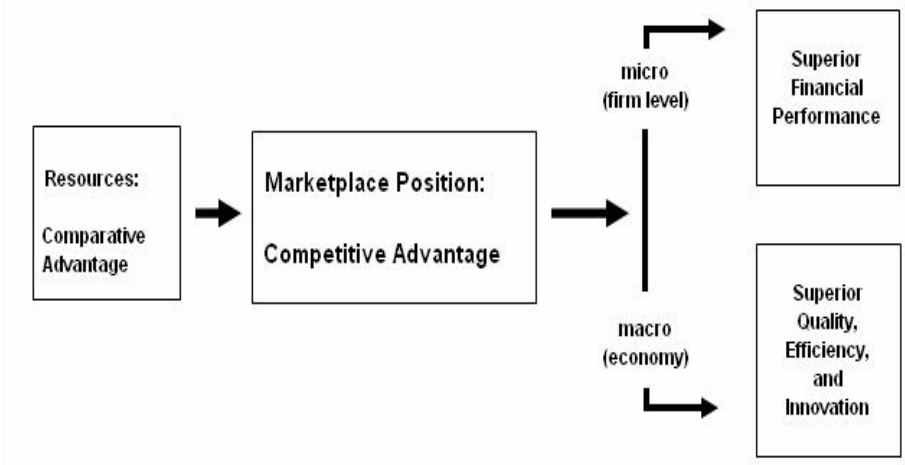
and innovative work practices across the Korean Shipbuilding Industry Cluster.

In designing the survey instrument, the elements of commitment to mutual cooperation need to be defined. Both ship buyers and ship builders make commitments to cooperate.

An open ended questionnaire (Appendix 2) based on Larson's research (1994) was used to identify major issues in the shipbuilding industry and this was then furtherrefined in the benchmarking questionnaire shown in Appendix 3.

To disentangle the mutuality of the issues in relationship marketing, constructs need to be identified that are unique to one side of the relationship these then become the independent variables. In the shipbuilding industry personal character attributes are demographic variables and cluster customer service levels are set by the shipbuilding companies and assessed by the ship buyers. The elements of personal character assessed are honesty, reliability and openness.

<Figure 3> The Comparative Advantage Theory of Competition

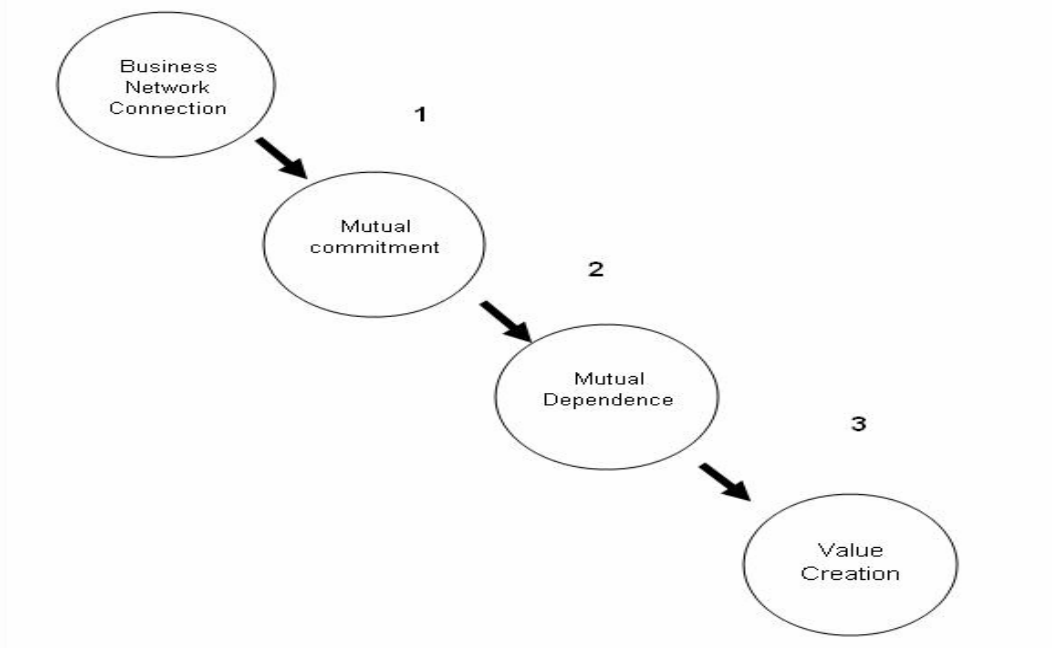


Source: *Hunt S.D. and Morgan R.M. (1995) The Comparative Advantage Theory of Competition*

From the comparative advantage theory of competition (Hunt and Morgan, 1995, p. 9), as shown in Figure 3, the relevant questions then become what are the effects on the comparative advantage of a company given differing levels of customer service and personal character?

The model is limited to addressing the following questions: customer service levels on commitment to relationship marketing? and; attributes of personal character on commitment to relationship marketing? Given that mutual commitment is a modifier of comparative advantage (Figure 4) (Holm, Erikkson and Johanson, 1999 p. 470).

<Figure 4> Structural model of relations between value creation, mutual dependence, mutual commitment and business network connection



Source: *Holm D.B., Eriksson K., and Johanson J., Creating Value through Mutual Commitment to Business Network Relationships, P. 470.*

These are critical questions due to the high barriers of entry and exit for both buyers and builders in the shipbuilding industry. The higher the level of commitment by either side the lesser the likelihood of switching suppliers. Lower levels of commitment will result in a significant financial impact in the loss of market share to rival suppliers with comparable levels of product quality and price.

CHAPTER 2: LITERATURE REVIEW

2.1 Conceptualisation of the Trust-Commitment Interface

Korean shipbuilding companies need to trust that their buyers will not desert them. Trust therefore is the key construct in the research. The underlying elements of trust seem to be differentiated at the personal level and the organizational level (Ganesan p. 18, 1994).

At the personal level, trust is assessed by the characteristics of the relationship manager (Anderson and Narus p. 57, 1990; Doney and Cannon p. 51, 1997; Smith and Barclay p. 21, 1997). Organizationally, trust is assessed through the organizational capabilities that each organization offers to the other party (Ring and Van de Ven p. 119, 1994).

2.2 Trust and Commitment Literature

The constructs derived from the trust construct can then be separated into six categories; Personal Character, Communication Frequency, Perceived Dependence, Organisational Capability, Investment and Business Volume.

Appendix 2 lists the research questions under these categories: Questions 1 to 6 relate to Personal Character measures, questions to relate to 7 to 8 relate to Communication Frequency measures, questions 9 to 12 relate to Perceived Dependence measures, questions 13 to 15 relate to Organisational Capability measures, questions 16 to 20 relate to Investment measures and questions 38

and 39 relate to Business Volume measures. Questions 21 to 37 relate to Customer Service measures.

Each category is further divided into sub-categories. Personal character is subdivided into measures ofHonesty (questions 1 and 2) (Gundlach, and Murphy p. 46, 1993; Ganesan p. 19, 1994), Reliability (questions 3, 4 and 6) (Kumar, Scheer and Steenkamp, p. 366, 1995; Gundlach, Achrol and Mentzer, 1995) and Openness (question 5) (Ganesan, p. 19, 1994).

Communication Frequency is subdivided into measures ofInformation Exchange Due to Meeting Length (question 7) and Information Exchange through the Use of Electronic Information Exchange Systems (question 8).

Perceived Dependence is subdivided into measures of Cost/Benefit Assessment (question 9), (Ganesan, p. 1-19, 1994) Market Alternatives (question 10), (Ganesan, p. 1-19, 1994) Objective Attainment (question 11) (Smith and Barclay, p. 3-21, 1997) and General Assessment (question 12)

Organisational Capability is subdivided into measures of Dependability (question 13) (Ganesan, p. 19, 1994), Reliability (question 14) (Ganesan, p. 19, 1994), Flexibility (question 15) (Heide and John, p. 44, 1992).

Investment is subdivided into measures of Personnel (question 16) (Ganesan, p. 20, 1994), Expertise (question 17) (Heide and John, p. 44, 1992), Dedicated Equipment (question 18) (Heide and John, p. 44, 1992), Electronic Information Exchange (question 19) and Capital Assets (Heide and John, p. 44, 1992).

Business volume is subdivided into measures of Volume (Heide and John, p. 36, 1990) and Revenue (Frazier and Rody, p. 69, 1991).

2.2.1 Personal character

Network research has expanded to include research not only on the organisational traits associated with supplier-customer relationships and the issue of personal trust has been noted as an important element (Ganesan p. 19, 1994; Handy p. 50, 1995; Heide and Miner p. 291, 1992; Kumar, Scheer and Steenkamp, p. 366, 1995).

McAllister (p. 36, 1995) has concluded that trust occurs in cognitive and emotional based constructs. Cognitive constructs have their origins in reliable role performance, cultural-ethnic similarity, and professional credentials, while the emotionally based constructs are a function of individual behaviour and interaction frequency.

Both sets of constructs have been found to enhance coordination by reducing administrative costs. Boundary Definition by parties requires Coordination which in turn requires Trust and this is reflected in the defining of which set of tasks each party expects the other to perform (Mohr and Spekman, p. 152, 1994).

Trust has also been noted a significant factor in supplier/manufacturer relational exchange norms and organisationshave begun to recognise the importance of Trust and Coordination in cooperative relationships (Pilling and Zhang, p. 9, 1992).

Gulati (p. 113, 1995) discovered that suppliers and customers are less likely to use equity sharing agreements after gaining more experience with each other through continuous relationships. Greater familiarity with each other also led to greater trust, which significantly replaced legal relationships.

The underlying theme of these studies is that trust develops when tangible

benefits appear to both parties from the business relationship (Rinehart, Eckert, Handfield, Thomas, Page and Atkin, p. 30, 2004). Although companies may increase the length of their agreements this does not ensure Trust and research by Coviello, Brodie, Danaher and Johnston (p. 46, 2002) concluded that many supplier- customer relationships are still characterized by a lack of trust.

When one party engages in opportunistic behavior it can lead to a lack of trust by the other party (Stump and Heide, p. 440, 1996).

"The role of trust is also indirectly addressed through investments in the personal relationships between the boundary spanners that minimize the risk to both parties.

This attitude often leads to a sharing of responsibilities traditionally considered the exclusive domain of one party, such as "implanting" a representative in the operations of the other party to facilitate operational flows and transaction activities between the parties.

This type of attitude leads to significant increases in the quality and duration of supplier- customer relationships" (Rinehart, Eckert, Handfield, Thomas, Page and Atkin, pp. 30-31, 2004).

This last observation is particularly pertinent to the shipbuilding industries of the Republic of Korea, Japan and China,as only shipbuilding companies in the Republic of Korea have encouraged the setting up of large scale buyer representative teams within their shipyards.

2.2.2 Organizational capability

Organizational level dimensions of trust address the capability of the other organization to meet the needs of the focal organization. Trust at this level implies that a firm has the resources available and is capable of implementing those resources for the benefit of the relationship (Anderson and Narus, p. 42, 1990; Ganesan, p. 18, 1994).

For example, a shipbuilding company's assignment of specific assets, such as dedicating new buildings for foreign buyer representative teams, can affect the buyer's interpretation of that firm's willingness to pursue or continue the relationship.

Research suggests that asset specificity can play a major role in cultivating trust between the parties involved in supplier-customer relationships (Ring and Van de Ven, p. 90, 1994). Transaction-specific investments serve as safeguards under conditions of uncertainty which influence the type of relationship desired between a supplier and customer (Rindfleisch and Heide, p. 54, 1997).

This phenomenon has also been referred to as "bilateral hostages" (Borys and Jemison, p. 234, 1989) and suggests that an important linkage exists between asset specificity and trust.

2.2.3 Interaction Frequency

Success in a shipbuilder-shipbuyer relationship is partly based on how frequently the parties interact concerning shipbuilding activities and the volume of business transacted.

At the personal level, communication frequency affects each party's perception of the value created by the other through time spent communicating with the

other party. At the organisational level, interaction frequency is characterized by the amount of business transacted between the parties.

2.2.4 Communication frequency

Communication and the sharing of information are fundamental to most aspects of supplier-customer relationships (Kapp and Bamett, p. 239, 1983; Mohr and Nevin, p. 36, 1990). Indeed, it has been proposed that the exchange of information between the parties serves to "create" a necessary environment for the conduct of business relationships (Pfeffer and Salancik, p. 1, 1978; Weick, p. 2, 1969).

Therefore, as boundary spanners, such as foreign buyer representatives and customer service staff in shipbuilding companies, exchange information, that information provides cues to the other party as to what the communicating boundary spanner considers important to his/her organisation and the relationship.

In order for the boundary spanner to react appropriately, he/she must be able to interpret the information and determine its value to his/her organization.

If the parties do not effectively exchange the information, then relationship utility is minimised (Handfield, p. 602, 1993; Mohr and Spekman, p. 152, 1994).

2.2.5 Business volume

Interaction frequency at the organisational level is based on the amount of business transacted between the parties whether that amount of business is transacted based on volume or dollars of revenue.

For example, a financially powerful shipbuyer such as an oil company can demand greater support in the form of more frequent deliveries and guaranteed

product availability from shipbuilding companies.

Therefore, the large volume of transactions and resulting revenues reflects the influence that the shipbuyer can have over the shipbuilder. Consequently, volume is a strategic element of consideration by the boundary spanner, when interacting with the shipbuilder or with the shipbuyer.

It is assumed that the likelihood of a strong relationship between a shipbuilder and shipbuyer increases over time if relational exchange norms emerge between the parties that result in positive outcomes such as guaranteed ship quality and on-time delivery.

2.2.6 Commitment

Interorganizational relationships are also the result of the level of commitment of the shipbuilders and shipbuyers to the relationship.

Commitment involves the perception of dependence that the shipbuilder or shipbuyer perceives they have on the each other, and the amount of investment in time and resources that shipbuyers and shipbuilders make in the relationship (Gundlach, Achrol, and Mentzer, p. 92, 1995).

2.2.7 Perceived dependence

Dependence exists when one of the boundary spanners does not entirely control all of the conditions necessary for achievement of a desired outcome performed by the other party (Emerson pp. 32-33, 1962; Ganesan, p. 18, 1994).

Resource dependence theory specifies the conditions under which one unit is able to obtain compliance with its demands when dependence between the

parties is present (Pfeffer and Salancik, p. 10, 1978).

Three critical factors that affect the degree of perceived dependence include the importance of the resource, the extent to which the group has discretion over the resource, and the extent to which there are limited alternatives.

For example, Provan and Skinner (p. 211, 1989) found that dealers of agriculture equipment were less opportunistic when they depended on a primary supplier, whereas suppliers with greater control over dealers′ decisions exhibited greater opportunism.

Therefore, as the dealer became more dependent on the supplier, they chose to minimize their opportunism in the supply market and limit their business with the supplier.

However, those that sense guaranteed business from a dependent supplier or customer will pursue opportunities for other business relationships at the expense of the existing relationship.

Also, Frazier, Gill, and Kale (p. 51, 1989) found that boundary spanners often use coercive influences on the other party under various conditions of dependence, including threats, promises, and legalistic pleas as a mechanism to get the other party to accomplish the former′s objectives.

Understanding resource dependence theory is critical for interpreting the impact of dependence on different types of relationships. It would be expected that collaborative relationships in the shipbuilding industry would operate under conditions of mutual dependence by the parties and competitive relationships would result from situations of a power/dependence imbalance.

2.2.8 Organizational investment

Commitment to a relationship in the shipbuilding industry is most frequently demonstrated by committing resources to the relationship, which may occur in the form of a manager's time, money, facilities and equipment.

These types of resources are often referred to as "asset specific" resources, in that they are directed specifically toward the other party (Dyer and Singh, p. 27,1998; Rokkan, Heide, and Wathne, 223, 2003). The influence of asset specificity on organizational relationships was originally described by transaction cost theorists (Williamson 1979).

However, only recently have theorists described how the commitment of assets influences the nature of supplier-customer relationships.

Several studies have found a relationship between resource commitment and the joint action or continuity between parties within supplier-customer relationships (Heide and John, p. 36, 1990; Nishiguchi, p. 2, 1994; Yoshino and Rangan, p. 3, 1995).

These studies suggest that longer-term relationships tend to be characterized by a willingness of both parties to commit a variety of different assets to a set of future transactions.

2.2.9 Customer Service Levels

The construct of Customer Service is another measure of the Personal Character of shipbuilding company staff. Customer Service is also a measure of commitment by the shipbuilding company to cooperate with shipbuyer representative teams.

With more complex ships, there are more and larger problems arising from revising existing procedures, policies and programmes to incorporate new activities.This requires a greater commitment to customer staff training by shipbuilding companies. This is consistent with research on competitive responses to complexity (MacMillan, McCaffery, van Wijk, p. 77, 1985).

2.3 International Cooperation and Work Groups

The greater cooperation in internationally diverse work groups in the Korean Shipbuilding Industry Cluster may be attributable to the longer periods of time Korean workers have interacted with international workers in comparison to Korean workers in the Korean Motor Vehicle Industry Cluster.

Daft & Lengel (1986) note that time provides opportunities for members of groups to acquire interpersonal information.

The amount of information acquired is a function of three variables: the length of shared experience for group members, the breadth of group activities and the depth of task interdependence.

These variables allow group members to learn deeper-level information about their psychological similarity to or dissimilarity from their co-workers, where before they would have used superficial demographic data such as age, gender, ethnic origin, regional origin and school ties to determine the level of similarity of co-workers.

Sociological studies indicate that under conditions of equal status and cooperative contact (Ellison & Powers, 1994; Sigelman & Welch, 1993) more positive and beneficial interactions will occur.

Interviewees noted, however, that the gender stereotyping prevalent in wider Korean society prevented women from being provided with equal status and that this limited opportunities for women to be viewed beyond a superficial manner in the Korean Shipbuilding Industry Cluster.

In other areas such as age, ethnic origin, regional origin and school ties flagship companies made substantial commitments to providing equal pay, conditions and promotional opportunities for employees.

Flagship companies also provided activities where employees could interact in an informal manner and build effective teams based on personal trust within work groups of diverse origins rather than the regionally based ties that existed in other industry clusters within Korea.

2.4 Outsourcing in the Korea Shipbuilding Industry Cluster

Outsourcing limits the effects of downstream price competition by generating incremental rents that can be shared by all companies within the Korean Shipbuilding Industry Cluster. i.e., there exists a set of contracts that result in nonnegative profits for all firms.

A decision to outsource services or to keep them in-house depends on three main factors: financial prudency, operational capability, reputation for cooperation and safety.

Outsourcing could still occur even if outsourcing provided no cost advantage in comparison to keeping operations in-house.

But a lower price alone is not sufficient for a change to take place. As

flagship companies' competitive advantage is based on costs of production, the Korean shipyards operate on twenty four hour operations, 365 days of the year, though there are regular carefully scheduled closures of different parts of the shipyard for the maintenance of machinery.

Any engineering, maintenance or painting contractor that has a reputation for delays, unreliability, or intransigence will not obtain a contract, even if it offers a lower price, as these characteristics will interfere in the smooth running of the shipyard, and any delays may cost a substantial amount of money.

In Korea although wages are high the flagship companies within the Korean Shipbuilding Industry Cluster are still sufficiently productive to make handsome profits.

In China, wage levels are much lower with a consequently lower pressure on operational efficiency (Korea Shipbuilders' Association, 2006). The reliability of a contractor is assessed through an informal social network of shipyard managers and design engineers. These individuals frequently exchange information on the reputation of contractors.

Contractors rarely exchange information at all. Reliability is measured in three dimensions; the financial prudency, operational capability and reputation for co-operation amongst the contracting company's employees.

Contractors must also have an impeccable reputation for safety, as this is the most important consideration in the Korean Shipbuilding Industry Cluster. A painting contractor may offer a lower price, but have a poor cash-flow situation. If such a company becomes insolvent during the term of the contract, the 24hour operation of the shipyard is severely disrupted and it is difficult to quickly find men and machinery to replace such contractors. The operational capability of a welding contractor is based on the quality of its machinery and its managerial

competency. Newer machinery is more reliable and easier to maintain.

On the larger ships, such as LNG carriers, newer machinery is essential while on smaller ships different welding contractors using older equipment may be employed.

Although major contractors strive to be flexible, the shorter building periods for smaller ships often does not make it worthwhile for them to devote men, machinery and managerial time for such a small job.

Smaller ships offer an opportunity for new contracting companies to establish a reputation for efficiency, capability and competence. They also provide cash for newer machinery. Managerial competency includes the efficient management of both machinery and men.

A welding contractor will schedule different machinery and men tomove from shipyard to shipyard as the flagship companies build different types of ships from LNG carriers and oil tankers to large VLCCs.

These changes require different types of machinery and skills. Men and machinery move from the Ulsan shipyard to Busan and across to Kojedo.

The variety of work in the the Korean Shipbuilding Industry Cluster requires high levels of cooperation between flagship companies, welding contractors, painting contractors and engineering contractors. This is another salient characteristic of the Korean Shipbuilding Industry Cluster.

Although all relationships between the contractors are based on written legal contracts, the volatility of work constantly forces minor variations within the contracts.

These variations are seldom, if ever, legally disputed. Shipyard managers and

customer site managers often merely approve agreements reached at a lower level across the companies for a minor variation in the contract.

Occasionally, these variations are major and the customer site managers and the shipyard managers make written alterations to the contract.

Most often, however, these variations are solved at a lower level immediately on site between the two parties. Contractual bickering is not a characteristic of Korean Shipbuilding Industry Cluster.

Even variations to the design of a ship may be quickly resolved through a telephone call to a shipyard manager who makes an immediate decision.

Requests from either party are quickly acceded to, this includes the removal of staff deemed unreliable or incompetent they are quickly replaced by the contractors with new maintenance personnel, welders or machinery specialists within a few hours.

This is possible because the contractors maintain a pool of labour and machinery that it strives to keep flexible and motivated by constantly moving around the Korean Shipbuilding Industry Cluster.

The major outcome of this type of co-operation is that contractors are often able to do a job more efficiently and reliably than if it was done in-house by a flagship company.

Contractors are never allowed to rest on their laurels, however, and shipyard managers constantly assess whether it is better for a flagship company to have an operation performed in-house or by a rival contractor at the end of a twelve or eighteen month contract.

Competition is so fierce in this industry that contracts that normally ran for three years are now often much shorter. In the case of smaller ships, the contract is often a simple pro forma type for short periods, on larger ships the contracts are often lengthy and detailed.

During contracts the differences between shipyard company personnel, contracting personnel and even customer representative personnel are minor, both sets of personnel wear similar clothing and are accountable to flagship companies, contracting managers and customer representative managers.

The egalitarian nature of these operations has even led to managers, office staff, secretarial staff and tradespersons being indistinguishable in terms of their khaki clothing. Overlaying these relationships is a social information network tying all companies together in a spirit of co-operative behaviour.

While companies are "friendly" with each other they are not "friends" and are most careful in protecting their core competencies. The constant movement of personnel and the similar backgrounds of many of the participants means this type of behaviour is better explained by "attraction theories" (Smith et al, 1995) rather than traditional "network theories" of relationships.

Which core competencies are protected is a subject for further research, though it is clear that an essential competency in the Korean Shipbuilding Industry Cluster is "co-operativeness" (Hollander, 1990) which often, but not always, relies on prior social ties (Rogers & Larson, 1984).

This spirit of co-operativeness is regarded by interviewees as a byproduct of Gyeongsangnamdo's isolation during the reign of presidents from other provinces.

People within the province all worked together to try to ensure the economic

prosperity of the region as many people left to find employment in the Seoul, Gyeonggido or Incheon regions.

There has always been a preference for local contractors who have absorbed the additional transport costs of operating 500 km from Seoul. This sense of "fair play", with the predominance of Busan and Gyeongsangnamdo people in the contracting workforce, has also helped create a spirit of cooperation within Gyeongsangnamdo.

The communication network is not isolated to Ulsan, Busan and Kojedo, and information on machinery and contractors in the Korean Shipbuilding Industry Cluster is regarded as "open", compared to the Korean Motor Vehicle Industry Cluster.

2.5 Employee Relations within the Korea Shipbuilding Industry Cluster

Interviewees noted that in comparison to similar industry clusters in Korea, such as the motor vehicle and steel industries there were lower levels of unrest.

This was attributed to more positive treatment of employees that created positive attitudes toward employers and work activities. This was especially noticeable in terms of the work and family balance of employees in the Korean Shipbuilding Industry Cluster.

The high rates of job mobility in the contracting workforce within the Korean Shipbuilding Industry Cluster also had a positive effect on self-esteem and consequently less emotional exhaustion from family versus work stresses.

This ultimately resulted in higher rates of productivity in the Korean Shipbuilding Industry Cluster (Korea Shipbuilders' Association, 2006).

2.5.1 Development of High-Level Skills

When employees know and buy into the strategic goals of an organisation, they can use this knowledge to motivate and legitimate the framing of their own employment (Mohrman, 1993).

Within the Korean Shipbuilding Industry Cluster this type of framing is used to allow employees of flagship companies to help frame their own job outcomes and job duties.

Additional tasks are often included in job descriptions to better match the strategic goals of flagship companies.

For example, interviewees noted that ship design teams often framed the quality of the design of the ships with the harmony of their family and work ethics.

A good quality ship could only be designed by members of design teams that were in harmony with each other.

This type of work framing helped to legitimate a different form of relating to each other and to customers and encouraged the addition of interpersonal tasks to the design team.

2.5.2 Transnational Team Building

Turner's self-categorization theory (1985) explains how individuals identify themselves with different groups by matching self-identified traits with traits of groups. It is possible to belong to two groups simultaneously, however, there is a hierarchy of group identity. Thus in the Korean Shipbuilding Industry Cluster a person may identify with a region, a nation, a company or a family at different times.

In the initial stages of the formation of a transnational team members may identify more strongly with how they are different from other group members rather than looking for similarities.

Research in the negotiation literature (Axelrod, 1984) stresses the importance of looking for commonalities and working toward super-ordinate goals.

The ultimate super-ordinate goal in the Korean Shipbuilding Industry Cluster is the building of a ship.

This can be broken down into smaller group goals such as reducing target times for ship completion. Interviewees noted that by 2005 for example, Korean shipyards managed to reduce construction times for LNG carriers from 28 months to less than 24 months.

Chinese shipyards by comparison took over three years to complete similar sized LNG carriers.

Significantly, interviewees noted that due to regional and schoolaffiliations all-Korean teams engaged in less interaction and demonstrated more communication problems, relational conflict and lower levels of team identity.

These three behaviours were dysfunctional to team productivity.

The implications for team building are discussed in the section on Implication for Further Research.

Teams within the Korean Shipbuilding Industry Cluster have deliberately high levels of communication interaction.

The purpose of this heightened level of interaction is to reduce task uncertainty. With lower task uncertainty team members worked more interdependently and

collectively thus improving both group efficacy and group effectiveness.

2.5.3 Team Meetings in the Korean Shipbuilding Industry Cluster

Although regular team meetings are a common feature of Korean business culture, traditional Confucian concepts of modesty and hierarchy restrain group members from full and frank discussions of problems and optimal solutions to such problems (Hiddink, 2006).

In Northern European business, countries such as The Netherlands, Norway, Denmark and Sweden, business culture stresses more equal status within organisations.

The Korean Shipbuilding Industry Cluster has adopted aspects of Scandinavian business culture especially in regard to team mission activities.

According to Geert Hofstede's Cultural Dimensions, South Korea has a Power Distance Index of over 60 compared to Power Distance Indices of less than 30 for Denmark and Norway (Hofstede, 2001).

The Power Distance Index (PDI) that is the extent to which the less powerful members of organizations and institutions (like the family) accept and expect that power is distributed unequally.

This represents inequality (more versus less), but defined from below, not from above. It suggests that Korean society's level of inequality is endorsed by the followers as much as by the leaders.

2.5.4 Conflict Management

Working in teams provides an interpersonal context in which conflicts may occur and attempts to manage them are made (Jehn, 1995). There are two types of conflict management processes that can be used to resolve or minimise conflict:

(1) preemptive conflict management which that establishes conditions to prevent, control, or guide team conflict before it occurs, and

(2) reactive conflict management that requires working through task, process, and interpersonal disagreements among team members.

The degree to which conflict emerges, and eventually interferes with (or enhances) the productivity of work teams, is a function of the conflict management process, which involves how the team handles conflict situations that have arisen or have the potential to arise.

Research on conflict resolution targets is also known as "reactive conflict management."

This involves techniques for reducing or facilitating conflict that has emerged during the team's performance cycle.

Some techniques for reactive conflict management include identification of the parameters of conflict between team members (Pace, 1990), problem solving, compromising, openness and flexibility, and willingness to accept differences of opinions.

Preemptive conflict management focuses specifically on reducing or controlling the nature of team conflict before it occurs.

The establishment of norms for cooperative rather than competitive approaches to conflict resolution (Tjosvold, 1985), team contracts or charters that specify before shipbuilding activities how team members agree to handle difficult situations (Smolek et al., 1999), and the development of team rules and norms about the nature and timing of conflict may be vehicles for limiting the destructive aspects of conflict before they occur.

2.5.5 Motivating and Confidence Building

Motivating and confidence building involve creating and maintaining a sense of collective confidence, motivation, and task-based cohesion with regard to mission accomplishment.

This includes encouraging team members to perform better or to maintain high levels of performance.

Teams motivate members by communicating their beliefs about team ability (e.g., motivational talks), competence on particular tasks, and feedback on team success.

Teams may also rely on imagery or modelling techniques to illustrate the capabilities that teams like themselves have for particular situations. Interviewees noted that Korean teams sometimes acted in ways that are demotivational to team members.

Negative comments about the team's (lack of) competence or that of individual members can reduce confidence levels and task cohesiveness.

Just as teams can enhance working relationships and performance by boosting their confidence level, so, too, they can hamper them by deflating themselves.

Debilitating team processes can spiral teams into a vicious cycle that drags down both team confidence and performance over time (Lindsley, Brass, & Thomas, 1994).

In addition, processes such as social loafing (Latane, Williams, & Harkins, 1979) and shirking (Jones, 1984) typically occur when low motivation levels reduce the amount of effort expended by members on the team task, thus lowering collective performance.

Levels of social loafing in the Korean Shipbuilding Industry Cluster were considered by interviewees to be much lower than in other Korean organisations such as the Korean public service.

Interviewees attributed this phenomenon to the immediate presence of financially powerful foreign customers. Industries, such as the Korean Motor Vehicle Industry Cluster., with a more distant and less powerful customer base, were regarded as having higher levels of social loafing.

2.5.6 Affect Management

Affect management involves regulating member emotions during mission accomplishment, including (but not limited to) social cohesion, frustration, and excitement.

It refers to the process of adjusting team member emotional levels (George, 1990), which can be inflated (or deflated) because of task conditions (e.g., failure, temporal stress), personal factors (e.g., animosity among members), or situational factors (e.g., job security concerns).

Techniques involved in regulating emotions included attempts to calm

members down, control frustration levels, boost team morale and cohesiveness among members, and provide empathy.

A telecommunications service and repair team deals frequently with stress-producing situations, such as dealing with irate customers and making weather-induced emergency repairs.

The team can effectively handle the situation by actively working to calm down frustrated members or by sending in another person to deal with the angry customer.

In contrast, the team could ineffectively manage member affect by ignoring, isolating, or fueling angry teammates.

Traditional team-building interventions have targeted affect management by focusing on the regulation of team member emotions.

For example, traditional T groups put members into confrontational environments to deal with inter or intrapersonal issues (Patten, 1981).

Exercises have been developed to manage the affect generated from team conflict (Harrison, 1983) and to improve relations among team members (Bechhard, 1983).

Team activities such as joking, relaxing, and complaining may also be considered forms of affect management, if implemented in a manner that builds cohesion, breaks tension, vents frustration, or manages stressful situations.

However, it is also possible that such activities, if managed ineffectively, may lead to increased negative affect, wasted time, and performance problems.

2.6 Continuous Innovation and Globalization

To combat the threat of intellectual property theft from China the Korean Shipbuilding Industry Cluster relies on a policy of sustainable technological competitiveness (Korea Shipbuilders' Association 2006).

This section describes a mechanism of skill-biased innovation that limits informational leakages and spillovers which can be freely acquired by outside competitors, and thereby lessen the threat of imitation and technological leapfrogging.

Flagship companies have incentives to increase the share of tacit knowledge and non-codified know-how embedded in their production process.

In this context, openness, by intensifying international technological competition, triggers a race to imitation and innovation. As a consequence, it may induce firms to develop innovations of a new kind, less imitable and endogenously more skill intensive.

Flagship companies in the Korean Shipbuilding Industry Cluster make their products or technologies more immune to imitation at the cost of reinforcing the skill intensiveness of their production process.

This phenomenon has been highlighted in the theory of economic development on catching-up and is nowadays widely debated among firm practitioners and in the business literature.

Scholars in corporate strategy for instance specifically address the issue of finding business strategies to sustain some competitive advantage once it has been created.

In particular, emphasis is put on the fact that strategic decisions in companies are (and should be) shaped by the concern of reducing the imitation of the firm's core capacities (Michael E. Porter, 1985).

The economic literature has also long recognised the highly intangible nature of specific knowledge embodied in a product or a technology and the fact that as such, it is difficult to protect, even by legal means (Kenneth J. Arrow, 1962).

This partial nonexcludability of information generates so-called technological spillovers and, opportunities for firms to "acquire information created by others without paying for that information in a market transaction" (Gene M. Grossman and Elhanan Helpman, 1991, p. 16).

Technological spillovers, however, depend crucially on the degree of tacitness of the specific knowledge embodied in production. Indeed, for any innovation, there is a share of specific information which is codified in the form of (potentially patentable) blueprints while the rest remains tacit and informal.

Even though that second part cannot be legally protected, it has the advantage of being more difficult to imitate and to transfer in comparison to the blueprints that were stolenfrom Korean shipbuilding companies and sold to Chinese rivals (Chosun Ilbo, 2007).

Well codified knowledge and routinised procedures are much easier to learn and to be used for imitation or further innovation.

Given that technological spillovers promote imitation and innovation and that they are limited by knowledge tacitness, firms may then have incentives to reinforce the tacitness and non-replication of their technologies and reduce the diffusion of technical information in the economy.

This can be done by complexifying products or work organisational methods, and by relying more on non-codified workers' knowhow.'

This last solution, in turn, requires relatively more skilled workers (a) either because less codified technologies require more learning efforts to be handled (Richard R. Nelson and Sidney G. Winter, 1977), or (b) because skilled workers have the right cognitive capacities to deal with complex tasks (Alice H. Amsden, 1986) and nonroutine procedures (David Autor et al., 2001).

Interviewees noted that Chinese shipbuilding industry workers have much lower skill levels than comparable employees in the Korean Shipbuilding Industry Cluster. Several factors were provided by interviewees to explain this observation.

Firstly, the One Child Policy of China that began in 1977 has led to a preference for male children to be directed toward clerical occupations and away from manual occupations.

Secondly, since the late 1970s urban drift in China has attracted well educated workers to the large inland cities in the south of China to work in the rapidly growing manufacturing industries and its spin-off industries of finance, real estate and construction.

Thirdly, social loafing was endemic in Chinese shipyards due to the twin influences of communism and guan xi.

Communist reward systems provided a 21st Century example of the Hawthorne Effect (Rose, 1975) as communism did not provide adequate incentives for good workers who were brought down to the level of less able workers.

Guan xi provided sinecures at the management level for communist party cadres who lacked management skills and spent more time on their private projects than working for the benefit of shipyards.

Consequently, productivity in Chinese shipyards was well behind productivity in the Korean Shipbuilding Industry Cluster (Korea Shipbuilding Association, 2006).

CHAPTER 3: MODEL DEVELOPMENT & HYPOTHESES

3.1 Model Development

The purpose of this research is to test for, and specifically identify how Personal Character and Customer Service Levels by shipbuilders are related to variation in the levels of the factors of mutual commitment with an intervening construct of organizational culture that differs according to whether organizations belong to the Korean Shipbuilding Industry Cluster, the Japanese Shipbuilding Industry Cluster or the Chinese Shipbuilding Industry Cluster.

As noted above, Holm, Eriksson and Johanson (1999, p. 470) have provided empirical evidence that there is a causal chain from business network connections through mutual commitment and mutual dependence to value creation in the relationship as shown in Figure 4.

Hambrick and Mason (1984, p. 204) suggest that, "It is expected that relatively straightforward demographic data on managers may be potent predictors of strategies and performance levels."

Similarly, demographic data on Korean, Japanese and Chinese marketing employees may be potent predictors of commitment strategies.

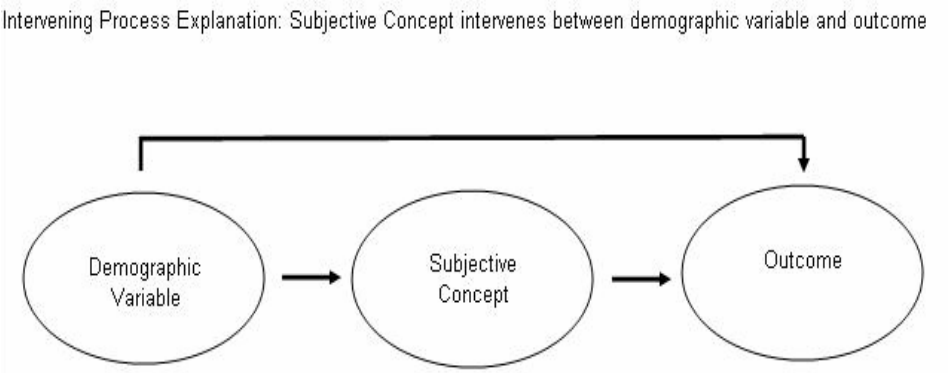
The proposed model treats the subjective concept of organisational culture as an intervening process, in its relationship to both the demographic predictors of personal character and customer service levels and the outcomes of commitment levels.

3.2 Interpreting Relationships with Intervening Theories

The theoretical basis is described by Lawrence (1997, p. 4). "In this approach, demographic variables prove good predictors when they predict some outcome because both predictor and outcome are related to the intervening process.

The demographic predictor is antecedent to the subjective concept, which is itself antecedent to the outcome. When the intervening process is included in the relationship, the predictor and outcome are no longer related. In other words, the intervening process "accounts for" the original relationship between the demographic predictor and the outcome." As shown in Figure 5

<Figure 5> Interpreting Relationships with Intervening Theories



Source: Adapted from Lawrence, B.S. The Black Box of Organizational Demography. Organization Science. Vol. 8. No. 1. (Jan – Feb., 1977). pp. 1-22.

Holm, Eriksson and Johanson's key idea is that "business relationships between suppliers and customers imply that the two exchange partners coordinate a number of exchange and production activities in a way that increases their interdependence, thereby raising their joint productivity and creating relationship.

By relationship value creation, we mean the effect of the relationship on the joint economic performance of the partner firms" (Barney, 1996).

3.3 Developed Three Stage Model

The model framework described by Lawrence (1997, p. 4) is expanded in this paper to describe the connections between the measured demographic variables (honesty, reliability, openness and customer service) and the measured outcomes of commitment to a relationship with an intervening construct of the organisational culture of the shipbuilding company. The model then built is shown in Figure 6.

Due to the risks of industrial espionage in the Republic of Korea (Kim, S.Y. 2007), the joint economic performance of shipbuilders and shipbuyers is not measured as the relevant internal financial data is not publicly available.

Commitment has a pivotal role in exchange relationships (Anderson and Weitz, 1989; Ganesan, 1994; Morgan & Hunt, 1994; Wilson, 1995). It can serve as a psychological bond that keeps partners together when they encounter frustrations. Uncommitted partners may resolve such problems by seeking new partners.

3.4 Description of Three Stage Model

If shipbuilders and buyers are committed to a relationship, they will be motivated to try to maintain their relationship by working together to find common solutions (Day, 1995; MacNeil, 1980).

Tellefsen and Thomas (2005, pp. 31-34) identified several antecedents of organizational and personal commitment in business service relationships. Specifically, they found that personal trust had a positive and significant effect on personal commitment.

Organisational trust and organizational commitment were also found to be positively related and significant. A surprising result in the research by Tellefsen and Thomas (2005, p. 34) was that service performance did not have a significant relationship with organizational commitment.

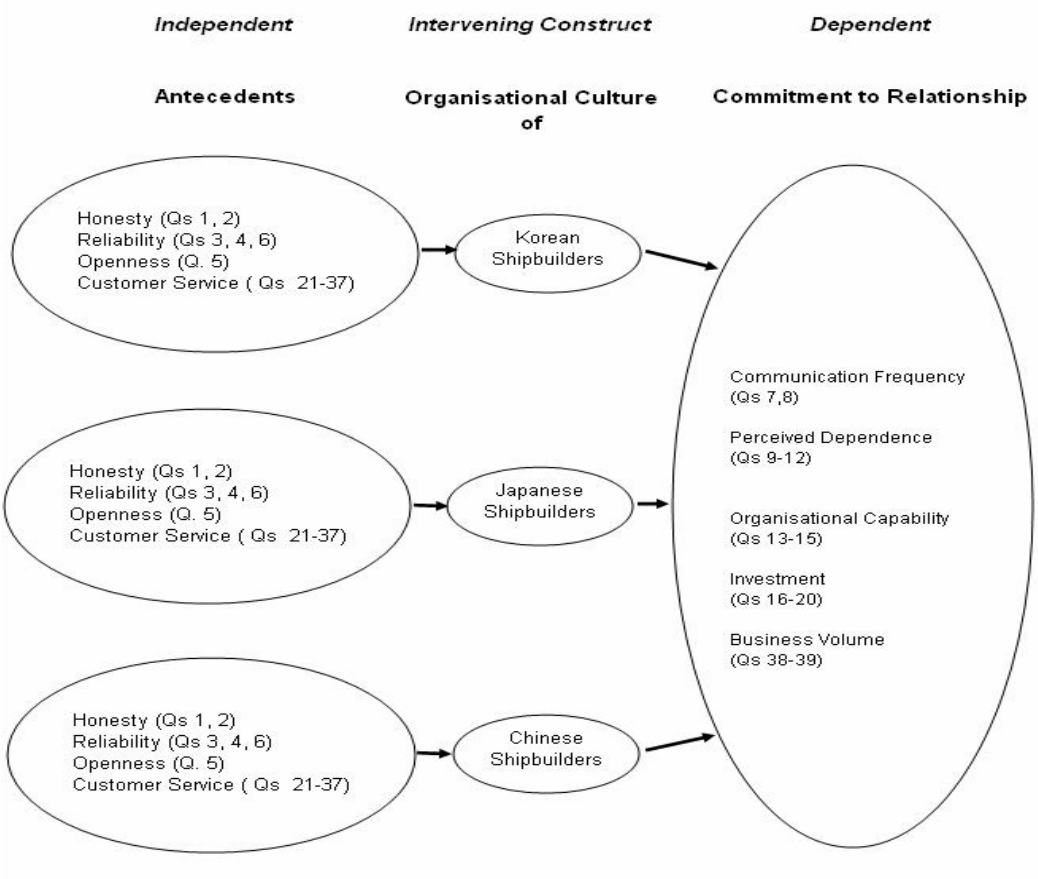
Parasuraman, Berry and Zeithaml (1991) have divided service performance into attributessuch as reliability, responsiveness, and tangible evidence of service.

Tellefsen and Thomas (2005, p. 34) suggest that such constructs may "provide a deeper understanding of the nature of service quality and its role in business relationships."

The literature review has presented the attributes identified as distinguishing factors for mutual commitment in shipbuilder-shipbuyer relationships.

Specifically, these elements are Communication Frequency, Perceived Dependence, Organisational Capability, Investment and Business Volume. Personal Character and Customer Service are independent factors defining the characteristics of shipbuilding companies.

<Figure 6> Three Stage Model of Organisational Culture and Relationship Marketing Outcomes



There is thus a three phase model of Personal Character, Intervening Construct and Mutual Commitment as shown in Figure 6.

The intervening construct is organisational culture where those employees who are more honest, more reliable, more open and provide high levels of customer service are rewarded by the organization and those who are less honest, less reliable, less open and provide lower levels of customer service leave the organization.

This is consistent with research by McCain, O'Reilly and Pfeffer (1983, p. 628) who found that people who dislike conflict and communication problems would be likely to leave and people who are losers in power struggles may either choose or be asked to leave.

Are Korean shipbuilding company employees more able to successfully form relationships with foreign buyers than Japanese and Chinese shipbuilders?

The model proposes that organisational culture increases international understanding, where organisational culture is represented by honesty, reliability, openness and customer service levels. Organisational cultures in shipbuilding companies that support mutual understanding and thereby relationship marketing will thereby have greater commitment to relationships with foreign companies.

3.5 HYPOTHESES

The above model development leads to the following hypotheses:

Hypothesis 1A: The different organisational cultures of the Korean, Japanese and Chinese shipbuilding industries have different outcomes in terms of commitment by shipbuyers.

This hypothesis tests whether the different organisational cultures of the Korean, Japanese and Chinese shipbuilding industries have an effect on commitment by foreign shipbuyers. Following Lawrence (1997, p.4) organisational culture is the explanatory factor for different commitment outcomes.

Hypothesis 1B: Shipbuilding companies that provide higher levels of customer service will have higher levels of mutual commitment

Hunt and Morgan (1995, p. 9) propose that marketing competencies, such as customer service, may yield a comparative advantage to companies.

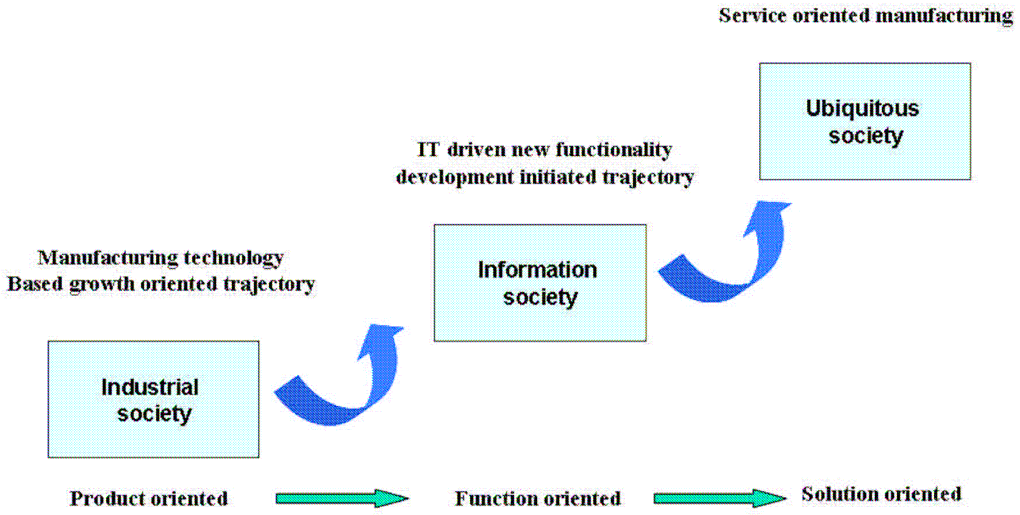
For such an advantage to exist specific companies must possess more of the resource, in this paper customer service, than their competitors (Glazer, 1991, p16).

The model proposes that the marketing resource of superior customer service leads to greater commitment and following the model of Holm, Eriksson and Johanson (1999, p. 470) greater commitment will in turn lead to greater value.

Hypothesis 2A: Korean shipbuilding companies provide higher levels of customer service than Japanese shipbuilding companies

There is a perception in Japan thatcustomer service levels are not globally competitive.

<Figure 7> Paradigm Shift and Consequent Development Trajectory from an Industrial Society to an Information Society and to a Ubiquitous Society



Source: Watanabe and Fukuda. "National Innovation Ecosystems: The Similarity and Disparity of Japan:US Technology Policy Systems Toward a Service Oriented Economy," *Journal of Services Research*, Volume 6, Number 1 (April 2006 - September 2006 p. 164)

To tackle the perceived weaknesses in Japanese industry in service delivery the Japanese Ministry of Economy, Trade and Industry (METI) formed a Services Innovation Study Group in 2005. Part of its role is to develop service innovation leaders (Feldman, Nathan, Li, Hidaka and Schulze, 2004, p. 87).

Figure 7 shows the desire to orientate Japanese industry toward a service perspective to make Japanese industry competitive vis-à-vis the U.S.A. Hypothesis 2 will therefore measure the relative competitiveness in service orientation between the Republic of Korea and Japan specifically in the shipbuilding industry.

Hypothesis 2B: Korean shipbuilding companies provide higher levels of customer service than Chinese shipbuilding companies

As the shipbuilding industry in the People's Republic of China is designated as a strategic industry (Chinese State Council, Annual Report 2006) shipyards are state owned enterprises (SOE).

Research by Millington, Eberhardt and Wilkinson (2006, p. 196)found that the underlying culture of Chinese SOEs was associated with inadequate levels of service performance.

Tu, Forret and Sullivan (2003) noted that some Chinese employees based their performances on political ties or family relationships rather than obtaining the best customer service outcomes for their employers.

Consequently, Hypothesis 2B is expected to produce evidence that Korean shipbuilders are more customer service orientated than Chinese shipbuilders.

Hypothesis 3A: Korean shipbuilding companies are more honest than Japanese shipbuilding companies

Gundlach and Murphy (1993, p. 39) note that the Uniform Commercial Code of the United States of America requires "honesty in fact and the observance of reasonable commercial standards of fair dealing in the trade" (Section 1-201).

This is a fundamental tenet of western commercial law and the respondents to the survey should be able to provide a precise evaluation of levels of honesty within the context of western commercial practices.

Gundlach and Murphy (1993, pp. 43-44) then call for cross-cultural studies to consider the case of ethical dimensions such as trust.

Hypothesis 3B: Korean shipbuilding companies are more honest than Chinese shipbuilding companies

Yu, Lai and Daniel (2008, p. 354) adapted measures from Ganesan (1994), as has this research, to test honesty in the Chinese logistics industry.

They found empirical evidence that the rapid economic growth, social transition, and unique culture of China had distorted the nature of outsourcing relationships in China and called for more research in this area.

Hypothesis 4A: Korean shipbuilding companies are more reliablethan Japanese shipbuilding companies

Gundlach, Achrol and Mentzer (1995, p. 80) note that, "consistent behavior demonstrates reliability and tends to be rewarded over a series of transactions." It is thus an antecedent of trust in the model of commitment building.

They also note (Gundlach, Achrol and Mentzer, p. 79) that trade cultures pose significant conditions on relationships. This hypothesis will test how the different commercial cultures of Japan and the Republic of Korea impact on reliability as a measure of relationships.

Hypothesis 4B: Korean shipbuilding companies are more reliable than Chinese shipbuilding companies

Similarly to Hypothesis 4A, Hypothesis 4B will test the impact of the different commercial cultures of China and the Republic of Korea impact on reliability.

Hypothesis 5A: Korean shipbuilding companies are more open than Japanese shipbuilding companies

Ganesan (1994, p. 16) provides a measure of openness to test trust and credibility, which is considered as essential to a long-term relationship by Ganesan (1994, p. 2). Openness is an antecedent of commitment and thus fits

the model framework Ganesan (1994, p. 3).

Hypothesis 5B: Korean shipbuilding companies are more open than Chinese shipbuilding companies

Hypothesis 5B also tests openness as an antecedent to long-term relationships and thereby to commitment which will create value for partners in a long-term relationship (Holm, Erikkson and Johanson, 1999 p. 468).

Hypothesis 6A: Shipbuilding companies that are more honest will have higher levels of mutual commitment

Hypothesis 6B: Shipbuilding companies that are more reliable will have higher levels of mutual commitment

Hypothesis 6C: Shipbuilding companies that are more open will have higher levels of mutual commitment

Hypotheses 6A, 6B and 6C are designed to measure the relationship between the three antecedents of commitment honesty, reliability and openness.

This fits the model proposed by Hunt and Morgan: "Competition in the comparative advantage theory is the constant struggle for a comparative advantage in resources that will yield a marketplace position of competitive advantage and, thereby, superior financial performance.

All activities that contribute to positions of competitive advantage or the absence of which would contribute to positions of competitive disadvantage are presumptively procompetitive – marketing activities are no exception to this rule." (Hunt and Morgan, 1995, p 10)

CHAPTER 4: DATA ANALYSIS AND FINDINGS

4.1 Level of Analysis and Respondent Sample Frame

The unit of research was the buyer representative team as the interviewees represented the managerial level and as boundary spanners they had a good overall view of their company's operations and its interaction with the shipbuilding companies.

The sampling frame for the study was based on a surveyof ship buyer representative teams operating in the Republic of Korea, Japan and the People's Republic of China.

Both personal contact and email survey methods were used to collect data from respondents through a formal structured questionnaire. Using the key informant method questionnaires were distributed to senior executives that have experience in the Republic of Korea, Japan or the People's Republic of China.

4.2 Survey Instrument and Construct Operalisation

Items for the dimensions Communication Frequency, Perceived Dependence, Organisational Capability, Investment, Business Volume, Personal Character and Customer Service were developed based on the analysis in the Chapter 3.

This was done so that the items represented general aspects of a shipbuilding companies' attributes and behaviour. The items were designed to capture the perception of differences between the countries of origin of shipbuilding companies.

Respondents were asked to indicate the degree to which the shipbuilding companies from different countries matched the descriptions provided on a 10-point Likert scale, ranging from 0 (strongly disagree) to 10 (strongly disagree). The Questionnaire is shown in Appendix 5.

4.3 Data Collection and Sample Description

A useable sample of 36 responses was obtained, yielding a 72% response rate.

Respondents represented companies from the following countries; Denmark (5), France (4), Germany (5), Nigeria (1), Norway (6), Saudi Arabia (1), Spain (1), the Netherlands (1), United Kingdom (10) and the USA (2).

Due to concerns of industrial espionage in the Republic of Korea (Kim, S.Y. 2007) respondents were reluctant to have their names and the names of their companies recorded, as shipbuilding companies considered that such information could be used to identify specific shipbuilding companies and be used by industry rivals.

Respondents represented shipbuyers and had helped supervise the construction of ships in shipyards in Dalian, Yantai and Shanghai in the People's Republic of China; Kobe, Kumamoto and Nagasaki in Japan; Kojedo and Ulsan in the Republic of Korea.

4.4 Analysis of Hypotheses

Hypothesis 1A: The different organisational cultures of the Korean, Japanese and Chinese shipbuilding industries have different outcomes in terms of commitment by shipbuyers.

A multivariate analysis of variance (MANOVA) was conducted on the sample responses using the R programming language. R is a programming language and software environment for statistical computing, originally created by Ross Ihaka and Robert Gentleman at the University of Auckland, New Zealand, and now developed by the R Development Core Team.

The program and results are shown below in Appendix1. Response 1 refers to Korean companies, Response 2 to Japanese companies and Response 3 to Chinese companies. A further correlation analysis was performed on the response data and is shown in Appendices 2, 3 and 4.

The MANOVA results show that Korean responses are significant at the 0.001 level, the Japanese responses are significant at the 0.0001 level and the Chinese responses are significant at the 0.0001 level.

Hypothesis 1B: Shipbuilding companies that provide higher levels of customer service will have higher levels of mutual commitment

From the correlation analyses shown in Appendices 2, 3 and 4 it can be seen that Japanese and Chinese companies had correlations above 0.7 for almost all customer service levels (questions 21 to 37, Appendix 5) related to commitment levels.

Korean customer service levels were only strongly correlated for questions 6, 7, 14 16, 17 and 18. These results seem counterintuitive when compared to the

mean responses of Korean companies which are higher than Japanese and Chinese companies.

What explains this phenomenon? A possible explanation is that there is less variance within the Korean shipbuilding industry and so if all Korean shipbuilding companies are providing high levels of customer service then there would less variance in shipbuyers' responses.

Hypothesis 2A: Korean shipbuilding companies provide higher levels of customer service than Japanese shipbuilding companies

This hypothesis tested questions 20 to 37 shown in Appendix 5 and the results of a comparison of means at the 0.01 level is also shown in Appendix 5. Mean responses for all customer service levels were higher for Korean than for Japanese companiesexcept for items 20, 25, 26, 30, 31, 32, 34 and 37 though none of those results was statistically significant at the 0.01 level.

Interestingly items 28, 29 and 33 showed that perceptions of Japanese customer service levels were higher than Korean service levels and these results were significant at the 0.01 level.

Item 28: "The Customer Service Department staff provides correct information." Further research needs to be done to identify why Korean shipbuilding companies are less competitive in this area.

Is the incorrect information given relating to shipbuilding information, management information or general information such as communicating the correct location of parking facilities for foreign visitors?

Item 29: "The Customer Service Department staff often consult on decisions." This result is not surprising given the hierarchical nature of Korean

management (Lee and Trim; 2008, p. 67).

Although Japanese management is also hierarchical in nature the development of the quality circle concept (Munchus III, 1983 pp. 255-261) in Japanese management allows the involvement of personnel in decision making activities both laterally and horizontally.

Item 33: "The Customer Service Department staff reliably handle confidential information." This result is possibly a reflection of the relatively recent problem in Korean industry of intellectual property theft (Chosun Ilbo, 2007).

Hypothesis 2B: Korean shipbuilding companies provide higher levels of customer service than Chinese shipbuilding companies

This hypothesis tested questions 20 to 37 shown in Appendix 5 and the results of a comparison of means at the 0.01 level is also shown in Appendix 5.

Mean responses for all customer service levels were higher for Korean than for Japanese companies except for items 20.

Item 20: "Information exchange with the company is aided by its investment in a high level of electronic interface capability."

Significant at the 0.01 level this result indicates that there is no difference between the electronic interface capabilities of Korean and Chinese shipbuilders.

This result is consistent withthe rapid acquisition of electronic technology in all areas of Chinese industry and more particularly the possible acquisition shipbuilding related electronic interface technology from former Korean shipbuilding staff now resident in the People's Republic of China.

Hypothesis 3A: Korean shipbuilding companies are more honest than Japanese shipbuilding companies

This hypothesis tested Items 1 and 2 (Appendix 5) at the 0.01 level and found that there were no significant differences in perceptions of honesty between Korean and Japanese shipbuilding companies.

Hypothesis 3B: Korean shipbuilding companies are more honest than Chinese shipbuilding companies

This hypothesis tested Items 1 and 2 (Appendix 5) at the 0.01 level and found that there were significant differences in perceptions of honesty between Korean and Chinese shipbuilding companies.

Hypothesis 4A: Korean shipbuilding companies are more reliable than Japanese shipbuilding companies

This hypothesis tested Items 3, 4 and 6 (Appendix 5) at the 0.01 level and found that there were significant differences in perceptions of reliability between Korean and Japanese shipbuilding companies.

This is an interesting result given the results of Hypothesis 2A that showed no significant differences in perceptions of honesty.

Reliability is a more practical measure of honesty in that it measures past behaviour in a relationship. It is a measure of trust that has been tested over time.

This raises the possibility that the members of the Korean shipbuilding industry may be perceived as reliable in the carrying out of their duties in the shipyard and less honest in other aspects of their interaction with shipbuyer representatives.

Hypothesis 4B: Korean shipbuilding companies are more reliable than Chinese shipbuilding companies

This hypothesis tested Items 3, 4 and 6 (Appendix 5) at the 0.01 level and found that there were significant differences in perceptions of reliability between Korean and Chinese shipbuilding companies.

This is an interesting result given the results of Hypothesis 2A that showed no significant differences in perceptions of honesty.

Hypothesis 5A: Korean shipbuilding companies are more open than Japanese shipbuilding companies

This hypothesis tested Item 5 (Appendix 5) at the 0.01 level and found that there was not a significant difference in perceptions of openness between Korean and Japanese shipbuilding companies.

Hypothesis 5B: Korean shipbuilding companies are more open than Chinese shipbuilding companies

This hypothesis tested Item 5 (Appendix 5) at the 0.01 level and found that there was a significant difference in perceptions of openness between Korean and Chinese shipbuilding companies.

Hypothesis 6A: Shipbuilding companies that are more honest will have higher levels of mutual commitment

Data results for Korean companies are shown in Appendix 2. The results showed a strong correlation that was significant at the 0.01 level for questions 7, 14 and 16.

Item 7: "Face-to-face meetings we have with the company take longer than the meetings held with most of our other suppliers/customers."

This result indicates that honesty has an effect on both sides of the relationship in that they have both committed more time to each other than they have committed to other relationships.

Item 14: "In my opinion the company is reliable.

This result is partly auto-correlative. More honest partners will more reliably carry out their responsibilities to ensure the success of the relationship.

Item 16: "We have invested substantially in personnel dedicated to our relationship with the company."

This is an important result as personnel are the most valuable resource of ship buying companies.

It also enables a more efficient flow of information between shipbuilding and shipbuying companies, as shipbuyer representatives that have had dedicated training, financial and other non-financial benefits provided by their employer will carry out their responsibilities more effectively (Harvard Management Update; 2001, p. 1-4).

Data results for Japanese companies are shown in Appendix 3. This was tested at the 0.01 level and for Japanese companies the result was significantly strong correlation for questions 6 to 20 except questions 6, 12 and 15.

That there were stronger correlations for Japanese companies is a result of greater variance in responses for Japanese companies as can be seen in Appendix 5.

Greater variance indicates that the strength of conformity to industry cluster standards in Japan is less than industry cluster conformity in Korea.

Essentially, Korean companies benchmark themselves against other Korean companies and they are in turn compared to other Korean companies when shipbuyer representatives make their comparisons.

Data results for Chinese companies are shown in Appendix 4. The results for Chinese companies were significant the 0.01 level and showed strong correlations for questions 6 to 20.

These results also demonstrate a greater variance within the Chinese shipbuilding industry.

It also indicates the need for further research on the degree of, and the reasons for, fragmentation within the Chinese shipbuilding industry.

Hypothesis 6B: Shipbuilding companies that are more reliable will have higher levels of mutual commitment

This was tested at the 0.01 level and for Korean companies the result was significant for questions 7 and 17.

Item 7: "Face-to-face meetings we have with the company take longer than the meetings held with most of our other suppliers/customer."

This result indicates that reliability has an effect on both sides of the relationship in that they have both committed more time to each other than they have committed to other relationships.

Item 17: "We have provided substantial proprietary expertise and/or technology to our relationship with the company."

This is an important result as valuable resources of ship buying companies are being dedicated to Korean shipbuilding companies.

This hypothesis was tested at the 0.01 level for Japanese companies and the results were significant for all items 6 to 20 except items 9, 11 and 17.

Item 9: "If this exchange relationship with the company was terminated, it would be very difficult to make up the lost supply."

With the rapid emergence of the Chinese shipbuilding industry and stronger market performance by Korean shipbuilders the foreign shipbuyers in the Japanese shipbuilding industry have less reliance on Japanese shipbuilders that are not seen to be reliable.

Item 11: "We need this relationship with the company to accomplish our organisation's objectives."

Similarly to Item 9, foreign shipbuilders have begun to reduce their reliance on Japanese shipbuilders.

Item 17: "We have provided substantial proprietary expertise and/or technology to our relationship with the company."

The reliance on Japanese shipbuilders has fallen sufficiently that foreign shipbuyers are reluctant to invest substantial proprietary expertise and/or technology with Japanese shipbuilders.

This was tested at the 0.01 level and for Chinese companies the result was significant for questions 6 to 20 except question 11.

Item 11: "We need this relationship with the company to accomplish our organisation's objectives."

This result indicates that foreign shipbuilders may be testing the reliability of Chinese shipbuilders on non-essential projects.

Once Chinese shipbuilders demonstrate reliability in performance foreign shipbuyers will presumably begin to rely more on Chinese shipbuilders to accomplish their objectives.

Hypothesis 6C: Shipbuilding companies that are more open will have higher levels of mutual commitment

This was tested at the 0.01 level and for Korean companies the result was significant strong correlations for items 7, 13, 16 and 18.

Item 7: "Face-to-face meetings we have with the company take longer than the meetings held with most of our other suppliers/customers."

Again this shows the strength of commitment between the Korean shipbuilding companies and foreign shipbuyers and that there is greater variance within the Korean shipbuilding industry in the area of openness.

That is, not all companies have the same high level of openness and this is an area where Korea's competitive advantage does not extend to all companies within the Korean shipbuilding industry.

Item 13: "The company has demonstrated its dependability in the performance of our agreement."

Again this shows the importance of openness in a relationship and that there is greater variance within the Korean shipbuilding industry in the area of openness when correlated with commitment outcomes.

Item 16: "We have invested substantially in personnel dedicated to our

relationship with the company."

With greater investment in personnel there is a correlation with openness as shipbuyer representatives may themselves be perceived as more trusted and so shipbuilding companies are more open in their dealings with shipbuyer representatives.

Item 18: "We have made significant investments in capital assets dedicated to our relationship with the company."

With greater investment in capital assets thereis a correlation with openness as shipbuyer representatives may themselves be perceived as more trusted and so shipbuilding companies are more open in their dealings with as shipbuyer representatives.

This was tested at the 0.01 level and for Japanese companies the result was significant for all items 6 to 20except item 20.

Item 20: "The Customer Service Department staff are more efficient and polite in delivering the service than I expected."

This result possibly indicates that in the pressured atmosphere of building a ship on budget, on time and meeting quality specifications the Japanese reputation for politeness may also be under pressure.

This was tested at the 0.01 level and for Chinese companies the result was significant for questions 6 to 20 except question 11.

Item 11: "We need this relationship with the company to accomplish our organisation's objectives."

Similarly to the result in Hypothesis 6B, this result indicates that foreign

shipbuilders may be testing the reliability of Chinese shipbuilders on non-essential projects.

Once Chinese shipbuilders demonstrate reliability in performance foreign shipbuyers will presumably begin to rely more on Chinese shipbuilders to accomplish their objectives.

<Table 5> Summary of Hypothesis Results

Number	Hypothesis	Result
H1A	The different organisational cultures of the Korean, Japanese and Chinese shipbuilding industries have different outcomes in terms of commitment by shipbuyers.	Supported
H 1B	Shipbuilding companies that provide higher levels of customer service will have higher levels of mutual commitment	Supported
H 2A	Korean shipbuilding companies provide higher levels of customer service than Japanese shipbuilding companies	Not Supported
H 2B	Korean shipbuilding companies provide higher levels of customer service than Chinese shipbuilding companies	Supported
H 3A	Korean shipbuilding companies are more honest than Japanese shipbuilding companies	Not Supported
H 3B	Korean shipbuilding companies are more honest than Chinese shipbuilding companies	Supported
H 4A	Korean shipbuilding companies are more reliable than Japanese shipbuilding companies	Supported
H 4B	Korean shipbuilding companies are more reliable than Chinese shipbuilding companies	Supported
H 5A	Korean shipbuilding companies are more open than Japanese shipbuilding companies	Not Supported
H 5B	Korean shipbuilding companies are more open than Chinese shipbuilding companies	Supported
H 6A	Shipbuilding companies that are more honest will have higher levels of mutual commitment	Supported
H 6B	Shipbuilding companies that are more reliable will have higher levels of mutual commitment	Supported
H 6C	Shipbuilding companies that are more open will have higher levels of mutual commitment	Supported

CHAPTER 5: CONCLUSION, IMPLICATIONS & FUTURE RESEARCH

5.1 Discussion of Results

The major management implication of this research on the three shipbuilding industry clusters is that the MANOVA performed on the data supports the hypothesis that there are cultural differences between the three clusters of Korea, Japan and China and that these three cultures produced statistically significant differences in relationship marketing outcomes.

This leads to the question of the industry antecedents of difference. What are the antecedents of the differentiation of the three clusters?

Is it a result of national cultures affecting the organisational cultures or, is it a result of particular industry structures producing particular industry relationship marketing outcomes?

To test the former would require further research comparing the organisational cultures of different industries within the same national cultures.

For example, comparing the organisational culture of the Korean automotive industry with the organisational culture of the Korean shipbuilding industry.

5.2 Research Contribution

Figure 1 showed that the Korean shipbuilding industry was much more globally competitive than the Korean automotive industry cluster.

This implies that the competitiveness of the Korean shipbuilding industry may be specific to a particular organisational culture for that industry rather than a particular organisational culture for the Republic of Korea as a whole.

There is support from the results of hypotheses 2, 3 and 4 that shipbuilding companies in the Republic of Korea are more customer dominant focus (Vargo and Lusch; 2004, p. 1) than central dominant focus relative to Japanese and Chinese shipbuilding companies.

This form of relationship marketing better enables both Korean shipbuilding companies and theirforeign buyers to become co-creators of value (Payne, Storbacka and Frow; 2008, p. 83).

Results from Hypotheses 4, 5 and 6 support the hypothesis that foreign shipbuyers have devoted substantial personnel and capital resources to physically locate in theKorean shipbuilding cluster centred around Ulsan, Busan and Kojedo.

These relationships between the parties within the Korean industry cluster are regarded by shipbuyer representatives as resources that affect the innovativeness creation of value for both shipbuilders and shipbuyers (Ganesan, Malter and Rindfleisch, 2005, p. 44).

This implication is also supported by the results of Hypothesis 3 where Korean shipbuilding companies are perceived as having a more open

organisational culture than their Japanese and Chinese rivals.

Hypothesis 3 also found support for the hypothesis that Japanese and Chinese shipbuilding companies were perceived as less open than their Korean counterparts.

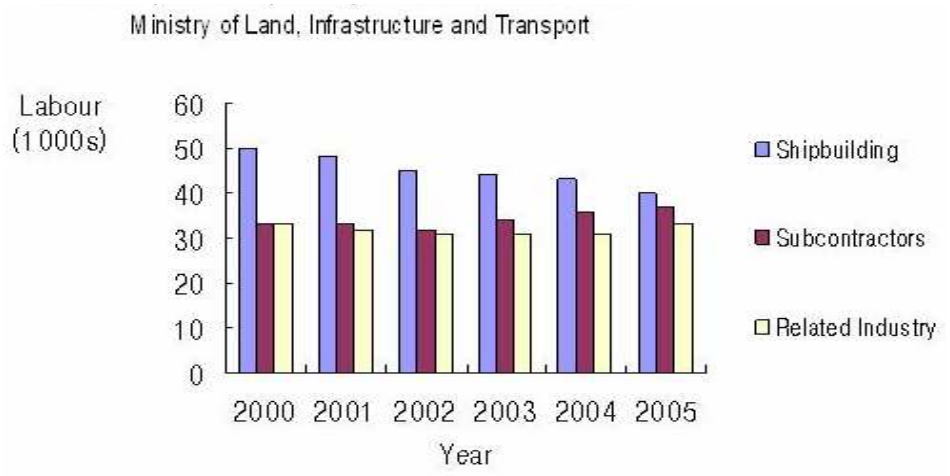
This less open organisational culture was also correlated with less investment in terms of equipment, proprietary technology and personnel in relationships with Chinese shipbuilding companies.

This may also be explained by the lack of an oligopolistic structure within the Chinese shipbuilding industry that has many small shipbuilding yards and the consequent effect on perceptions of reliability in such an industry structure of smaller firms (Van Witteloostuijn, A., & Boone; 2006, p. 419).

Consequently, Chinese shipyards have been unable to develop long standing relationships with ship buyers as they do not yet have the individual capacity to satisfy multiple ship orders. This implies that there will be a rationalization within the Chinese shipbuilding industry to meet the long term needs of their customers in terms of relationships and reliability.

The industry structure of the Japanese shipbuilding industry is also more fragmented than their Korean oligopolistic competitors. This is exemplified by the shift to outsourcing within the Japanese shipbuilding industry as shown in Table 5.

<Table 6> Japanese Shipbuilding Labour Force(2000～2005)



With a more fragmented industry shipbuyers are less able to develop long standing relationships with shipbuilding companies.

Results from Hypotheses 2A and 3A and 4A provide support for the consequent effects on perceptions of the honesty, reliability and openness of Japanese shipbuilding companies.

When rationalization occurs in the Chinese shipbuilding industry and it begins to consolidate its structure Chinese shipbuilding companies will need to improve their relationship marketing skills to take market share from their Korean rivals.

This would require a major realignment of current perceptions of honesty, reliability, openness and customer service levels by foreign shipbuyers.

5.3 Managerial Implications

5.3.1 Management Strategies and Sustainable Innovation

Sustainable innovation in the Korean Shipbuilding Industry Cluster is exemplified by the implementation of range of management strategies that interviewees believed that Chinese shipyards would find difficult to replicate.

1) Professionalism in the organisation: this was achieved by managers receiving comprehensive training at the beginning of their employment and continuous education throughout their working lives. Employers within the Korean Shipbuilding Industry Cluster paid premium wages to well qualified workers (Korea Shipbuilders' Association, 2006).

2) Promote beliefs and values: interviewees noted that a strong sense of identity with companies was fostered by employers within the Korean Shipbuilding Industry Cluster.

3) Promote culture of honesty: employees who weren't afraid to speak up in team meetings and tell the truth about work situations were rewarded rather than scolded though Korean cultural practices ensured that all criticisms were made respectfully to co-workers and supervisors.

4) Resist culture of compliance by employees: this refers to the practice within the Korean Shipbuilding Industry Cluster of perturbation.

5) Perturbations were regarded as producing creativity and innovations which are the fundamental mechanisms required for the firm to evolve, adapt, compete and prosper (von Krogh, Nonaka and Nishiguchi 2000).

6) Understand employee motivations and limitations: within other Korean industry clusters unrealistic demands were often placed on workers leading to industrial unrest. Interviewees noted that as managers in the Korean Shipbuilding Industry Cluster that they would meet employees at regular intervals to identify the non-financial motivations of employees and then provide salary packages that enable workers to continuously work to the best of their ability over long periods of time rather than working strenuously for short periods of time and then collapsing with exhaustion.

7) Create and manage client expectations: interviewees provided an insight to this issue as both customers of flagship companies and as managers within flagship companies. The paramount concern was the development and maintenance of rapid and accurate information between clients and managers. All shipyards set up offices for foreign customers to observe the construction process in the Korean Shipbuilding Industry Cluster.

5.3.2 Reward Systems in the Korea Shipbuilding Industry Cluster

In this section the reward systems used by flagship companies in the Korean Shipbuilding Industry Cluster are discussed.

The high rates of productivity (Korea Shipbuilders'Association, 2006) in the Korean Shipbuilding Industry Cluster are correlated with work rates that exceed the minimum limits that are specified in employment contracts. In addition to increasing worker wages, flagship companies provided reward systems that allowed employees to embrace opportunities to participate in shipbuilding problem solving and decision making.

This increased worker trust and intrinsic rewards and consequently trust and

intrinsic rewards produced positive relationships between reward systems and organisational commitment and job satisfaction which helped to decrease workplace stress.

Opportunity to participate implies that the flagship companies trust and value the input of the employee and that the worker is seen as a resource rather than a commodity. This is a strongly held value within the Korean Shipbuilding Industry Cluster. To the worker, being valued and trusted are important and satisfying benefits granted by the employer.

Many incentives such as employment security, promotion opportunities, assistance with work-family issues, and increased wages are very strong indicators (whether intentional or not) of the flagship companies'concern for and commitment to the welfare of their employees.

Flagship companies, through provision of these scarce incentives (in today's work world), are seen by employees as benefactors.

Blau's (1963) concept of social obligation shows that it is quite plausible (perhaps made more likely because of diminishing existence of the traditional psychological contract) that human resource practices perceived by employees to be of high value will elicit from those employees the desire to enjoy the continued benefit of such practices.

Such continued benefit is dependent upon their continued employment with the employer, and continued employment is dependent on the contribution that employees make to the flagship company.

Therefore, it is in the employees' best interests to perform and contribute in such a manner as to ensure the continuation of these benefits - in short, to

contribute greater effort.

Social reciprocity norms have also been posited to facilitate the attainment of commitment and behaviour consistent with that commitment (Howard, 1995).

Reciprocity has been suggested to be a ubiquitous and powerful social convention (Webley & Lea, 1993), as well as an antecedent of positive organisational behaviours (Brief & Motowidlo, 1986).

Social obligations in the flagship companies are engendered through the perception of the flagship company as a benefactor to whom some degree of allegiance and loyalty, in the form of performance and contribution, is owed.

The greater the perceived commitment of the "benefactor" flagship company to the employee, the stronger the influence of reciprocity norms is on employees to provide greater effort.

As a result, in addition to the opportunity to contribute greater effort, employees in the Korean Shipbuilding Industry Cluster are stimulated by psychological factors inherent to incentives to contribute greater effort.

This is quite contrary to the situation in Chinese shipyards where employees are seen as either serfs to be exploited or guan xi holders provided with a sinecure.

5.3.3 Cooperation between Korean and Non-Korean Staff

Increasing competition resulting from the global and technological nature of markets has heightened the need for businesses to rely on cross-functional new product teams to produce innovations in a timely manner; yet ethnically diverse teams' inevitable disagreements often appear to prevent this from happening.

Intervieweesnoted that the effect of task disagreement on team outcomes depended on how free members felt to express task-related doubts and how collaboratively or contentiously these doubts were expressed.

The Scandinavian co-operative model (Hakanson, 1987) has come to dominate the British, Norwegian, German, Swedish and even French companies that are involved in the Global Shipbuilding Industry Cluster.

This co-operative model has "spilled over"into the Korean Shipbuilding Industry Cluster and Korean management and employees were regarded as freer in disagreeing over tasks with foreign colleagues than Korean management and staff in the comparable Korean Motor Vehicle Industry Cluster.

5.3.4 Inter-firm Networks and Innovation

There are three major dimensions of social capital for inter-firm networks in the Korean Shipbuilding Industry Cluster: social interaction, trustworthiness, and shared vision.

All three of these dimensions were regarded by interviewees as having significant effects, directly or indirectly, on resource exchanges and cooperation.

The higher the level of resource exchange and cooperation, the higher the level of product innovation. The Korea Shipbuilders' Association has a strategy to invest in the creation of social capital within the Korean Shipbuilding Industry Cluster to create value (Korea Shipbuilders' Association, 2006).

The strategy emphasized the development of informal social relations and tacit social arrangements to encourage productive resource exchange and cooperation and thereby promote product innovations.

How do social interactions, trustworthiness and shared vision within the Korean Shipbuilding Industry Cluster create value?

The trustworthiness of staff within flagship companies is essential to social interactions and shared vision. Unlike other Korean industry clusters interviewees noted that there was a high level of geographical transfers of management staff to interact with the global clientele of the Korean Shipbuilding Industry Cluster.

This high level of interaction has created a high velocity of open information about the trustworthiness of staff. Reputations for trust were quickly disseminated throughout the Korean Shipbuilding Industry Cluster. The shared visions or super-ordinate goals of the flagship companies stimulated innovation.

5.3.5 Social Networks

Interpersonal relationships between members of different companies and individuals' perceptions of inter-company conflict are discussed in this section.

Although individual friendships across companies were not regarded as affecting perceptions of inter-company conflict, negative personal relationships were associated with higher perceived inter-company conflict.

Perceptions of inter-company conflict were related to indirect relationships through friends, and an amplification effect existed due to the wide regional and school based networksin Korean society.

To overcome the problem of negative perceptions in the Korean Shipbuilding Industry Cluster the Korea Shipbuilders' Association has devised strategies to provide a shared vision for the cluster by promoting greater cooperation (Korea

Shipbuilders' Association, 2006).

This is achieved by providing interactive activities that reduced negative personal perceptions as greater contact through shared tasks reduces negative perceptions (Sherif et al 1954).

The Korean economy has traditionally been seen as a resource dependent economy with its only resource being its highly educated workforce.

This is especially true of the Korean Shipbuilding Industry Cluster which requires large inputs of steel (smelted from imported iron ore) and imported energy and relies on the high quality of its workforce for its global competitiveness.

Further research is needed to identify how to leverage the competitive advantage of the Korean Shipbuilding Industry Cluster in an environment of rapidly rising prices for iron ore, coal, oil and natural gas.

5.4 Limitations and Future Directions of Research

Although this study makes a significant contribution to the literature and has important managerial implications, it also has several limitations, and the findings must be interpreted in light of these limitations.

Firstly, the data was collected from self-reported questionnaires from individual shipbuyer representatives and may have included individual bias.

Future studies would use more objective measurements to reduce the potential for self-reporting bias.

Secondly, the data was collected from foreign shipbuyer representatives and may have included cultural bias. This is inevitable for the Korean and Japanese shipbuilding industries where the bulk of purchases are by foreign shipbuyers,

As can be seen from Table 4, the Chinese shipbuilding industry, however, is dominated by domestic sales. Responses by Chinese shipbuyers may have produced a different perception of relationship marketing compared to foreign shipbuyers.

Further research would need to be done on the relationship marketing expectations of Chinese shipbuyers vis-à-vis non-Chinese shipbuyers.

Thirdly, the research was confined to shipbuilding companies and thus is limited to the organisational culture of shipbuilding companies and as a meta-group of shipbuilding companies, the respective shipbuilding industry clusters of Korea, Japan and China respectively.

Consequently, other closely related entities to shipbuilding companies such as steel suppliers, component and paint suppliers, will not necessarily have similar research outcomes.

This opens an interesting area for future research in identifying the driving forces for relationship marketing for all types of companies within the shipbuilding industry clusters.

Fourthly, Korea, Japan and China have distinct national cultures and this research was not designed to measure aspects of each national culture but aspects of the organisational cultures and their impact on relationship marketing withineach shipbuilding industry.

Further research is required to identify whether the relationship marketing

values of different industries within each national culture are similar to the relationship marketing values of the respective shipbuilding industry clusters.

For example, measuring the similarities between the relationship marketing strategies of the automotive industry cluster of Korea, and the shipbuilding industry cluster of Korea.

Fifthly, in the course of this research anecdotal evidence was revealed indicating that foreign shipbuyers preferred to base their Asian operations in Korea instead of Japan or China which may have conflated the results between Korean shipbuilding company cultures and their overall experience of Korean culture as a whole.

Although respondents were all experienced engineers, naval architects or managers and would provide professional responses rather than emotional responses further research would be needed to disentangle these issues.

This also raises the issue of the reasons behind the decision to base Asian operations in Korea. As the cost of living is much higher in Japan compared to Korea it seems obvious why Korea is preferred to Japan but does not explain the aversion to China in housing expatriate staff.

Being close to the most innovative industry cluster may be the reason and this is a further avenue of investigation. Comparisons could also be done with the preferences of non-Asian companies to locate staff that work in other industry clusters such as the automotive industry and the information technology industry.

Resource Dependency of the Korean Shipbuilding Industry Cluster

The Korean Shipbuilding Industry Cluster is dependent on resources in two ways.

1) Resource allocation: control over how much of a resource is accessible
2) Resource use: control over how resources can be used.

5.4.1 Resource Allocation and Use Implications

Resource allocation is a major concern for the Korean Shipbuilding Industry Cluster as the current price driver for steel and energy is the booming construction industry in China.

In 2005, iron ore prices from the world's major exporters Brazil and Australia increased by 71.5 % (Chessell, 2005).

In determining the boundaries of resource allocation, a resource stakeholder with discretion over allocation only has power if it has the "ability to articulate a credible threat of withdrawal" of those resources (Pfeffer & Leong, 1977: 779).

For example, within the Korean Motor Vehicle Industry Cluster unions continuously threaten to disrupt production. Successive Korean governments have been ineffectual in dealing with the withdrawal of human resources within the Korean Motor Vehicle Industry Cluster.

Given the lack of success by the Korean government in this area of human resource management the flagship companies in the Korean Shipbuilding Industry Cluster have developed their own strategies to maintain high quality human resources.

Resource use has become a significant driver in the Korean Shipbuilding

Industry Cluster with the dangers of global warming both in terms of the need to construct ships efficiently and to manufacture energy efficient ships.

Environmental pressure come form both lobby groups such as Greenpeace and scientific knowledge within corporations. For example, the multinational oil company Shell decided not to dispose of the Brent Spar oil facility in the North Atlantic for two reasons; major Greenpeace protests in Britain and Germany and concern within Shell by its own scientists of the environmental consequences of disposing of the Brent Spar at sea (Jordan, 2001).

Proponents of global warming theory have begun to force changes in all aspects of the global economy. The implications for research for the resource use perspective are clear.

From international treaties, to domestic government legislation to changesin consumer behaviour the effects of the threat of global warming to several industries have been profound and in particular to energy intensive industries such as the Korean shipbuilding industry.

The Korean Shipbuilding Industry Cluster and the Korean Motor Vehicle Industry Cluster play a crucial role in tackling the challenges of global warming.

Further research is needed to identify how the two industries can cooperate to accessing cleaner energy for their own industries; and for the industry that is most dependent on these two industries the Korean Steel Industry Cluster.

Cooperation on spillover effects in engine design from industry consortia that are rivals in the Korean marketplace but allies in the global marketplace are also implied from this research.

How to balance the need for commercial confidentiality and the benefits of inter-industry cooperation is a major challenge facing the Korean Shipbuilding Industry Cluster.

5.4.2 Competition from China

A Third implication for research is the strategy of the Chinese government to use intermediaries to attack the Korean Shipbuilding Industry Cluster (Chosun Ilbo, 2007).

By undermining the fidelity of the Korean workforce the Chinese government is indirectly undermining the viability of the Korean Shipbuilding Industry Cluster.

Although Korean Shipbuilding Industry strategies are currently successful the threat of poaching Korean shipbuilding construction crews and ship designers by Chinese rivals is growing year by year. This implies that further research needs to be done on how cluster cooperation can foster human resource development and keep jobs in Korea.

5.4.3 Slack Resources and Innovation

A fourth implication for further research is the need to identify strategies to nurture human resources in the Korean Shipbuilding Industry Cluster as human resources are the primary source of innovation and sustainable competitive advantage.

Cyert and March (1963) have noted that slack resources are a necessary but not sufficient condition for allocating resources to innovation. In addition to slack, innovation requires the strategic intent, as well as other enabling flagship

company conditions, to invest slack resources in innovation.

The global shipbuilding industry went into a slump from about 1992 when Hyundai, Samsung and Daewoo all greatly expanded their shipyard facilities.

Ship prices fell by almost a third between 1991 and 1999 and Japanese shipbuilders restructured their operations and fired many of their veteran engineers (Cho J.S., 2007).

The Korean Shipbuilding Industry Cluster resisted the pressure to downsize its workforce and has reaped the benefits of the upturn in ship demand and higher prices.

The expected glut of supply from Chinese overcapacity threatens employment in the Korean Shipbuilding Industry Cluster, however, Korean flagship companies will be able to leverage slack human resources by focusing on improving the quality of their workforce training programs.

Prestige Factors within the Korea Shipbuilding Industry Cluster

A fifth implication for further research is how to maintain the fidelity of workers in the Korean Shipbuilding Industry Cluster.

The recent cases of Korean shipbuilding employees who attempted to pass on Korean shipbuilding technology to Chinese competitors (valued at approximately USD 40 billion) demonstrates the resolve of Chinese shipbuilding rivals to use unorthodox strategies to compete against Korea's flagship companies.

By leveraging the prestige associated with working in Korean Shipbuilding Industry Cluster the fidelity of employees can be sustained.

Employees who identify strongly with their organisations are more likely to

show a supportive attitude toward them (Ashforth & Mael, 1989) and to make decisions that are consistent with organisational objectives (Simon, 1997: 284).

Hence, organisations should engender identification to facilitate their functioning (Cheney, 1983; Pratt, 1998).

One strategy could be to improve their perceived external prestige, since prestige has been shown to positively affect organisational identification (e.g., Mael & Ashforth, 1992).

Members may feel proud of being part of a well-respected company, as it strengthens their feelings of self-worth to "bask in reflected glory."

Another, rather neglected, management instrument for engendering identification is organisational communication to employees.

As Cheney (1983) proposed, the content of employee communication may facilitate the identification process, it discloses the goals, values, and achievements of an organisation.

Exposure to an organisation's identity is considered fundamental to group identification (Dutton, Dukerich, & Harquail, 1994).

5.4.4 Employee Communication and Organisational Identification

Identifying strategies to improve employee communication is a sixth implication of this research.

Employee Communication is defined as "the communication transactions between individuals and/or groups at various levels and in different areas of specialization that are intended to design and redesign organisations, to

implement designs and to coordinate day-to-day activities" (Frank and Brownell, 1989: 5-6).

Employee communication is a multidimensional construct. Employees are not merely satisfied or dissatisfied with communication in general, but can express varying degrees of satisfaction about definite aspects of communication (Clampitt and Downs, 1993: 6).

Two particular components of employee communication are pertinent antecedents of organisational identification: (1) the content of organisational messages as it concerns members' satisfaction with what is being communicated and (2) the communication climate, or how the information is communicated within an organisation.

5.4.5 Content of Employee Communication

The seventh implication is identifying thecontent of employee communication. Whereas social categorization would require that employees receive adequate information about what is central and distinctive about their organisations, self-categorization (Turner, 1987) can be facilitated when employees are provided with useful information about their roles in organisations.

There is a difference between communication about how an organisation deals with relevant organisational issues and communication about an individual's personal contribution to the company's success.

Being well-informed about organisational issues (such as goals and objectives, new developments, activities and achievements) will enable an organisation's members to discover the salient characteristics that distinguish this organisation

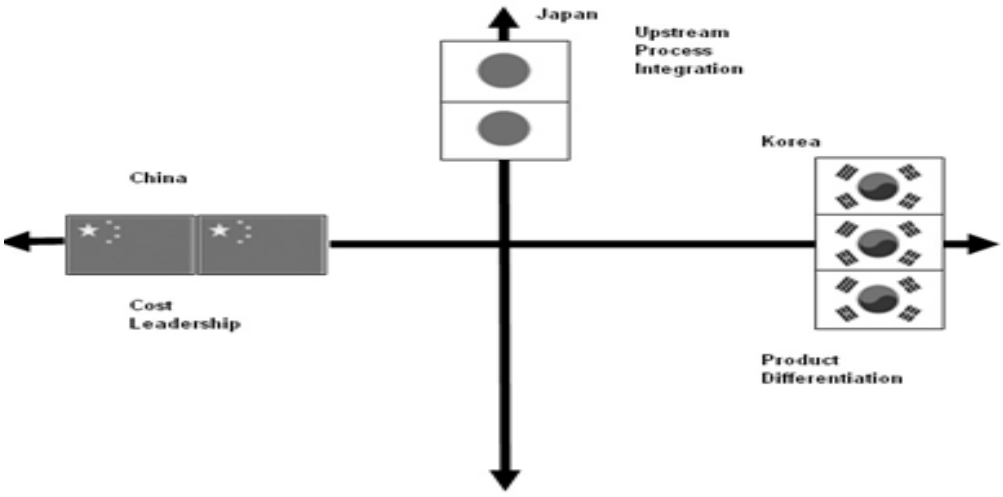
from others (Dutton et al., 1994) and thus enhance social categorization.

The in-group (the organisation) will become more salient and transparent as an object with which to identify. Furthermore, repeated exposure to information about the organisation may increase its perceived attractiveness (as in Zajonc's [I980] "mere exposure effect") and may thus reassure members that they work for an organization that is worth being associated with. In organisations that are perceived favorably by their members, organisational identification is more likely to occur (Dutton et al., 1994), because it enhances members' feelings of self-worth.

5.5 Conclusion

Figure 8 shows a comparative analysis of Korean, Japanese and Chinese shipbuilding marketing strategies given their respective resource constraints.

<Figure 8> Comparative Analysis of Korean, Japanese and Chinese Shipbuilding Marketing Strategies



The Japanese Shipbuilding Industry Cluster has moved into a strategy of upstream integration due to its loss, through retrenchments, of substantial numbers of engineers.

The Chinese Shipbuilding Industry Cluster has lower labour costs but poor management skills and there is little pressure from its mostly domestic competitors to improve the productivity of its labour force and the quality of its ship output.

The strong relationships that flagship companies in the Korean Shipbuilding Industry Cluster have developed with foreign shipbuyers have influenced the organizational culture of Korean shipbuilding companies to allow for product differentiation of complex ships that require high levels of communication with foreign buyers.

This has led to the development of strategies of western style participatory communication methods of communicating to their workforce to combat the traditional Korean style of top-down management prevalent in other Korean industry clusters.

This has enhanced worker identification and fidelity to flagship companies within the Korean Shipbuilding Industry Cluster and consequently lower rates of industrial unrest and higher rates of productivity than other Korean industry clusters.

Other Korean industry clusters may benefit from learning the lessons of internal and external relationship marketing that exist in the Korean shipbuilding industry cluster.

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Appendix 1 Manova using R Plus Programming Language

<code>data <- Xdependent <- cbind(data$Korea,data$Japan,data$China) ;question <- data$Question ;fit <- manova(dependent ~ question) ;print (fit) ;print(summary.aov(fit));print(summary(fit,tests="Wilks"));print(summary(fit)) ;</code>

<output>Rweb:> data <- X Rweb:> dependent <- cbind(data$Korea,data$Japan,data$China) ; Rweb:> question <- data$Question ; Rweb:> fit <- manova(dependent ~ question) ; Rweb:> print (fit) Call: manova(dependent ~ question) Terms: question Residuals resp 1 23.378 4494.288 resp 2 217.546 9977.762 resp 3 840.503 10184.337 Deg. of Freedom 1 1402 Residual standard error: 1.790426 2.667734 2.695208 Estimated effects may be unbalanced Rweb:> print(summary.aov(fit)); Response 1 : Df Sum Sq Mean Sq F value Pr(>F) question 1 23.4 23.4 7.2928 0.007007 ** Residuals 1402 4494.3 3.2 --- Signif. codes: 0 `***' 0.001 `**' 0.01 `*' 0.05 `.' 0.1 ` ' 1 Response 2 : Df Sum Sq Mean Sq F value Pr(>F) question 1 217.5 217.5 30.568 3.84e-08 *** Residuals 1402 9977.8 7.1 --- Signif. codes: 0 `***' 0.001 `**' 0.01 `*' 0.05 `.' 0.1 ` ' 1 Response 3 : Df Sum Sq Mean Sq F value Pr(>F) question 1 840.5 840.5 115.71 < 2.2e-16 *** Residuals 1402 10184.3 7.3 --- Signif. codes: 0 `***' 0.001 `**' 0.01 `*' 0.05 `.' 0.1 ` ' 1

Rweb:> print(summary(fit,tests="Wilks")); Df Pillai approx F num Df den Df Pr(>F) question 1 0.086 43.665 3 1400 < 2.2e-16 *** Residuals 1402

--- Signif. codes: 0 `***' 0.001 `**' 0.01 `*' 0.05 `.' 0.1 ` ' 1 Rweb:> print(summary(fit)) ; Df Pillai approx F num Df den Df Pr(>F) question 1 0.086 43.665 3 1400 < 2.2e-16 *** Residuals 1402 ---
Signif. codes: 0 `***' 0.001 `**' 0.01 `*' 0.05 `.' 0.1 ` ' 1 Rweb:>
Rweb:> Rweb:>
</output>

Appendix 2 Open Ended Questionnaire History

When was the company founded?

1. Describe your operations 5 years ago (10 years ago) and compare with today.
2. What has your revenue growth rate been over the last 5 years?
3. What were the primary drivers of that growth?
4. What role have alliances played?
5. Historically, how important have they been?

Business Description

What are the company's products/services?

1. In what markets and industries does the firm participate?
2. How competitive are these?
3. What does the firm have to do to be successful in these businesses?
4. Are alliances part of a strategy for success in these businesses?

ALLIANCE

History

How did the relationship first begin?

1. How did you hear about the alliance partner?

2. What kind of product/service were you looking for?

3. What factors caused you to enter into the alliance?

3a) What factors would cause you to leave the alliance?
(As open ended question on price vs quality)

4. Are they the same actors that keep you involved today?

5. Is the history of this arrangement the same or different than that of other outside ties?

6. Is there, or was there ever, a written contract?

7. Were personal contacts a factor?

8. How important was the alliance to your business when it first began?

9. Has that changed over time?

10. Describe the exchange as it began and any important stages in its evolution.

Product/service exchanged

1. What is the product, how is it made etc.?
2. What percentage of sales or cost of goods sold does this represent?
3. How has this changed over time?
4. How important is the exchange to your business?
5. Is the business run as a profit centre?
6. What does it take to be successful?

Present Situation

1. What is the present economic value of the exchange?
2. How important is the relationship to the company?
3. What is its strategic contribution?
4. How would you describe the benefits you get from this arrangement?
5. Are they economic only?
6. If other, were they always present or did they evolve over time?
7. Does your company have more or less leverage than your partner?

a. Why?

8. Has this balance changed over time? How?
9. Has the relationship enhanced your competitive position?

10. Has it helped you to grow? How?

11. Do you see the alliance as a long term commitment? How long?

12. Are there advantages/disavantages of long versus short term commitment in this situation?

13. Describe communication between the two firms?

14. Who is responsible for the management of the relationship?

15. What are the costs of maintaining the tie?

16. How do you quantify those?

17. Have there been any disputes? How were these handled?

18. Has it been easy/difficult to maintain this alliance?

19. What explains the stability over time?

20. What kinds of investment have you made in this alliance?

Contract

Is there a written contract?

1. How formal are your dealings with the other side?

2. Are there standard operating procedures?

3. Are there dispute resolution mechanisms?

4. Do you use any non-market pricing variations?

5. How do you measure performance?

6. Have the terms changed over the course of the relationship?

7. How do you exercise control?

8. How does this arrangement compare with other outside relationships?

a. How typical is it?

Subcontracting versus in-house

Why did you form an alliance instead of incorporating the activity in-house?

1. Are there advantages in this arrangement compared to vertical integration? Disadvantages?

2. How hard/easy would it be to replace this alliance?

3. What would be the gains/losses and costs?

Appendix 3 Benchmarking Korean Shipbuilding Customer Service

The following is a questionnaire designed to benchmark customer perceptions of their experiences with Korean (K), Japanese (J) and Chinese (C) shipbuilders.

For each statement shown below please rate on a scale of 0 to 10.

10 Strongly Agree, 5 Neutral and 0 Strongly Disagree

#	Question	K	J	C
1	The company has negotiated in good faith in the past			
2	I think that the company does not mislead us			
3	We feel confident that the company won't take advantage of us			
4	If an important decision needed to be made, our firm would be willing to rely on the company to make a mutually beneficial decision without our input.			
5	We think the company is open in describing their strengths and weaknesses with us			
6	I feel that the company negotiates joint expectations fairly			
7	Face-to-face meetings we have with the company take longer than the meetings held with most of our other suppliers/customers.			
8	We have more electronic communication with the company than in most of our other relationships			
9	If this exchange relationship with the company was terminated, it would be very difficult to make up the lost supply			
10	We do not have good alternatives to the relationship with the company			
11	We need this relationship with the company to accomplish our organisation's objectives			
12	My organisation is highly dependent on the company			
13	The company has demonstrated their dependability in the performance of our agreement.			

#	Question	K	J	C
14	In my opinion the company is reliable.			
15	The company is flexible in response to requests for changes in the characteristics of the relationship			
16	We have invested substantially in personnel dedicated to our relationship with the company			
17	We have provided substantial proprietary expertise and/or technology to our relationship with the company			
18	We have made significant investments in dedicated equipment or dedicated support systems to our relationship with the company			
19	We have made significant investments in capital assets dedicated to our relationship with the company			
20	Information exchange with the company is aided by its investment in a high level of electronic interface capability			
21	The Customer Service Department (CSD) staff are more efficient and polite in delivering the service than I expected			
22	The CSD staff show care and concern for me above what is normally expected			
23	The CSD staff are more friendly, helpful, or courteous than what I expected			
24	The speed of responses to queries to the CSD is faster than I expected			
25	My requests to the CSD are accurately filled			
26	I often personally meet with CSD staff			
27	The CSD listens to feedback on how to improve service quality			
28	The CSD staff provides correct information			
29	The CSD staff often consult on decisions			
30	The CSD staff are approachable			
31	The CSD staff consult on progress, problems or changes which may impact upon my activities			
32	The CSD staff are constantly available to help me			
33	The CSD staff reliably handle confidential information			
34	The CSD staff discreetly handle sensitive situations			
35	The CSD employs people that are qualified to undertake their jobs			
35	Paperwork from the CSD never delays solutions to my problems			
37	I would highly recommend the CSD to my colleagues			

	For the following 2 questions please answer yes or no.	**Yes**	**No**
38	Relative to the rest of my supplier base I mostly buy from Korea		
39	Relative to the rest of my supplier base most of my costs are from Korea		

Appendix 4 Korean Correlations

	Q1	Q2	Q3	Q4	Q5	Q6	Q7	Q8	Q9	Q10	Q11	Q12	Q13	Q14	Q15	Q16	Q17	Q18	Q19	Q20
Q7	0.63	**0.78**	0.49	**0.71**	**0.77**															
Q8	0.62	0.43	0.39	0.46	0.33															
Q9	0.49	0.57	0.33	0.58	0.61															
Q10	0.65	0.60	0.32	0.63	0.59															
Q11	0.61	0.61	0.41	0.61	0.71															
Q12	0.54	0.59	0.41	0.40	0.49															
Q13	0.50	0.58	0.32	0.50	**0.75**															
Q14	0.61	**0.79**	0.41	0.65	**0.73**															
Q15	0.62	0.59	0.41	0.56	0.58															
Q16	0.63	**0.79**	0.42	0.68	**0.77**															
Q17	0.59	0.69	0.46	**0.72**	0.67															
Q18	0.61	0.67	0.42	0.60	**0.75**															
Q19	0.55	0.62	0.37	0.47	0.55															
Q20	0.54	0.65	0.35	0.58	0.66															
Q21						**0.76**	0.58	0.40	0.58	0.62	0.67	0.59	0.39	**0.71**	0.64	0.60	**0.70**	0.60	0.60	0.61
Q22						0.60	**0.70**	0.19	0.52	0.63	0.60	0.54	0.53	**0.71**	0.53	0.60	0.55	0.61	0.58	0.61
Q23						**0.76**	**0.77**	0.48	0.69	**0.75**	0.66	0.51	0.65	**0.80**	**0.76**	**0.77**	**0.77**	0.71	0.66	0.68
Q24						0.65	0.64	0.65	0.59	**0.70**	0.68	0.66	0.56	**0.74**	0.69	**0.70**	0.63	0.73	0.66	0.56
Q25						0.63	0.59	0.39	0.54	0.67	**0.74**	0.48	0.62	**0.74**	0.52	**0.71**	0.60	0.61	0.52	0.55
Q26						**0.72**	0.80	0.37	0.66	**0.70**	0.69	0.58	0.67	**0.81**	0.68	**0.82**	**0.75**	**0.75**	0.64	0.66
Q27						**0.71**	0.58	0.47	0.57	**0.72**	0.68	0.55	0.50	0.67	**0.74**	0.57	0.66	0.66	**0.71**	0.64
Q28						**0.73**	**0.84**	0.54	0.60	0.64	0.63	0.59	0.52	**0.85**	0.66	**0.79**	**0.76**	0.67	0.64	0.62
Q29						**0.72**	**0.76**	0.47	0.64	**0.73**	**0.77**	0.44	0.68	**0.76**	0.74	**0.76**	**0.76**	**0.78**	**0.70**	**0.71**
Q30						**0.81**	0.66	0.31	**0.72**	0.66	0.65	0.58	0.57	**0.76**	0.70	**0.78**	**0.75**	0.54	0.62	0.61
Q31						0.63	**0.71**	0.17	0.60	0.51	0.46	0.44	0.57	0.60	0.44	0.60	0.59	0.61	0.40	0.52
Q32						**0.72**	**0.72**	0.50	0.55	**0.76**	0.67	0.56	0.48	**0.72**	0.75	0.67	**0.71**	**0.73**	**0.70**	0.66
Q33						0.65	**0.74**	0.46	0.63	0.65	0.66	0.49	0.52	**0.74**	0.71	**0.76**	0.67	**0.72**	0.59	0.64
Q34						**0.74**	**0.77**	0.46	0.65	0.64	**0.73**	0.57	0.60	**0.79**	0.69	**0.77**	0.67	**0.77**	0.63	**0.71**
Q35	**0.71**	0.65	0.35	0.51	**0.72**															
Q36	0.60	0.64	0.36	0.55	0.56															

Appendix 5 Japanese Correlations

	Q1	Q2	Q3	Q4	Q5	Q6	Q7	Q8	Q9	Q10	Q11	Q12	Q13	Q14	Q15	Q16	Q17	Q18	Q19	Q20
Q7	0.89	0.77	0.74	0.85	0.83	0.86														
Q8	0.77	0.76	0.80	0.78	0.75	0.77														
Q9	0.72	0.72	0.67	0.73	0.74	0.75														
Q10	0.84	0.79	0.74	0.83	0.76	0.77														
Q11	0.83	0.81	0.60	0.82	0.71	0.78														
Q12	0.73	0.65	0.74	0.70	0.67	0.80														
Q13	0.87	0.80	0.71	0.82	0.82	0.78														
Q14	0.81	0.82	0.75	0.85	0.87	0.80														
Q15	0.79	0.68	0.77	0.83	0.70	0.77														
Q16	0.84	0.75	0.73	0.84	0.82	0.84														
Q17	0.79	0.84	0.68	0.85	0.76	0.75														
Q18	0.81	0.85	0.78	0.89	0.84	0.78														
Q19	0.76	0.83	0.73	0.82	0.84	0.78														
Q20	0.77	0.82	0.73	0.72	0.77	0.66														
Q21							0.76	0.74	0.81	0.79	0.78	0.80	0.73	0.74	0.70	0.80	0.78	0.81	0.78	0.68
Q22							0.82	0.85	0.72	0.84	0.70	0.84	0.76	0.86	0.80	0.87	0.76	0.84	0.82	0.74
Q23							0.81	0.70	0.76	0.74	0.68	0.66	0.71	0.84	0.72	0.79	0.74	0.77	0.77	0.58
Q24							0.85	0.81	0.76	0.79	0.71	0.75	0.77	0.90	0.83	0.82	0.75	0.78	0.82	0.77
Q25							0.80	0.74	0.79	0.82	0.84	0.69	0.88	0.83	0.75	0.81	0.86	0.86	0.85	0.85
Q26							0.80	0.66	0.71	0.85	0.72	0.69	0.82	0.83	0.75	0.77	0.81	0.83	0.78	0.75
Q27							0.85	0.76	0.70	0.70	0.76	0.77	0.77	0.86	0.80	0.82	0.80	0.75	0.80	0.71
Q28							0.77	0.79	0.78	0.70	0.79	0.76	0.71	0.78	0.78	0.78	0.79	0.87	0.74	0.61
Q29							0.75	0.68	0.72	0.75	0.72	0.71	0.81	0.86	0.77	0.75	0.79	0.80	0.81	0.78
Q30							0.83	0.75	0.77	0.78	0.66	0.76	0.77	0.79	0.79	0.82	0.73	0.74	0.81	0.66
Q31							0.83	0.78	0.79	0.83	0.83	0.75	0.82	0.82	0.76	0.84	0.83	0.89	0.83	0.75
Q32							0.82	0.83	0.70	0.81	0.73	0.74	0.76	0.88	0.81	0.83	0.76	0.85	0.87	0.77
Q33							0.89	0.80	0.73	0.85	0.80	0.80	0.82	0.82	0.82	0.85	0.76	0.85	0.85	0.74
Q34							0.79	0.72	0.77	0.77	0.84	0.77	0.75	0.82	0.77	0.82	0.74	0.73	0.78	0.71
Q35	0.85	0.84	0.76	0.85	0.83	0.84														
Q36	0.79	0.78	0.70	0.82	0.71	0.79														

Appendix 6 Chinese Correlations

	Q1	Q2	Q3	Q4	Q5	Q6	Q7	Q8	Q9	Q10	Q11	Q12	Q13	Q14	Q15	Q16	Q17	Q18	Q19	Q20
Q7	0.78	0.84	0.79	0.82	0.83	0.75	0.75													
Q8	0.70	0.74	0.83	0.76	0.75	0.79	0.79													
Q9	0.75	0.84	0.79	0.85	0.74	0.80	0.80													
Q10	0.81	0.72	0.84	0.69	0.82	0.79	0.79													
Q11	0.69	0.77	0.72	0.83	0.70	0.75	0.75													
Q12	0.88	0.81	0.89	0.71	0.84	0.79	0.79													
Q13	0.83	0.83	0.85	0.82	0.86	0.90	0.90													
Q14	0.76	0.73	0.82	0.80	0.75	0.74	0.74													
Q15	0.78	0.80	0.89	0.77	0.87	0.82	0.82													
Q16	0.85	0.83	0.88	0.84	0.89	0.89	0.89													
Q17	0.69	0.72	0.77	0.81	0.64	0.84	0.84													
Q18	0.76	0.81	0.80	0.80	0.78	0.86	0.86													
Q19	0.84	0.78	0.85	0.72	0.86	0.86	0.86													
Q20	0.75	0.70	0.74	0.77	0.82	0.79	0.79													
Q21								0.79	0.78	0.83	0.69	0.83	0.87	0.79	0.87	0.94	0.73	0.87	0.85	0.79
Q22								0.73	0.78	0.83	0.77	0.84	0.85	0.80	0.82	0.83	0.76	0.79	0.78	0.76
Q23								0.53	0.68	0.63	0.71	0.77	0.69	0.79	0.61	0.70	0.68	0.67	0.66	0.55
Q24								0.79	0.71	0.82	0.77	0.88	0.88	0.74	0.87	0.88	0.77	0.83	0.88	0.80
Q25								0.84	0.82	0.84	0.77	0.86	0.89	0.80	0.89	0.92	0.81	0.87	0.87	0.84
Q26								0.77	0.84	0.79	0.82	0.85	0.90	0.79	0.85	0.90	0.80	0.85	0.86	0.83
Q27								0.74	0.74	0.61	0.67	0.68	0.75	0.76	0.72	0.74	0.64	0.71	0.80	0.80
Q28								0.78	0.80	0.71	0.70	0.81	0.77	0.77	0.74	0.83	0.75	0.83	0.75	0.72
Q29								0.72	0.72	0.73	0.86	0.77	0.80	0.83	0.79	0.80	0.73	0.77	0.71	0.69
Q30								0.77	0.85	0.80	0.82	0.84	0.89	0.85	0.84	0.88	0.78	0.80	0.87	0.77
Q31								0.77	0.83	0.80	0.71	0.80	0.89	0.77	0.83	0.93	0.77	0.80	0.87	0.81
Q32								0.70	0.77	0.81	0.76	0.86	0.79	0.78	0.78	0.85	0.69	0.78	0.76	0.65
Q33								0.84	0.74	0.80	0.74	0.86	0.84	0.77	0.83	0.91	0.77	0.80	0.86	0.83
Q34								0.70	0.72	0.88	0.71	0.82	0.83	0.74	0.80	0.85	0.68	0.76	0.78	0.71
Q35	0.84	0.79	0.85	0.70	0.84	0.81	0.81													
Q36	0.88	0.88	0.88	0.87	0.85	0.86	0.86													

Appendix 7 Comparison of Means

Comparison of Means		Z scores		Means			Standard Deviations		
		Korea Japan	Korea China	Korea	Japan	China	Korea	Japan	China
1	The company has negotiated in good faith in the past	-0.78	5.50	8.4	8.6	7.2	1.02	0.77	0.76
2	I think that the company does not mislead us	0.87	4.92	8.7	8.4	6.9	1.68	1.27	1.26
3	We feel confident that the company won't take advantage of us	5.05	18.07	8.3	6.2	2.3	1.59	1.81	1.17
4	If an important decision needed to be made, our firm would be willing to rely on the company to make a mutually beneficial decision without our input.	6.61	17.98	8.3	6.2	2.5	0.85	1.66	1.72
5	We think the company is open in describing their strengths and weaknesses with us	-0.54	20.18	8.7	8.9	2.2	1.14	1.46	1.55
6	I feel that the company negotiates joint expectations fairly	1.44	10.07	8.5	8.1	4.3	1.03	0.93	2.24
7	Face-to-face meetings we have with the company take longer than the meetings held with most of our other suppliers/customers.	2.69	-11.22	5.1	4.3	8.6	1.22	1.32	1.42
8	We have more electronic communication with the company than in most of our other relationships	2.82	7.54	8.9	8.2	7.2	1.19	1.06	0.68
9	If this exchange relationship with the company was terminated, it would be very difficult to make up the lost supply	8.37	1.55	9.3	7.2	8.9	1.11	1.00	1.02
10	We do not have good alternatives to the relationship with the company	26.35	9.25	8.3	2.2	4.3	0.73	1.17	2.49
11	We need this relationship with the company to accomplish our organisation's objectives	7.11	-2.36	7.6	5.2	8.3	1.25	1.58	1.25
12	My organisation is highly dependent on the company	20.79	5.24	8.3	2.2	6.8	1.18	1.30	1.25
13	The company has demonstrated their dependability in the performance of our agreement.	0.26	-0.39	8.3	8.2	8.3	0.91	0.92	0.90
14	In my opinion the company is reliable.	0.64	10.47	9.3	9.1	6.1	0.94	0.90	1.57
15	The company is flexible in response to requests for changes in the characteristics of the relationship	10.93	19.62	8.4	4.5	2.2	1.13	1.83	1.51
16	We have invested substantially in personnel dedicated to our relationship with the company	14.16	6.73	7.2	2.2	5.2	1.34	1.61	1.14

Comparison of Means		Z scores		Means			Standard Deviations		
		Korea Japan	Korea China	Korea	Japan	China	Korea	Japan	China
17	We have provided substantial proprietary expertise and/or technology to our relationship with the company	11.08	0.60	8.3	4.2	8.2	0.99	2.01	0.98
18	We have made significant investments in dedicated equipment or dedicated support systems to our relationship with the company	1.41	-15.90	3.1	2.5	8.2	1.57	1.76	1.12
19	We have made significant investments in capital assets dedicated to our relationship with the company	4.00	-19.52	3.5	2.2	8.1	1.18	1.51	0.80
20	Information exchange with the company is aided by its investment in a high level of electronic interface capability	-0.22	0.85	9.1	9.1	8.8	1.09	1.06	1.13
21	The Customer Service Department (CSD) staff are more efficient and polite in delivering the service than I expected	6.68	11.88	8.8	6.8	5.3	1.22	1.25	1.24
22	The CSD staff show care and concern for me above what is normally expected	4.13	12.43	8.5	7.2	5.0	1.18	1.38	1.21
23	The CSD staff are more friendly, helpful, or courteous than what I expected	3.19	11.68	8.4	7.6	5.2	1.05	1.23	1.28
24	The speed of responses to queries to the CSD is faster than I expected	7.33	28.78	9.2	7.3	2.2	0.82	1.31	1.20
25	My requests to the CSD are accurately filled	-1.92	23.25	8.8	9.3	2.2	1.08	0.73	1.33
26	I often personally meet with CSD staff	1.04	4.37	9.4	9.3	8.5	0.74	0.84	1.11
27	The CSD listens to feedback on how to improve service quality	7.05	27.69	9.1	7.4	2.6	0.83	1.18	1.16
28	The CSD staff provides correct information	-4.28	13.51	8.8	9.7	4.2	1.08	0.62	1.74
29	The CSD staff often consult on decisions	-3.95	15.74	7.2	8.3	2.2	1.35	0.94	1.36
30	The CSD staff are approachable	0.00	17.07	8.8	8.8	4.1	0.96	0.96	1.33
31	The CSD staff consult on progress, problems or changes which may impact upon my activities	-0.07	12.16	6.2	6.3	2.0	1.81	1.73	1.06
32	The CSD staff are constantly available to help me	0.65	38.53	9.5	9.4	2.1	0.65	0.80	0.96
33	The CSD staff reliably handle confidential information	-5.71	27.73	8.2	9.4	1.2	0.81	0.96	1.28
34	The CSD staff discreetly handle sensitive situations	0.44	6.60	8.2	8.1	6.5	0.78	0.84	1.30
35	The CSD employs people that are qualified to undertake their jobs	3.36	27.70	9.2	8.4	2.5	0.85	1.10	1.16
36	Paperwork from the CSD never delays solutions to my problems	5.77	25.63	8.4	6.8	1.4	1.05	1.27	1.25
37	I would highly recommend the CSD to my colleagues	0.65	15.94	9.2	9.1	5.1	0.93	0.87	1.25
38	Relative to the rest of my supplier base I mostly buy from …	10.55	7.35	7.5	3.5	5.4	1.23	1.95	1.27
39	Relative to the rest of my supplier base most of my costs are from …	11.59	5.89	8.5	4.5	6.8	1.00	1.83	1.44