Preparing to Penetrate the Chinese Control Room Market

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“This paper is done as a part of the undergraduate program at BI Norwegian School of Management. This does not entail that BI Norwegian School of Management has cleared the methods applied, the results presented, or the conclusions drawn.”
Executive Summary

The purpose of this thesis is to provide the Born Global company 3D Perception (3DP) with advice on how they can prepare to further penetrate the market in China, especially the control room market. Due to limited knowledge of the conditions in China we chose to use an exploratory research design, with an emphasis on in-depth interviews supplemented by relevant secondary sources.

Firstly, the thesis provides information on how and why 3DP should make internal changes in the organization and in their relationship with their value added resellers (VARs) in China, in order to increase control and be well prepared for further market penetration in the control room market.

Secondly, the thesis discusses unique market characteristics in China 3DP needs to be aware of to adapt their business model to the Chinese market. Particularly 3DP should develop strong relationships both with their own employees in China, to their VARs and in a more long-term perspective, to their end-customers. This would enable 3DP to more thoroughly understand the Chinese customers’ needs and wants. Therefore we have also investigated what product attributes 3DP should emphasize in the Chinese control room market.

Thirdly, though this is not the main focus of the thesis we have investigated whether there is a potential for growth in the Chinese control room market. We have found strong economic indicators such as the 4 trillion RMB stimulation package and the 65 billion RMB independent investments in upgrading the electrical grid, to be strong evidence of a growth potential in this market.

Based on the findings in this thesis it is likely that 3DP can succeed in the control room market in China. For this potential to be realized 3DP should hire a manager skilled in Western management style and with strong interpersonal skills. 3DP should introduce incentive systems for their employees and hire sufficient manpower so that they will be able to service their customers properly, thus acquiring more knowledge about unique customer needs and wants in the Chinese control room market. Finally 3DP should work to obtain references from satisfied customers in the control room market.
Acknowledgements

We would like to thank the management of 3D Perception, especially CEO Knut Krogstad, Sales Director Eric Finsaas and China Director Leo Liao for their detailed answers to our numerous questions about 3DP’s products and organization.

Thanks also to all our interviewees, experts in their chosen fields. They have given us valuable insight we would have been unable to achieve without their input.

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Shanghai, June 2009

Sindre Strupstad Andreassen

Martine Holth Dreessen

Øyvind Eriksen

Martin Ygre
Figure 1: Strategic Overview for the Bachelor Thesis\(^1\).

\(^1\) Own model (2009)
# Table of Content

EXECUTIVE SUMMARY ............................................................................................................. I

ACKNOWLEDGEMENTS ........................................................................................................... II

STRATEGIC OVERVIEW FOR THE BACHELOR THESIS ...................................................... III

TABLE OF CONTENT ............................................................................................................... IV

INDEX OF FIGURES ................................................................................................................ VIII

INDEX OF TABLES ................................................................................................................ IX

ABBREVIATIONS ..................................................................................................................... IX

PART I: BACKGROUND ............................................................................................................ 1

1. INTRODUCTION .................................................................................................................. 1
   1.1. INTRODUCTION .............................................................................................................. 1
   1.1.1. Research Objective .................................................................................................. 2
   1.1.2. Exploratory Questions ............................................................................................. 2
   1.2. RESEARCH LIMITATIONS ......................................................................................... 2

2. ABOUT 3D PERCEPTION ...................................................................................................... 3
   2.1. HISTORY ...................................................................................................................... 3
   2.1.1. Value Added Resellers ............................................................................................ 4
   2.1.2. Outsourcing ............................................................................................................ 4
   2.1.3. Why the Control Room Market ............................................................................. 4
   2.2. 3D PERCEPTION TODAY ............................................................................................ 5
   2.2.1. General Situation ................................................................................................... 5
   2.2.2. Control Room Market Today ................................................................................ 5
   2.2.3. 3DP in China ........................................................................................................... 6
   2.2.4. 3DP’s Control Room Products ............................................................................. 7

PART II: RESEARCH PROCESS .................................................................................................. 8

3. METHODOLOGY ................................................................................................................... 8
   3.1. METHODOLOGICAL PERSPECTIVE ........................................................................ 8
   3.2. CHOICE OF METHOD .................................................................................................. 8
   3.3. THE RESEARCH PROCESS ........................................................................................ 9
       3.3.1. Research Design .................................................................................................. 10
       3.3.3. Data Collection ................................................................................................... 11
       3.3.4. Data Analysis ....................................................................................................... 17

4. THEORY REVIEW ................................................................................................................. 19
   4.1. INTERNAL ANALYSIS THEORIES ....................................................................... 19
PART III: ANALYSIS OF DATA

6. INTERNAL ANALYSIS

6.1. 3DP: A BORN GLOBAL

6.2. ACE

6.2.1. Attitude

6.2.2. Competence

6.2.3. Embodiment

6.2.4. Summary of ACE

6.3. RESOURCE ANALYSIS

6.3.1. Tangible Resources

6.3.2. Intangible Resources

7. EXTERNAL ANALYSIS

7.1. COMPETITIVE ANALYSIS

7.1.1. Identify the Competitive Arena and its Potential Value

7.1.2. Analyze Own and Other Players Position

7.1.3. Evaluate Threats and Opportunities

7.2. PESTEL ANALYSIS

7.2.1. Political

7.2.2. Economical

7.2.3. Socio-cultural

7.2.4. Technological

7.2.5. Legal

7.2.6. Summary of the PESTEL Framework
13.2. ARTICLES ......................................................................................................................... 117
  13.2.1. Published Articles .................................................................................................................. 117
  13.2.2. Newspaper Articles .................................................................................................................. 117
13.3. ONLINE SOURCES ................................................................................................................... 118
13.4. IN-DEPTH INTERVIEWS ........................................................................................................... 122
13.5. OTHER SOURCES ....................................................................................................................... 124
14. APPENDIX .................................................................................................................................. 125
   APPENDIX 1: INTERVIEW WITH MR. KNUT KROGSTAD OF 3DP..................................................... 125
   APPENDIX 2: INTERVIEW WITH MR. ERIC FINSAAAS OF 3DP. .................................................... 135
   APPENDIX 3: INTERVIEW WITH MR. LEO LIAO OF 3DP. ................................................................. 147
   APPENDIX 4: INTERVIEW WITH MR. OLAV SANDNES OF 3DP. .................................................. 156
   APPENDIX 5: INTERVIEW WITH MR. TETSUYA SATO OF 3DP. ..................................................... 162
   APPENDIX 6: INTERVIEW WITH MR. ZHOU DUNREN OF FUDAN UNIVERSITY ......................... 165
   APPENDIX 7: INTERVIEW WITH MR. MARTIN NICKELSEN OF THE 17-GROUP. ......................... 169
   APPENDIX 8: INTERVIEW WITH MR. MARK SCHAUB OF KING AND WOOD.............................. 174
   APPENDIX 9: INTERVIEW WITH MR. CARL ARTHUR SOLBERG OF BI NORWEGIAN SCHOOL OF MANAGE
   APPENDIX 10: INTERVIEW WITH MR. HENNING KRISTOFFERSEN OF BI NORWEGIAN SCHOOL OF MANAGEMENT. ... 184
   APPENDIX 11: INTERVIEW WITH MR. TIMOTHY HILTON OF ACCURPRESS. ............................... 190
   APPENDIX 12: INTERVIEW WITH MS. YINGNI ZHUANG OF SHINCON ....................................... 195
   APPENDIX 13: INTERVIEW WITH MR. ARNE KNUTSEN OF TTS MARINE ..................................... 203
# Index of Figures

<table>
<thead>
<tr>
<th>Figure</th>
<th>Page</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>Figure 1</td>
<td>iii</td>
<td>Strategic Overview for the Bachelor Thesis. Own model: 2009</td>
</tr>
<tr>
<td>Figure 2</td>
<td>9</td>
<td>Choice of Method. Own model: 2009</td>
</tr>
<tr>
<td>Figure 3</td>
<td>9</td>
<td>Levels of the Research Process. Gripsrud, Olsson and Silkoset: 2006</td>
</tr>
<tr>
<td>Figure 4</td>
<td>11</td>
<td>Secondary Sources Used in the Thesis. Own model: 2009</td>
</tr>
<tr>
<td>Figure 5</td>
<td>13</td>
<td>An Overview of Primary Sources. Own model: 2009</td>
</tr>
<tr>
<td>Figure 6</td>
<td>14</td>
<td>The Categories of In-depth Interviews. Own model: 2009</td>
</tr>
<tr>
<td>Figure 7</td>
<td>19</td>
<td>ACE Model. Solberg: 2005</td>
</tr>
<tr>
<td>Figure 8</td>
<td>20</td>
<td>Resource Analysis Model. Lunnan: 2008, adapted from Løwendahl and Wenstøp: 2008</td>
</tr>
<tr>
<td>Figure 9</td>
<td>22</td>
<td>Competitive Analysis. Løwendahl and Wenstøp: 2008</td>
</tr>
<tr>
<td>Figure 10</td>
<td>23</td>
<td>Porters Five Forces. Løwendahl and Wenstøp: 2008</td>
</tr>
<tr>
<td>Figure 11</td>
<td>25</td>
<td>The PESTEL Framework. Own model: 2009, adapted from Løwendahl and Wenstøp: 2008</td>
</tr>
<tr>
<td>Figure 12</td>
<td>26</td>
<td>SWOT. Framnes, Pettersen and Thjømøe: 2005</td>
</tr>
<tr>
<td>Figure 13</td>
<td>27</td>
<td>SWOT Matrixes. Framnes, Pettersen and Thjømøe: 2005</td>
</tr>
<tr>
<td>Figure 14</td>
<td>28</td>
<td>Framework for Strategic Decisions. Own model: 2009</td>
</tr>
<tr>
<td>Figure 15</td>
<td>29</td>
<td>Strategies for Branding in the High-Tech Environment. Own model: 2009, adapted from Mohr, Sengupta and Slater: 2005</td>
</tr>
<tr>
<td>Figure 16</td>
<td>50</td>
<td>3DP’s Competitive Arena. Own model: 2009, adapted from Løwendahl and Wenstøp: 2008</td>
</tr>
<tr>
<td>Figure 17</td>
<td>55</td>
<td>Scaled Porters Five Forces. Own model: 2009, adapted from Løwendahl and Wenstøp: 2008</td>
</tr>
<tr>
<td>Figure 18</td>
<td>75</td>
<td>Competence Matrix with Strengths. Own model: 2009, adapted from Framnes, Pettersen and Thjømøe: 2005</td>
</tr>
<tr>
<td>Figure 19</td>
<td>77</td>
<td>Competence Matrix with Weaknesses. Own model: 2009, adapted from Framnes, Pettersen and Thjømøe: 2005</td>
</tr>
<tr>
<td>Figure 20</td>
<td>79</td>
<td>Opportunity Matrix. Own model: 2009, adapted from Framnes, Pettersen and Thjømøe: 2005</td>
</tr>
<tr>
<td>Figure 21</td>
<td>81</td>
<td>Threat Matrix. Own model: 2009, adapted from Framnes, Pettersen and Thjømøe: 2005</td>
</tr>
</tbody>
</table>
Index of Tables

Table 1: Page: 59. Corruption Perceptions Index. Transparency International: 2008
Table 2: Page: 66. Power Distance Index Between Norway, United States and China. Geert Hofstede: 2009
Table 3: Page: 71. AIC: Enforcement Statistics Own table: 2009
Table 4: Page: 74. Overview of 3DP’s Strengths (weighted). Own table: 2009
Table 5: Page: 76. Overview of 3DP’s Weaknesses (weighted). Own table: 2009
Table 6: Page: 79. Overview of 3DP’s Opportunities (weighted). Own table: 2009
Table 7: Page: 81. Overview of 3DP’s Threats (weighted). Own table: 2009
Table 8: Page: 83. Summary of SWOT. Own table: 2009

Abbreviations

3DP: 3D Perception
AIC: Administration of Industry and Commerce
BG: Born Global
CAA: China Advertising Association
CCP: Chinese Communist Party
CIA: Central Intelligence Agency
CSF: Critical Success Factor(s)
DTC: Decision Tree Consulting
EOW: Extended Operator Workplace
FIE: Foreign Invested Enterprise
FTZ: Free Trade Zone
GAC: General Administration of Customs
GNP: Gross National Product
HQ: Head Quarter
IIPA: International Intellectual Property Alliance
IPR: Intellectual Property Rights
PAO: Patent Administration Office
PDI: Power Distance Index
PPP: Purchasing Power Parity
PRC: Peoples Republic of China
R&D: Research and Development
SOE: State-Owned Enterprise
SPD: Strategic Problem Definition
TRIPS: Agreement on Trade-Related Aspects of Intellectual Property Rights
TSB: Technical Supervision Bureau
VAT: Value Added Tax
VAR: Value Added Reseller
WFOE: Wholly Foreign-Owned Enterprise
Part I:  BACKGROUND

Part I consist of two chapters: Introduction and About 3D Perception (3DP). Its aim is to help the reader understand the underlying reasons of the assignment.

1. Introduction

In this chapter we will give an introduction to our thesis so it will be easier for the reader to understand our research aim. Further we will present our research objective and research questions. Finally, the introduction will include our research limitations.

1.1. Introduction

3DP is a Norwegian Born Global\(^2\) (BG) company offering projection systems to the simulation, control room, and entertainment market\(^3\). They use leading edge technology in developing products with a focus on offering effective solutions with a modern design\(^4\).

3DP has exported to China since 2001, although initially it was through an agent. In 2005 an operative decision was made and a sales representative office was opened in Shanghai. However, like many BGs 3DP has limited resources and as such they did little information gathering regarding the unique characteristics of the Chinese market.

3DP has enjoyed moderate success in the simulation market in China; they currently get about 15% of their total sales revenue from this market. In the control room market they have only had one sale. Consequently they wanted us to mainly examine why they have enjoyed such limited success in the control room market. 3DP has also developed a brand new product designed for use in control rooms, Megawall 2, making such an analysis all the more desirable. Therefore we initially we formed the following research objective together with 3DP’s CEO Mr. Knut Krogstad:

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\(^2\) See explanation in section 6.1: 3DP: A Born Global

\(^3\) 3D Perception (2009)

\(^4\) Appendix 4, Mr. Sandnes, Marketing and Sales Director of 3D Perception
1.1.1. Research Objective

- How can 3DP increase their market penetration in China, especially in the control room market, and what strategy should they use to optimize control over their marketing efforts and investments in China while protecting their key technology?

We discovered quickly however that there were other more pressing issues for 3DP, and that they needed more preparation and knowledge before exploring the control room market in detail. Our early findings we indicated that 3DP’s headquarter (HQ) are in need of more control over their operations in China and developed the following exploratory questions:

1.1.2. Exploratory Questions

1) How can 3DP increase internal control over their organization in China?

2) How can 3DP increase their control over their value added resellers (VARs) in China?

3) What attributes of their product and company should 3DP emphasize in China?

4) What aspects of their key technology should 3DP protect and how should they do it?

1.2. Research Limitations

3DP is a global company with customers worldwide. The focus of this thesis is the Chinese market, with information gathering predominantly having been done in the Shanghai area. This is due to 3DP having their representation office in this city, and that we have had limited funds available for travel. The thesis may therefore have a Shanghai bias, with more research necessary in China’s other regions.
A restriction that has affected us is the lack of market data and financial data, the latter being a natural result of the financial crisis making financial data unreliable. Finding relevant updated market reports have also proven to be difficult. We have contacted the consulting companies McKinsey and Boston Consulting Group, but neither of these companies were in possession of relevant market reports. Furthermore we have been in contact with marketresearch.com who has the worlds’ largest collection of market research\(^5\), and marketavenue.cn who specializes in market reports in the China, but they were not in possession of any market reports in this area either. Finally we have been in contact with Future Source Consulting, formerly Decision Tree Consulting (DTC) and Understanding and Solutions, who is also a provider of market reports, this company was also not in possession of any relevant market reports.

Lastly a limitation on our research has been that we have not been able to secure interviews with any of 3DP’s VARs, like for example the Shanghai based Immersions Technologies, nor VTRON who could be a potential partner for selling their new product Megawall 2 to the Chinese control room market. This has to some extent impacted on our ability to provide well-founded advice to 3DP.

## 2. About 3D Perception

The aim of this chapter is to give the reader a better understanding of 3DP. We will include history and today’s situation, as well as their situation in China.

### 2.1. History

In 1997, Mr. Knut Krogstad and Mr. Johan Litleskare left their jobs in the Kongsberg Group where they had worked since 1992 with simulation products. The Kongsberg Group bought projector systems from Barco, a Belgian company. The Norwegian company bought as many as 400 systems a year, and Mr. Krogstad and Mr. Litleskare came up with an idea on how to make these systems themselves, only better and more modern. The Kongsberg Group was not interested in their idea; therefore Mr. Krogstad and Mr. Litleskare decided to start a business on their own. They established 3DP in 1998 and launched their first

\(^5\) Market Research (2009)
simulation product in 2001. They penetrated the market quickly by using their obtained knowledge about the simulation market, the customers and competitors and by utilizing connections they had developed working for the Kongsberg Group.

2.1.1. Value Added Resellers

Early on 3DP decided to use value added resellers (VARs) to distribute their product. VARs are resellers who purchase products from high tech companies and add value to these products through their own expertise. Often the product(s) will be added to the VARs existing portfolio. To ensure the commitment of the resellers, several demands were set; they had to attend a course in order to learn about the product and how it works. The VARs also had to buy a demonstration system, which was rather expensive. This approach was intended to both secure sales and ensure that the reseller was genuinely interested in promoting 3DP’s product.

2.1.2. Outsourcing

3DP outsources most of the value chain in order to put full focus on meeting the market expectations. Parts of the development process, all production, testing, packing, legal services, dispatch, shipment and finance are all outsourced activities. 3DP support the resellers, in order to make them as good as possible. The goal is to be excellent at development, choice of suppliers, logistics and sales support.

2.1.3. Why the Control Room Market

Targeting the control room market was not a deliberate decision on the part of 3DP, rather a result of a friend of the management wanting to use their product for offshore control rooms. 3DP’s seamless solutions product for simulation takes up less expensive floor space than more traditional solutions, which is an important

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6 Appendix 4, Mr. Sandnes, Marketing and Sales Director of 3D Perception
7 Mohr, Jakki, Sengupta, Sanjit and Slater, Stanley (2005)
8 Mohr, Sengupta and Slater (2005)
9 Appendix 4, Mr. Sandnes, Marketing and Sales Director of 3D Perception
10 3D Perception (2009)
selling point to the offshore market. Their first delivery of control room products was the company this friend worked for: Statoil. The equipment was used in the control rooms on the “Troll” and “Snehvit” platforms in the North Sea.\footnote{Appendix 4, Mr. Sandnes, Marketing and Sales Director of 3D Perception}

\section*{2.2. 3D Perception Today}

\subsection*{2.2.1. General Situation}

3DP is now an organization consisting of 28 employees, with offices in Norway, United States, Great Britain, China and Japan. They have located their offices thus, in order to serve their market as effectively as possible considering their small size.\footnote{Appendix 4, Mr. Sandnes, Marketing and Sales Director of 3D Perception}

3DP no longer places quite as strict demands on their resellers as they did in the start up phase, due to a highly competitive market they cannot demand that their resellers buy a demonstration system. However, all the resellers still have to attend a course in order to obtain the technological knowledge needed.\footnote{Appendix 4, Mr. Sandnes, Marketing and Sales Director of 3D Perception}

Development of new products is important for 3DP, as they are known for having the best and latest products. In the development phase however, it is the second to last technology that is used. This is to secure a position as \textit{leading edge}, and not bleeding edge. The very last technology is referred to as bleeding edge because it often has bugs and errors. The second to last technology, leading edge, is already tested, and is more secure to use.\footnote{Appendix 1 and 4, Mr. Krogstad, Managing Director and co-founder of 3D Perception and Mr. Sandnes, Marketing and Sales Director of 3D Perception}

\subsection*{2.2.2. Control Room Market Today}

Within the simulations market worldwide, 3DP has had great success and enjoys a satisfying market share.\footnote{Appendix 1, Mr. Krogstad, Managing Director and co-founder of 3D Perception} This is a more narrow market, and as such it has been easier to get sales and brand recognition. However, 3DP sees the control room market as very attractive as it is larger and has more growth potential than the
simulation market. Control rooms currently cover 20-25% of the total sales of 3DP, a number that they hope to increase, therefore extra attention has been given to this market lately. A new product designed especially for control room use has been developed and launched in May 2009 – Megawall 2. Megawall 2 is especially designed to meet customer needs as it is based on feedback from customers about what they thought was and is lacking in current products on the market. Furthermore the product is designed to provide a complete system so that the customer will not need to buy additional products to meet their needs\(^\text{17}\).

## 2.2.3. 3DP in China

3DP started selling their products in China immediately after their first product was launched. A contact they had from the Kongsberg Group became a reseller for the Chinese market. However, 3DP did not follow up the sales and lost too much control. Many problems were neither reported nor solved, and 3DP found that they had started to get a bad reputation\(^\text{18}\). Action was taken, and a representative office was opened in Shanghai in 2005, but the research of the Chinese market was minimal. Hence, this decision was not strategic but operational\(^\text{19}\). Two persons were employed, Mr. Leo Liao and Mr. Teddy Yan. They had previously been employed by 3DP’s competitors, and had the knowledge, experience and relations that were needed. Mr. Liao and Mr. Yan have been given responsibility and freedom to run the office as they like, and also have the responsibility of quality ensuring 3DP’s VARs in China\(^\text{20}\).

The development has been stable since the opening of the office, but growth has been rather slow\(^\text{21}\). 3DP has also discovered that Chinese customers are quite demanding. Today, sales in China account for approximately 15% of the total sales. This makes 3DP profitable in China, but as mentioned this mainly includes sales from the simulation market\(^\text{22}\).

\(^{17}\) Appendix 4, Mr. Sandnes, Marketing and Sales Director of 3D Perception

\(^{18}\) Appendix 4, Mr. Sandnes, Marketing and Sales Director of 3D Perception

\(^{19}\) Appendix 1, Mr. Krogstad, Managing Director and co-founder of 3D Perception

\(^{20}\) Appendix 1, Mr. Krogstad, Managing Director and co-founder of 3D Perception

\(^{21}\) Appendix 1, Mr. Krogstad, Managing Director and co-founder of 3D Perception

\(^{22}\) Appendix 4, Mr. Sandnes, Marketing and Sales Director of 3D Perception
2.2.4. 3DP’s Control Room Products

EOW - Extended Operator Workplace:
This picture illustrates 3DP’s total solution control room package. This solution is designed to be easy to adapt to already existing control room layouts, and future expansions/modifications. The total solution is also highly space saving, since it relies on seamless projector technology rather than large LCD screens.

Megawall 2:
The Megawall 2 is a box, which contains 3DP’s core technology. It is the Megawall 2 that enables the connection of multiple projectors to create a seamless display on the curved wall. This is an upgrade from the original Megawall box, and is made especially for control rooms where the original Megawall was originally intended for the simulations market.

CLOV - Close Large Over View:
The CLOV is a motorized height-adjustable stand with a screen and projectors, which is controlled by the Megawall 2. It assists in creating an ergonomic working environment for the control room technicians.

Curved screen - seamless technology:
This is an example of 3DP’s curved screen technology.
Part II: RESEARCH PROCESS

The second part of our thesis will clarify the research process. The chapters will give an introduction to the specific methods used and the theories that have been chosen. The findings from our research will be presented in chapter 5: Findings.

3. Methodology

In this chapter we will explain our research methodology. This will include our choice of methodological perspective, our use of method, the research process and different sources of information. Additionally we will include a list of our interviewees.

3.1. Methodological Perspective

This thesis’ objective is to explore how 3DP can increase control over their operations in China, especially the control room market, and examine how 3DP can profile their leading edge technology products, in order to create sustained profitability and growth in the Chinese market. Subsequently it is important to understand the unique characteristics of the Chinese market. Due to the subjective approach and vision to explore the area with qualitative techniques, this thesis will be written from a hermeneutic approach. The hermeneutic perspective is concerned with explaining the coherence between the totality and its individual parts. The emphasis on subjectivity set forth in the hermeneutic perspective connotes a use of qualitative techniques\textsuperscript{23}.

3.2. Choice of Method

As doing business in the Chinese projector technology market is relatively new to both 3DP and us, it is preferable to utilize a strategy called the iterative method. The iterative method involves a weaving back and forth between data and theory\textsuperscript{24}.

\textsuperscript{23} Gripsrud, Geir, Olsson, Ulf Henning and Silkoset, Ragnhild (2006)
\textsuperscript{24} Bryman, Alan and Bell, Emma (2007)
3.3. The Research Process

The different stages of the research process are formulated as shown in figure 3. These stages will provide us with more precise answers to our research objective and thereby contribute to a more effective research process. The research objective and exploratory questions have been formulated in Section 1.1: Introduction, and the research design, collection of data and the potential errors when analysing data is described in this chapter. The analysis of primary and secondary sources is explained in chapter 5: Summary of Findings, and in the chapter 6 and 7: Internal Analysis and External Analysis.

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25 Own model (2009)
26 Gripsrud, Olsson and Silkoset (2006)
3.3.1. Research Design

Bryman and Bell (2007) elucidates, “A research design provides a framework for the collection and analysis of data”\(^{27}\). It contains a description of how the entire research process should be organized in order to solve the specific task given. The choice of research design depends on the extent of knowledge one has about the research area, and the degree of ambition for the project\(^{28}\).

There are three main research designs: Exploratory, descriptive and causal design. The purpose of the descriptive design is to describe the situation in a certain field, and is used when the researcher has formative knowledge of the problem area. Furthermore, the descriptive design cannot verify causal coherence, only co variation\(^{29}\). The causal design is used when the purpose for the research is to unveil possible cause-and-effect relationships in a research field. The method used is to conduct several different experiments. These experiments may, unlike the descriptive design, determine that a certain variable caused a certain effect\(^{30}\). An exploratory design is used when the researcher has little or no knowledge about the research area, and the primary goal is to explore a certain topic. The purpose of the design is to gain insight and to comprehend the situation at hand as well as to develop a hypothesis, which then later can be used as bases for further research\(^{31}\).

We have chosen to use the exploratory research design; due to 3DP’s imperfect understanding about exactly what measures should be taken to increase their control and profitability in China. The common way to utilize an exploratory design is to start exploring relevant literature and to gather information through secondary data. The collection of primary data will also be employed in order to facilitate the subjective approach\(^{32}\).

\(^{27}\) Bryman and Bell (2007:40)  
\(^{28}\) Gripsrud, Olsson and Silkoset (2006)  
\(^{29}\) Gripsrud, Olsson and Silkoset (2006)  
\(^{30}\) Gripsrud, Olsson and Silkoset (2006)  
\(^{31}\) Gripsrud, Olsson and Silkoset (2006)  
\(^{32}\) Gripsrud, Olsson and Silkoset (2006)
3.3.3. Data Collection

Data can be collected in two ways, by secondary or primary sources. In our thesis we have chosen to combine these two ways of data collection, and we will therefore elaborate on these two methods.

3.3.3.1. Secondary Sources

Secondary information is “information collected by other researchers for various purposes”\(^{33}\). Gripsrud, Olsson and Silkoset (2006) refers to the work of Aaker et al. (2004), which divides secondary information into two groups; internal sources and external sources. Internal sources consist of sales numbers, budget information, and different reports gathered from within 3DP. External sources are further divided into public sources and standardized surveys. Public sources are generally any information that is available to the public. Standardized surveys are conducted by professional research bureaus and intended for use by various companies\(^{34}\). As secondary information this thesis has utilized mainly information derived from internal data collected from 3DP and external sources such as relevant literature, the Internet, scientific reports, academic journals, former bachelor and master thesis’ and articles published in a variety of magazines and newspapers.

![Secondary Sources Used in the Thesis](image)

Collection of internal sources:

Regarding internal sources, the Internet has been used in order to obtain general information about the company and other external sources. Internal data from 3DP consists of sales numbers and finances.

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\(^{33}\) Gripsrud, Olsson and Silkoset (2006:78)  
\(^{34}\) Gripsrud, Olsson and Silkoset (2006)  
\(^{35}\) Own model (2009)
Collection of external sources:

Regarding external sources, various subjects like entrepreneurial marketing, BG theory, business to business marketing, strategy, marketing of technological products, method and research, management in China, international business and economy and international marketing have been collected through the usage of secondary literature. It has been of vital importance to utilize the most updated information written by credible authors cited in recognized publications and to make use of internationally acknowledged literature on the subject in order to provide 3DP with as relevant and useful recommendations as possible. However, most of the literature used is written from a non-Chinese perspective by Western authors, meaning that most of the theories is based on Western marketing and business concepts which could be different from the actual Chinese situation. Regarding online sources, the authors are aware that information gathered on the Internet could be biased, altered, false or censored. The online sources have therefore when possible been crosschecked with existing literature on the chosen subject.

Google Translate has been utilized when collecting information from the Chinese website of Huakong, one of 3DP’s main local Chinese competitors in the Chinese control room market. Here it is important to note that Google Translate only provides us with the essence of the information and thus important details could have been overlooked. Lastly, the authors have in general been careful to assess the external sources with critical eyes, because the theories and opinions are not written directly for the purpose of our research for 3DP. One example is that certain models have been adapted to better suit 3DP’s situation in China.

3.3.3.2. Primary Sources

Primary data can be defined as “information primary collected to answer our own research objective and exploratory questions”\(^{36}\), and can be collected either through quantitative or qualitative methods. As previously mentioned, this thesis will be conducted based on hermeneutic, iterative and exploratory research methods. Qualitative data are generally used in order to perform analytical descriptions and to gain a comprehension of the context. We have therefore

\(^{36}\) Gripsrud, Olsson and Silkoset (2006:78)
chosen to use *qualitative techniques*, which are often preferred when conducting market analysis in an exploratory design. Qualitative techniques generally involve questionnaires, observational techniques, analyzing documents, both written and graphical, as well as the preferred alternative for this thesis; in-depth interviews.

In-depth interviews:
In order to reach the thesis’ research objective it is important to gather personal information such as experiences, opinions and other relevant information, from 3DP’s own employees as well as other relevant interview objects. The questions have been sent out to most of the interviewees prior to the interview in order for them to be prepared, thus enabling them to provide us with more detailed and precise answers.

The goal of the interviews has been to gain a deeper understanding of the interviewee’s point of view. This is also in keeping with our choice of an exploratory research design. It has been important for us to be able to have some latitude to ask further questions in response to what are seen as significant replies. It has also been important to give the interviewee a great deal of leeway in how to reply. We have therefore chosen to conduct semi-structured in-depth interviews. Bryman and Bell (2007) refers to the term semi-structured interview as “a context in which the interviewer has a series of questions that are in the general form of an interview schedule but is able to vary the sequence of questions”. This semi-flexible approach and the degree of freedom has allowed us to explore new areas.

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37 Gripsrud, Olsson and Silkoset (2006)
38 Gripsrud, Olsson and Silkoset (2006)
39 Own model (2009)
40 Gripsrud, Olsson and Silkoset (2006)
41 Bryman and Bell (2007:213)
of interest relevant to the research objective, such as complementary and supplementary questions asked during the interviews. An example of this is when we interviewed Mr. Finsaas. During the interview we discovered 3DP’s biggest competitor Barco is perceived to be less service minded than 3DP. In a structured interview this information could easily have been missed.

Conduction of the in-depth interviews and selection of respondents:
When conducting the interviews we emphasized the importance of proper preparation and made use of the general rules for designing questions set forth by Bryman and Bell (2007). Apart from applying knowledge from secondary sources, we focused on using background information on the topics and work setting of the interviewees to secure the most relevant answers in accordance to our research objective. We have especially been careful to avoid ambiguous terms in questions, long questions, leading questions and very general questions when information was needed on a specific issue. Furthermore, a digital tape recorder was used in all the interviews to best recapture them in written form and to be able to structure and analyze the respondents’ answers. It is important to note that our lack of experience in conducting semi-structured in-depth interviews is a possible source of error in the thesis. The interviews can be found in the appendix.

The interviews conducted have been divided into two categories: internal and external interviews.

Internal interviews:
The aim of the internal interviews is to gain a greater understanding of 3DP’s vision, goal and aim for their China operations and to retrieve important internal

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42 Bryman and Bell (2007)
43 Own model (2009)
and external secondary data. The interviews have been conducted on several different occasions with the following respondents:

- Mr. Knut Krogstad, Managing Director and co-founder of 3D Perception.
  o Interview conducted in Asker, Norway, 06.04.2009.
- Mr. Eric Finsaas, Sales Director – Automation Markets of 3D Perception.
  o Interview conducted in Asker, Norway, 06.04.2009.
- Mr. Leo Liao, China Director of 3D Perception’s Representative Office.
  o Interview conducted in Shanghai, China, 27.04.2009.
- Mr. Olav Sandnes, Marketing and Sales Director of 3D Perception.
  o Interview conducted in Shanghai, China, 17.03.2009.
- Mr. Tetsuya Sato, Manager of 3D Perceptions operation in Japan.
  o Interview conducted in Tokyo, Japan, 24.04.2009.

*External interviews:*

The aim for the external interviews is to gain a greater understanding of the Chinese market, laws and regulations and how doing business in China differs from doing business elsewhere. The external interviews have been conducted with selected respondents from within the fields of academics and from companies with relevant experience for 3DP. These are:

- Mr. Zhou Dunren, Professor at Fudan University.
  o Interview conducted in Shanghai, China, 14.03.2009.
  Professor Zhou is the co-founder of the Centre for American Studies at Fudan University. He has spent significant time researching the current financial crisis, and has been able to give us valuable political advices for the Chinese market as well as information regarding the financial crisis and how it affects China.

- Mr. Martin Nickelsen, General Manager of the 17-Group.
  o Interview conducted in Shanghai, China, 17.03.2009.
  Mr. Nickelsen is the general manager of the 17-group, which is an umbrella organization for Norwegian high-tech firms delivering to the marine industry. He shared with us his knowledge and expertise on how to deal with Chinese agents and end customers.
• Mr. Mark Schaub, Partner in King and Wood law firm, and director of JV and WFOE.
  o Interview conducted in Shanghai, China, 19.03.2009.
  Mr. Schaub has worked as a foreign direct partner in China for 10 years, and is the author of the book “China: the Art of Law”. He was able to give us useful information about legal matters when doing business as a foreign entity in the Chinese market.

• Mr. Carl Arthur Solberg, Professor at BI Norwegian School of Management.
  o Interview conducted in Oslo, Norway, 24.03.2009.
  Mr. Solberg has worked for the Norwegian School of Management in over 25 years, with internationalization and strategy as a focus area. He contributed with his knowledge about international business, and also gave us several tips on different sources of relevance for our thesis.

• Mr. Henning Kristoffersen, China expert from BI Norwegian School of Management and Fudan University.
  o Interview conducted in Shanghai, China, 18.04.2009.
  Mr. Kristoffersen is a social anthropologist who has been doing business in China for years. He has experienced and knows about the many pitfalls for Western companies without knowledge about the Chinese market, and gave us important advice concerning guanxi, Chinese employees and what the Chinese customers value in relation to 3DP’s products.

• Mr. Timothy Hilton, Owner and CEO of Accurpress International Sales Ltd.
  o Interview conducted in Taicang, China, 19.04.2009.
  Mr. Hilton is the CEO of a medium sized company in the automation industry. He shared his own experiences with doing business in China as well as giving us tips regarding 3DP’s situation in the Chinese market.

• Ms. Yingni Zhuang, Managing Director of Shincon AS, Shanghai.
  o Interview conducted in Shanghai, China, 25.04.2009.
  Ms. Zhuang is the managing director of Shincon; a consultancy firm specialized in helping firms start up in China. She was able to give us first-hand information on how to overcome cultural obstacles in China, concerning employees and in general, for high-tech companies like 3DP.
• Mr. Arne Knutsen, CEO of TTS Marine in Shanghai.
  o Interview conducted in Shanghai, China, 28.04.2009.

Mr. Knutsen is the CEO of a Norwegian company supplying equipment to the shipping industry, and currently the Norwegian who has lived the longest in Shanghai with his ten-year residency. Under his leadership TTS Marine in Shanghai has dramatically reduced the turnover of employees, currently at about 1%, and achieved yearly double-digit growth. He shared his knowledge and experience about Chinese employees and Chinese work culture, as well as he had input concerning after sales service in the Chinese market.

3.3.4. Data Analysis

In this section we intend to explain how potential risk of errors when collecting data, described in section 3.3.3: Data Collection, affects the reliability and validity of the thesis. We have emphasized the importance of critically assessing data used, due to the fact that the theories and opinions utilized in this thesis are not written directly for the purpose of our research for 3DP. As mentioned there is also a question connected to how believable our interview subjects were, this potential fault of course also extends to our use of secondary literature, as the same flaw might be present in the works we have cited in our thesis. This will in turn also affect the reliability and validity.

3.3.4.1. Reliability and Validity

Reliability and validity are two of the most imperative criteria in business research today. They both function as a measurement of the quality of the collected data. Gripsholm, Olsson and Silkoset (2006) state that reliability measures how reliable the results are, while validity states whether you actually measure what you intend to determine44.

Bryman and Bell (2007) describes the term reliability as; “the term is commonly used in relation to the question of whether or not the measures that are devised for concepts in business and management (...) are consistent”45. They further define validity as “concerned with the integrity of the conclusions that are generated from a piece of research”46. The main types of validity; measurement

44 Gripsholm, Olsson and Silkoset (2006)
45 Bryman and Bell (2007:40-41)
46 Bryman and Bell (2007:41)
validity, internal validity external validity and ecological validity, mainly regards to the issue of causality; whether the results can be generalized beyond the context and if in fact the research measures the right variable\(^{47}\).

There is a debate among scholars if reliability and validity can be applied in qualitative research due to the fact that “both reliability and measurement validity are essentially concerned with the adequacy of measures, which are most obviously a concern in quantitative research”\(^{48}\). Bryman and Bell (2007) refers to Lincoln and Guba (1985), which proposes the use of alternative terms for assessing qualitative research\(^{49}\). These terms use trustworthiness as their main criteria and are:

- **Credibility**: linked to internal validity. How believable are the statements from our interview objects?
- **Transferability**: linked to external validity. For example, the companies interviewed are not in the same industry as 3DP. This means that some parts may not apply to our context.
- **Dependability**: linked to reliability. Most of our interviews were only conducted once and it is not given that the respondents would answer the same thing if asked again, because of changes in the business climate, new information etcetera.
- **Confirmability**: linked to objectivity. Personal views, opinions and values might have affected the outline and discussion of the thesis.

Regardless of terminology, the important thing is to be aware of the potential errors linked to our use of in-depth interviews as a qualitative technique. By incorporating this knowledge when interviewing our objects, a higher degree of reliability and validity will be assured. One example occurred when we interviewed Mr. Liao – the Director of 3DP’s China office: Even though he speaks English, it was clear that the language barrier prevented us from communicating flawlessly with him. We therefore spent extra time making sure we understood each other.

\(^{47}\) Bryman and Bell (2007)
\(^{48}\) Bryman and Bell (2007:42)
\(^{49}\) Bryman and Bell (2007)
4. Theory Review

This chapter will go through theories of relevance for this thesis.

4.1. Internal Analysis Theories

We found it important to analyze 3DP’s core competences and resources within the organization in order to highlight their strength and weaknesses. The two theories used are the ACE model and a resource theory framework.

4.1.1. ACE

The ACE model is used to analyze a company’s probability of success regarding export of goods or services. Together the different elements make up the “good export circle” \(^{50}\).

4.1.1.1. Attitude

The theory holds that the management of the company needs to have the right set of attitudes. These attitudes include but are not limited to being willing to take risks, market orientation, attitude towards other cultures and view of market barriers. In order for the company to succeed it is crucial that the managements attitude towards these areas are proactive and positive \(^{52}\).

4.1.1.2. Competence

Specific areas of competence that the company needs to have and develop are sales technique, product development and good customer relations. In other words

\(^{50}\) Solberg, Carl Arthur (2005)  
\(^{51}\) Solberg (2005)  
\(^{52}\) Solberg (2005)
it is important to have an active interest in gaining and leveraging knowledge about the markets abroad\(^53\).

### 4.1.1.3. Embodiment

It is crucial that the attitudes and competence are embodied in the entire organization, and especially at the top level. Finally for a company to be a successful exporter they need to spend a significant amount of time developing and implementing strategy and investing in market development\(^54\).

### 4.1.2. Resource Analysis Theory

In order to create a successful strategy for a company, it is vital to know what resources and capabilities they have, as these factors are the primary determinants of the strategy\(^55\). The resources of 3DP can be divided into tangible and intangible resources, which again can be broken down into a total of 12 factors. It is important to examine all these factors, as they will not create value alone. It is the synergy of them that will create the capabilities of the company.

![Resource Analysis](image)

Figure 8: Resource Analysis\(^56\).

\(^{53}\) Solberg (2005)  
\(^{54}\) Solberg (2005)  
\(^{55}\) Grant, Robert (2002)  
\(^{56}\) Lunnan, Randi (2008) adapted from Løwendahl and Wenstøp (2008)
4.1.2.1. **Tangible Resources**

The tangible resources of a company is usually the easiest to discover, and are divided into three categories; physical, financial and rights:

*Physical*:

Products, size of company and location of offices are all factors of 3DP’s assets that can indicate market value and general situation of the company.

*Financial*:

Figures in 3DP’s company balance will give a good indication of the financial resources. These numbers will also indicate the potential for new investments.

*Rights*:

The rights of 3DP will consist of their technical assets: Patents, trademarks, intellectual property and copyrights. This is especially important for technological companies.

4.1.2.2. **Intangible Resources**

The resources of 3DP that are to some extent invisible will be classified as intangible resources. These resources however, are fundamental to the success of the company. According to Professor Randi Lunnan (2008), you will find the intangible resources both within the individual and organizational parts of the company, and they will be divided into two categories; relationship-based and competence-based resources.

*Relationship-based*:

The relationship-based resources are created when the organization meets its surroundings; hence, it is not something 3DP can fully control. According to Grant (2002), one of the most important resources of a company is reputation. Reputation refers to how the customers value and speak about the company, and how strong their brand name is. Relations are also to some extent connected with the reputation, and are especially important in the Chinese market.

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57 Grant (2002)
58 Lunnan (2008)
60 Grant (2002)
customers look upon 3DP will decide their image and can ultimately decide whether or not they will become customers, this again depends to a large extent on how 3DP’s employees represent them in the Chinese market. The customer may in fact even judge the product by 3DP’s sales personnel competence and behaviour.

**Competence-based:**
The competence-based resources refer mostly to the human capital within the organization and the capability of creating value from it. Knowledge, skills and abilities of the personnel can often be the most important factors to a company’s success. These factors will often be affected by the overall culture and special routines that exists within the organization, and it is important for 3DP to understand how such characteristics in China can differ from North American and European characteristics.

### 4.2. External Analysis Theories

We will use two theories in order to determine 3DP’s threats and opportunities; the competitor analysis that will include Porters Five Forces, and the PESTEL framework.

#### 4.2.1. Competitive Analysis

To create a better overview of the environment 3DP is operating in, the authors have decided to incorporate the three steps in competitive analysis – identify the competitive arena and its potential value, analyse own and other players’ position through Porters Five Forces, and evaluate threats and opportunities.

![Competitive Analysis](image)

Figure 9: Competitive analysis.

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61 Appendix 11, Mr. Hilton, Owner and CEO of Accurpress International Sales Ltd.
62 Løwendahl and Wenstøp (2008)
63 Løwendahl and Wenstøp (2008)
64 Løwendahl and Wenstøp (2008)
4.2.1.1. **Step One - Identify the Competitive Arena and its Potential for Value**

According to Løwendahl and Wenstøp (2008), the first step is to decide what competitive arena 3DP is operating in. This arena needs to be accurate as a too broad or too narrow arena can result in a non-functional analysis. Step one also includes choosing substitutes, suppliers, possible new entrants and customers relevant for the purpose of the analysis. The important thing will therefore be to prioritize the right components to include in the analysis.\(^{65}\)

4.2.1.2. **Step Two - Analyze Own and Other Players’ Position**

In order for 3DP to be successful in this arena it is important that they position themselves according to the competitive structure within the industry. Step two will include the analysis of the components chosen in step one, in order to be able to pay close attention to competitors and the industry’s structural attractiveness. Introduced in 1979 by Michael Porter, Porters Five Forces is a useful tool to “determine the intensity of competition and hence the profitability and attractiveness of an industry”\(^{66}\), and consists of the following:

![Figure 10: Porters Five Forces\(^{67}\).](image)

**Competitive rivalry within an industry:**

An industry will be attractive or not, depending on how intense the competitive rivalry within that industry is\(^{68}\). For 3DP the competitive intensity should be compared to the potential for growth in the Chinese control room market.

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\(^{65}\) Løwendahl and Wenstøp (2008)
\(^{66}\) Recklies, Dagmar (2009)
\(^{67}\) Løwendahl and Wenstøp (2008)
\(^{68}\) Kotler, Philip and Keller, Kevin Lane (2006)
Threat of new entrants:
The attractiveness of an industry will depend on the height of both the entry and exit barriers. The most attractive markets are those with high entry barriers and low exit barriers\textsuperscript{69}.

Substitute products:
An unattractive industry is one were there is a lot of actual or potential substitutes for a particular product\textsuperscript{70}.

Customers bargaining power:
The customers bargaining power is high when there are low switching costs, undifferentiated products, when the product represents a high percentage of the customer’s costs, when they are price sensitive, or when customers can integrate upstream\textsuperscript{71}.

Bargaining power of suppliers:
Suppliers tend to become more powerful if they are organized, if there are few or no substitutes, when a supplied product is an important production input, when switching costs are high, and if the supplier can integrate downstream\textsuperscript{72}.

4.2.1.3. Step Three - Evaluate Threats and Opportunities
The third step in Løwendahl and Wenstøps competitor analysis is to evaluate the information gathered in step two; to map the factors creating the largest threats for 3DP and how one can minimize said threats or transform them to opportunities. Step three will be discussed in a SWOT analysis under section 4.3, and executed in chapter 10: Strategy Tools.

4.2.2. PESTEL
The PESTEL framework has two main purposes; making the company reflect over which macro environmental factors are most important in the present, and whether they will be as important in the future. For 3DP it is particularly important to monitor the external environment in China as it changes rapidly.

\textsuperscript{69} Kotler and Keller (2006)
\textsuperscript{70} Kotler and Keller (2006)
\textsuperscript{71} Kotler and Keller (2006)
\textsuperscript{72} Kotler and Keller (2006)
4.2.2.1. **Political Factors**
Political factors refer to political stability, government policies, and degree of intervention in the economy. These factors can affect many areas of business for 3DP, especially in China, where political corruption and preferential treatment are quite common.

4.2.2.2. **Economic Factors**
Economic factors include inflation, interest rates, economic growth, exchange rate, unemployment rate and taxation changes. Changes in these factors can to a high degree impact on 3DP’s behaviour in the Chinese market.

4.2.2.3. **Socio-cultural Factors**
The main socio-cultural factors that 3DP needs to be aware of when conducting business in China are: The focus on relationships, the Chinese concept of network, guanxi, and the importance of face, mianzi. Furthermore, given the cultural chasm that exists between the Norwegian management and their Chinese employees we have devoted a section to how 3DP should manage their China office. Finally, ethical issues regarding employees will be discussed due to the different perceptions, values and norms that exist in these two cultures.

4.2.2.4. **Technological Factors**
Technological factors mainly include innovations or significant improvements to existing products. Technology can both reduce costs and improve a product’s quality. In 3DP’s case we will focus on the possibilities associated with utilization of the Internet.

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73 Own model (2009), adapted from Løwendahl and Wenstøp (2008)
74 Oxford University Press (2009)
75 Fernandez, Juan Antonio and Underwood, Laurie (2009)
76 Oxford University Press (2009)
77 Løwendahl and Wenstøp (2008)
4.2.2.5. **Environmental Factors**

Environmental factors mainly include energy consumption, environmental protection, and recycling\(^{78}\). As 3DP are not a manufacturing entity in China, we will not discuss this element in detail in this thesis.

4.2.2.6. **Legal Factors**

Legal factors are related to the legal aspects a company is required to follow when conducting business. Such aspects include consumer, competition, employment, and health and safety legislations\(^{79}\). This factor in the PESTEL analysis is of great importance to 3DP, since China has a very complex legal system that can easily change over a short period of time\(^{80}\).

### 4.3. SWOT Analysis

"The aim of any SWOT analysis should be to isolate the key issues that will be important to the future of the firm and that subsequent strategy will address."

![SWOT Diagram](image)

Figure 12: SWOT\(^{82}\).

The SWOT analysis is one of the most well-know tools for making a structured strategic analysis. The SWOT is divided into two categories: The internal values, which include the potential strengths and weaknesses, and the external environment, which includes opportunities and threats. Using this framework will give 3DP a clear and structured analysis of their operations.

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\(^{78}\) Løwendahl and Wenstøp (2008)

\(^{79}\) Oxford University Press (2009)

\(^{80}\) Schaub, Mark E. (2006)

\(^{81}\) Kotabe, Masaaki and Helsen, Kristiaan (2004:261)

\(^{82}\) Framnes, Runar, Pettersen, Arve and Thjømøe, Hans Mathias (2006)
Since the factors discovered in the SWOT-analysis are not of equal importance for the customer and the company, all factors should be double weighed in order to ensure that the most crucial elements receive the proper attention\textsuperscript{83}. Following this, the factors are placed in the competence-, opportunities-, and threats-matrix, which is a visual aid ensuring that 3DP focuses its attention on the right factors\textsuperscript{84}. This maximizes the use of the SWOT analysis.

![SWOT Matrixes](image)

The competence-matrix measures which internal factors and their degree of importance for 3DP, while the opportunities- and threats-matrix evaluate the likelihood for these factors to occur \textsuperscript{86}. Thereafter one will identify which factors appear in the critical corners of each matrix \textsuperscript{87}, as shown in section 8.4: Summary of Swot.

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\textsuperscript{83} Framnes, Pettersen and Thjømøe (2006)  
\textsuperscript{84} Kotler and Keller (2006)  
\textsuperscript{85} Framnes, Pettersen and Thjømøe (2006)  
\textsuperscript{86} Framnes, Pettersen and Thjømøe (2006)  
\textsuperscript{87} Framnes, Pettersen and Thjømøe (2006)
By evaluating the important factors discovered from the analysis, the authors will be able to formulate a strategic problem definition (SPD), which will mention how 3DP can play on their strengths to improve on their weaknesses, in order to take advantage of opportunities while avoiding or counteracting threats.\textsuperscript{88} The SPD then, according to Framnes, Pettersen and Thjømøe (2006), creates the foundation for a product- or market strategy for 3DP. However, this strategy should be based on the critical success factors (CSF) required to implement this strategy.\textsuperscript{89}

4.4. Strategy Tools

We have chosen to create our own model consisting of the elements we consider most likely to be of importance to 3DP in strengthening their organization in China, and increasing market penetration.

\textsuperscript{88} Framnes, Pettersen and Thjømøe (2006)
\textsuperscript{89} Framnes, Pettersen and Thjømøe (2006)
\textsuperscript{90} Own model (2009)
Mohr, Sengupta and Slater (2005) have identified eight strategies for branding in the high-tech environment\(^92\). Out of these eight strategies we have selected the four considered to be the most feasible for 3DP to implement in China within the frame of their current status in the Chinese market due to their limited resources. The four strategies we have left out are excluded for the reasons that they are either not relevant, for example there is little point in discussing creating a steady stream of innovations while having only one customer in the control room market thus far, or that we don’t consider spending resources on developing these strategies to be the most urgent or cost effective for 3DP.

That leaves us with:

**4.4.1.1. Influencing the Influencers and Stimulate Word of Mouth**

For high-tech companies endorsements from industry experts and companies in the industry confer greater credibility than advertising\(^93\). Perhaps especially in China where the importance of networks is emphasized, word of mouth in the industry is tremendously important.

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\(^91\) Own model (2009) adapted from Mohr, Sengupta and Slater (2005)
\(^92\) Mohr, Sengupta and Slater (2005)
\(^93\) Mohr, Sengupta and Slater (2005)
4.4.1.2. **Manage All Points of Contact**

If the customers do not get the service they expect at all touch points they will have a negative experience of the brand, inversely positive experience of the service rendered will strengthen the brand. For 3DP in China the main touch point of the customers will be the VARs, and for the VARs it will be 3DP’s two employees in China. This aspect will be discussed in section 10.2.3: Contact and Communication.

4.4.1.3. **Work With Partners**

The idea is that in working together with a partner and leveraging the value of both brands there will be a synergy effect making the value of the two brands together greater than the sum of their parts. This is known as co-branding and will be discussed in section 10.1.2: Relationship Marketing.

4.4.1.4. **Use the Internet Effectively**

“The customer’s experience at a particular Web site communicates brand meaning,” meaning that 3DP’s website imprints some perception of their enterprise and products in the mind of the customer. The Internet provides several cost effective ways of creating brand awareness, this will be discussed in section 10.1.2: Online Marketing.

4.4.2. **Creating Competitive Advantage**

4.4.2.1. **Marketing Mix**

The marketing mix, also known as the four Ps include the following variables – product, price, place and promotion and can be defined as a “set of marketing tools the firm uses to pursue its marketing objectives.” We have also chosen to include the factor people from “The extended marketing mix” as we consider this aspect of the marketing mix to be crucial for 3DP as they are a small company among some huge players in a big market. This is one point that can really make a difference while being cost effective. We did not consider process and physical

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94 Mohr, Sengupta and Slater (2005)
95 Mohr, Sengupta and Slater (2005:332)
96 Kotler and Keller (2006:19)
evidence from the extended marketing mix to be of interest for this thesis, as 3DP is not predominately a service provider.

**Product:**
The product itself refers to more than just physical merchandise. It can also be a service. In addition it includes the services surrounding the core product like: product variety, quality, design, packaging, brand name, and warranties\(^98\). This is especially important for 3DP, which due to hard competition in the market, focuses on additional features with the product in their current marketing campaigns.

**Price:**
Price in the marketing mix refers to different pricing strategies. This includes list price, discounts, allowances, payment period, and credit terms\(^99\), and for technological companies like 3DP also after sales pricing\(^100\).

**Place:**
Place refers to the location where a product can be purchased. In China as well as the rest of the world 3DP offers their product through VARs\(^101\).

**Promotion:**
Promotion in the marketing mix refers to how 3DP can present its offer to the market. In other words, market communication. Here the main goal is to create a positive attitude towards the product in the mind of the consumer\(^102\).

**People:**
As 3DP has not yet made any sales of Megawall 2 in the Chinese market the customers will to some extent make judgments of the product based on the interaction with 3DP’s sales personnel and VARs\(^103\). Therefore it becomes all the more important that 3DP’s VARs and employees are knowledgeable about the product, have good people skills and are in possession of the right attitude.

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\(^98\) Kotler and Keller (2006)  
\(^99\) Kotler and Keller (2006)  
\(^100\) Mohr, Sengupta and Slater (2005)  
\(^101\) Kotler and Keller (2006)  
\(^102\) Kotler and Keller (2006)  
\(^103\) Appendix 11, Mr. Hilton, Owner and CEO of Accurpress International Sales Ltd.
4.4.2.2. **Online Marketing**

Online marketing is a cost-effective marketing approach, which limits the potential risks, and maximizes the customers’ response\(^{104}\). To adapt this approach could be of high interest for 3DP, since it is suitable for all companies regardless of size, industry, geography, and target audience\(^{105}\).

4.4.3. **Managing Relations**

4.4.3.1. **Relationship Marketing: Partnership and Alliances**

“Relationship marketing has the aim of building mutually satisfying long-term relationships with key parties – customers, suppliers, distributors, and other marketing partners – in order to earn and retain their business\(^{106}\)” For 3DP the key issue initially will be to establish strong relations with distributors, or other partners that can ensure wider and faster distribution in the Chinese market than what they could achieve on their own. Indeed the whole point of fostering partnerships is to gain access to resources “in a timely, more cost efficient manner\(^{107}\)”.

4.4.3.2. **HRM**

Human resource management (HRM) consists of the different processes involving managing of people in the company\(^{108}\), namely employing people, developing their resources, utilizing, maintaining and compensating their services in accordance with 3DP’s values. This is a greater challenge in China than in the rest of the world, as there exist a big gap between the cultures at 3DP’s HQ and their regional office in Shanghai.

4.4.3.3. **Contact and Communication**

Andreassen (2007) refers to interactive marketing as the process of interaction between employee and customer, where this “moment of truth” shall result in

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\(^{104}\) Bryntse, Annika (2009)
\(^{105}\) Bryntse (2009)
\(^{106}\) Kotler and Keller (2006:17)
\(^{107}\) Mohr, Sengupta and Slater (2005:86)
\(^{108}\) Armstrong, Michael (2006)
purchase, satisfaction and thereby lead to re-purchase. The customers perceived quality of the service affect the perceived value of 3DP’s products. According to the American National Standards Institute (ANSI), defines service quality as “The totality of features and characteristics of a product or service that bears on its ability to satisfy given needs”. Perceived quality is a function of internal elements for the customer, such as word-of-mouth, personal needs and previous experience, and marketing activities performed by 3DP. The “moments of truth” exist in all points of contact. This means that the perceived quality of the service delivered will be perceived differently at each point of contact, as service is not a tangible constant. Therefore it is important to ensure that the perceived and delivered quality is equally high between 3DP and its resellers and between the resellers and the end customers.

According to Dwyer and Tanner (2006) “Successful learning organizations gather, share and act on information”. Hence, the flow of information is critical within the organization and between it and the prospective market in order to increase communication and coordinate activities.

4.4.4. Adapting to China

4.4.4.1. Characteristics About the Chinese Market

Unique Chinese characteristics include more importance being placed on face-to-face contact and relations that do not end after business hours. Furthermore it is likely that closer follow-up and control is necessary in China than in 3DP’s markets in North America and Europe.

4.4.4.2. Dealing with Volatile Conditions in China

China has over the last 30 years slowly developed a sufficient legal system, which many experts agree satisfy international requirements. However, many foreign companies find their Intellectual Property Rights (IPR) breached by local Chinese

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109 Andreassen, Tor Wallin (2007)
110 Andreassen (2007:176)
111 Andreassen (2007)
112 Dwyer, Robert F. and Tanner, John F. Jr. (2006:369)
firms\textsuperscript{115}, or faced with corrupted government officials that expect a bribe\textsuperscript{116}. Such situations can be especially taxing and difficult for a company like 3DP, who are relatively inexperienced with regards to conducting business in China.

5. Summary of Findings

Our purpose in this section is to present our findings from primary sources and secondary literature. We have chosen to divide our findings into sub-categories based on each of our four research questions.

5.1. Need of Internal Control

1) How can 3DP increase internal control over their organization in China?

“If the management doesn’t visit China, if you are not involved, it doesn’t matter if you own it, it is not yours. If you do not know who you are selling to you are not really the boss”

- Mark Schaub, Director of Joint Venture and WFOE at King and Wood, China’s biggest law firm.

An element that is stressed by many if not all our interviewees is the need for an excellent manager that 3DP can trust in China. This one aspect is according to our interviewees the most important by far, and is supported by sources in the book China Entrepreneur\textsuperscript{117}.

"It's not difficult to find intelligent people in China - there are plenty of very intelligent people. But it is difficult to find people who are able and willing to take on the challenge, to be accountable, and willing to make decisions and really manage"

- Olaf Litjens, Founder and CEO, Unisono Fieldmarketing, Shanghai\textsuperscript{118}.

\textsuperscript{115} Chow (2002)  
\textsuperscript{116} Fernandez and Underwood (2009)  
\textsuperscript{117} Fernandez and Underwood (2009)  
\textsuperscript{118} Fernandez and Underwood (2009:110)
The interviewees are divided on whether this should be a Western or Chinese manager, but there is a wide consensus that the manager in question should be culture savvy and that people skills are far more important than technical know-how. That the person has connections/guanxi is also considered to be a top priority when hiring the manager as this makes it easier both to achieve sales and to choose the right people for expansion. Finally this person should have the ability to assist the HQ with strategic planning.

Moreover the interviewees mention the importance of including the Chinese employees and make them feel part of the team. Letting the Chinese office go out on it’s own as with little or no supervision as 3DP has done, can according to one interviewee foster problems in that the Chinese manager can then think of himself as the big leader and not really part of the company that pays him. Another problem that can occur in this case is that the employees starts with new projects on the side, as they would rather devote time to something that gives them a possibly additional payoff. Several interviewees points out that this is where China differs the most from the West: Chinese employees are expecting to be controlled, and get more support from their management as it is a Chinese way of thinking that it is the managements responsibility to direct their employees. This can be difficult for a Norwegian management to understand, as Norwegian employees often prefer to work independently.

It is mentioned that one way of making the Chinese manager a part of the team this is to bring the Chinese employee to Norway for three months or more. This also gives the company the opportunity to have the Chinese employee sign a training bond says an interviewee. This means that the employee binds himself to the company for six years and not to disclose any of the technology the company uses, failure to comply with these requirements after signature can result in a several million RMB fine or jail. A positive effect of bringing the employee to Norway can be that the employee forms a bond with the Norwegian management as Chinese are more likely to form a bond to their management and not to the company itself\textsuperscript{119}. This can then help with retention of employees. While using a stick like binding contracts is mentioned as an alternative, another valid, indeed

\textsuperscript{119} Fernandez and Underwood (2009)
necessary option, is to introduce incentives. One interviewee goes so far as to say that without monetary incentives like for example a bonus program you will never succeed in China\textsuperscript{120}.

Furthermore the use of open and clear communication is pointed out to be a way of generating a feeling of trust, which we have found to be a springing point in how to control and retain employees.

It appears as 3DP has not properly appreciated the importance of a manager with both Western and Chinese management understanding, most particularly regarding strategic planning capabilities, and that they have been somewhat blinded by the potential market size in China. This then has led to a rather hasty entry into China without the proper control mechanisms in place. On the basis of these findings it seems likely that the people aspect is the most vital element to have in place for 3DP to enjoy future success in China.

5.2. Need of Good Relationships

2) How can 3DP increase their control over their value added resellers (VARs) in China?

Our findings indicate that this is the most difficult part for 3DP in China at the moment. Their China Director states that there is little or no loyalty from their resellers as these can also choose to use solutions from big players like Barco or Christie. Another big difficulty for 3DP appears to be that their resellers do not know in detail how the end customer can use 3DP’s products in the most advantageous manner, or specifically how 3DP’s products adds value to the end customer. We observed this when we visited Shanghai Power, the site of 3DP’s only control room total solutions sale so far, with 3DP’s Sales Director Mr. Olav Sandnes who is stationed in Norway. He told us that he was in China to fix a problem Shanghai Power had because their reseller Lantech could not fix it, later he added that Lantech’s employee had no clue about control room lingo\textsuperscript{121}. Clearly this is unfortunate.

\textsuperscript{120} Appendix 12, Ms. Zhuang, Managing Director of Shincon AS, Shanghai

\textsuperscript{121} Appendix 4, Mr. Sandnes, Marketing and Sales Director of 3D Perception
Advice from CEOs and other interviewees emphasizes the need for connections; the relationship developed with the resellers appears to be key. One of our CEO interviewees was of the opinion that you just have to accept that you have little or no control over your resellers in China\textsuperscript{122}, therefore the best way of deciding which resellers to go for and keep is simply to look at their results. Currently 3DP has not achieved significant sales despite having eight resellers, though only two of these are in the control room market.

Despite less than successful attempts in holding training courses for their Chinese VARs in Norway, our research showed that visits from Chinese partners could have a positive effect beyond the purely technical training. It can create a stronger bond to their VARs if 3DP treat the senior staff sent to Norway in a proper and respectful manner while they are in Norway. The effect of meeting 3DP’s senior management and CEO in such a setting would also assist in creating tighter connections between the Norwegian management and their VARs in China.

5.3. Findings on Preferred Attributes in China

3) What attributes of their product and company should 3DP emphasize in China?

References and satisfied previous customers are said to be of paramount importance in the Chinese market. Therefore it is important for 3DP to emphasize the satisfied customers they have worldwide so far, especially the big well-known brands. Of course this does not replace the need for references in the Chinese market, as such it is imperative for 3DP to keep their first customers in the Chinese control room market happy.

The fact that they are a Western firm with the quality that implies also seems to be more important than being a Norwegian firm in Europe and the USA. After sales service is crucial in China as it is in other places, but we have found that it is not a great initial selling point as all salesmen say that their company is good at after sales service\textsuperscript{123}.

\textsuperscript{122} Appendix 13, Mr. Knutsen, CEO of TTS Marine in Shanghai

\textsuperscript{123} Appendix 12, Ms. Zhuang, Managing Director of Shincon AS, Shanghai
3DP’s product is space saving and has a design that looks very high-tech and modern, this might seem trivial in a Western perspective, but can actually be an important part of 3DP’s brand strategy in China. This because, according to Professor Zhou, the decision makers in China most often is not the user of the product and also do not base their decisions purely on commercial benefit. Mr. Kristoffersen supports Professor Zhou’s point of view. He believes that 3DP’s product being “high tech and cool” is definitely a branding point. Therefore it is important for 3DP to realize that they should focus part of their strategy on making the decision maker look good in the eyes of their superiors and peers, something their modern design is well suited to do.

The ergonomic superiority of 3DP’s products is not a good branding point at present according to the findings from our in-depth interviews. However there is some value to educating the resellers and end customers in China in the ergonomic benefits this product offers. The reasoning behind this argument is that while the Chinese decision makers do not care about the comfort of their employees, they do care about productivity. One can increase efficiency by as much as 40% by implementing work stations that are ergonomically correct. Other product aspects that matter here are providing a good overview of the process, being fully interactive, modern and attractive, having equipment that replaces wall panels that are more difficult to manage, and ability to integrate video monitors. 3DP’s products offer all the elements on this checklist, thus this could be a selling point 3DP should consider developing.

5.4. Findings on IPR Protection

4) What aspects of their key technology should 3DP protect and how should they do it?

The biggest danger to a company like 3DP’s IPR can be their employees, or rather ex-employees that have a good understanding of 3DP’s product and its utility

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124 Appendix 6, Mr. Zhou, Professor at Fudan University
125 Appendix 10, Mr. Kristoffersen, China expert from BI Norwegian School of Management
126 ABB Review (2007)
127 ABB Review (2007)
areas. The copying of products combined with the bureaucratic amnesia that would result from 3DP’s two Chinese employees quitting would be crippling to 3DP’s operations in China. Bureaucratic amnesia refers to the loss of the company’s knowledge about a certain market or knowledge area that would result from certain key employees leaving the firm. In 3DP’s case their two employees leaving would mean that they lose nearly all knowledge about their VARs and their potential customers in the control room market, as well as their only two employees conversant in Chinese. A prudent step would be signing contracts prohibiting the employees to use any technology and/or knowhow learned in 3DP for any other purpose than their work in 3DP, though such agreements are notoriously difficult to enforce in China. Such enforcement is not made easier by the fact that 3DP has no patents in China. It should be noted that having contacts in the appropriate levels of the local governments could be more effective than having the letter of the law on your side.\textsuperscript{128}

Several of 3DP’s products have been copied already, both within and outside of China’s borders, therefore it would appear that 3DP would not be best served by committing large resources to protecting their intellectual property rights (IPR). This does not mean that IPR-protection is not important to 3DP. Most particularly use of technology copied from them that does not function properly can damage 3DP’s reputation, thereby robbing them of more than just that particular sale. 3DP has taken few measures to minimize this threat although they have made a stronger copy block for their products to lessen the chance of being copied.\textsuperscript{129} As China also has a first to file approach rather than a first to use approach regarding use of trademarks this is also a real danger to 3DP’s operations in China as 3DP has not registered their trademark here, nor have they registered any patents.

Sourcing their products in other places than China will also lessen the chances of being copied, this is what 3DP are doing now, however such a strategy also makes the product more expensive and the profit margins tighter.

\textsuperscript{128} Appendix 11, Mr. Hilton, Owner and CEO of Accurpress International Sales Ltd
\textsuperscript{129} Appendix 1, Mr. Krogstad, Managing Director and co-founder of 3D Perception
Part III: ANALYSIS OF DATA

We will in this part use both the primary and secondary sources to analyze 3DP’s internal strengths and weaknesses, as well as their external opportunities and threats. The most important findings will then be presented in the SWOT analysis in chapter 8.

6. Internal Analysis

In our internal analysis we have examined the unique characteristics of successful BGs and compared these to 3DP’s organization. Furthermore we have included the ACE model in our internal analysis due to the fact that 3DP is relatively new to the Chinese market, and especially the control room market. Finally we have utilized a resource analysis consisting of tangible and intangible factors.

6.1. 3DP: A Born Global

McKinsey Co’s definition of a BG is as follows:

“They export 75% of their total sales, starting after less than two years of operations. They generally produce leading edge technology products with significant international niche markets.”

McKinsey also characterize BGs as close to their customers, flexible and able to adapt quickly. This definition then supports Bretteville’s assertion in her master thesis “Stakeholder Relationships and the strategic development of the BG firm”, that BGs defy the traditional incremental internationalisation described in the Uppsala model.

Further characteristics of entrepreneurial global firms include managers having a global mindset, in other words having “the willingness to seize international market opportunities, ability to handle cultural diversity, and the preparedness to take risks in building cross-border relationships.”

McKinsey’s definition clearly paints 3DP as a BG. As is evident from interviews of 3DP’s management they base their production on leading edge technology and

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130 Madsen, Tage Koed and Servais, Per (1997:564)
131 Madsen and Servais (1997)
132 Bretteville, Trine (2008)
133 Haar, Jerry and Meyer-Stamer, Jörg (2008:90)
the majority of their sales are to foreign markets\textsuperscript{134}, they also have a strong position in the simulation market internationally\textsuperscript{135}, which is considered a niche market. The company’s presence in the US, Europe, Japan and China also clearly shows their international mindset.

\textit{``The growth of a Born Global is positively associated with high innovative skills, including an ability to access effective R&D as well as distribution channels.''}\textsuperscript{136} China is an emerging market with large growth potential. 3DP would increase their chance of success in the control room market if they manage to establish themselves as a leading developer\textsuperscript{137} like they have managed in the simulations market world wide, functioning distribution channels are of course also of paramount importance. 3DP has a job to do here. The authors would also point out that several of the characteristics of successful BGs coincide with Solberg’s (2005) claims in the ACE model\textsuperscript{138}.

6.2. ACE

6.2.1. Attitude

Regarding this aspect of the ACE model Solberg has stated that a firm wishing to succeed abroad needs to be market oriented, conduct risk evaluations, have an understanding of cultural chasms as well as being opportunity oriented\textsuperscript{139}

CEO of 3DP Mr. Knut Krogstad mentions that they might have underestimated the cultural differences in China and the difficulties in using their proven approach to the market in the rest of the world when entering China\textsuperscript{140}. While such miscalculations are not to be wished for, Mr. Krogstad nevertheless shows that he is aware of such difficulties and is prepared to adapt. Their strategy to bridge this gap in other markets has been to hire locally, but due to the different values in China regarding such things as loyalty this is perhaps not optimal in this

\textsuperscript{134} Appendix 4, Mr. Sandnes, Marketing and Sales Director of 3D Perception
\textsuperscript{135} Appendix 1, Mr. Krogstad, Managing Director and co-founder of 3D Perception
\textsuperscript{136} Madsen and Servais (1997:578)
\textsuperscript{137} Haar and Meyer-Stamer (2008)
\textsuperscript{138} Solberg (2005)
\textsuperscript{139} Solberg (2005)
\textsuperscript{140} Appendix 1, Mr. Krogstad, Managing Director and co-founder of 3D Perception
country. As a small firm he says, they are also able to “turn around quickly” as opportunities present themselves, which in turn could lead them to get a jump on their larger competitors. This orientation is of course in keeping with Solberg’s thoughts on the matter.

In China one can also question to what extent 3DP is market oriented due to the fact that they have only limited knowledge of what the customer wants and needs in the Chinese market. One example is that in Europe and the USA their customers highly value ergonomic solutions, which 3DP is good at providing. Their potential Chinese customers however, probably values more direct performance enhancing attributes and do not appreciate the intrinsic productivity increase that is inherent in having healthy employees\textsuperscript{141}. As such 3DP probably must focus their marketing efforts differently, and to do this they need more knowledge about the market, which again necessitates a market orientation that is difficult to achieve in China with only two employees and small use of resources. However, our research has discovered that there currently are no research reports available for this market, which makes it more difficult for 3DP to acquire relevant information.

It should be noted however that 3DP is strongly considering stepping up their efforts in China through employing more people, both technical personnel and also an office manager and global marketing coordinator – China. Furthermore they are considering changing their business vehicle to a wholly foreign-owned enterprise (WFOE), such a move might make it easier to be more sensitive to the markets needs in China.

6.2.2. Competence

Solberg claims that a firm should have the following elements in place in order to succeed on the international market arena; a customer oriented product policy, close relations to their partners abroad, managing to extract a high price and thereby wider profit margins, and conduct marketing analysis\textsuperscript{142}.

\textsuperscript{141} Appendix 12, Ms. Zhuang, Managing Director of Shincon AS, Shanghai
\textsuperscript{142} Solberg (2005)
3DP seems to have two of these elements in place, they do have a customer oriented product policy and they manage to extract a fairly high price for their products compared to their customers according to Mr. Sandnes. When they are developing new products they seek to eliminate problems or difficulties that their customers have experienced with previous products, witness Mr. Krogstads’ assertion that they seek to improve the functionality of the products based on what the market needs. However in China 3DP has their shortcomings also in this regard. They are as yet uncertain as to what exactly the Chinese customers needs are and therefore are hindered in their efforts to address them. This flaw is related to another problem 3DP has in China; they do not have close relations to their partners. Indeed the management in Norway scarcely knows whom they are doing business with due to the fact that they have delegated this responsibility totally to their Chinese employees. Though this is somewhat understandable since 3DP is a small organization with limited resources, it nevertheless represents a drawback when dealing with the Chinese market and therefore also endangers their potential for sales, exports and profits.

Finally they have to this point not conducted any marketing analysis with regards to market size, growth and potential. Rather they base themselves on a strategy of following in the wake of bigger organizations. A thought not without merit considering their limited resources, but it could lead to opportunities missed as their big competition might not even consider market niches that could be interesting for 3DP.

6.2.3. Embodiment

Two factors play an important role when identifying the level of a firm’s international corporate culture – the stage in the internationalization process and the corporate culture in general.

Ways to measure how far a firm has come in the internationalization process include the firm’s dependence on exports and their foreign direct investments. Since 3DP is a BG firm they naturally are heavily dependent on exports, indeed

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143 Appendix 1, Mr. Krogstad, Managing Director and co-founder of 3D Perception
144 Solberg (2005)
exports are crucial to the 3DP’s survival. Furthermore 3DP is present with personnel of their own in USA, the United Kingdom, Japan and of course China, and their staff can in total answer customer needs in seven languages; English, Norwegian, Mandarin, Cantonese, German, Spanish and Japanese\textsuperscript{145}.

Moreover the management of 3DP has from the very first been very conscious of the fact that their market would have to be the world, rather than being limited to Norway as their market is too small for anything else. As is made clear by our interview with 3DP’s CEO Mr. Krogstad they are also very motivated to provide the customer with the best possible solutions with significant improvements to their newer products, this to better meet customer needs as previously mentioned. This clearly indicates that the management of 3DP does indeed have the attitude aspect of this model firmly fixed in their minds.

6.2.4. Summary of ACE

It would seem fair to claim that 3DP has come quite far in their internal internationalization process despite of their limited resources. Somewhat technical orientation does leave something to be desired. It should be mentioned though, that the new investors might complicate this image somewhat as there might arise conflicts if the investors don’t experience a fairly quickly realised monetary payoff on their investments\textsuperscript{146}. That remains to be seen.

6.3. Resource Analysis

6.3.1. Tangible Resources

6.3.1.1. Physical Resources

3DP is a limited stock company that has 5 offices worldwide, in Norway, USA, UK, Japan and China\textsuperscript{147}. Their physical resources lie in their product portfolio and their offices, which have been strategically placed in order to serve all markets.

\textsuperscript{145} 3D Perception (2009)
\textsuperscript{146} Appendix 9, Mr. Solberg, Professor at BI Norwegian School of Management
\textsuperscript{147} 3D Perception (2009)
The HQ in Asker is located right by the airport train station, which makes it easy for their VARs, employees and customers to access. Asker is a suburb of Oslo, and therefore the costs of office place are cheaper. Still, Asker is not more than a 20-minute drive from the city centre.

In China 3DP has chosen to place their representative office in Shanghai, where also one of their employees is situated. As Shanghai is the financial hub of China with good transport opportunities through the railway and the two airports – Pudong and Hongqiao, it makes sense for 3DP to locate office facilities here. The Shanghai location also brings 3DP closer to the decision makers in the control room market as well as the entertainment market\(^\text{148}\), which are two of the three product types in their portfolio. Regarding their third area, simulations, the decision makers are situated in Beijing where 3DP already have an employee, and in addition Beijing is easily reached by plane from Shanghai. 3DP has several products available for each of these markets.

3DP’s new product for the control room market, Megawall 2, was launched in May 2009, after two years of research and development. It is an update from the previous product, which did not provide the customers with full functionality and resulted in them having to buy extra components\(^\text{149}\). Megawall 2 include many of these components and is therefore cost effective for the customer as it contains many functions that have been demanded from the customer. This gives 3DP an edge in the market\(^\text{150}\).

6.3.1.2. Financial Resources

3DP has traditionally had an organic growth model since they launched their first commercial product in 2001, and they have achieved steady growth every year since then\(^\text{151}\). Internationally, 3DP had in 2008 invoices sales of $2.5 million, more than doubled from $1.1 million in 2005\(^\text{152}\). In China however, their growth has been fairly limited thus far, but it has been positive and the Chinese market

\(^\text{148}\) Appendix 3, Mr. Liao, China Director of 3D Perception’s Representative Office
\(^\text{149}\) Appendix 1, Mr. Krogstad, Managing Director and co-founder of 3D Perception
\(^\text{150}\) Appendix 1, Mr. Krogstad, Managing Director and co-founder of 3D Perception
\(^\text{151}\) Appendix 4, Mr. Sandnes, Marketing and Sales Director of 3D Perception
\(^\text{152}\) Internal documents from 3DP (2009)
now supplies approximately 15% of 3DP’s sales. Clearly having only two employees limits their costs, but at the same time it limits their potential for growth.

Up to this point 3DP’s gains have outweighed their costs in China, making a continued presence in the Chinese market all the more attractive. The general economy of 3DP is healthy, as can be seen from their key figures. However it should be noted that they have sunk considerable resources into the development of the product Megawall 2 and are heavily dependent on the success of this product. This has resulted in their decision to bring in venture capital, which will increase their resources, thus making it possible to launch their product faster and wider. Their R&D development combined with 3DP being a small firm on the global- and Chinese arena, nevertheless results in fairly constrained resources and they are therefore focused on short-term gains.

3DP sees the Chinese control room market as important in a long-term perspective and is open to further expansion here, though some restructuring of operations is needed. They have only achieved one sale in this market, indicating that they must focus more attention and resources on the control room market if they are to achieve noticeable sales figures.

6.3.1.3. Rights and Technical Resources

While 3DP has a wide range of patents worldwide they currently have no patents or trademarks in China. The management bases this decision on the belief that IPR-protection is complicated and enforcement less than effective, this belief is not unfounded, as we will discuss in our PESTEL analysis in section 7.2.

As mentioned, 3DP bases itself on leading edge technology rather than bleeding edge technology, which means that the technology has been proven to work and does not suffer of “child-diseases”. Their newest technology includes unique digital technology for geometrical correction of images when projected on to

153 Appendix 4, Mr. Sandnes, Marketing and Sales Director of 3D Perception
154 Purehelp (2009)
155 Appendix 1, Mr. Krogstad, Managing Director and co-founder of 3D Perception
156 Appendix 1, Mr. Krogstad, Managing Director and co-founder of 3D Perception
157 Appendix 1, Mr. Krogstad, Managing Director and co-founder of 3D Perception
158 Appendix 4, Mr. Sandnes, Marketing and Sales Director of 3D Perception
curved screens, this also allows the user to combine two or more projectors seamlessly and still obtain smooth and realistic images, which is not possible with even slightly older technology\textsuperscript{159}. Their products have achieved the CCC certification\textsuperscript{160} necessary in the Chinese market. It is naturally important for 3DP to gain this certificate for their newest product development Megawall 2, as such certification will help give the company and product a quality stamp. They are currently in the process of acquiring this certificate\textsuperscript{161}. 3DP also have showcasing products that they have situated in their Norwegian HQ and also demonstration products they use at trade fairs around the globe. In October 2008 they were present at a trade fair in Hong Kong where they showcased their product to potential buyers. Unfortunately they were unable to demonstrate their latest product development, as Megawall 2 was not finished at that point. Their biggest global reseller ABB, who is also present in China planned to buy two demonstration systems from 3DP in the autumn of 2008, the purchase was cancelled however, due to the financial crisis.\textsuperscript{162} Therefore the only fully-fledged system that is in operation in China on the control room market is situated at Shanghai Power.

6.3.2. Intangible Resources

6.3.2.1. Relationship-based Resources

In 2005 3DP hired Mr. Liao and Mr. Yan, their main task was to manage 3DP’s relations to their VARs and ensure more control in the Chinese market. Within the control room segment, 3DP has as mentioned above acquired only one sale. Therefore their reputation in the control room market is close to non-existing. According to Mr. Liao, the reputation they have from the simulation market is not transferable\textsuperscript{163}; CEO Mr. Krogstad lends his voice to this argument, though less assertively than Mr. Liao. However, the brand name “3D Perception” remains the same for both markets, and has a good reputation internationally\textsuperscript{164}.

\textsuperscript{159} 3D Perception (2009)
\textsuperscript{160} Appendix 3, Mr. Liao, China Director of 3D Perception’s Representative Office
\textsuperscript{161} Appendix 1, Mr. Krogstad, Managing Director and co-founder of 3D Perception
\textsuperscript{162} Appendix 2, Mr. Eric Finsaas, Sales Director – Automation Markets of 3D Perception
\textsuperscript{163} Appendix 3, Mr. Liao, China Director of 3D Perception’s Representative Office
\textsuperscript{164} Appendix 1 and 3, Mr. Krogstad, Managing Director and co-founder of 3D Perception and Mr. Liao, China Director of 3D Perception’s Representative Office
Many of 3DP’s employees in Norway came from the Kongsberg Group, where they worked with simulation. They have a considerable number of relations in this market, a direct result from their time with the Kongsberg Group. These relations have been a tremendous help, and also gave them an entry to the control room market in 2003\textsuperscript{165}. In China 3DP has quite good relations in the simulation market, but have close to none in the control room market\textsuperscript{166}. As mentioned both Mr. Liao and Mr. Yan came from 3DP’s competitors, and therefore they have both experience and some connections within the field\textsuperscript{167}, but out of 3DP’s eight resellers, only two are within the control room market\textsuperscript{168}. Mr. Sandnes also believe that their resellers in China are less competent at speaking the control room lingo rather than the simulation lingo\textsuperscript{169}, which of course is not optimal.

6.3.2.2. Competence-based Resources

While we have dealt partly with this element under the ACE model we will seek to elaborate somewhat regarding the Chinese branch of 3DP. While the technical knowledge of 3DP’s Chinese employees seems to be impeccable considering that they both have degrees as computer specialists. There are some shortcomings regarding strategic planning capability, since Mr. Liao has stated that he should not be the one taking initiative in the forming of goals and strategy in China\textsuperscript{170}. It should be noted that this is not a unique phenomenon found in 3DP’s employees, but rather perhaps a common characteristic found in Chinese employees\textsuperscript{171}. Indeed it has been said that the Chinese prefer to pulverize responsibility so that no one is accountable\textsuperscript{172}. Nevertheless this is clearly a structural shortcoming in 3DP’s organization. Furthermore both 3DP and their resellers in China have a somewhat limited understanding of the needs of the control room market compared to their expertise in simulations, which can definitely hamper 3DP’s progress in China. The lack of success so far in the Chinese control room market could also indicate that the Chinese employees have less strong connections here than in the simulation market.

\textsuperscript{165} Appendix 4, Mr. Sandnes, Marketing and Sales Director of 3D Perception
\textsuperscript{166} Appendix 1, Mr. Krogstad, Managing Director and co-founder of 3D Perception
\textsuperscript{167} Appendix 4, Mr. Sandnes, Marketing and Sales Director of 3D Perception
\textsuperscript{168} Appendix 3, Mr. Liao, China Director of 3D Perception’s Representative Office
\textsuperscript{169} Appendix 4, Mr. Sandnes, Marketing and Sales Director of 3D Perception
\textsuperscript{170} Appendix 3, Mr. Liao, China Director of 3D Perception’s Representative Office
\textsuperscript{171} Fernandez and Underwood (2009)
\textsuperscript{172} Appendix 13, Mr. Arne Knutsen, CEO of TTS Marine in Shanghai
7. **External Analysis**

In the external analysis we have made use of Porters Five Forces to identify elements and players that can impact on 3DP’s competitive ability on the Chinese control room market. Furthermore we have utilized a PESTEL analysis to map what macro-economical factors 3DP should be aware to minimize threats and be positioned to make the best possible use of any opportunities that are present.

7.1. **Competitive Analysis**

7.1.1. **Identify the Competitive Arena and its Potential Value**

The first and foremost important aspect in step one of the competitor analysis is to determine the competitive arena for 3DP. There are many choices; the whole projector technology industry, seamless projector technology, control room solutions, etc. As the competitors within the whole projector technology industry and control room solution markets are quite numerous, we have decided to narrow it down to “seamless control room solutions”, where we have discovered three main players in the Chinese market. These are the international brands Barco and Christie while China Director Mr. Liao has mentioned Huakong as a strong local competitor on the Chinese market.

Possible new entrants will include existing substitutes that are developing new products and international players not yet in the Chinese market.

As for the substitutes, we consider cube-solutions to be the largest threat seeing that many customers are not aware of the added benefits of seamless solutions.

Suppliers will be every company that can supply 3DP with their outsourced products and services, and customers will include 3DP’s VARs.
7.1.2. **Analyze Own and Other Players Position**

According to Porter (1979)\(^{174}\), the key to growth and survival is to use one’s knowledge of the Five Forces in order to create a position for the company that is less vulnerable to attack from players in the industry. Such a position can be achieved by product differentiation or by gaining technical leadership. Porter (1979) also mentions solidifying relationships with profitable customers and integrating operations, though this aspect is not relevant at the present time as 3DP only has one customer in the control room market thus far\(^{175}\). “The collective strength of these forces, determines the ultimate profit potential of an industry\(^{176}\)”\(^{176}\). It is therefore important to analyze both 3DP’s position and the other players in the industry.

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\(^{173}\) Own model (2009) adapted from Løwendahl and Wenstøp (2009)

\(^{174}\) Porter, Michael E. (1979)

\(^{175}\) Porter (1979)

\(^{176}\) Harvard Business Essentials (2005)
7.1.2.1. Competitive Rivalry Within an Industry

3DP is currently operating in an industry that has two main players; the Belgian company Barco and the Canadian company Christie\textsuperscript{177}. The situation is made all the more difficult as Barco is basically the default choice when selecting projection technology worldwide\textsuperscript{178}, and they also consider themselves leading within control room solutions\textsuperscript{179}, as indeed they are according to the market report from DTC\textsuperscript{180}. This can especially be a problem in China, since employees are afraid of making mistakes\textsuperscript{181}, and choosing the default choice could be considered safe, thus seen to be less risky by the decision makers. 3DP’s challenge will be to reach out to the customers and inform them about why they provide better solutions and are more service minded than Barco\textsuperscript{182}. To make 3DP’s brand more known in the market is also of critical importance, and this will be further discussed in chapter 10: Strategy Tools.

In China, there are many local competitors, and China Director Mr. Liao is especially aware of the mentioned company Huakong. Huakong has the same technology as 3DP, only with different products, and the customers needs is fulfilled in the same way as with Megawall 2\textsuperscript{183}. Furthermore, by using Google Translate we discovered that Huakong has a large customer portfolio including many government projects\textsuperscript{184}, indicating that Huakong should be a strong competitor in the market. As mentioned, Porter (1979)\textsuperscript{185} explains that by differentiating their product or by gaining technical leadership 3DP can create a competitive position. 3DP should therefore focus on after sales service as competitors challenge their product. However, even if their competitors’ products fulfil the same needs, 3DP can achieve this position by convincing their customers that their extended product or technical leadership is superior.

\textsuperscript{177} Appendix 1, 2, 3 and 4, Mr. Krogstad, Managing Director and co-founder of 3D Perception, Mr. Finsaas, Sales Director – Automation Markets of 3D Perception, Mr. Liao, China Director of 3D Perception’s Representative Office and Mr. Sandnes, Marketing and Sales Director of 3D Perception
\textsuperscript{178} Appendix 2, Mr. Finsaas, Sales Director – Automation Markets of 3D Perception
\textsuperscript{179} Barco (2009)
\textsuperscript{180} DTC (2003)
\textsuperscript{181} Appendix 10 and 13, Mr. Kristoffersen, China expert from BI Norwegian School of Management and Mr. Knutsen, CEO of TTS Marine in Shanghai.
\textsuperscript{182} Appendix 2, Mr. Finsaas, Sales Director – Automation Markets of 3D Perception
\textsuperscript{183} Appendix 3, Mr. Liao, China Director of 3D Perception’s Representative Office
\textsuperscript{184} Huakong (2009) translated by google translate
\textsuperscript{185} Porter, Michael E. (1979)
Barco had as of 2002 9% volume market share in China (23% worldwide), while Christie had 3% (5% worldwide). The big player in China seemed to be VTRON, a company that provides a substitute product, with 33%, but these numbers are not limited to the control room market, and VTRON’s market share was expected to fall by 10% by 2003, as a consequence of intensified competition. It is till reasonable to believe that their presence in the Chinese market is strong in 2009 however, we will therefore later discuss a possible partnership between VTRON and 3DP. The giant in the international market was still Barco with a 35% volume market share as of 2002, Christie lagged far behind with a mere 6%.

Barco has a worldwide network and are offering complete integrated solutions, while Christie “have a range of solutions but have remained relatively uncompetitive compared to Barco when complex solutions are required” this could be an area where 3DP can strengthen their reputation.

7.1.2.2. Threat of New Entrants

As stated in the theory part, the attractiveness of an industry will depend on the height of both the entry and exit barriers. There are several scenarios worth mentioning concerning the threat of new entrants in this market. The most severe threat will be the several substitute companies providing the old cube technology which could develop seamless technology products of their own, or possibly even leapfrog to a new technology, thus changing the competitive arena significantly. Leapfrogging means to bypass the existing technology entirely and ascend to a new and better technological solution, thereby disrupting the established competitive order. Other possible entrants include companies not yet established in China, but with the technology necessary to offer competition. These would then fall under the same category as 3DP; small companies with limited resources. Therefore they would not immediately represent as big a challenge as the major competitors discussed above. The third possible option is newly established companies. In order to enter this industry, quite an amount of resources will be needed: Knowledge, time to develop a competitive product; time to build relations and financial resources. This creates a high entry barrier, which is an advantage for 3DP.

186 DTC (2003)
187 DTC (2003:28)
188 Mohr, Sengupta and Slater (2005)
Exit barriers for a company like 3DP will be fairly low, as they have not invested large amounts in China. A representative office is a low-cost vehicle with few entry barriers and easy approval\(^{189}\). A company that has invested in the establishment of a WFOE will however, experience bigger losses when exiting this market. The establishing cost of a WFOE alone is minimum $140,000\(^{190}\). As their big competitors have invested significant resources in the Chinese market, their organizations are considerably bigger than 3DPs in China for one thing, their exist barriers will be relatively high. It should also be noted that many companies choose to stay in China even if it is not profitable because it is considered too risky not to be present in the an emerging Chinese market\(^{191}\).

### 7.1.2.3. Threat of Substitute Products

Currently, 3DP’s seamless projector technology is quite rare in the market\(^{192}\). However, their competitors, such as Barco and Christie, are offering many different solutions that satisfy some of the same needs – like the cube design\(^{193}\). Apparently many customers are not aware of the added benefits of seamless solutions such as a clearer overview of the situation resulting in increased efficiency. There are many providers of cube solutions in China; among the largest are VTRON, Mitsubishi, Barco and Christie in that order\(^{194}\). Barco and Christie are total providers and also have seamless solutions in their product portfolio.

We are also including simple LCD screens to show that there exists other substitutes, however we see this as a minimal threat and will not discuss this factor further.

Furthermore if one considers the low loyalty among VARs, which are free to select whichever solution they want, price and profit are crucial rather than the technology used to satisfy the end user\(^{195}\).

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\(^{189}\) Grant Thorton (2003)  
\(^{190}\) Schaub (2006)  
\(^{191}\) Kristoffersen, Henning (2008)  
\(^{192}\) Appendix 2, Mr. Finsaas, Sales Director – Automation Markets of 3D Perception  
\(^{193}\) Barco (2009)  
\(^{194}\) DTC (2003)  
\(^{195}\) Appendix 3, Mr. Liao, China Director of 3D Perception’s Representative Office
7.1.2.4. **Bargaining Power of Customers**

The decision makers of 3DP’s customers in the control room market often do not seem to possess the right knowledge needed to choose the most advantageous solution for their company\(^{196}\). Rather they choose what they believe will reflect most positively on themselves\(^{197}\), since the control room often also is used as a showcase room\(^{198}\). Moreover, as mentioned above, several competitors in the market offer both seamless projector technology, and substitute products like cube design. Add to this the lack of customer knowledge to the equation, and the customers bargaining power increases for those choosing their solution based to a large extent on exterior design. On the positive side 3DP’s products looks very high technological and future oriented. Furthermore, according to Mr. Finsaas, a lot of the customers are cost sensitive, and therefore asks the VARs to split 3DP’s total solution so they can purchase only the flat screens\(^{199}\). Considering that most of 3DP’s competitors offer this solution as well, a customer could play the competitors against each other on both price and design. 3DP has constructed their new product platform so that one can remove product parts and make the product more “stupid”, hence cheaper, without having to resort to more expensive customization to meet this challenge\(^{200}\). The initial inertia would also weigh in here as the potential customer could argue that they cannot be certain of 3DP’s competence and survival chance on the Chinese market arena as long as they have no, or at least negligible sales on the control room market in China\(^{201}\).

Finally there are many VARs present in China and 3DP makes use of eight of these: Lantech, Seastar, Huacrete, Eastcat, Golden Bridge, Secway, ABB and Shanghai-based Immersions. Two of these are specialized on the control room market, namely Secway and Immersions Technologies\(^{202}\). 3DP’s challenge in China is that their resellers do not feel any loyalty to 3DP and have several other companies to choose from when selecting the supplier for projects they have going, price therefore definitely becomes an issue\(^{203}\). Often they pick and choose

\[196\text{ Appendix 2, Mr. Finsaas, Sales Director – Automation Markets of 3D Perception} \]
\[197\text{ Appendix 6, Mr. Zhou, Professor at Fudan University} \]
\[198\text{ Appendix 2, Mr. Finsaas, Sales Director – Automation Markets of 3D Perception} \]
\[199\text{ Appendix 2, Mr. Finsaas, Sales Director – Automation Markets of 3D Perception} \]
\[200\text{ Appendix 4, Mr. Sandnes, Marketing and Sales Director of 3D Perception} \]
\[201\text{ Appendix 11, Mr. Hilton, Owner and CEO of Accurpress International Sales Ltd.} \]
\[202\text{ Appendix 3, Mr. Liao, China Director of 3D Perception’s Representative Office} \]
\[203\text{ Appendix 3, Mr. Liao, China Director of 3D Perception’s Representative Office} \]
single products from each supplier and provide their own total solution product\(^{204}\), rather than selling 3DP’s total solution. This might actually decrease efficiency for the end customer\(^{205}\) because the final product will not be a totally integrated product. As 3DP only have a representative office in China they cannot do business with the end-customer directly and is therefore forced to base their operations solely on VARs.

### 7.1.2.5. Bargaining Power of Suppliers

According to Mr. Sandnes, 3DP is a company that is good at development, logistics, sales, and choosing competent suppliers\(^{206}\). Furthermore, being a small company with limited financial resources makes it beneficial to outsource certain areas of their business like production, legal services, and accounting\(^{207}\). There are a considerable number of firms in the world that can provide production of 3DP’s components\(^{208}\), since 3DP possesses the core competence and create the product from these components\(^{209}\). Therefore the bargaining power of suppliers is considered to be low.

### 7.1.2.6. Summary of Porters Five Forces

![Figure 17: Scaled Porters Five Forces\(^{210}\).](image)

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\(^{204}\) Appendix 3, Mr. Liao, China Director of 3D Perception’s Representative Office

\(^{205}\) ABB Review (2007)

\(^{206}\) Appendix 4, Mr. Sandnes, Marketing and Sales Director of 3D Perception

\(^{207}\) Appendix 4, Mr. Sandnes, Marketing and Sales Director of 3D Perception

\(^{208}\) Appendix 1, Mr. Krogstad, Managing Director and co-founder of 3D Perception

\(^{209}\) Appendix 4, Mr. Sandnes, Marketing and Sales Director of 3D Perception

\(^{210}\) Own model (2009) adapted from Løwendahl and Wenstøp (2008)
Unfortunately the only numbers we have are from 2002 and can not be trusted as there has been tremendously large changes in China, especially in this market since then. However, they can be used as an indication, and when we know that VTRON, which was the largest player in 2002 do not provide this new technology, the company can represent a possible partner for 3DP in this difficult market. Barco, which is said to be the default choice of projector technology, dominates the industry and there are also at least three other players, Barco, Christie and Huakong, who can provide seamless projector solutions as 3DP. The competitive rivalry within this industry should therefore be considered high.

The only major threat concerning new entrants will be from the already existing substitute companies, which can develop new technology. VTRON is in this category, which is an important fact to remember when considering a possible partnership. The entry barriers for this industry as a whole are quite high, while the exit barriers depend on the level of resources invested. The threat of new entrants is therefore medium.

Customers not aware of the benefits of seamless solutions technology could choose to buy the older and cheaper cube solutions. Therefore the substitutes can be considered a threat to 3DP.

There are numerous providers of both seamless solutions and cube solutions, and many customers are lacking knowledge about the products. 3DP’s VARs therefore have significant bargaining power as 3DP is forced to sell their product through them since 3DP only has a representative office in China.

There are numerous firms that can provide production for 3DP. The bargaining power of suppliers is therefore assessed to be non-existing to low.

7.1.3. Evaluate Threats and Opportunities

Step three in the competitive analysis will be discussed as a part of the SWOT analysis and can be found in chapter 8: SWOT.
7.2. PESTEL Analysis

The PESTEL framework is used to analyse different factors in a company’s macroeconomic environment, and is divided into political, economical, socio-cultural, technological, environmental and legal. We have determined that the environmental factor will not influence 3DP’s operations in China; therefore we will focus our analysis on the following factors – political, economical, socio-cultural, technological and legal.

7.2.1. Political

China has since 1949 been under the governance of the Chinese Communist Party (CCP), who retain an iron grip on the country’s politics. There is no real opposition to the party’s absolute power. Therefore a potential problem for 3DP could be one of the sudden policy shifts one has seen in China several times since they opened up the economy in 1979, and as they are a small company with no political relationships in China and limited financial resources they could have serious trouble coping with worsened conditions resulting from any given policy shift. Moreover Professor Zhou claims that government interference is faster, stronger and more aggressive than in democratic countries, indicating that even though China is seen as a stable country due to the strong leadership of the CCP conditions can change quickly. On the positive side it seems likely that China will soon change regulations in the financial system so as to make it easier for small and medium-sized enterprises to develop.

7.2.1.1. China and the WTO

On the 11th December 2001, China joined the WTO. This has given global high-tech companies like 3DP access to one of the world’s biggest markets. Despite this many foreign companies see themselves discriminated by Chinese
authorities, which goes against the WTO precept\textsuperscript{219}. Therefore, if 3DP gains a larger market share in the control room market, it is entirely possible that Chinese authorities might react by creating a more advantageous economic situation for the Chinese competitors. This is because, especially at the local level, which 3DP usually deals with due to their size, foreign companies are seen as having an advantage over their local competitors due to their technological and managerial superior capabilities\textsuperscript{220}. Professor Zhou suggests that 3DP could take a closer look at government projects, like sophisticated monitoring of the railway, which are according to him loaded with money\textsuperscript{221}. However, according to Crossick and Reuter (2007), local companies are often met with preferential treatment on both government projects and as suppliers for State-Owned Enterprises (SEO), even though this is in defiance of WTO regulations\textsuperscript{222}. Though this might be the case this is a segment that is currently seeing large investments\textsuperscript{223}, and one should therefore keep in mind that it is easier for a small company like 3DP to gain market shares in a growth market.

\subsection*{7.2.1.2. Political Corruption}

Political corruption is not an unknown phenomenon to Western businessmen and entrepreneurs operating in China. Some might even go as far as stating that government connections are a necessity to operate a successful business in China\textsuperscript{224}. While there is probably some truth to such a statement it is ultimately misleading as this would make it close to impossible for small companies like 3DP to operate in China. Indeed Professor Zhou claims that China, now more than ever, are welcoming small businesses as they employ around 60\% of China’s workers\textsuperscript{225}, this can be seen as an upside of the financial crisis for 3DP. On the downside it is important to note that China ranks as number 72 out of 180 on Transparency International’s annual 2008 Corruption Perceptions Index, clearly not an optimal ranking\textsuperscript{226}.

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\bibitem{220} Crossick and Reuter (2007)
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\bibitem{222} Crossick and Reuter (2007)
\bibitem{223} The Economist (2009)
\bibitem{224} Fernandez and Underwood (2009)
\bibitem{225} Appendix 6, Mr. Zhou, Professor at Fudan University
\bibitem{226} Transparency International (2009)
\end{thebibliography}
Table 1: Corruption Perceptions Index\textsuperscript{227}.

The level of government related corruption one meets in China varies depending on ones industry, location and connections\textsuperscript{228}. First tier cities like Shanghai, Beijing and Guangzhou, where 3DP is currently focusing their attentions, is in general cleaner than second- and third tier cities, the latter ones have according to Simon Lichtenberg, Founder and CEO of Trayton Group, fairly rotten court systems\textsuperscript{229}.

*Political corruption and counterfeiting:*

China is as mentioned, widely known for their political corruption, and counterfeiting enforcement officials are no exception. It is a common practice that local enforcement officials ask for payments, also known as case fees to conduct actions against counterfeiters\textsuperscript{230}. Such payments can be troublesome for small firms with limited resources, like 3DP. The case fees include cash payments ranging from RMB 1,000 to as much as RMB 100,000, gifts like mobile phones and computers, or even in some cases that the officials will retain some or all of the compensation awarded the company from a convicted counterfeiter\textsuperscript{231}. Norway participates in numerous international treaties against corruption\textsuperscript{232}, and penal laws in Norway forbid any form of corruption practices both national and

\textsuperscript{227} Own table (2009) adapted from Transparency International (2008)
\textsuperscript{228} Fernandez and Underwood (2009)
\textsuperscript{229} Fernandez and Underwood (2009)
\textsuperscript{230} Chow (2002)
\textsuperscript{231} Chow (2002)
\textsuperscript{232} Regjeringen (2009)
Dealing with Chinese authorities in ways that are considered more or less normal in China can and probably will be viewed as corrupt according to Norwegian and international law, this can to some extent hamstring companies like 3DP in their attempts to bring lawsuits to court.

7.2.2. **Economical**

China has in the space of 30 years evolved to a market-oriented economy with a rapidly growing private sector. Free Trade Zones (FTZs) have been established to make it easier, among other things to introduce more leading edge technological expertise, which is exactly the kind of product 3DP offers. For 3DP it will be essential to take the indicators below into account. However, considering that figures provided by the Chinese government can be unreliable, one should view them with some scepticism.

7.2.2.1. **Growth**

"China is now conducting massive countercyclical politics"

- Mr. Rune Bjerke, CEO of DnB NOR

Throughout the 1980s and 1990s China’s economy grew at an annual rate of approximately 10%. Today China’s GDP real growth rate is estimated to hit 8% a downfall from 13% in 2007 and 11.6% in 2006. On the positive side Goldman Sachs forecast a 10,9% rise in 2010 revised upwards from their previous estimate of 9%, stating that this is “largely driven by stronger investment growth, especially from private investment.” China’s GDP – per capita is estimated at $6,000 in 2008, an increase from $5,500 in 2007 and $4,900 in 2006. China was in 2006 the third-largest economy in the world, ranked behind the United States and Japan. Measured by purchasing power parity (PPP), adjusted for price differences, China was the second-largest economy in the world in 2008 just

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233 Utenriksdepartementet (2008)
234 CIA – The World Factbook: China (2009)
235 Snow, Donald M. (2006)
236 Dagens Næringsliv (2009)
237 Snow (2006)
238 Wall Street Journal (2009)
239 CIA – The World Factbook: China (2009)
241 CIA – The World Factbook: China (2009)
242 Snow (2006)
behind the United States. The financial crisis means that one should view these numbers in a critical light however, since 2009 is likely to be a more difficult year. One should bear in mind though that the Chinese governments huge investments in infrastructure are likely to mitigate the drop in domestic spending\textsuperscript{243}, this is of particular interest to 3DP as much of the infrastructure being built and upgraded are in need of control rooms. Experts like Professor Zhou Dunren of Fudan University believe that China will weather this crisis better than many other countries.\textsuperscript{244}

7.2.2.2. Inflation and Interest Rate

China’s inflation rate is estimated at 6\% in 2008\textsuperscript{245}. This is just above the 4.2 \% inflation rate in the US\textsuperscript{246} and 3.6\% in Norway\textsuperscript{247}. Inflation may result in higher wage demands thus increasing costs\textsuperscript{248}, though the financial crisis will also provide a severe dampener here, perhaps even cutting wage costs for new hires. At any rate this should not pose any real difficulty to 3DP as they have a small organization in China.

According to BBC News, China cut the interest rate from 6.93\% to 6.66\% in October 2008\textsuperscript{249}, and further to 5.31\% in March 2009 according to China Daily\textsuperscript{250}, providing some incentive for investments in capital assets among other things.

7.2.2.3. Unemployment Rate

According to the Wall Street Journal Asia, due to the global slowdown the demand for China’s exports has been weakened causing an increase in bankruptcies and causing unemployment in coastal China\textsuperscript{251}, this could be to the advantage of 3DP should they decide to increase their workforce. Intel is an example of a company who is cutting down on their workforce\textsuperscript{252}.

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7.2.2.4.  Exchange Rate

When China devalued its currency by 2.1% against the US dollar in July 2005 they moved away from their previously tight link to the dollar. Their current exchange rate system references a basket of currencies and the change has caused a cumulative appreciation of the RMB against the US dollar of more than 20% by late 2008\textsuperscript{253}. Appreciation of the dollar represents a certain risk for 3DP given possible losses due to currency fluctuations. However, Professor Zhou stated in our interview with him that a continued appreciation of the dollar is most unlikely, and therefore this should not affect 3DP noticeably\textsuperscript{254}.

7.2.2.5.  Future Economic Development and Challenges

According to Brown (2006) “Most forecasts indicate that by 2020 China’s gross national product (GNP) will exceed that of individual Western economic powers except for the United States”\textsuperscript{255}. Brown further predicts that China’s per capita GDP will raise to approximately 37 % of US per capita GDP by 2050\textsuperscript{256}. Due to current slowdown in foreign demand for Chinese exports the government has promised to continue its economic reforms and they thereby emphasize the importance of increasing domestic consumption in order to make China less dependent on foreign exports for GDP growth in the future\textsuperscript{257}. The January snowstorms and the May earthquake in Sichuan province last year emphasized that China’s electrical power structure definitely is in need of new and better technology, as the systems totally buckled. China is currently battling with overwhelming demand for power and this has led the government to allocate over $65 billion dollars earmarked for expansion and upgrade of the electrical power grids\textsuperscript{258}. This should create an opportunity for 3DP’s total solutions for control rooms. According to The Economist, China’s State Council unveiled a 4 trillion RMB stimulus package in November 2008 to be spent over the next two years. The spending areas include among other different infrastructure projects, mainly railways, roads, airports and the power grid\textsuperscript{259}. These are all areas that would be in need of 3DP’s products for their control rooms. As much as 43% of the stimulus

\textsuperscript{253} CIA – The World Factbook: China (2009)
\textsuperscript{254} Appendix 6, Mr. Zhou, Professor at Fudan University
\textsuperscript{255} Brown, Janet P. (2006)
\textsuperscript{256} Brown (2006)
\textsuperscript{257} CIA – The World Factbook: China (2009)
\textsuperscript{258} Market Avenue (2009)
\textsuperscript{259} The Economist (2009)
package is “being spent on transportation infrastructure, eco-environmental improvements, and technological innovation”\textsuperscript{260}. One example is the plans of building over 20 hydro dams alongside the Yangtse River\textsuperscript{261}, which will also need control rooms. Another example of the need for control rooms is China’s large investments in their railroad system which is by Mr. Sean Darby, known strategist at the financial company Nomura International, characterized as “the new Silk Road, (...) the investment is equivalent to building railroad tracks around the earth three times (...) and roads two and a half times.”\textsuperscript{262}. In addition, China is currently supplementing these investments with pipes in order to secure the access of needed energy\textsuperscript{263}. Furthermore, according to both the Economist and The Wall Street Journal Asia, China’s value added tax system (VAT) will undertake a revamping which will allow firms to deduct purchases of fixed assets such as capital equipment. This reform of the VAT system will reduce companies’ tax bills by a total of 120 billion RMB. This should in turn encourage Chinese and foreign firms to upgrade their capital equipment. Finally, the government states that the program gives companies an opportunity to upgrade to higher-tech equipment\textsuperscript{264}, something that 3DP definitely offers.

There is a wide gap between the economic system and the anachronistic political system in China\textsuperscript{265}, experts expect a minimum of one or two more quarters of slowing growth before a change can be seen\textsuperscript{266}.

For 3DP these investments mean that the market in China for their products is widening. When the stimulus package takes effect, companies will have the capital to invest in better-equipped control rooms and more importantly, available service if something malfunctions. Even though China is experiencing a slowdown in their growth, the urge for companies to upgrade and invest in their capital equipment provides 3DP with a golden opportunity to attract new customers.

\textsuperscript{260}MoneyShow (2009)  
\textsuperscript{261}China Digital Times (2009)  
\textsuperscript{262}Langum, Cecilie (2009)  
\textsuperscript{263}Langum (2009)  
\textsuperscript{264}Batson, Andrew (2008) and The Economist (2009)  
\textsuperscript{265}Snow (2006)  
\textsuperscript{266}Batson (2008)
7.2.3. Socio-cultural

“Culture is more often a source of conflict than of synergy. Cultural differences are a nuisance at best and often a disaster.”

- Professor Geert Hofstede, Emeritus Professor, Maastricht University

When 3DP is doing business across cultures it is important to be aware of the cultural differences that exist between countries. We will here discuss the cultural differences between Norway and China in greater detail, then point out key cultural traits in China.

7.2.3.1. Relationship-Focused Versus Deal-Focused

Richard R. Gesteland (2005) defines the market in China as relationship-oriented. Meaning that the Chinese prefer to do business through personal contacts and are not particularly susceptible to the direct “cold call” from strangers. Trust is a key issue. Northern Europe (Norway) and North America on the other hand are characterized as a strongly deal-focused culture, meaning that they are more used to making direct contact with potential distributors and end-users in these markets. This can be a source of problems and misunderstandings when 3DP’s Norwegian HQs communicates with their Chinese employees and customers in that the Northern direct style might sometimes seem abrupt or aggressive. A possible cause for misunderstanding even when meeting in person is that while Northern Europeans and Americans interpret a direct gaze as a sign of honesty the Chinese might view such a non-verbal sign as an indication of intimidation or hostility.

7.2.3.2. Mianzi

The Chinese “face” also called mianzi, is the value of a person’s status, prestige and honour achieved through success and ostentation; personal effort or clever manoeuvring accumulates it. One could therefore say that mianzi is the value of your social face that is directly affected by your social capital; your friends, family and network. It seems likely that 3DP’s products can contribute to give...

267 Geert Hofstede (2009)
269 Gesteland (2005)
270 Hu, H.C. (1944)
271 Kristoffersen (2008)
mianzi to their end customer in China. This reasoning is based on the fact that 3DP’s products are leading edge high technological and have a visually pleasing and modern design. These are status-conferring elements in China and could be seen as a strong selling point. Indeed if 3DP’s products contributes to giving the end customer mianzi he in turn will have good opportunities to create good guanxi for himself\textsuperscript{272}. This in turn may make this customer a good reference in the Chinese market, something that is very important for 3DP in the Chinese market\textsuperscript{273}

7.2.3.3. Guanxi

One could say that guanxi means, “pass the gate and get connected”\textsuperscript{274}. The sum total or extent of one’s guanxi is a “guanxiwang”, which can loosely be translated as a network\textsuperscript{275}. These forms of networking and personal relationships are generally based on mutual interest and benefit\textsuperscript{276}. It is a system of reciprocal obligations\textsuperscript{277}. Such a system can easily be argued to include an element of corruption, thus making it difficult for employees in a Norwegian firm like 3DP to function within a guanxiwang. Nevertheless there are elements to guanxi that could be very beneficial to 3DP, we have been given the understanding that Mr. Liao and Mr. Yan’s connections in the simulations market has been of considerable use to 3DP in this market\textsuperscript{278}. Thus a manager 3DP might hire with responsibility for the control room market might do well in investing considerable time and effort in establishing a network in China. This is because such a network would give 3DP a greater understanding of customer needs and wants in China, something that 3DP is lacking at the moment\textsuperscript{279}, and also because it would give 3DP more contact points in the Chinese market other than Mr. Liao and Mr. Yan who might after all at some point quit.

\textsuperscript{272} Gold, Thomas. Guthrie, Doug and Wank, David. (2002)
\textsuperscript{273} Appendix 11, Mr. Hilton, Owner and CEO of Accurpress International Sales Ltd
\textsuperscript{274} Lee, D.Y. and Dawes, P.L. (2005)
\textsuperscript{275} Gold, Guthrie and Wank (2002)
\textsuperscript{276} Parnell, M.F. (2005)
\textsuperscript{277} Gold, Guthrie and Wank (2002)
\textsuperscript{278} Appendix 4, Mr. Sandnes, Marketing and Sales Director of 3D Perception
\textsuperscript{279} Appendix 4, Mr. Sandnes, Marketing and Sales Director of 3D Perception
7.2.3.4. Management Style

The management style in China and Norway contrasts sharply. WorldBusinessCulture.com claims that Chinese management style does not tolerate subordinates questioning their superiors’ directives as this will cause loss of mianzi for all concerned\textsuperscript{280}, while the Norwegian embassy characterises the Norwegian management style as participative and team oriented with an open and consultative communication\textsuperscript{281}.

Concerning management, the Power Distance Index (PDI) is a good indicator of the important differences between China and Norway\textsuperscript{282}. Power distance is one of five cultural dimensions set forth by Professor Geert Hofstede, a renowned European scientist that have conducted comprehensive studies of how values in the workplace are influenced by culture\textsuperscript{283}. According to Hofstede, PDI measures the degree of power distance in the society.

Due to the fact that 3DP mainly have employees from North America and Northern Europe, it is of vital importance that 3DP are aware of these cultural differences in order to avoid misunderstandings and unnecessary blunders. One thinkable scenario is that the Norwegian management could expect their Chinese

\begin{table}[h]
\centering
\begin{tabular}{|c|c|c|c|c|c|}
\hline
 & Scores & & & & \\
\hline
 & 0 & 20 & 40 & 60 & 80 & 100 \\
\hline
PDI & China & United States & Norway & & & \\
\hline
\end{tabular}
\caption{Power Distance Index between Norway, United States and China\textsuperscript{284,285,286}.}
\end{table}

\textsuperscript{280} World Business Culture (2009)
\textsuperscript{281} The Norwegian Embassy (2009)
\textsuperscript{282} Laroche, L. (2005)
\textsuperscript{283} Geert Hofstede Cultural Dimensions (2009)
\textsuperscript{284} Geert Hofstede Cultural Dimensions: China (2009)
\textsuperscript{285} Geert Hofstede Cultural Dimensions: United States (2009)
\textsuperscript{286} Geert Hofstede Cultural Dimensions: Norway (2009)
employees to correct the management if they believe the Norwegian HQ to be wrong; while in reality they could be cautious to do so as this is not accepted in Chinese culture\textsuperscript{287}. Another problem would be that in a Norwegian or American way of thinking it is expected that subordinates take initiative and act independently to reach desirable objectives for the company, while the Chinese employees could have the view that it is the management’s responsibility to direct them. This again might lead to communications difficulties.

7.2.3.5. \textit{Ethical Issues Regarding Employees}

“I insist that we use legitimate copies of software. But my employees come up to me and say: “Are you an idiot? Nobody does that.”

- Steven Ganster (USA) – Founder and Managing Director, Technomic Asia\textsuperscript{288}.

One of the greater problems when doing business in China is the vast difference in ethical procedures. According to Fernandez and Underwood (2009) \textit{“corruption against a company from its own employees is one of the most harmful challenges faced by foreign business founders in China”} \textsuperscript{289}. Firstly, many Chinese employees look upon foreign companies as stupid if they do not take advantages of loopholes in the Chinese system. Fernandez and Underwood (2009) further states that foreign managers that are used to following government directions are surprised by the fact that most Chinese employees have never fully followed the regulations before\textsuperscript{290}. Due to the communication and information problems discovered in interviews with Mr. Liao, Mr. Sandnes, Mr. Krogstad and Mr. Finsaas\textsuperscript{291}, it is possible that the Chinese employees in China have already or will in the future perform operations that is in the “gray zone” according to Western business rules, because they do not see anything wrong with it. Secondly, suppliers and business partners are known to offer perks and kickbacks to employees of foreign businesses\textsuperscript{292}. Therefore it is not unconceivable that such
practices conducted by their competitors can represent a barrier for 3DP in entering the control room market in China.

The cultural differences we have listed here will be discussed in section 7.3: Characteristics of the Chinese Market.

7.2.4. Technological

7.2.4.1. The Internet and China
This year China Advertising Association (CAA), introduced new guidelines regarding Internet advertising standards. The aim being to reduce the previous number of 170,000 size options to a mere 199, thus making Internet advertising easier to sell in China. Add to this the 42% increase in Internet users from 2007 to 2008 resulting in 298 million Internet users in China alone and this field in advertising clearly has vast potential. Furthermore, Chinese is currently the second largest language on the Internet, only exceeded by English, and still growing. Moreover 3DP’s target audience are to a large extent technically savvy people and there is reason to believe that the density of people connected to the Internet is significantly higher in this segment than even the rest of urban China.

7.2.5. Legal
According to Mr. Mark Schaub, Director of Joint Venture and WFOE at King and Wood law firm, the most serious problem for foreign companies are the enforcement of judgments or arbitration awards given in said companies favour. However the legal system is constantly improving. As a way of comparison one can see that in 1976, China only saw eight laws and regulations issued while year 2005 saw a total of 4690 laws and regulations issued. This however says little about enforcement.

293 B2B International China (2009)
294 China Tech News (2009)
295 Jacobs, Andrew (2009)
296 Internet World Stats (2009)
297 Schaub (2006)
298 Schaub (2006)
7.2.5.1. Intellectual Property Rights

“Intellectual property rights are the rights given to persons over the creations of their minds. They usually give the creator an exclusive right over the use of his/her creation for a certain period of time.”

- The World Trade Organization

According to the American Chamber of Commerce protection of IPR was rated as the most important concern regarding investing in China in 2005. However, since China joined the WTO on the 11th December 2001, they have strengthened their IPR laws and regulations to comply with the Agreement on Trade-Related Aspects of Intellectual Property Rights, also known as TRIPS. Though legal experts in the field claim that if you have a popular product in China, it will probably be counterfeited.

Patents:
The patent law was promulgated in 1984, and has since then been amended a vast number of times. China is also a member of the Paris Convention for the Protection of Industrial Property (1985), The Patent Cooperation Treaty (1994), and TRIPS. However it seems that these international treaties does not offer any real form of protection of IPR in China, thus giving inexperienced firms a false impression of security.

Trademarks:
“They (3DP) should register their trademark”

- Mr. Schaub, Partner in King and Wood law firm, and director of JV and WFOE

China’s trademark law, which was last amended in 2001, is slightly different from most countries. China has implemented a “first-to-file” system rather than the

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299 World Trade Organization (2009)  
300 Schaub (2006)  
301 World Trade Organization (2009)  
302 Embassy of the United States of America (2009)  
303 Schaub (2006)  
304 Schaub (2006)  
305 Appendix 8, Mr. Schaub, Partner in King and Wood law firm, and director of JV and WFOE  
306 Appendix 8, Mr. Schaub, Partner in King and Wood law firm, and director of JV and WFOE
According to Mr. Sandnes, the Marketing and Sales Director of 3D Perception, they have not registered any form of trademarks in China. This might be a very poor decision, since experts on Chinese law suggest that one should register trademarks early and often, no matter what the situation might be.

7.2.5.2. Counterfeiting Enforcement and Related Problems

Legal experts in Chinese law claim that China currently has both a wide range of civil and criminal law that meet international standards. However, there are still problems with certain areas of the political and legal system, which includes interpretation of existing laws, and political corruption. These areas can cause number of problems for 3DP and will therefore be discussed in detail below.

The Chinese enforcement system:

It is quite unclear in the Chinese enforcement system which legal authority would be dealing with a firm’s counterfeiting problem. China possesses a number of enforcement authorities with both parallel and sometimes overlapping jurisdiction, which can cause a vast number of headaches for any firm. Depending on the severity, 3DP could file a charge against a counterfeiter crossing several legal sectors. An example; the Administration of Industry and Commerce (AIC) has authority of all aspects of trademarks, while the Technical Supervision Bureau (TSB) handles cases related to product quality and customer protection, which includes enforcements against counterfeiters that produce products with inferior quality. Moreover enforcements can also done by the Patent Administration Office (PAO). Furthermore issues regarding exports of trademark-violated products can be brought to the General Administration of Customs (GAC), under the Customs Law. Such a vast number of overlapping jurisdictions can result in a lot of time and financially consuming work for a company, which in turn could scare any firm from ever filing a charge against a
counterfeiter. Especially small firms like 3DP, which instead relies on staying one step ahead of their competition could be hesitant to get bogged down in a resource-consuming lawsuit.

**Criminal prosecutions and compensations:**

“Criminal enforcement is widely recognized as the single most effective deterrent against counterfeiting”\(^{315}\). Although China’s legal framework is sufficient, they are lacking with regards to criminal convictions, which can be seen in the table below. In 1997, the AIC handled a total of 15,321 cases with only 57 criminal prosecutions, which equalled only 1 in 269 cases. Over an 11-year period, no significant improvements can be seen. The year 2008 saw a total of 56,634 cases, but with only 145 prosecutions, or 1 in every 391 cases. These numbers are not pleasant reading for a high-technology firm like 3DP. However international organizations like the International Intellectual Property Alliance (IIPA), are putting pressure on China to increase their number of criminal prosecutions, and significantly increase both the manpower and financial resources available to do so.\(^{316}\)

<table>
<thead>
<tr>
<th>Years</th>
<th>Cases</th>
<th>Average Fines</th>
<th>Average damages</th>
<th>Criminal prosecutions</th>
</tr>
</thead>
<tbody>
<tr>
<td>1997</td>
<td>15,321</td>
<td>$679</td>
<td>$40</td>
<td>57 total or 1 in 269 cases</td>
</tr>
<tr>
<td>1998</td>
<td>14,736</td>
<td>$699</td>
<td>$41</td>
<td>35 total or 1 in 421 cases</td>
</tr>
<tr>
<td>1999</td>
<td>16,938</td>
<td>$754</td>
<td>$40</td>
<td>21 total or 1 in 807 cases</td>
</tr>
<tr>
<td>2002</td>
<td>23,549</td>
<td>$844</td>
<td>$23</td>
<td>78 total or 1 in 302 cases</td>
</tr>
<tr>
<td>2008</td>
<td>56,634</td>
<td>$1206</td>
<td>$90</td>
<td>145 total or 1 in 391 cases</td>
</tr>
</tbody>
</table>

Table 3: AIC: Enforcement Statistics \(^{317}\).

### 7.2.5.3. **Business Vehicles**

When entering or establishing a sustainable business in China, one has to consider what kind of business vehicle to adopt. Currently three types of vehicles are available for foreign firms – representative office, JV, and WFOE. This section will discuss the legal requirements and issues with a representative office and WFOE, since 3DP currently has a representative office in China, and are

\(^{315}\) Chow (2002)

\(^{316}\) IIPA 2009 special 301 report on copyright protection and enforcement in China (2009)

considering establishing a WFOE. JVs will not be discussed due to the high risks it brings regarding compromising IPR\textsuperscript{318}.

**Representative office:**
A representative office is according to Peoples Republic of China (PRC) law an “office for liaison purposes only and is not entitled to carry out direct business activities”\textsuperscript{319}. Additionally a representative office does not possess a separate legal identity, which makes the parent company liable for the obligations of the office. Such includes leas feeds and salaries, to mention a few\textsuperscript{320}.

3DP is as of this moment conducting business through their sales personnel in Shanghai and Beijing, which in turn establishes relationships with different VARs throughout China. This form of conducting business is perfectly legal, though paying the correct taxes is important as failure to do so might hinder a company if they later on wishes to establish a WFOE\textsuperscript{321}.

**Wholly foreign-owned enterprise:**
China has since 3DP established their representative office in 2005 become increasingly interesting for the company, and they are considering establishing a WFOE within 2009\textsuperscript{322}. Schaub (2006) claims, “A WFOE is a limited liability company that is wholly invested by foreign investors”\textsuperscript{323}. In total there are four main types of WFOE, Free Trade Zone Foreign-Invested Enterprise (FTZ FIE), Manufacturing WFOE, Consulting WFOE and Foreign Invested Commercial Enterprise in this thesis we will only discuss FTZ FIE, which we believe is the most attractive option for 3DP based on expert advice from Mr. Schaub\textsuperscript{324}.

FTZ FIEs are WFOEs set up in one of China’s many free trade zones, like Shanghai’s Waigaoqiao. Legal wise a FTZ FIE offers a number of business advantages compared to a representative office. The biggest advantage it offers 3DP is perhaps it being a separate legal entity, this in turn allows it to engage in

\begin{flushright}
\textsuperscript{318} Schaub (2006) \\
\textsuperscript{319} Schaub (2006) \\
\textsuperscript{320} Schaub (2006) \\
\textsuperscript{321} Schaub (2006) \\
\textsuperscript{322} Appendix 1, Mr. Krogstad, Managing Director and co-founder of 3D Perception \\
\textsuperscript{323} Schaub (2006:65) \\
\textsuperscript{324} Appendix 8, Mr. Schaub, Partner in King and Wood law firm, and director of JV and WFOE
\end{flushright}
direct sales and serving RMB invoices to their end customer\(^{325}\). In addition general equipment imported into a FTZ is customs free, which in turns offer 3DP the possibility to warehouse their equipment, showcase it and provide just-in-time delivery to their customers\(^{326}\). Import tax would then only kick in after an actual sale. Up until 2008 taxation within FTZs like Waigaoqiao was considerably more favourable than without. The difference was in fact as large as 15% taxation inside the FTZ and 33% outside\(^{327}\). Recently however China changed this policy and there is now a uniform company income tax of 25%\(^{328}\). Furthermore, a FTZ FIE is allowed to hire its own staff directly, rather than using an employment agency like FESCO\(^{329}\). Mr. Schaub however sees no significant value in this, since according to him, one would outsource the HR function anyway\(^{330}\). It is also important to note though, that in certain cases regulations can hinder an FTZ FIE in selling directly to Chinese end-users, however this hindrance can be circumvented by ensuring that the end customer in question is compliant with Chinese import formalities\(^{331}\).

7.2.6. Summary of the PESTEL Framework

Despite China’s entry into the WTO eight years ago, Western companies still experience unfair treatment in comparison with their local Chinese competitors. This is an obstacle 3DP could meet in the future, as this combined political corruption and can possibly hinder 3DP in acquiring highly profitable government jobs. On the other hand China is now allocating four trillion RMB to different infrastructure projects as well as introducing a stimulation package that can encourage Chinese companies to upgrade their capital equipment also in control rooms as their current systems has been shown to fail when needed the most.

Conducting business in China is difficult when one is lacking in connections, thus developing guanxi is still seen as necessary by many. It should be noted that guanxi could be a two-edged sword, especially for Western companies as the dark

\(^{325}\) Schaub (2006)  
\(^{326}\) Appendix 8, Mr. Schaub, Partner in King and Wood law firm, and director of JV and WFOE  
\(^{327}\) Mauritsson, Martine, Nilsson, Mats, Olovgren, Franceska and Westlund, Tobias (2003)  
\(^{328}\) Appendix 8, Mr. Schaub, Partner in King and Wood law firm, and director of JV and WFOE  
\(^{329}\) Schaub (2006)  
\(^{330}\) Appendix 8, Mr. Schaub, Partner in King and Wood law firm, and director of JV and WFOE  
\(^{331}\) Schaub (2006)
side of guanxi is corruption like practices. Internet advertising is likely to become more effective as there is rapid growth in Chinese Internet users and is also cost-effective. Though IPR protection continues to be a nightmare in China as enforcement is weak, some aspects of it like registering a trademark are cheap and easy to implement though. There are also several different business vehicles that can be used when doing business in China, such as representative offices and WFOE, each with their own advantages and drawbacks.

8. SWOT

The purpose of using the SWOT Analysis is to map the internal competence in a company by identifying its strengths and weaknesses, and furthermore what threats and opportunities exist in the environment related to the enterprise itself\textsuperscript{332}. We have chosen to double-weight the factors identified in our analysis in order to be able to rank them in order of importance, attractiveness and seriousness for 3DP. Finally we have utilized the competence, opportunity, and threat matrix to illustrate what factors 3DP should focus their attentions on depending on where each factor is placed in the matrixes.

8.1. Competence Matrix

The competence matrix indicates where a company should allocate their resources based on where in the matrix the firm’s different strengths and weaknesses are placed\textsuperscript{333}.

<table>
<thead>
<tr>
<th>Strength Criteria</th>
<th>Importance</th>
<th>Score</th>
</tr>
</thead>
<tbody>
<tr>
<td>1 Modern and high-technological products with visually pleasing design conferring status in China</td>
<td>5</td>
<td>5</td>
</tr>
<tr>
<td>2 Organizational adaptability</td>
<td>4</td>
<td>4</td>
</tr>
<tr>
<td>3 Achieving high price on products world wide</td>
<td>3</td>
<td>4</td>
</tr>
<tr>
<td>4 R&amp;D capabilities, newly designed control room product addressing customer needs</td>
<td>5</td>
<td>4</td>
</tr>
<tr>
<td>5 Company in growth, healthy economy</td>
<td>4</td>
<td>3</td>
</tr>
<tr>
<td>6 International brand strength</td>
<td>5</td>
<td>3</td>
</tr>
</tbody>
</table>

Importance: 1 = Minimal, 5 = Vitally important  
Score: 3 = Neutral, 5 = Major strength

Table 4: Overview of 3DP’s Strengths (weighted)\textsuperscript{334}.

\textsuperscript{332} Framnes, Pettersen and Thjømøe (2006)  
\textsuperscript{333} Framnes, Pettersen and Thjømøe (2006)
Our research showed that a modern and visually pleasing design is important to customers in China. This is because control rooms often function as showcasing rooms. Therefore such a design confers status on the decision maker of any facility using modern products in their control rooms, and also to the employees actually working there. 3DP’s products have a very modern and pleasing design, thus making it one of their greatest strengths.

Conditions in China can quickly change and it is therefore important for companies to be able to adapt on a short notice. A case in point is the removal of tax benefits for companies localized inside FTZs, which resulted in an 8% increase in income tax. 3DP is a young and small organization, established in 2001. In only eight years the company has established itself in most key markets, and is profitable in all of them. This is proof of a strong capacity for adapting, and they are also open to changing their business model in China. 3DP therefore achieves a high score on organizational adaptability.

For an exporting company to survive it is important for them to achieve a high price on their products, resulting in higher margins and a better economy. This is even more important for a small company like 3DP, which invests heavily in R&D and does not enjoy economies of scale.

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334 Own table (2009)
335 Own model (2009) adapted from Framnes, Pettersen and Thjømøe (2006)
336 Solberg (2005)
3DP has strong R&D capabilities. In a fast moving business area like leading edge high technology it is crucial not to become obsolete\textsuperscript{337}. It is important however that the products developed actually addresses customer needs; 3DP solves this by to a large extent designing their products on the basis of customer feedback as well as attempting to anticipate their needs. They have however, a disadvantage in not having detailed knowledge of Chinese customer needs in the control room market and therefore receive the score 4 rather than 5.

To survive and profit in China it is important to have a solid economy. 3DP is a company in growth and the company has enjoyed organic growth and profitability up until 2008. At that point they brought in venture capital to be able to ensure greater chance of fast market penetration of their new control room product Megawall 2, due to launch in May 2009. 3DP has consistently achieved profitability, but as they are a small company spanning many regions, they have finite resources available for investment at any given point. 3DP therefore does not receive top score in this category.

3DP has a strong brand internationally. However they are not visible in the Chinese control room market as of yet, therefore 3DP are not able to leverage their brand name fully.

\begin{table}[h]
\centering
\begin{tabular}{|c|c|c|}
\hline
Weakness Criteria & Importance & Score \\
\hline
Guanxi in the control room market & 4 & 1 \\
\hline
The Norwegian management’s understanding of Chinese culture & 4 & 2 \\
\hline
Communication between the Norwegian H.Q. and the Chinese Rep. office & 5 & 1 \\
\hline
Norwegian H.Q.’s control over operations in China & 5 & 1 \\
\hline
Strategic planning and planning capabilities in China at present & 4 & 1 \\
\hline
Protection of IPR in China & 3 & 2 \\
\hline
Demonstration systems in China & 4 & 1 \\
\hline
Visibility in the Chinese control room market & 5 & 1 \\
\hline
\end{tabular}
\caption{Overview of 3DP’s Weaknesses (weighted)\textsuperscript{338}.}
\end{table}

\textsuperscript{337} Mohr, Sengupta and Slater (2005)
\textsuperscript{338} Own table (2009)
Guanxi is important for 3DP to develop in China because much since business is still done mostly within networks. Currently neither 3DP’s employees in China, nor their VARs have strong connections here and we therefore estimate 3DP’s score to be very low.

The Norwegian management understands that the Chinese culture is different, but they have little conception of how it is different. Therefore 3DP’s Norwegian management receives a low score here. As Norwegian and Chinese culture is quite different, especially as regards to whether authority and responsibility should be the sole domain of the CEO or delegated downwards in the organization, we judge this aspect to be quite important.

Good communication between the Norwegian HQ and their representative office in China is important to ensure the transfer of knowledge of conditions in China. Without updated and comprehensive knowledge of how 3DP’s VARs operate in China, how the representative office works with the VARs, and what concrete projects the employees work on in China at any given time, it is very difficult for 3DP’s HQ to give their employees in China the proper support and guidance. 3DP’s HQ has so far not prioritized to ensure that good communication routines are in place and 3DP is therefore given a low score.

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3DP established their representative office in China to ensure greater control over their operations in China. As this halted the spread of a beginning negative reputation for 3DP it has to some degree worked. However they still have a too limited understanding of how their products are being sold by their VARs and their VARs do not have sufficient competence in after sales service on the control room market. To be able to significantly penetrate the control room market in China they need more control over their VARs and understanding of how their Chinese employees prioritize in their work.

Currently 3DP’s HQ has not formulated any specific strategies of short term or long-term goals for the control room market in China. 3DP’s Norwegian management has delegated this job to their China Director Mr. Liao. There seems however, as if a glitch in communications has occurred here, as Mr. Liao does not share this understanding. Furthermore he does not believe that strategic planning should be within his sphere of responsibility, but something that the higher management should formulate. We therefore conclude that there are no personnel with strategic planning knowledge and experience in China. Clear goals and strategies would seem rather important though, if 3DP were to achieve measurable success in the Chinese control room market.

Protection of IPR is considered to be a constant headache in China. Contrary to common wisdom we choose not to list this factor as very important to 3DP. This is because they develop and sell leading edge technology and therefore to a large degree base themselves on staying ahead of copying firms.

According to 3DP’s China Director Mr. Liao, it is important for potential Chinese customers to be able to actually see the product, how it functions and how it looks. As 3DP has only made one sale of the EOW in China so far, and as 3DP has no showcasing room of their own, it is difficult for Mr. Liao to demonstrate the product to potential customers. This results in a low score.

Since 3DP has only made one sale of EOW to the control room market in China they are entirely invisible in this market in China. Especially since the customer needs to be aware of 3DP in order to consider buying from them this is a considerable problem. Compounding the fact is that it is impossible to find 3DP
through Internet search engines without knowing the company exists, which largely defeats the purpose of such search engines.

8.2. Opportunity Matrix

An opportunity placed in the upper left corner of the opportunity matrix is considered highly attractive and probable\textsuperscript{340}.

<table>
<thead>
<tr>
<th>Opportunity Criteria</th>
<th>Attractiveness</th>
<th>Probability</th>
</tr>
</thead>
<tbody>
<tr>
<td>1 Chinese Free Trade Zone regulations</td>
<td>4</td>
<td>4</td>
</tr>
<tr>
<td>2 Government investment in infrastructure and economic stimulation package leading to increased capital investments</td>
<td>5</td>
<td>5</td>
</tr>
<tr>
<td>3 Access to labour</td>
<td>3</td>
<td>5</td>
</tr>
<tr>
<td>4 Online marketing</td>
<td>5</td>
<td>5</td>
</tr>
<tr>
<td>5 Status orientation among Chinese decision makers</td>
<td>4</td>
<td>5</td>
</tr>
</tbody>
</table>

Framnes, Pettersen and Thjømøe (2006)\textsuperscript{341}

Own table (2009)

Own model (2009) adapted from Framnes, Pettersen and Thjømøe (2006)\textsuperscript{342}.
The highly favourable taxation regulations within FTZs were removed in 2008, but FTZ still offers 3DP some lucrative advantages. Goods imported to a FTZ are customs free until an actual sale occurs. This is highly beneficial for 3DP since it allows them to warehouse equipment, showcase it, and make just-in-time deliveries to customers. The density of firms in a FTZ also makes pooling of resources in acquiring such things as legal council. Therefore we have ranked the opportunities inherent in FTZ as attractive and probable.

China is despite of the financial crisis investing heavily in infrastructure improvements, upgrading electrical power grids, and technological innovations. 43% of a 4 trillion RMB stimulus package being spent on these areas, as well as a separate 65 billion RMB investment in the same area, is a clear proof of this. These investments open up some highly lucrative opportunities for 3DP since most of these projects would be inn need of control rooms. In addition China is set to build 20 new hydro dams alongside the Yangtse River, opening up a possibility for selling EOWs. As a result we deem this to be a very attractive opportunity.

Due to the financial crises companies are forced to cut both costs and manpower. This result in an increasing unemployment rate in China that 3DP can take advantage of. 3DP is a small organization and will not make large-scale hires, therefore the opportunity is only moderately attractive. However the added chance of finding a qualified manager at relatively low cost makes the opportunity worth mentioning.

This year the CAA introduced new guidelines for Internet advertising to make it easier and more attractive to advertise in China. Furthermore China has had a steady increase in the number of Internet users with a 42% increase in 2007. Chinese is also the second largest language on the Internet with a staggering growth of 894.8% during the past eight years\textsuperscript{343}. The Internet in general offers some good opportunities for 3DP, and the new advertising guidelines will make it easier to reach potential customers in a more cost-effective manner. We therefore conclude that the Internet provides very attractive opportunities for 3DP.

\textsuperscript{343} Internet World Stats (2009)
The Chinese decisions makers are highly status oriented and are often more interested in products that reflect well upon them, rather than ergonomic solutions. This offers 3DP the opportunity to focus their sales efforts on their products pleasing design, thus increasing sales. As 3DP’s products have a design that should appeal greatly to the Chinese status orientation we rank the opportunity as attractive and highly probable.

8.3. Threat Matrix

Threats places in the upper left corner of the threat matrix are considered very serious and highly probable.

<table>
<thead>
<tr>
<th>Threat Criteria</th>
<th>Seriousness</th>
<th>Probability</th>
</tr>
</thead>
<tbody>
<tr>
<td>Bureaucratic amnesia</td>
<td>5</td>
<td>5</td>
</tr>
<tr>
<td>Copyright infringement / trademark counterfeiting</td>
<td>5</td>
<td>2</td>
</tr>
<tr>
<td>Competitive intensity</td>
<td>4</td>
<td>5</td>
</tr>
<tr>
<td>Loyalty among Value Added Resellers</td>
<td>4</td>
<td>5</td>
</tr>
<tr>
<td>Political corruption</td>
<td>3</td>
<td>4</td>
</tr>
<tr>
<td>IPR law enforcement</td>
<td>3</td>
<td>5</td>
</tr>
</tbody>
</table>

Table 7: Overview of 3DP’s Threats (weighted).

Figure 21. Threat Matrix.

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344 Framnes, Pettersen and Thjømøe (2006)
345 Own table (2009)
Bureaucratic amnesia, meaning loss of important organizational knowledge due to key employees quitting, is a highly relevant threat to 3DP. 3DP only have two employees in China, one of which is localized in Shanghai and one in Beijing. Should these two employees get an offer of better work conditions than they are currently enjoying at 3DP, the effects on 3DP’s operations in China would be debilitating. Such occurrences are not unheard of in China\(^{347}\), and it would in effect wipe out all organizational knowledge related to China that 3DP has. We have therefore ranked this as the most serious threat.

Trademark counterfeiting is a rather common occurrence in China\(^{348}\), and the effects of 3DP’s trademark being counterfeited could be seriously damaging to 3DP’s reputation in China. The probability of this happening is not very big as of yet, since 3DP is nearly invisible in the Chinese control room market. Should 3DP penetrate the market significantly the probability would rise sharply.

There are several big competitors in the market, among them Christie and Barco, with Barco being almost the default choice worldwide. The resulting stiff competition is a large threat to 3DP as this could limit their market penetration significantly.

3DP’s VARs are not loyal to 3DP; they prefer to shop around for the cheapest solution available and do not exclusively sell 3DP’s products to the control room market. The lack of loyalty impacts considerably on 3DP’s potential for sales and the margins of each sale as the VARs are not motivated to sell for 3DP. Therefore we deem the seriousness to be high.

Transparency international\(^{349}\) ranks China as number 72 out of 180 on their Corruption Perceptions Index. Corruption is a problem in China and it is not likely to disappear any time soon\(^{350}\). However there are ways of dealing with this as we discuss later on in section 10.3.2.2: Dealing with Chinese Authorities. We have therefore not ranked the seriousness as more than moderately high.

\(^{347}\) Fernandez and Underwood (2009)  
\(^{348}\) Shaub (2006) and Chow (2002)  
\(^{349}\) Transparency International (2009)  
\(^{350}\) Appendix 11, Mr. Hilton, Owner and CEO of Accurpress International Sales Ltd.
There is a law framework for dealing with IPR infringement and it looks good on paper. However we have found that the enforcement of IPR verdicts is uncertain and arbitrary at best. We rank the seriousness as moderately high as the technology development and complex in 3DP’s area of business, furthermore we have found alternative ways of dealing with IPR infringement, discussed in section 10.3.2.1: How to Protect IPR.

8.4. Summary of SWOT

After double weighing the different variables and placing them in the competence, opportunity and threat matrix, we have extracted the most essential aspects for 3DP:

<table>
<thead>
<tr>
<th>3DP’s Greatest Strengths</th>
<th>Importance</th>
<th>Score</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Modern and high-technological products with visually pleasing design conferring status in China</td>
<td>5</td>
<td>5</td>
</tr>
<tr>
<td>2. R&amp;D capabilities, newly designed control room product addressing customer needs</td>
<td>5</td>
<td>4</td>
</tr>
<tr>
<td>3. Organizational adaptability</td>
<td>4</td>
<td>4</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>3DP’s Major Weaknesses</th>
<th>Importance</th>
<th>Score</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Norwegian H.Q’s control over operations in China</td>
<td>5</td>
<td>1</td>
</tr>
<tr>
<td>2. Communication between the Norwegian H.Q and the Chinese Rep. office</td>
<td>5</td>
<td>1</td>
</tr>
<tr>
<td>3. Visibility in the Chinese control room market</td>
<td>5</td>
<td>1</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>3DP’s Most Important Opportunities</th>
<th>Attractiveness</th>
<th>Probability</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Government investment in infrastructure and economic stimulation package leading to increased capital investments</td>
<td>5</td>
<td>5</td>
</tr>
<tr>
<td>2. Online marketing</td>
<td>5</td>
<td>5</td>
</tr>
<tr>
<td>3. Status orientation among Chinese decision makers</td>
<td>4</td>
<td>5</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>3DP’s Most Severe Threats</th>
<th>Seriousness</th>
<th>Probability</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Bureaucratic amnesia</td>
<td>5</td>
<td>5</td>
</tr>
<tr>
<td>2. Competitive intensity</td>
<td>4</td>
<td>5</td>
</tr>
<tr>
<td>3. Loyalty among Value Added Resellers</td>
<td>4</td>
<td>5</td>
</tr>
</tbody>
</table>

Table 8: Summary of SWOT

351 Own table (2009)
Part IV: STRATEGY

In this part we will state the problem definition, what goals that are realistically achievable for 3DP and what the critical success factors in reaching these goals are. Based on these criteria we will seek to outline what strategy tools 3DP can utilize in order to reach said goals.

9. Strategic Problem Definition

*How can 3DP through leveraging the status conferring element of their products’ high technological modern design, and utilizing the adaptability being a small organization gives them, as well as their good international brand name, increase brand awareness and market penetration in China through riding the incoming wave of China’s economic stimulation package, while reducing the risk of bureaucratic amnesia and the disadvantage of being a small player with weak ties to their VARs among big competitors?*

9.1. Goals

We have chosen to divide our goals in two categories: Operative short-term and strategic long-term goals.

9.1.1. Operative – 1-2 Years

- Establish better communication and reporting routines between the Norwegian HQ and their China office, thus giving HQ greater control over the China operation.
- Achieve three sales of EOW and/or Megawall 2 to the control room market within the third quarter of 2010. This should be in strategic locations like the first tier cities Beijing, Guangzhou and Shanghai in order to secure client references and word of mouth.
- Establish and maintain strong relations to two or three selected VARs with intimate knowledge of the control room market. This to secure a preference of 3DP's products to this market.
9.1.2. Strategic – 5-10 Years

- Achieve substantial sales in the control room market in China, making operations in China able to contribute considerably to the 3DP organization as a whole.
- Build a solid brand/reputation in China.

9.2. Critical Success Factors

- Establish strategic planning capabilities in China by hiring a manager with Western management skills and with great loyalty to 3DP.
- Reducing the risk of bureaucratic amnesia.
- Achieve a few sales of the EOW system to acquire references in the Chinese control room market.

10. Strategy Tools

In this section we will seek to provide 3DP with a set of tools 3DP can use to ensure likelihood of creating a sustainable and profitable business in China.

10.1. Creating Competitive Advantage

This chapter discusses how 3DP can use the different aspects of the marketing mix as well as creative use of online marketing to create competitive advantage in the Chinese market. We also include and element of branding in this chapter.

10.1.1. Marketing Mix

10.1.1.1. Product

3DP’s primary physical product for the control room market is the Megawall 2. This brand new product is made for the customers, and by the feedback from the customers. 3DP is offering total solutions (EOW) for their customers, which include ergonomic equipment with great design. Design is something that Chinese customers will appreciate, as this can create direct value by not only giving the
company a better image, but improve the standing of the Chinese that ordered the system in the eyes of his superiors.

Selling Megawall 2 separate from the total solutions package to spearhead their penetration of the market could be a feasible short-term strategy for 3DP to gain traction. Nevertheless 3DP should also emphasize the added efficiency bonus the customer would gain from the total solutions package.

As mentioned in chapter 5: Summary of Findings, after sales service is definitely a key factor that 3DP should take advantage of in the Chinese market. This is underscored by the claim from 3DP’s Sales Director Mr. Finsaas, that the biggest player in the control room market, Barco, are known for not providing very good service. Currently, 3DP does not have the equipment or staff in China to provide superior after sales service, and the VARs have not had sufficient training. Pooling their resources with a potential partner could help 3DP with this obstacle.

10.1.1.2. Price

“Most Chinese customers are price-oriented out of habit”. The challenge for 3DP is therefore to convince their customers that their solutions are worth the expense. Even though 3DP has adopted a high price strategy, they consider themselves better priced than their competitors and are claiming to be cheaper or equal in most cases. This should be emphasized to attract customers.

10.1.1.3. Place

3DP is selling their products through VARs, which is the only possibility at the moment as they only have a representative office in China. The VARs creates many opportunities for 3DP, as they have more guanxi, and also more resources than 3DP currently have. However, there have been some problems with these VARs, they have not generated enough sales, and they have not given the end customer the proper service. As discussed, a WFOE can give 3DP many new opportunities as they can sell their own products and provide the right after sales

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352 Appendix 3, Mr. Liao, China Director of 3D Perception’s Representative Office
353 Appendix 2, Mr. Eric Finsaas, Sales Director – Automation Markets of 3D Perception
service for their customers. They can also reach a broader customer base, as they will be allowed to sell in RMB. 3DP should also erect a show casing room where they can demonstrate their product for potential customers. At the moment 3DP has some products in China, but the company should have a demonstration system for the EOW so that the customer can touch, see and feel the product. This would better enable the customer to visualize the product at his own facility. If 3DP establishes a WFOE in a FTZ like Waigaoqiao they can also bring in expensive demonstration equipment for their show casing room without paying import tax. 3DP has also considered collaboration with VTRON. VTRON, a well-known supplier of the substitute product cube display systems, has a large market share and good relations in the Chinese market. To implement Megawall 2 in their portfolio could give 3DP a jumpstart in the Chinese market and increase 3DP’s market penetration in the control room market.

10.1.1.4. Promotion

Megawall 2 was made from customer requests in Europe and the USA. In China however, this product is unknown, and 3DP will have to use a push strategy in this market to make sure that the customers is aware of the product.\(^{355}\)

The promotion techniques 3DP is currently using are trade shows, trade magazines and their own web page. However, the web page does by this date not have a Chinese version, and can also be improved in other ways, this will be discussed in section 10.1.2: Online Marketing. Personal sales will be important as the VARs and end customers’ needs to be “educated” in why 3DP should be chosen. The EXPO in Shanghai in 2010 could be considered an ideal profiling arena, but the price for paying participants is a minimum of six million NKR\(^{356}\). Admittedly this price can be shared among several enterprises, but it is unlikely that the price would be less than one million per company, it is doubtful that such an investment would pay sufficient dividends for 3DP in China at this time. A better solution could then be to approach firms in both the Norwegian and Chinese pavilion that needs projector systems for their own profiling. In such a way 3DP could get paid to deliver systems to these pavilions, as well as getting valuable promotion.

\(^{355}\) Kotler and Keller (2006)
\(^{356}\) Welle-Strand, Kristin, Communication Manager EXPO 2010 Norway Project Group
10.1.1.5. People

The greatest problem for 3DP in China is the lack of control, and the misunderstandings between the Chinese employees and the HQ. The HQ claims that all responsibility for the China operation is in the hands of these two employees, while the China Director claim that they get too little information from the HQ and that things as strategic planning is not their job. This lack of communication has led to no clear goals and strategies having been formed for the China market as neither the Norwegian HQ nor the Chinese office have taken any initiative to do so. Therefore this should be one of the first points on the agenda for 3DP. The personnel in China are also lacking in Western management skills, this is understandable as they have a technical background. Hiring a person with Western management and people skills as well as Chinese cultural understanding should be a priority for 3DP to increase the profitability in China. We base this statement on an interview with Ms. Zhuang, the Managing Director of Shincon, who is specialized in helping Norwegian firms start up in China\textsuperscript{357}, and information found in both China Entrepreneur\textsuperscript{358} and One Billion Customers\textsuperscript{359}. In these books several interviewees have stated that there are several pitfalls one can tumble into from lack of cultural understanding. Having such a person in an administrative capacity would also free Mr. Liao and Mr. Yan to spend more time following up customers and VARs.

10.1.2. Online Marketing

“Why online marketing? – Because your competitors are doing it and your customers expect it”.

- Annika Bryntse, Media Director at True North Interactive\textsuperscript{360}.

Since the public release of the Internet 18 years ago\textsuperscript{361}, it has each year generated a steady stream of new users. The year 2008 saw over 1.5 billion Internet users, which in turn create a large customer base for many companies\textsuperscript{362}. In addition a staggering 75 % of the companies that are presenting themselves online, do not

\textsuperscript{357} Appendix 12, Ms. Zhuang, Managing Director of Shincon AS, Shanghai
\textsuperscript{358} Fernandez and Underwood (2009)
\textsuperscript{359} McGregor (2005)
\textsuperscript{360} Bryntse (2009)
\textsuperscript{361} Ward, Mark (2009)
\textsuperscript{362} Internet World Stats (2009)
use any rational thought behind their strategic directions. Furthermore, Internet advertising is cost effective, which can offer a small company like 3DP many unforeseen opportunities. However it would require 3DP to develop a strategic marketing plan for their online approach. The follow sections will focus on three effective advertising formats – banner ads, 3D visualization and keyword search.

**10.1.2.1. Banner Ads**

Banner ads are one of the most popular advertising formats on the Internet. Although their click-through ratio has declined since the mid-1990s, they could still be quite useful for 3DP. This decline is mostly due to customers developing “banner blindness”. According to a survey conducted by Rex Briggs and Nigel Hollins, banner ads, even without click-through, resulted in both heightened and favourable brand awareness. Therefore, 3DP could strategically place banner ads on product related sites, to increase their brand awareness, and possibly make them a top of mind brand.

**10.1.2.2. 3D Visualization**

3D visualization is different from banner ads, since they enable the user to interact with a website. They can be strategically placed on a third party website, or on 3DP’s own website. In fact, 3D visualization offers “a natural approach to product inspection”. It is also known to increase product knowledge, create positive brand attitude, and increase the consumer’s purchasing intention. Considering that 3DP currently has no showroom in China, they could utilize this technology to create a virtual showroom for their products, like Megawall 2. In this virtual showroom the customer can see for himself what “his” control room would look like when installed, rather than relying solely on mail contact or verbal information from 3DP’s sales personnel. Such a format would be highly cost effective compared to building a new showroom, and could also be used as a supplementary to physical showrooms. 3DP should have a commentary forum for

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363 Colborn, James (2006)  
364 Bryntse (2009)  
365 Banner ads are often made of text and / or graphics, which is either static or animated.  
367 Li and Leckenby (2007)  
368 Nielsen, Jakob (2009)  
369 Li and Leckenby (2007)  
370 Li and Leckenby (2007:215)  
371 Li and Leckenby (2007)
customer feedback, where the user could opt to be anonymous. This could alleviate the Chinese reluctance to offer negative information and give 3DP valuable direct information. This approach could benefit 3DP, not only in China, but also on a global scale.

### 10.1.2.3. Keyword Search

Keyword search is currently the most popular advertising format on the Internet. In fact 45% of all Internet advertising is keyword search\(^{372}\). This statistic includes both generic-\(^{373}\) and paid search\(^{374}\) on search engines like Google, Yahoo, MSN and more. Paid search, though very useful, has proven to cause huge financial losses for some companies. Thanks to automated hacker programs generating fake click-troughs, some companies have recorded losses as high as $10 million\(^{375}\). Therefore 3DP should focus on generic search, which will be discussed below.

### 10.1.2.4. Search Engine Optimization

Search engine optimization (SEO) is a strategic “approach to optimize a website’s code and linking architecture”\(^{376}\) to increase the website’s ranking on search engines. Taking a first glance at 3DP’s website, presents a comfortable image. However it is not optimized for search engines, which in turn make them non-present on search engines like Google, when searching for control room solutions. A search for “3D Perception” on Google, gave the website rank 1. However, without any company information present (Table 8), one would have to know the company to actually understand what it provides, while their largest competitor Barco provides a detailed description of their business area making them easy to find.

<table>
<thead>
<tr>
<th>3D Perception</th>
<th>Barco</th>
<th>Visibly yours</th>
<th>Display and visualization solutions...</th>
</tr>
</thead>
<tbody>
<tr>
<td><a href="http://www.3d-perception.com/">www.3d-perception.com/</a></td>
<td>Barco is a world leader in business-to-business markets, in which it offers professional display and visualization solutions. Based upon in-depth market...</td>
<td><a href="http://www.barco.com/">www.barco.com/</a></td>
<td>27k - Cached - Similar pages -</td>
</tr>
</tbody>
</table>

Table 9: Google search: 3D Perception and Barco\(^{377}\)

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\(^{372}\) Interactive Advertising Bureau (2009)  
^{373}\) Generic search: A website is naturally listed by a search engine due to relevance.  
^{374}\) Paid search: A website is listed by a search engine due to payment, and the company pays the search engine whenever someone clicks on the advert.  
^{375}\) Li and Leckenby (2007)  
^{376}\) Colborn (2006:12)  
^{377}\) Google (2009)
A further weakness 3DP’s website has is that it does not have a Chinese version. Many Chinese are not by any means fluent in English and it should be noted that Chinese is now the second most used language on the Internet\textsuperscript{378}. A Chinese version would therefore make it more likely that Chinese potential customers will find 3DP’s site when searching for this product, as it is likely they will first conduct such a search in Chinese.

In addition, an optimization search on seoque.com\textsuperscript{379} showed that 3DP had no relevant keywords at all on the homepage\textsuperscript{380}. The homepage is an ideal spot to place keywords relevant to 3DP’s business scope and product range, and it should therefore contain considerable more information than is currently the case. This will increase the chance of customers finding 3DP’s website. However, optimizing a website for generic search is a difficult task. Therefore, 3DP should contact a company that specializes in SEO to create their SEO-strategy. However, 3DP should conduct a due diligence to ensure that the SEO-company actually can deliver what it promises as this is often by no means a certainty.

10.2. Managing Relations

Managing relations is important in any business climate, but especially so in the Chinese market. This chapter aims to give 3DP an understanding of how one can use relationship marketing, human resource management and clear communication as well as management of all points of contact in order to create lasting and profitable relations in China. We will focus on 3DP’s internal organization and the control room market.

10.2.1. Relationship Marketing: Partnership and Alliances

10.2.1.1. Importance of Screening and Training VARs

As 3DP is a small firm with limited resources as mentioned, in a rapidly developing market, they do neither have the funds nor the organizational size

\begin{footnotesize}
\begin{itemize}
\item\textsuperscript{378} Internet World Stats (2009)
\item\textsuperscript{379} Go to \url{http://seoquake.com/} install their tool for SEO. Then go to 3DP’s homepage \url{http://www.3D Perception.com} and run their program with regard to keyword density.
\item\textsuperscript{380} 3D Perception (2009)
\end{itemize}
\end{footnotesize}
needed to get their products rapidly to market on their own. In China 3DP also has the added concern of accessing new markets and in the long term achieve some influence in the market\textsuperscript{381}. Consequently they use VARs at the moment, but with little success so far in the control room market. Part of the problem is that they have little control over their VARs, which is fairly common in China\textsuperscript{382}, and that the Chinese VARs do not seem to have a comprehensive understanding of 3DP’s products. As mentioned earlier 3DP had to send a person from the management in Norway to fix a problem their only control room customer had as their VAR Lantech was incapable of fixing it. For 3DP to succeed in China, it is imperative that they take the time to properly screen and train their VARs even though they have experienced difficulties in the training area earlier\textsuperscript{383}. As Mr. Sandnes said that Lantech did not even properly speak the control room lingo\textsuperscript{384} we do not consider it likely that this VAR will be able to make much headway for 3DP in the control room market without extensive training.

10.2.1.2. **Strengthen 3DP’s Position by Partnership**

An alternative way of penetrating the control room market could then be to enter into a partnership in China. The attractive partner should be able to offer 3DP the following: a strong brand name so that the insecurity a potential customer feels about purchasing 3DP’s product is removed or lessened, a wide and well functioning sales network and an existing customer base. For the partnership to be successful there must be an element of interdependence present\textsuperscript{385}, in other words the partner must be in need of a resource 3DP possesses. In this case this will be 3DP’s product technology and to some extent 3DP’s solid brand name internationally. In such a way both companies’ brand would be strengthened in that they would combine the strengths of the two firms\textsuperscript{386}, namely 3DP’s superior product and the potential partner’s established network in China.

*Possible partnership with VTRON:*

While considerable due diligence is clearly needed VTRON, who is a provider of the substitute cube display systems, could be such a partner for 3DP. The data on

\textsuperscript{381} Mohr, Sengupta and Slater (2005)
\textsuperscript{382} Appendix 13, Mr. Knutsen, CEO of TTS Marine in Shanghai
\textsuperscript{383} Appendix 1, Mr. Krogstad, Managing Director and co-founder of 3D Perception
\textsuperscript{384} Appendix 4, Mr. Sandnes, Marketing and Sales Director of 3D Perception
\textsuperscript{385} Mohr, Sengupta and Slater (2005)
\textsuperscript{386} Roll, Martin (2006)
VTRON being a market leader, discussed in section 7.1.2.1: Competitive Rivalry Within an Industry, is too outdated to be more than an indication of conditions in the market now. Nevertheless these numbers implies that VTRON definitely has an existing customer base that can speed 3DP’s time to market and has a well-known brand in China that 3DP can exploit. We have not been able to get an interview with VTRON, but according to 3DP’s CEO Mr. Krogstad VTRON is interested in functioning as a reseller for 3DP’s newest control room product Megawall 2 to use in their display systems. This might be a short cut into the Chinese control room market for 3DP as according to VTRON’s website they have experience in all application areas that we have identified as interesting for 3DP to target in China, namely power generation, energy and transportation.

Reducing risks:
In order to not bind themselves too closely to VTRON, 3DP could enter into a narrow marketing agreement with VTRON including only Megawall 2, thus mitigating the risk of opportunistic behaviour from VTRON. Another risk 3DP would run in engaging in such a partnership could be a blurring of their brand image in China as their partner would be significantly larger. One way of working around this obstacle could be to prioritize sending their own employees to customers they gain through VTRONs sales, in order to understand their Chinese customers needs better and strengthen the customers awareness of 3DP as a brand. Furthermore, if these two companies should reach an agreement they should agree on arbitration in a country outside of China to settle any disputes that might occur. Sweden would be an ideal choice for 3DP if possible, since Swedish law is similar to Norwegian law, and write a detailed contract rather than depending on what one believes is obvious as what is obvious might differ from culture to culture.

Another possibility increasingly popular among foreign companies, which is suggested by Schaub (2006), is to agree to submit disputes to the China International Economic and Trade Arbitration Commission (CIETAC). Clear communication and trust are also mentioned as important aspects of a functioning

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387 VTRON (2009)
388 Mohr, Sengupta and Slater (2005)
389 Appendix 9, Mr. Solberg, Professor at BI Norwegian School of Management
partnership. 3DP has worked with VTRON earlier and as such has some knowledge of the company. In order to foster trust and overcoming communication barriers it could be wise to have a member of the Western management spend considerable time in China. In getting to know the counterpart 3DP would have a solid foundation to reach a decision on whether partnership is the way to go in China. Such a foundation is necessary as it takes considerable time to build relations in China, and it would be a waste of time and resources if 3DP does not ensure that theirs and VTRON’s goals are compatible beforehand. The Chinese also prefer to discuss important matters face-to-face rather than through mail and telephones, this is also a possible way to establish lasting guanxi for the Western management. This can also have the added benefit of lending prestige to 3DP from a Chinese perspective. 3DP should also make sure that their employees in China does the utmost to learn as much from a potential partnership as possible in order to be ready to serve the market at the time the partnership ends.

### 10.2.1.3. **Enhancing Customer Relations**

Should 3DP establish a WFOE here they can also do business with the end customer directly. Even though this is not the traditional strategy of 3DP it could be useful to employ such a method in China in combination with using VARs and a partnership. Our reasoning is that 3DP is in need of more detailed knowledge of what aspects of the product the end customer in China values. Meeting and listening to the end customer would contribute to understanding how the customer thinks and what his needs are, this would enable 3DP to refute the arguments of the competition and also providing their VARs with more tools in how to sell their product, making their job on behalf of 3DP easier as well.

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390 Mohr, Sengupta and Slater (2005)
391 Appendix 1, Mr. Krogstad, Managing Director and co-founder of 3D Perception
392 Appendix 7, Mr. Nickelsen, General Manager of the 17-Group
393 Gesteland (2005)
394 Appendix 10, Mr. Kristoffersen, China expert from BI Norwegian School of Management
395 Mohr, Sengupta and Slater (2005)
10.2.2. HRM

“If you can manage human relations in China, you can manage China. I think it’s the key factor”

- Prakash Menon, President, NIIT (China)396.

10.2.2.1. Choosing and Training the Right Employees

A strategy suggested by Fernandez and Underwood (2009) is to recruit rigorously in order to reduce staff turnover, improve efficiency and enhance success for the company. The same strategy for hiring in China has been mentioned by several of our interviewees; the most important thing is to find the right personality, someone who fits with the organizational culture and who embodies the most important personal qualities. If that person does not possess the right skills or experience it is always possible to train them. Chinese personnel would either way need more thorough and frequent training than any other employees397. For a small sized company, sending employees on expensive training courses is no option, a wise thing for 3DP could be to develop their own staff training in order to keep internal values and spread internal knowledge. A suggestion from some of our interviewees is to bring the Chinese employee to the HQ for a period of 1-3 months so the employee can get to know the organizational culture and knowledge398, while another goes so far as to suggest a period of one whole year399. Another important factor for 3DP is to make sure that every employee in contact with VARs and end customers possesses certain sales-skills, as the employees will need to actively sell the product and not only inform about it. Mr. Hilton says that he personally trains his sales personnel, and that he has one full-time employee whose sole responsibility is visiting possible customers to see if they might need Accurpress’ product. Once someone has shown interest, Hilton sends a sales team with a more thorough sales pitch in order to really convince the management why their product is good for their company400. 3DP should consider a similar approach if they decide to expand their workforce in China. The employee visiting potential customers should receive intensive training first however.

396 Fernandez and Underwood (2009:105)
397 Fernandez and Underwood (2009)
398 Appendix 12, Ms. Zhuang, Managing Director of Shincon AS, Shanghai
399 Appendix 13, Mr. Knutsen, CEO of TTS Marine in Shanghai
400 Appendix 11, Mr. Hilton, Owner and CEO of Accurpress International Sales Ltd
10.2.2.2. **Employee Motivation**

**Monetary incentives:**
In order to utilize the employees and to keep them motivated, incentive systems are essential in China. One of our interviewees mentioned that Chinese are extremely hard working, but only when they personally benefit from it\(^{401}\). Currently, 3DP’s employees in China have a fixed salary, overtime is not rewarded and there does not exist any kind of bonus systems for extraordinary results. Mr. Liao is clearly not satisfied with this system\(^{402}\), and we consider it likely that he would be more satisfied in his job and put in more time and effort for the company were an incentive system to be introduced. According to Ms. Zhuang, a fixed salary is very undesirable for companies operating in China; without bonuses “*you will never have sales*”\(^{403}\), she says. She also points out that if a manager gets a percentage of sales, he will hire the right people to work under him, as this eventually will affect his salary. Hiring the right manager with good connections to skilled sales personnel then becomes a springing point.

**Non-monetary incentives:**
Non-monetary incentives are also becoming more and more essential in order to keep employees motivated in China, however many of these are not possible for 3DP to use considering the size of their China operation. It will therefore be important to exploit the factors they can; make sure the employee have opportunities for personal development, and that the work environment is enjoyable. A fancy office could perhaps be a motivating factor in itself as this could confer a certain status on the employees in China. In the extent 3DP can, internal recruitment should be used; this can also be used as an incentive for motivating the employees to work for the rapid growth of 3DP, as they will then benefit directly from such growth. The larger a company is the more status is connected with working for it\(^{404}\), as such 3DP as a company growing larger could also be a motivating factor for the employees. With increased growth and more employees 3DP should create social gatherings among the employees and management to foster a stronger sense of belonging to the workplace and people

\(^{401}\) Appendix 10, Mr. Kristoffersen, China expert from BI Norwegian School of Management
\(^{402}\) Appendix 3, Mr. Liao, China Director of 3D Perception’s Representative Office
\(^{403}\) Appendix 12, Ms. Zhuang, Managing Director of Shincon AS, Shanghai
\(^{404}\) Appendix 10, Mr. Kristoffersen, China expert from BI Norwegian School of Management
there, which would likely have a positive impact on work motivation. In the long run 3DP could consider creating a yearly event where all employees from all offices worldwide can meet, enjoy themselves and exchange experiences.

10.2.2.3. Creating Opportunities
As high turnover is typical for Chinese companies, these incentives will be of great importance. In order to keep key persons in the company there is also a possibility for 3DP to offer a possible partnership. However, no matter what combination of positive incentives 3DP decides to implement, is has to be done in addition to increased control and enhanced communication with the HQ. The manager in charge of control rooms will need to have a regular appearance in China to support and help the employees, in addition to building strong, lasting relations to employees, VARs and possible partners.

This will create several opportunities; 3DP will have more human resources in China to maintain and build new relationships with value added resellers, customers and possible partners, and it will send a signal to the current employees that 3DP prioritizes the China operations. This could lead to increased employee motivation. Furthermore with more employees based at the Shanghai office there will be a stronger control mechanism in that the employees can support each other and be aware of what activities the other employees are engaged in at any given time, thus adding an element of self control in China.

10.2.2.4. How to Cope with Different Communication Styles
3DP has to be aware that Chinese employees expect step-by-step instructions, and does not like unclear tasks. Ms. Zhuang says that one of the biggest mistakes 3DP can do is to assume that Chinese employees will tell them straight out that something is not working well, this is often not the case. A simple remedy would be to hold meetings with Chinese employees and genuinely ask what is working and what is not. As in the rest of the world clear and open communication is important in China, perhaps even more so as trust is such an

405 Appendix 13, Mr. Knutsen, CEO of TTS Marine in Shanghai
406 Appendix 10, Mr. Kristoffersen, China expert from BI Norwegian School of Management
407 Fernandez and Underwood (2009)
408 Appendix 12, Ms. Zhuang, Managing Director of Shincon AS, Shanghai
409 Appendix 12, Ms. Zhuang, Managing Director of Shincon AS, Shanghai
such an important factor in China to keep vital information flowing from the Chinese employees to the management\textsuperscript{410}, something to remember for 3DP as Mr. Liao states that he misses communication from the HQ\textsuperscript{411}. Furthermore, Mr. Knutsen claims that the typical Chinese employee is wary about sharing any information other than what their boss would like to hear, thereby severely limiting the feedback you can expect\textsuperscript{412}. However Mr. Knutsen says that by continuously focusing on this issue he has been able to encourage the employees to share information more freely. By emulating Mr. Knutsens approach here 3DP can ensure better communication between the Norwegian HQ and the Chinese branch of the organization.

10.2.3. Contact and Communication

“When the moments of truth go unmanaged, the quality of service regresses to mediocrity”

- Karl Albrecht and Ron Zenke\textsuperscript{413}.

The importance of servicing the customers is illustrated by a study that found that “65 percent of the average company’s business comes from current customers\textsuperscript{414}”. Another study found “the cost of acquiring a new customer to be five times of that of keeping an old customer”\textsuperscript{415}.

10.2.3.1. Managing the Points of Contact

3DP’s employees have certain responsibilities in order to assure that the “moment of truth” is successful. At a minimum, they should “coordinate the firm’s actions in order to satisfy the customer requirements and gaining customer information (from their dialogue) and sharing information so that appropriate product, marketing and investment decisions can be made”\textsuperscript{416}. By ensuring that information flows directly from the HQ to the sales force, from the sales force to the resellers, from the resellers to the end customers and ultimately from the end

\textsuperscript{410} Appendix 13, Mr. Knutsen, CEO of TTS Marine in Shanghai
\textsuperscript{411} Appendix 3, Mr. Liao, China Director of 3D Perception’s Representative Office
\textsuperscript{412} Appendix 13, Mr. Knutsen, CEO of TTS Marine in Shanghai
\textsuperscript{413} Andreassen (2007:175)
\textsuperscript{414} Dwyer and Tanner (2006:368)
\textsuperscript{415} Dwyer and Tanner (2006:368)
\textsuperscript{416} Dwyer and Tanner (2006:367)
customers through the different contact points and back to the HQ, 3DP will gain greater knowledge, insight and comprehension about how they should handle and maintain the interaction better than their competitors, thereby creating a competitive advantage in the Chinese market\textsuperscript{417}. It is likely though, that 3DP’s employees must actively study how the products are used rather than relying solely on oral information from Chinese employees. This is because the Chinese are often reluctant to share information, and especially if the information is perceived to be negative for the person asking the questions\textsuperscript{418, 419}, in this case 3DP. This would mean that 3DP cannot expect valuable oral feedback on what their products lack according to Chinese product preferences, but must rather understand said preferences from observation of how the product is used. To ensure that this is done properly, 3DP needs a manager in China that is skilled in distributing information to the relevant persons in the organization.

10.2.3.2. **Ensuring Clear and Open Communication**

3DP’s sales force in China has the responsibility for making sure that the customers and their resellers are satisfied. Successful internal interaction in the company is often a determinant in whether one achieves this satisfaction\textsuperscript{420}. Dwyer and Tanner (2006) state; “salespeople depend on and interact with personnel from manufacturing, shipping, sales administration, credit and billing, among others”\textsuperscript{421}.

As discovered in the interviews with Mr. Liao, Mr. Sandnes and Mr. Krogstad, the communication and information flow between the HQ and the China office is limited. This creates problems when end customers for example ask resellers for maintenance and/or upgrades of 3DP’s products. Roll (2006) argues, “It is the sum of all the experiences the customers have through different touch points that ultimately builds strong brand equity”\textsuperscript{422}. Lack of information flow will therefore subsequently damage 3DP’s brand reputation and decrease their brand equity and at the same time contribute to a negative word-of-mouth. This will decrease the

\textsuperscript{417} Andreassen (2007)
\textsuperscript{418} Appendix 7 and 13, Mr. Nickelsen, General Manager of the 17-Group and Mr. Knutsen, CEO of TTS Marine in Shanghai
\textsuperscript{419} Fernandez and Underwood (2009)
\textsuperscript{420} Dwyer and Tanner (2006)
\textsuperscript{421} Dwyer and Tanner (2006:368)
\textsuperscript{422} Roll (2006:112)
perceived experience of the product and thus also the perceived quality of the product.

“(…) you need to know how the resellers work. Do they know? No, then they have a job to do there obviously. They need to know if they are selling their product successfully, and how they are selling it”.

- Mr. Tim Hilton, Owner and CEO of Accurpress International Sales Ltd.\(^{423}\)

Similarly, if 3DP’s HQ does not receive information from their sales force in China, they will not know how they should upgrade and develop their products according to the customers needs. Consequently, 3DP cannot act to the fullest extent possible. One way to reduce this problem would be to give Mr. Liao more well defined guidelines regarding delivery of updated reports on the general situation in China, and for the management to send him updated reports on their situation and intended strategy for China. Currently Mr. Liao is unhappy about the lack of instructions from the HQ concerning goals and strategies.\(^{424}\) The HQ however believes this to a large extent is Mr. Liao’s responsibility.\(^{425}\) Thus we see that 3DP is suffering from dysfunctional communication between the China office and the HQ in Norway. Mending this issue will in turn increase the probability of success in “the moment of truth”.\(^{426}\)

“We can still take approximately 50 percent higher price than our competitors, because the customer knows that he can come to us anytime, anywhere in the world, and get great service”

- Mr. Arne Knutsen, CEO of TTS Marine, Shanghai.\(^{427}\)

10.2.3.3. **Summary of Contact and Communication**

Managing all points of contact will be vital for 3DP because their sales force are in charge of managing customer relationships in China. If the flow of information continues to be limited, 3DP will ultimately weaken their position in the Chinese

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\(^{423}\) Appendix 11, Mr. Hilton, Owner and CEO of Accurpress International Sales Ltd
\(^{424}\) Mr. Liao, China Director of 3D Perception’s Representative Office.
\(^{425}\) Mr. Krogstad, Managing Director and co-founder of 3D Perception.
\(^{426}\) Andreassen (2007)
\(^{427}\) Appendix 13, Mr. Knutsen, CEO of TTS Marine in Shanghai.
market due to their limited ability to provide sufficient service. Subsequently it will be hard to sell their products and be able to retain their resellers in a long-term perspective. 3DP should therefore concentrate on improving the moments of truth in China, and particularly relating to after-sales service as mismanaging this point will quite possibly result in the loss of business from that customer, not to mention bad word of mouth.

10.3. Adapting to China

3DP has a thorough understanding of the markets in North America and Europe, however in China the HQ’s understanding is considerably more limited. This chapter therefore attempts to give 3DP suggestions on how to adapt their strategy to the Chinese market.

10.3.1. Characteristics About the Chinese Market

In this section we will suggest a strategy for how 3DP should proceed to overcome various cultural differences in China. Though 3DP’s Chinese employees may possess this knowledge, it is equally important for the Norwegian and Western employees to have certain knowledge about the Chinese culture and how it will effect doing business in China.

10.3.1.1. The Importance of Attending in Person

The main marketing technique of 3DP in China is attending international trade shows. Gesteland (2005) states that “often the best way to contact relationship-focused business partners is at an international trade show” as the atmosphere at such exhibitions tend to be more deal focused. Therefore this could be an ideal arena for a small company like 3DP to meet potential partners, VARs and end customers.

Doing business in China 3DP should also be aware of the initial inertia in this country, decision making processes are prone to taking longer here than in fully

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428 Appendix 1, Mr. Krogstad, Managing Director and co-founder of 3D Perception
429 Gesteland (2005: 23)
430 Appendix 11, Mr. Hilton, Owner and CEO of Accurpress International Sales Ltd
industrialized countries. A case in point is the nine years it took Volkswagen to negotiate the opening of a car factory in Shanghai\(^{431}\).

“I used to sit like a trained monkey while my sales people talked to the customer. But because I went there I lent some gravity to the situation”

- Mr. Hilton, Owner and CEO of Accurpress International Sales Ltd\(^{432}\)

In China the importance of meeting their VARs in person should not be underestimated by 3DP as “relationship focused business people are often very uncomfortable discussing important issues in writing or over the phone”\(^{433}\). The presence of a member of the Norwegian management at business meetings could lend status to the negotiations and be seen as a sign of respect, thus contributing to building guanxi which is considerably more important in China\(^{434}\) than in 3DP’s western markets. Mr. Sato, manager of 3DP Japan, supports this argument by claiming that a Western employee stationed in Asia would be a great support\(^{435}\). An Asia regional HQ situated in Shanghai or Beijing would help 3DP control their operations in both China and Japan as they are very limited in personnel in both countries at present time, this could also limit the cost related to serving both markets as well.

10.3.1.2. Enhancing Business Relations

Parnell (2005) claims that relationships still sit at the core of Chinese culture and business. As the legal and political environment is rapidly changing this makes effective guanxi imperative for a business to not only ensure continued growth but also survive\(^{436}\). While guanxi can certainly entail elements of corruption the positive aspects are that guanxi can reduce uncertainty regarding your business partner, or VARs in 3DP’s case, lower search and other transaction costs and also reduce the risk of opportunistic behaviour\(^{437}\). Gesteland (2005) asserts that regular contact with business partners in between personal visits is crucial in order to

\(^{431}\) Gesteland (2005)
\(^{432}\) Appendix 11, Mr. Hilton, Owner and CEO of Accurpress International Sales Ltd
\(^{433}\) Gesteland (2005: 31)
\(^{434}\) Gesteland (2005)
\(^{435}\) Appendix 5, Mr. Sato, Manager of 3D Perceptions operation in Japan
\(^{436}\) Parnell (2005)
\(^{437}\) Gold, Guthrie and Wank (2002)
enhance business relationship and cultivate guanxi\textsuperscript{438}, thus generating mutual trust. Leaving it to Mr. Liao and Mr. Yan to handle all business relations in China is a strategy 3DP might then do well to reconsider as all their contacts will be gone should Mr. Liao and Mr. Yan decide to leave the company.

10.3.1.3. \textit{The Necessity of Following Up}

“Generally speaking, many Chinese employees are probably laughing about the total lack of control and follow up from Western companies”\textsuperscript{439}

- Mr. Kristoffersen, China expert from BI School of Management.

Mr. Kristoffersen believes it is of paramount importance that 3DP gains a full overview of their situation in China, what is happening with their operations here and how it is happening if they want to be present in this market. Given that it is common practice for purchasers to receive kickbacks from their suppliers this can be a hindrance for 3DP in that it may not matter if their product is better as long as the gatekeeper, the purchaser, will not benefit personally from purchasing their product\textsuperscript{440}. 3DP is therefore dependent on selecting VARs that can identify what customers are afflicted with such gatekeepers and either circumvent them or focus their resources in selling 3DP’s products to other potential customers.

10.3.2. \textit{Dealing with Volatile Conditions in China}

10.3.2.1. \textit{How to Protect IPR}

Preventing IPR theft is a very difficult task, though not entirely impossible. Currently 3DP relies on being leading edge to avoid compromising their technology\textsuperscript{441}, though they do admit that they have been copied on a number of occasions\textsuperscript{442, 443}.

Mr. Mark Schaub, Director of Joint Venture and WFOE at King and Wood law firm, suggests seven measures for protecting ones intellectual property rights in

\textsuperscript{438} Gesteland (2005)
\textsuperscript{439} Appendix 10, Mr. Kristoffersen, China expert from BI Norwegian School of Management
\textsuperscript{440} Appendix 10, Mr. Kristoffersen, China expert from BI Norwegian School of Management
\textsuperscript{441} Appendix 4, Mr. Sandnes, Marketing and Sales Director of 3D Perception
\textsuperscript{442} Appendix 1, Mr. Krogstad, Managing Director and co-founder of 3D Perception
\textsuperscript{443} Appendix 4, Mr. Sandnes, Marketing and Sales Director of 3D Perception
China. However, two of these measures are not relevant to 3DP, and we therefore include only five of them.

1. Register all trademarks in China in relevant classes.
2. Find out what the relevant Chinese versions of your trademarks are and register them as well.
3. See a reputable IP agency or law firm.
4. Talk to your technical personnel when formulating your intellectual property protection strategy.
5. Remain paranoid.

Registering ones IPR:
Daniel C. K. Chow (2002) suggests an approach to protecting IPR in China, which could be useful for 3DP. Firstly, the mother company should register all relevant IPRs in China. Secondly, once these are registered, the company should licence their trademarks and patents to the FIE. A law firm should draw up the licence agreement. Through utilizing this IP-protection strategy, there would be no question that 3DP’s mother company in Norway owns the IPR, not the FIE in China. If one does not utilize such a strategy, Chow (2002) claims that there can be uncertainty in the Chinese law system as to whether it is 3DP’s HQ who owns the IPR or their representative persons in China, who is now Mr. Liao and Mr. Yan. Therefore the benefit of such a strategy would be that the IPR belongs to 3DP beyond any doubt, and cannot be wrested from 3DP in the Chinese courts.

Trademark and patent agents:
China currently has a system, which requires the registration of patents and trademarks through qualified agents approved by the PRC government. As mentioned, 3DP should register their trademark, which only costs €500. However supervising the registration process can be a time consuming task, especially for a small company like 3DP. Therefore engaging a local law firm to

\[444\] Schaub (2006:333)
\[445\] Chow (2002)
\[446\] Chow (2002)
\[447\] Chow (2002)
\[448\] Chow (2002)
\[449\] Chow (2002)
\[450\] Appendix 8, Mr. Schaub, Partner in King and Wood law firm, and director of JV and WFOE
oversee the registration would be a logical approach. The reason for this is due to the fact that all trademark and patent applications in China needs to be submitted in Chinese.\textsuperscript{451}

\textit{Shaming the counterfeiter:}

The desire to avoid losing face is a powerful motivator in China, perhaps even stronger than guilt in the Western world. A practice that is being followed by several firms that are being owed money in China is to send a person to stand outside the office of the firm owing money until that firm pays up.\textsuperscript{452} As strange as this might sound this could be a strategy 3DP should consider. The Internet provides 3DP with an opportunity to do this in large scale and 3DP could whenever they discovered someone that had copied their product publicly shame them, perhaps even with their names and pictures. Another strategy we have heard mentioned is sending letters, electronically and otherwise, reprimanding the counterfeiter for copying their product thus letting them know that 3DP is aware of them. If 3DP succeeds in making the counterfeiter lose face this could in many ways be more damaging to him than even a longwinded lawsuit, and it is certainly much faster and less resource demanding.

\textbf{10.3.2.2. Dealing with Chinese Authorities}

Dealing with Chinese authorities can be a painstaking task for 3DP. Based on advice given in China: The art of Law, and China Entrepreneur, we have found three ways for 3DP to avoid political corruption.

\textit{Have a “don’t start” policy:}

It is not unthinkable that 3DP might end up in a situation where an authority government figure will ask for, or hint that he wants a bribe. An example of when this could occur is when applying for approvals necessary to expand ones business.\textsuperscript{455} This is a situation 3DP might come across when applying for a business licence as a WFOE. Therefore it is recommendable that 3DP adopts a “don’t start” policy regarding bribes, and makes sure everyone connected with the

\textsuperscript{451} Chow (2002)
\textsuperscript{452} McGregor (2005)
\textsuperscript{453} Schaub (2006)
\textsuperscript{454} Fernandez and Underwood (2009)
\textsuperscript{455} Fernandez and Underwood (2009)
China operations knows about this. Paying one bribe might result in 3DP paying “extra fees” constantly, and without any guarantee of increased effectiveness

Give the right authorities face:
Maintaining a good relationship with the right authorities can result in friendly reminders, rather than fees. Therefore 3DP should do thorough research with regard to who the real decision makers within the authorities are. Giving face to these can result in preferential treatment, as can showing the official in question that you understand his or her position. However, failing to be polite can make them don’t want to help you, even though they actually can. Be persistent, but polite, is the repeated advice.

Most of the time the government is right:
According to Schaub (2006), 99 out of a 100 times, the authorities will be right. Therefore 3DP should ensure that if they feel they fall victim to wrongdoings, they should research the matter thoroughly, and consult a law firm. This could help 3DP to avoid any unpleasant surprises that might occur, if the authorities acted within the law. This could also damage the face of some authority figures, hence creating more barriers for 3DP, as mentioned above. However, it should be noted that if 3DP experiences any wrongdoings that are legitimate, they should defend their case, raise a lot of fuss, contact the media, and if possible use their guanxi.

11. Alternative Strategies
We consider that 3DP will not benefit from continuing to be an utterly marginal player in the Chinese control room market. We therefore recommend that they either pull out of the control room market, remaining only in the simulations market where they have enjoyed moderate success and are profitable, or invest more resources in building a growing and sustainable business in the control room market.

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456 Fernandez and Underwood (2009)
457 Schaub (2006)
458 Fernandez and Underwood (2009)
459 Schaub (2006)
460 Fernandez and Underwood (2009)
461 McGregor (2005)
market. The first alternative is described in section 11.1: Pull Out of the Chinese Control Room Market, while the other alternative, which is our recommendation, is thoroughly outlined in chapter 12: Recommendation.

11.1. Pull Out of the Chinese Control Room Market

3DP has done next to no investment in the Chinese control room market with the exception of salary expenses connected to the time Mr. Liao and Mr. Yan spends in trying to sell products to this market. Therefore there are almost no sunk costs connected to this market. Thus the exit barriers for 3DP in the Chinese control room market are extremely low. A possible choice for 3DP could be to remain in the Chinese simulation market, but spend no more resources here than what it costs them to have Mr. Liao and Mr. Yan employed and rather focus their resources on their established markets in North America and Europe.

The downside to such a strategy is naturally that many experts predict that the financial crisis could last for several years still, and one could argue that China will emerge from the crisis faster and stronger than the North American and European countries 3DP currently is getting their largest revenue share from. Were 3DP to stand aside and not build their customer base and brand name in the likely growth period that will ensue when China’s 4 trillion RMB stimulation package takes full effect they would have a hard time penetrating a more saturated control room market in China at a later date.

462 Appendix 6, Mr. Zhou, Professor at Fudan University
463 Hughes, Andrew (2009)
Part V: RECOMMENDATION

12. Recommendation

Based on our findings we recommend the following measures to be undertaken by 3DP in order to succeed in the Chinese market, and especially the control room market. Note that we recommend 2009 to be a preparatory year for 3DP in China, as the effects of China’s stimulation package is not likely to take effect before the end of 2009. It is therefore more important that 3DP is positioned to take advantage of the likely capital investments in 2010 than any rushed marketing efforts in 2009.

12.1. Control

First and foremost 3DP should take measures to increase control over their business in China. 3DP should hire a skilled manager with considerable interpersonal capabilities. One of the primary problems 3DP is experiencing in China seems to be a lack of functioning communications. As this seems to be the result of a cultural divide in how one understands the different roles in the organization, and how communication should function, we recommend that the manager hired should be either a Westerner or a Chinese experienced in Western management style and direct communication. When hiring this person 3DP’s Norwegian management should together with him/her work out routines for regular communication and meetings to discuss progress and problems connected to the China business. Of particular importance is gaining a detailed knowledge about how China’s stimuli package will impact on the market for control room products in China, this we have tried to describe to the best of our ability in our analysis.

In a more long-term perspective it could be useful to bring a Chinese manager candidate to Norway for a period of six month to one year to familiarize himself/herself with the business and management routines there. This could have the added benefit of creating personal ties between the Norwegian management and the potential Chinese manager, something that is more important in China than in Norway. The reasoning here is that in China the employees are more prone
to be loyal to the person, rather than the company. In the long run a Chinese
manager would also be more cost effective than keeping a Westerner in China on
expat wages. If 3DP chooses this solution they would likely do well to send a
member of the Norwegian management to China for periods no shorter than one
month at the time to keep good relations to the employees in China as well as their
selected resellers.

12.2. Knowledge Transfer

Inherent in the communications difficulties is also the current lack of knowledge
transfer. 3DP’s central office has very limited knowledge of how their employees
in China are handling business in China, what VARs they are using, how the
VARs are selling their products and what the Chinese customers’ preferences are.
3DP should implement structured communication guidelines in order to improve
the internal information flow. This is necessary to reduce the damages that would
ensue were Mr. Liao and Mr. Yan to leave 3DP at the same time, something that
is not unheard of in China. Ways to do this would include videoconferencing once
a week, Skype is an easy and free of charge program to use for this, it is also has
the added benefit of being free of charge. Furthermore written reports once a
month where the China management describes what concrete measures they have
taken to secure more customers or other relevant information, like meetings with
VARs or what support is needed from the Norwegian HQ should be included.
Finally we would suggest that the Norwegian management and the Chinese
management should meet face to face on a quarterly, or at least half yearly, basis.
This to promote a good relationship with an element of control included. In such a
way the Norwegian management should also be able to gain a much better
understanding of the Chinese market than is currently the case. An added benefit
is that the Western management being present in China could reduce staff
turnover, as Chinese employees often are loyal to the person rather than the firm.

12.3. Connected

Ideally the manager in question will have a wide personal network in China to
draw upon so that he can hire the personnel necessary to further penetrate the
control room market, as this seems to be the market with the biggest growth
potential for 3DP in China. Hiring one or two more sales/technical personnel preferably with good connections in the control room market is also likely to be necessary for 3DP to achieve significant market penetration in China. This because Mr. Liao and Mr. Yan do not seem to have sufficient time to properly manage relations in the control room market, being only two people. More employees in China would also carry with it an element of internal control and probably reduce the risk of opportunistic behaviour and bureaucratic amnesia. With more manpower in China 3DP’s employees could invest more time in understanding what unique needs and values their customers have in China compared to in North America and Europe, which again could lead to 3DP being able to offering the customer added value. A better relationship with customers would also contribute to reduce the bargaining power of 3DP’s VARs and potential partners. A new manager should invest resources in finding two VARs with intimate knowledge about the control room market and invest time in developing close relations with these. Ideally a member from the Norwegian management should be included in several of the meetings and wining and dining with these VARs in order to lend prestige and convey a sense of respect.

12.4. Partnership

3DP should explore further the possibilities of a partnership with VTRON or preferably a firm offering complementary services. We have not been able to secure an interview with VTRON and have limited understanding of VTRONs goals with such a partnership. The benefits of partnering with an established player in China are considerable, especially as this would enable 3DP to penetrate the market faster and deeper than what they would be able to on their own. Thus 3DP would also strengthen their brand value and visibility in the Chinese market in a more long-term perspective. However considerable due diligence is necessary before such a step could be undertaken, and any agreement should be well defined and narrowed to a few specific products.

12.5. Wholly Foreign-Owned Enterprise

Establishing a WFOE in a Free Trade Zone like Waigaoqiao would be a useful tool for 3DP in increasing control in China. Locating the WFOE in an FTZ would
ensure customs free import of products until such time they are ready to be sold. An added benefit is therefore that exporting expensive products to China to use in a show casing room within the FTZ would be significantly cheaper than otherwise would be the case. As the density of companies is high inside an FTZ there is perhaps also a possibility of pooling resources with other small companies regarding legal services and the like. A WFOE would enable 3DP to deal directly with the end customer and trade in RMB, thus supplementing our suggestion that 3DP’s employees spend more time understanding the customers needs. Moreover the ability to trade directly with the end customer would also significantly lessen the bargaining power of the VARs. Since a WFOE is allowed to trade in RMB this could also open the possibility of working with more localized VARs who are not large enough to trade in dollars or euro. While establishing a WFOE is connected with extra cost, especially initially, our findings indicate that this is necessary for significant market penetration and to balance the relationship to their VARs somewhat.

In a long-term perspective the Shanghai WFOE could function as an Asia HQ as 3DP has growth ambitions in several Asiatic markets, and not just the Chinese control room market. This could also increase the benefit of having an expat employed in Shanghai as he/she could then travel to other countries in Asia to lend status to negotiations and sales there. Mr. Sato, 3DP’s Japan manager, has also pointed out that a Western expat would be an asset in meeting potential clients in Japan. It is reasonable to believe that this would be true in other Asiatic countries as well.

12.6. IPR Protection

We have found that enforcement of IPR laws is sketchy and arbitrary even though the formal framework of the law is sound. As a consequence it does not seem worthwhile for 3DP to devote significant resources on patents. A more useful strategy could be to expose the copiers to the world as the desire to avoid shame can be a powerful motivator in China. 3DP should however register their trademark as China employs a first to file system and not first to use, this is also very cheap protection.
12.7. Incentives

It would seem as if the implementation of an incentive system for the Chinese employees is of vital importance if 3DP wishes to achieve significant market penetration in China. We base this observation on several of our interviews, one of which is with Mr. Liao himself. It would appear that Chinese employees are somewhat less motivated by the inner motivation proclaimed in Western management literature and more by the expectation of short term profit. As Mr. Liao himself said, why should he put in more effort if there is no benefit in it for him?

Likely the best solution for 3DP is to use a combination of the stick and carrot. One agreement that would benefit both parties is the signing of a training bond from the Chinese employees where they bind themselves to 3DP for a certain period of time, and 3DP introduces an incentive system. Our proposal for such an incentive scheme would be a percentage of each sale the employee successfully makes that would significantly impact on the employees’ salary. Furthermore the manager we suggest 3DP to hire should get a certain amount in bonus each time one of the employees makes a sale, thus giving him the incentive to pick new hires carefully in order to maximize his own gain. Finally we propose a long-term cumulative bonus system for each of 3DP’s employees in China. This could be an added bonus per sale the employee makes that would be kept by 3DP until such time that is stipulated in the contract. An example could be that the cumulative bonus would be paid after 10 years of working for 3DP, but if the employee was fired for any reason related to opportunistic behaviour or the employee himself quit before that time the bonus would be withheld. Such a bonus system could be a powerful incentive for the employees to stay loyal to 3DP.

12.8. Growth Potential

With a control room market that is expected to grow once the Chinese economic stimuli package takes effect it seems likely that 3DP has good potential for growth once they manage to streamline their own organization in China. Since 3DP is a small firm this could be done without having to invest an unreasonable amount of resources, especially as the financial crisis has led to several qualified
management and technical personnel lowering their wage expectations\textsuperscript{464}. Thus making 2009 an ideal year for building an organization in China. With the right personnel in place it seems clear that 3DP’s EOW and Megawall 2 products have a large potential for sales in China considering that they are leading edge, modern and with a future oriented design, all elements appreciated by status oriented Chinese. Once 3DP is able to secure more than the one reference they have in the control room market now, and preferably in diverse first tier locations such as Beijing, Guangzhou and Shanghai, their business can really grow fast\textsuperscript{465}.

\textsuperscript{464} Appendix 12, Ms. Zhuang, Managing Director of Shincon AS, Shanghai
\textsuperscript{465} Appendix 11, Mr. Hilton, Owner and CEO of Accurpress International Sales Ltd
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13.4. In-depth Interviews

The in-depth interviews can be found in the Appendix:

1. Mr. Knut Krogstad, Managing Director and co-founder of 3D Perception,
   Interview conducted 06.04.2009
<table>
<thead>
<tr>
<th></th>
<th>Name and Position</th>
<th>Interview Conducted</th>
</tr>
</thead>
<tbody>
<tr>
<td>2</td>
<td>Mr. Eric Finsaas, Sales Director of Automation Markets of 3D Perception</td>
<td>06.04.2009</td>
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<tr>
<td>3</td>
<td>Mr. Leo Liao, Manager of 3D Perception’s Representative Office in China</td>
<td>27.04.2009</td>
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<td>4</td>
<td>Mr. Olav Sandnes, Marketing and Sales Director of 3D Perception</td>
<td>17.03.2009</td>
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<tr>
<td>5</td>
<td>Mr. Tetsuya Sato, Manager of 3D Perceptions operation in Japan</td>
<td>24.04.2009</td>
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<tr>
<td>6</td>
<td>Mr. Zhou Dunren, Professor at Fudan University</td>
<td>14.03.2009</td>
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<td>7</td>
<td>Mr. Martin Nickelsen, General Manager of the 17 – Group</td>
<td>17.03.2009</td>
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<td>8</td>
<td>Mr. Mark Schaub, Director of Joint Venture and WFOE at King and Wood law firm</td>
<td>19.03.2009</td>
</tr>
<tr>
<td>9</td>
<td>Mr. Carl Arthur Solberg, Professor at BI Norwegian School of Management</td>
<td>24.03.2009</td>
</tr>
<tr>
<td>10</td>
<td>Mr. Henning Kristoffersen, China expert from BI Norwegian School of Management</td>
<td>18.04.2009</td>
</tr>
<tr>
<td>11</td>
<td>Mr. Timothy Hilton, Owner and CEO of Accurpress International Sales Ltd.</td>
<td>19.04.2009</td>
</tr>
<tr>
<td>13</td>
<td>Mr. Arne Knutsen, CEO of TTS Marine in Shanghai</td>
<td>28.04.2009</td>
</tr>
</tbody>
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14. Appendix

APPENDIX 1: Interview with Mr. Knut Krogstad of 3DP.

KNUT KROGSTAD
CEO and co-founder of 3D Perception

Date: 06.04.2009
Location: Asker, Norway
Text: Norwegian

Topic: General information about 3DP and its current activities, especially in China

Introduksjon – kan du fortelle litt om det nye produktet dere utvikler og skal lansere i mai, hvorfor det er bedre og hvilken merverdi kunden får?

Den har arbeidstitel ”Megawall 2” ut i fra at vi allerede har en ”Megawall 1” som er vårt eksisterende produkt for kontrollromsmarkedet. Produktet er basert på den opprinnelige ideen om å sette sammen mange bilder fra flere projekterer til et stort bilde. Etter vi lanserte ”Megawall 1” i 2002-2003 har vi lært at det eksisterer flere behov som ikke er dekket. For eksempel må flere av sluttkundene kjøpe inn eksterne komponenter for å få den funksjonaliteten de ønsker. Og siden da den funksjonaliteten ligger godt innenfor vårt kompetanseområde har vi kunnet ta en god del av denne funksjonaliteten inn i vårt produkt og dermed øke omfanget av vårt produkt og høste mer av verdiskapningen. Dette vil gjøre produktet vårt mer kostefektivt for kunden og vi vil dermed bli mer konkurransedyktige i markedet. Et eksempel på dette er at det nye systemet vil kunne ta imot alle formater, slik som videoer, bilder, diverse dokumenter og filer fra forskjellige programmer og sette det sammen til ett oversiktsbilde. Dette er funksjonalitet som markeds etterspør. Det eksisterende produktet har også hatt store begrensninger når det gjelder skalerbarhet, altså muligheten for å bygge større systemer, da spesielt når man kommer over fire projektorer. Da må vi inn med flere bokser og andre løsninger som blir uforholdsmessige dyrer. Vi har derfor designet den nye Megawallen fra bunnen av slik at den skal være skalerbar fra små systemer med få projektorer opp til store systemer med inntil 40 innganger for videosignaler og opp til 100 projektorer. Dette for å møte behov hos våre større kunder og for å angripe den biten av markedet som etterspør store systemer. Vår teknologi, det å prosjektere bilder på somløse skjermer, er fremdeles en liten nisje i totalmarkedet, flertallet av kundene ønsker å bruke såkalte kubedisplay, som har vært den tradisjonelle måten å gjøre det på. Flere av kundene får nå øynene opp for denne nye løsningen, og dermed representerer disse store systemene nye markedsmuligheter for 3DP. Utviklingsprosjektet har pågått i to år og har totalt kostet rundt 17 millioner norske kroner, så det er dermed kritisk for oss at produktet oppnår suksess. Noe av finansieringen har blitt hentet inn

Kan du kort forklare statusen til 3DP i Kina på nåværende tidspunkt?

Jeg opplever det at vi har kommet kort. Vi har gjort det med veldig små investeringer, og har derfor kommet veldig kort. Vi har nå nylig lært at den organisasjonsformen vi har der ikke er den rette i forhold til det vi ønsker å få til, og det fører oss litegrann der. Vi har jo to markeder, simulator og kontrollrom. Innenfor simulatormarkedet så har vi fått til en dialog med sentrale aktører på det kinesiske markedet som gjør at vi kan få posisjonert oss ganske godt i forhold til konkurrentene. Innenfor kontrollrom - markedet har vi dessverre ikke engang skrapet overflaten for å si det sånn. Der har vi mye jobb å gjøre, men det positive er jo at det eksisterer stort potensiale i markedet. Utfordringen vår er at vi ikke har all verdens ressurser å investere i dette her, vi er et lite selskap på godt og vondt. Det gode er at vi kan snu oss ganske raskt når vi bestemmer oss for noe, være lettbent og nærmest løpe gjennom bena på de store, men vi har da også dessverre ikke muskler til å investere tungt i markedet. Nå har jo vi som selskap her i Norge fått inn en ny eier som har gått inn med en del venture kapital i selskapet, men det er et stykke igjen til det får betydning i Kina, og vi må også velge en strategi for hvor havilke land vi skal satse på, vi er jo tilstede i mange markeder rundt om i verden, og så langt ser det ut til at det er USA og Europa som representerer de beste markedene kortsiktig sett. I øyeblikket har dermed ikke Kina vært prioritert i forhold til tunge investeringer, men jeg ser jo nå at Kina vil være viktig for oss når vi legger nye strategier de kommende årene. I og med det er vanskelig for oss i og med at vi har såpass begrenset med ressurser.

Hvordan kvalitetssikrer dere deres Value Added Resellers i Kina?

(Kontrollmessig, deres forståelse og anvendelse av produktet slik at de kan markedsføre produktet på en riktig måte i forhold til 3DPs bedriftsprofil)

Det har vi i og for seg delegert til våre kinesiske ansatte. Men vi ser jo det at denne representasjonsmodellen som vi har gjort i store deler av resten av verden muligens ikke er helt relevant i øyeblikket i Kina. Og vi har jo sånn sett også gitt Leo (Den kinesiske ansatte i Shanghai) ganske frie tøyler for hvordan han vil etablere partnerskap med sine kunder der nede. Kvalitetssikringen har dermed vært helt opp til han å ta seg av. Han kjører nok i stor grad sitt eget løp og vi har for så vidt lagt om på vår organisasjonsmodell hjemme og er i ferd med å rekrutere
en ny sjef for kontrollroms-markedet, vi regner med at det blir en som sitter her i Norge og leder markedet globalt. Innenfor simulatormarkedet har vi en ansatt som sitter i USA og som har vært på besøk i Kina flere ganger i løpet av det siste året. Olav har nok kjørt Kina oppfølgingen med relativt slakke tøyler, og vi håper derfor at den nye ansatte vil ha en tettere oppfølgning i Kina og vi vil også legge vekt på mer formell rapportering fra Kina.

Hvor mange Value Added Resellere har dere i Kina?


Hvilken trening i produktets anvendelse gir dere til resellers og hvilken trening gir dere til sluttkundene? Har dere noen slags oppfølgelse av treningen dere gir dem og hva består den i så fall i?


Hva tror dere vil gi dere størst salgspotensial i Kina med tanke på forretningsmodell og markedsvalg. Har dere noen klare tanker om dette?

I øyeblikket høres det ut som det ”missmatchet” vi har som organisasjonsmodell er det aller første vi må få ordnet. Samtidig tror jeg mye går på å faktisk finne de riktige partnerne der nede som kan dra oss inn i markedet med større volum. Samansynligvis vil vår arbeidsstyrke i Kina øke til 4-5 man, da spesielt tenker jeg på å få inn et par tekniske ansatte. Men vi kommer ikke til å bygge en organisasjon med 100 ansatte i Kina i overskuelig fremtid, det har vi ikke ressurser til. Da vil det heller bli aktuelt med ulike partnerskapsmodeller som kan gi den raskeste veksten. Vi har jo jobbet med et stort selskap innenfor kubedisplay, VTRON, som påstår selv å være markedsleder i Kina, og de ser nå på muligheten for å ta inn ”Megawall 2” som en styringsenhet for de displayene de leverer. Ved å utnytte deres brandname, salgsavdeling og nettverk vil vi kunne få en jump start i dette markedet.

Jeg tror også at vi må på sikt opprette en wfoe, Kina, men på grunn av ressurser er det uvisst når denne endringen vil finne sted, men jeg regner med at vi vil klare å gjennomføre det innen 2009.

Hvor viktig er det kinesiske markedet for dere?


Hvilke problemer og barrierer opplever dere på det nåværende tidspunkt i Kina?

Det er klart at kultur og språk er mest nærliggende. Men nå har vi jo lærte at organisasjonsmodellen vår er noe som bør taes tak i og endres. Det er overraskende at dette kommer til overflaten nå selv om vi har hatt ansatte der i flere år. Derfor viser det jo tydelig at det også eksisterer kommunikasjonsproblemer og at kulturforskjellen kanskje er større enn vi hadde forutsett. Det at vi er en fryktelig liten aktør i et veldig stort marked samtidig som vi har begrensede ressurser representerer veldig krevende utfordringer for oss. Vi gjorde nok veldig lite research før vi entret det kinesiske markedet, mye grunnet de begrensede ressursene vi har, men vi så at det lå et potensiale som kunne forsøre vår investering på kort sikt, altså det første året. Det samme gjorde vi da vi økte fra en til to ansatte, og videre fikk vi de til å kommentere et mer langsiktig budsjett som foresatte deres ansettelselser og som viste at vi ville gå med profit. Dette viste seg også å holde stikk. Det var altså ikke en strategisk beslutning å gå inn i Kina men en operasjonell vurdering der vi så at det lå et potensiale for kortsiktig inntjening.
Hvorfor har dere ingen norske ansatte i Kina?

Det å etablere en nordmann eller en vestlig i Kina koster oss atskillig mer, så det vi har prøvd å gjøre er at en vestlig representant har besøkt kontorene våre i Kina med jevne mellomrom slik at Leo og Teddy kan planlegge kundemøter da vi er tilstedet.

Har dere vurdert dette?

Ingen umiddelbare planer om å ansatte noen norske eller vestlige i Kina. Men det er klart at om situasjonen endrer seg vil vi absolutt vurdere dette.

Hvilke kortsiktige mål har 3DP for markedet i Kina?


Hvordan vil dere nå disse målene?

Da må vi bygge de rette partnerskapene som kan sette oss i stand til å få en skalerbarhet på markedssiden gjennom at vi knytter oss til selskaper som allerede har et nettverk i ulike delmarkeder.

Hvilke langsiktige mål har 3DP for markedet i Kina?

Vårt langsiktige mål vil være å få denne massen til å bli skalerbart og bli da en av flere områder som danner en langsiktig basis for hele selskapet. Vi ønsker absolutt å være i Kina på lang sikt.

Hvordan vil dere nå disse målene?

Ved å oppnå skalerbarhet vil vi kunne rulle ut våre produkter i større volum og dermed oppnå større fortjeneste. Dermed må vi bygge en organisasjon som kan skaleres, bygge det på produktet og verdiskapningssiden ved at produktet kan repeteres og selges i større antall.

Det finnes muligheten for å sette opp show rooms i special economic zones, blant annet i nærheten av Shanghai. Er dette noe som kan være interessant for dere?

Det kan det, og det må vi vurdere oppimot andre investeringer. Vi må se litt på hva som er den rette modellen, men det er absolutt interessant.
Hvorfor har dere hentet inn Venture Capital?

Det er for å kunne realisere veksten og for å kunne snu organisasjonen til å bli skalerbar, så er det noe av investeringene vi må gjøre for å profesjonalisere oss, å hente penger til det. Vekst og ønsket om økt volum krever mer arbeidskapital, og i disse dager er det ikke lett å hente inn dette gjennom lånefinansiering, så når vi da har muligheten til å hente inn privat kapital så er det veldig nødvendig for oss. Investeringen er delt i tre etasjer: NOK 3 millioner kom inn i januar, 3 millioner kommer inn midt i dette året, og 3 millioner kommer inn i slutten av dette året. Disse investorene har også brukt 3 millioner på å kjøpe ut småaksjonærer i selskapet. De er også åpne for å gjøre nye investeringer senere hvis det skulle være behov for det, men de er underlagt EU regler som sier at de maks kan investere EURO 1,5 millioner pr år i samme selskap. Muligheten for å finansiere ytterligere vekst og arbeidskapital er dermed tilstede. Mye av disse pengene har gått til å ferdigstille det nye produktet vårt, samt r&d (forskning og utvikling). Videre har vi brukt en del på å bygge oss opp i kontrollrom – markedet, for å kunne kommersialisere vårt nye produkt. Det meste vil allokeres til de generelle områdene, vi vil lite trolig allokere ressursene til et spesifikt område. Vi vil for eksempel bruke mye på markedsføring, gjøre oss synlig i markedet gjennom høvdsakelig messer verden over. Samtidig vil det gå til rekruttering av nye ansatte, spesielt å bygge opp en salgsavdeling.

Vil dette på noen måte affekte deres tankegang i forhold til Kina og i så fall på hvilken måte?

Vi er jo spesielt interesserte i å ansette teknisk kompetente folk for å avlaste våre to senior ansatte i Kina. Det vil også åpne muligheten for tyngre investeringer i det kinesiske markedet.

 Hvordan beskytter 3DP sin kjerneteknologi/kompetanse internasjonalt og i Kina?

Ja, i Kina betyr jo copyright right to copy! Vi har patenter på noe av kjerneteknologien, men vi har ingen form for beskyttelse i Kina. Vi har søkt patenter i Norge og videreført disse i de viktigste landene i Europa og USA. Vi har sett at IPR er så komplisert i Kina at vi rett og slett har holdt oss unna fordi vi ser liten verdi i å ha IPR rettigheter i og med at lovgivningen er så uklar og muligheten vår til å håndheve det er veldig begrenset. Den dagen en ordentlig lovgivning vil komme på plass vil vi sanntilsvinsig gjennom å allerede ha rettigheter i Europa og USA vil få overført disse til Kina. Når vi får det, vil disse rettighetene gjelde fra det tidspunktet vi søkte om det i Norge. Men som sagt, det største problemet vil være å håndheve rettighetene våre i Kina. Det er nok noe vanskeligere å kopiere vår teknologi, og den som kopierer vil alltid måtte ligge noen skritt bak. Vi har opplevd at vår software har blitt kopiert selv om vi har sperret de med lisensnøkler og lignende, de kinesiske kundene våre hadde imidlertid ingen skrupler med å overføre disse fra pc til pc. Da måtte vi legge inn en sterkere kopisperre som gjorde det noe vanskeligere for kunden å kopiere.
Har dere signert noen form for taushetskontrakter med deres ansatte i Kina, og er disse utformet i henhold til kinesisk lov? Har de kinesiske ansatte noen form for karantenetid hvis de skulle si opp? Er dette utformet etter kinesisk lov?

Vi har kontrakter med de to kinesiske ansatte som omfatter både taushetsplikt og karantene. Ulempen er håndhevelse av disse klausulene. Vi ser jo at det er både vanskelig og dyrt å prøve å håndheve kontraktene med våre kinesiske ansatte. Det er nok derfor lettere å holde folk lojale med de rette insentivene enn med pisken for å si det sånn. Det er helt klart at vi er veldig avhengig av disse nøkkelpersonene og vi vil lide store tap hvis de skulle slutte. Eierandel i selskapet er en måte og sørge for økt lojalitet men jeg synes det er viktigere å sørge for at de rette insentivene er på plass.

**Hvordan ansatte 3DP sine nåværende kinesiske ansatte? (FESCO)**

Vi kjente til begge av våre nåværende ansatte gjennom at de var i nettverket til folk vi allerede kjente i Kina. Leo var på vei ut av hans tidligere arbeidsplass (konkurrenten Christie), og vi ville derfor ha tak i ham istedenfor at han skulle forsvinne et annet sted. Vi rekrutterte Teddy på en lignende måte. Det var altså ren nettverksrekruttering.

**Hvordan mener du at finanskrisen har påvirket eller vil påvirke 3DPs økonomiske situasjon og markedsandel internasjonalt og i Kina?**

Det er klart at vi ikke er upåvirket. Våre to markeder oppfører seg forskjellig. I simulatormarkedet er våre hovedkunder offentlige og er derfor ikke i så stor grad påvirket, selv om det er noen prosjekter som blir litt forsinket grunnet usikkerhet blant kundene. Risikoen på disse prosjektene er imidlertid relativt liten.

Innenfor kontrollromsområdet så er dette en industri som vil bli påvirket, men vi har ennå ikke sett noen tegn til finanskrisen. Det tar tid før investeringsnivået synker på grunn av at det er store aktører og prosjektene tidshorisont er relativt lange. Finanskrisen har dermed ikke kommet med full tyngde enda. Jeg vil nok tro at det vil komme tidligst på slutten av dette året. Men på grunn av at vi er nykommer på dette markedet, vil vi ha muligheten til å ta tak i en annen nisje i dette markedet i og med at vi ikke har rukket å posisjonere oss i markedet ennå. Vi kan fokusere på kosteffektivitet som gjør at vi nødvendigvis ikke trenger å bli så hardt rammet. Finanskrisen vil nok uansett bremse den veksten vi ser i markedet, noe annet ville vært dumt å tro.

**Er dere klar over at EXPO 2010 er lagt til Shanghai, og at Norge vil ha en egen paviljong der Norge skal vises fram, og der norske bedrifter kan promotere sine produkter?**

Ja
Har dere vurdert eller vil dere vurdere å delta her?


Har 3DP et godt renномé i simatormarkedet internasjonalt og i Kina?

Jeg opplever at internasjonalt så er vi sett på som en av de ledende aktører innenfor simulator teknologi. Der har vi en brukbar trygg posisjon. Vi oppleves å ligge langt framme på teknologi, men det er også en relativt liten nisje så det er lettere å ta med seg en bevissthet der enn det er på et større marked.

I Kina så er vi i startgruppen, det som har hjulpet oss til å komme til de viktigste simulatoroperatørene er vel kanske det at de andre som har vært der lengre har stagnert slik at vi kan dra nytte av dette. Vi kan representere et annet alternativ med bedre løsninger enn våre konkurrenter. Men det er for tidlig til å ha fått et fotfeste i markedet.

Er dette overførbart til kontrollrom - markedet?

Det er mulig at rennoméet vårt fra simatormarkedet kan overføres i noe grad, men de to markedene er såpass forskjellig av natur at det å bygge seg opp i kontrollrom - markedet vil være ganske annerledes enn det å bygge seg opp i simatormarkedet. Gjennom å vise hva vi har fått til på simulatorsiden kan vi kanske bygge litt troverdighet hos kundene våre. Men jeg vet ikke om det har en fryktelig stor betydning.

Opplever dere at det er noe fordel å promotere 3DP som en bedrift som er fra Norge (Opprinnelseslandseffekten)?

Nei. Vi har egentlig vært veldig lite oppatt av å si at vi er fra Norge. Jeg har ingen illusion om at det betyr noe, det tror jeg ikke. Vi har ikke brukt noe norsk i vår markedsføring av våre produkter. Vi har heller ikke planer om å gjøre dette i fremtiden, jeg ser ikke at dette kan gi oss noen form for fordeler.
Har dere noen store kunder i kontrollrommarkedet som kan underbygge deres markedsføringstiltak i Kina?


Avsluttende bemerkning:

Det er jo sånn at de fleste av oss i 3DP har en ingeniørbakgrunn slik at det er ikke markedsføring vi har mest kunnskap om. Men vi prøver å lære så lenge vi driver business! Vi opplever jo også at våre systemer "bygger monumenter" det vil si at designmessig er de pene å se på, noe som kan virke statusfremmende i de kinesiske bedriftene som er under stadig utvikling. Det å spille på det kan jo være et viktig element. Det er for tiden mer viktig i Europa og USA at operatørene har det bra og at produktene er ergonomiske riktige. Dette har også vist seg å være produktivitetsfremmende. Slik er det enda ikke i Kina, men vi ser jo og håper på at utviklingen fører i vestens fotspor. Vi er veldig prisgitt det ABB velger å gjøre, altså selge totale løsninger, men det er klart at det er interessant for oss å vurdere andre alternativer.

To suppleringsspørsmål ble sendt i ettertid og besvart via mail:

Er Megawall 2 CCC sertifisert enda? Leo nevnte dette som nødvendig, men han sier at han ikke vet om dere har fått sertifisering på det enda. Hvilke andre sertifikater har dere worldwide?

CCC sertifisering er i arbeid, vi har et delprosjekt med Nemko som står for norsk og internasjonal sertifisering for oss. Ellers bruker vi normalt FCC, UL (USA), CSA (Canada), og CE (Europa) sertifisering, som anerkjennes i de fleste land. Men som du vet forlanger kineserne sin egen sertifisering for å kunne selge kommersielt.

Dere outsourcer jo OEM - manufacturing. Er det mange bedrifter som kan lage disse produktene for dere eller er det få som har denne kompetansen?

Ja – det er relativt mange selskaper som kan gjøre dette, i hvert fall i Europa. Vi gjorde også en undersøkelse for å se på mulige besparelser ved produksjon i Kina, men konkluderte med at dette ikke ville gi gevinst av betydning med de volumene vi opererer med. Siden dette er spesialiserte nisjeprodukter, er elektronikkproduksjonen krevende, og i Kina ser det ut til å være kun de mest avanserte (største) produsentene som kan greie dette. Samtidig er volumet vårt for lite til at det
bli tilstrekkelig interessant for slike produsenter. I Europa er bildet annerledes, her er det flere produsenter som fokuserer på småskala, krevende produkter. Derfor har vi så langt fortsatt å holde oss i Norge pga. nærhet til produsentene. Bare i Norge er det upproblematiskt å be om tilbud fra 2-4 produsenter.
APPENDIX 2: Interview with Mr. Eric Finsaas of 3DP.

ERIC FINSAAS
Sales Diretor – Automation Markets 3D Perception

Date: 06.04.2009
Location: Asker, Norway
Text: English
Topic: Information about 3DP and the control room market internationally and in China.

What is the current growth rate of 3DP, internationally and in China?

Well, the market is so large and diverse. And it is almost impossible for us as a small firm to conduct large market analyses. You know, we have only scratched the surface. For us it is more of a question of getting a piece of the cake. We have very little market data from China, so we base our decisions from data coming from our partner ABB. We respond to requests and we also sell some control room solution especially within the oil and gas sector through a sister company. 3DP is a company that utilizes resellers, so that means that we need to respond to their preferences and they need to respond to the customer preferences. The board of directors have recently decided to expand the control room business, and that means that more numbers will float to the surface, but right now most of our prognoses are based on what we get from ABB, and from resellers internationally and in China. We produced a turnover of 15 million NOK in the control room segment last year, before that it was 12 million NOK and before that it was 10,4 million NOK and before that it was 6,7 million NOK, so we have a healthy growth rate in the control room segment. This year we expect less than 15 million NOK due to the impact of the financial crisis. Internationally, a few projects have been put on hold. The only exception is in the middle east were they have started to understand the possibilities of our products and they do not have the same financial restrictions as in Europe or the United States.

Our biggest problem is that we have big competitors. I mean, Barco is basically the default choice for companies both internationally and in China when selecting projector technology. Of course they suffer from the fact that they are big and expensive, and it takes them more time to do things or to make decisions. Moreover, their service mindedness is not always on top, and that’s something that we can compete on. We have experienced that that’s a reason for companies to look around for other alternatives.

(Eric gives me the Internet address to Barco’s homepage and some power point slides which contains data from ABB)
As a small/medium sized company, what were the main obstacles when entering the Chinese market?

In China? Definitely PRICE. We package our main product together with furniture in order to provide a total solution. This solution is not cheap. We are selling what you will call a group display, which are designed to display an overview of different operations. If you have cubes, that’s called a global display. The whole point of our new product is that it is supposed to be a “working screen”. You can pull up and access large processes, like video files, documents and other formats. It is difficult for us to convey the value of this in the Chinese market. Our group display allows us to make more effective use of the screen than the old cube display.

Other obstacles besides price would be the large competitors as mentioned before. And the fact that the “eow – extended operator workplace” (Which is ABB’s name for the total solution) that we produce together with the “CLOV” (the name for the projectors, screen, display and controls produced by 3DP) has already been copied in China, I do not know how well it’s working though, represents a threat to us as the original provider of the product. Everybody can hang up three projectors and make it work, but it is our total solution – software, screen and the technology that comes with it that makes it important for us to partner with other companies in order to sell the “CLOV”. This is something that the copiers do not do.

What did you do to overcome them?

The best way to overcome the price issue is as I mentioned to package the solution and partner up with other companies like ABB. We are also replacing cubes with projection on our curbed screen solutions, especially offshore where space is an issue. But because we are a small company, we do have to take one thing at a time. We are also better priced than our competitors. We are at least cheaper or equal in the different markets. But it all depends on the specific packages.

What types of marketing techniques were used in the marketing strategy in China?

So far Teddy and Leo have basically approached the Chinese market in their own way. We have not had any fixed plans so far. At the moment we provide products to the Chinese resellers and the Chinese office, but we have not come to the stage yet were we have developed a business plan for Asia or China in the control room segment.

We have attended tradeshows, for example the one in Hong Kong in November 2008, but we have not planned or scheduled any other appearances on tradeshows in Asia this year. But if anything comes up, we will definitely look into it as a possibility. We have instead focused on high tech tradeshows and fares in Europe and the US.
Which of these has proved the most successful?

For 3DP it has always been about the big shows. Building up a big system that looks impressive. So that the industry knows that we are there, and if they do not see us, that is also a message! We try to attend the biggest shows and make a big appearance there instead of targeting little shows. Then we follow up with a certain amount of advertising to make sure that we are seen out there. We advertise in simulation magazines and control room magazines, mostly oil and gas. This advertisement is done in Europe and the US, I do not know if we are advertising in magazines in China. As I said, Teddy and Leo are doing the advertisement over there. However, the magazines we are advertising in are pretty much worldwide magazines so they are probably published in China. If not, they are definitely read in China. All the journals we advertise in are international, so this gives us a good coverage of the global market. Because of our size and limited resources we have to choose very carefully where we should put our marketing efforts.

Do you have a clear branding strategy for 3DP internationally and in China?

I think that brand awareness is especially important for 3DP. Branding is not always around the product, for us it is more about the solution. It is more important for us to, together with the customer, design a solution specifically for him or her. In control room people tend to brand us as providers of direct projection. Personally I think that 3DP should be linked more to the “total solution” instead of “projector technology” as it has been up until now. This is especially important in the control room segment. We should focus our branding around the total solution, not just our core technology. That is because simulation and control room are two completely different worlds. Projectors are more important in the simulation market than in the control room market. They are essential for simulation. In control room people are interested in the image. They prefer not to have projectors at all because of the sound and space they use/take up. If they could have just an image without the projector, they would be very happy! This means that new technology will be much more relevant more quickly in the control room market. 3DP must therefore associate themselves much more with solutions. But right now we are getting a lot of mileage out of direct projection.

It is important for 3DP to invest in the brand because the situation in the market changes everyday and new technology makes the future uncertain. The market demands “bigger and better” – just like flat screens – things move very quickly. We constantly need to increase the resolution and processing capabilities, which in turn means that a lot of money is going into r&d to keep the brand growing. I think you have to combine the understanding of the technology and the business with the r&d and try to stay up front. If you can do that, the brand will grow in the different markets. If not, you will drop behind very quickly because people want the latest and greatest. Therefore we will continue to invest in our brand in the future.

Regarding social responsibility in control rooms the environment is very important. Especially noise and heat are very important factors for the people working in control rooms. We always
aspire to make our projectors quieter because the operators are sitting under these projectors for eight-hour shifts, and you can imagine listening to the same irritating “whisper” for eight hours, not pleasant.

Where in the customers company hierarchy is the real purchase decision made?

I think it is a combination of management and users. We see that the balance is very different from case to case. Very often you actually find that the operators have surprisingly little to say. Sometimes management just simply want to increase efficiency, very often it is because they think it is cool to have a modern control room. Very often the control room itself is used as a showcase. Factories, power stations and other companies usually have a lot of visitors, and they would like have something special, modern and high technological to show off. That means that the management will put money into their “eow” or package the “eow” with furniture or in a big wall. The Middle East is a good example of this. There the money is not the big issue, they simply want to look good. Whereas in the US and Europe everything is more cost-focused, and every final decision is made on budget. I think China is also focused on cost, but you come across cases where the control rooms are meant to be showcases and here we see that the management usually presses the operators to except more flat screens or other applications that may not be the best solution for them.

If you consider that something like 15 percent of efficiency can be lost during a year in complicated operations based on operator mistakes – then consider how much is turned over in the process like in the mind or any other kind of process – you know you only need to improve a few percent before you can talk about not payback, but direct profits. The ability for a company to actually understand that they can save money and improve efficiency this way is often not there. It is therefore hard for us to try and convey this message, especially because 3DP is mostly just in contact with the resellers, not the end users. We push out advertising and sales brochures, but in the end it is the sales men from our resellers that are doing the arguing. It all depends on our ability to get them to understand how to convey all the arguments that are important to us. The big difference is if the sales representatives are selling the total solution or if they break it down, as the customers often ask for, the customers sees that he or she can save a lot of costs by just putting up some flat screens. So it depends on what kind of mentality that runs in the customer’s site.

How do the customers value your product offers on the market? What attributes of 3DP’s product do you think potential customers in China find most interesting?

I think that the fact that the whole package is space saving is important. The system is powerful; it delivers on promise and simply just works very good. The projectors are also quite small compared to our competitors. I think that 3DP is seen as a very innovative firm that is able to tailor-made a package for special situations. If you need a package that does a difficult job and does it well – with outstanding processing power – then 3DP represents the best alternative.
We have a functionality in our control rooms that enables us to create an overlap. We can do this in the same box, which makes it a neat package – it is one box and projectors that does the job and is compact and powerful. So I have to assume that this is what the Chinese appreciate. And the fact that the entire package – the total solution – comes from one company. The customers always appreciate that.

Do you believe this differs from preferences in western companies?

No, no I do not think so. I think probably that the main difference is that the first thing the Chinese will do is asking themselves: “How can we make this cheaper here?” They tend to copy everything, both hardware and software, which includes the various “bugs” in our systems, it is quite amusing actually! But I think that if you want the latest and greatest, you need to come to the source. We have seen copies of our “CLOV” and projectors, but we have never seen those copies in operation – Just people showing things. I therefore think it is extremely important to be able to tailor make the solution to the wishes of the customer, if you feel that you have a product that can be easily copied by someone else. I think that in China people actually want the latest and greatest technology as well. They all want great performance and I do not think they are very different from our other customers.

What are the benefits of utilizing resellers in China?

The reseller concept has both good and bad things about it. I think we are in the process of changing that now. I mean if you have too many resellers out there you end up supporting people that is actually competing against each other. If you have an agent for a country then he appoints his local resellers, which are often better. But the fact is if you do not have resellers out there dealing with local conditions then you are not going to be in much of the market unless you have a product that is so unique that nobody else can supply it.

Right now we depend a lot on our representative office in China. They decide how they should run the business. A good reseller will know the benefits of your product and know the market.

Drawbacks?

Basically what we have heard so far from our china office is that the “eow” and the “CLOV” are too expensive. The resellers are not necessarily just selling our products; they are also selling different products. This means that our product is not always prioritized.

How do you select your resellers?

For us it is difficult with control rooms in China. One of the reasons is that our main competitors, like Barco, have offices and agents out there. Of course we need to operate in the same way. We also come across companies in Asia that is requesting to be our resellers. Then we need to have a process of evaluating these resellers in order to decide who that will represent us in the best way and what kind of projects they have supplied to. Are they willing to invest in our products and are
they willing to be trained as our sales representatives? They have to be able to back up the product and provide adequate service when necessary. It all comes down to the connections they have in the market and if they are focused on what they are doing. I think it is necessary for 3DP to establish a WFOE in China in order to compete with our competitors.

**Being a small company, how have you assessed the risk of moving into a new market?**

It is not so much the risk that is the problem, the problem is to cut out a piece of the market for us. I would say that it is extremely difficult to team up with people as an original supplier. Because we just came in to the Chinese market as a control room supplier, we definitely have a hard road ahead.

**What steps, (if any), does 3DP take to minimize risk of not getting paid?**

Because we partner with big companies we feel much more secure about getting paid. We often get an advance payment and step payment when we are working with new people in order to make sure that things are being done properly. But the risk of not getting paid is low for us. The other risk to watch out for when you are stumbling in to a new market is: Always try not to make a bad name for yourself by doing something wrong.

To sum up, there are three risks when entering a new market:

- Estimate carefully how much it would cost to get into the market in terms of work and other costs involved.

- Be careful not to make a fool of yourself in the new market. Word of mouth travels fast.

- When you are literally scratching the surface of something that is quite firmly held by other larger companies, you have judge carefully and aim to grow organically. You cannot go and risk a lot and throw yourself in there, you may just bounce of the wall. And a failure is to time consuming to fix. This company got a really good start by working together by ABB.

**Do you feel that the country of origin effect is important for 3DP?**

Yeah. Norway generally has a pretty clean reputation when it comes to technology around the world. If you have a product that is unique then people will buy it anywhere in the world, but if you have more of a “shelf-product” it helps to have a local office, it is not enough just being from Norway. It helps that Norway has a clean reputation for delivering what is promised, but I do not think that it is a factor for 3DP in China. I think that the business is too much driven by and focused on technology, that putting Norway as a part of our branding does not make any difference.
In China, many people claim that “guanxi”, or what is roughly translated as networks, is of paramount importance. What is the current strategy of 3DP at the present time and have you taken any steps to ensure that these connections are also tied to the western management in Norway?

I think that our connections in China are tied up to Teddy and Leo. Of course we have other connections like “Lantech”. I think it is difficult to have any real connections with clients in China for us that are based in Norway. I think that we need to become more local in China, and it is important for us to take good care of our business relations.

Have you taken any measures to minimize the damages of lost connections if the Chinese employees should leave the firm?

I think that it is very normal for companies to hire a “westerner” to minimize the risk of bureaucratic amnesia. That would certainly make a lot of sense for us because we are now getting more serious in the Chinese market. But then again, 3DP is in transition, our whole sales department for the simulation market is in the US and I think that the new head of the control room market will be based in Norway. But because we are a small company, it is too expensive to put one of us in China at the moment.

I do not think that we have good enough measures of minimizing the risk of lost connections in China if any of our Chinese employees should decide to leave 3DP. Most of our business in China is revolving around Teddy and Leo. Without them the connections are lost. On top of that, the only person that has been there much is Olav, and he has as you know recently quit.

How does 3DP protect their core technology/competence both internationally and specific in China?

Our technology is protected very well. Competence is something you build up over a longer period of time. I do not see any bigger danger here than with anything else. You have to be careful when you are selling technology to a new market. We have patents in different countries in Europe and in the US, but it is difficult to protect our technology in China. But I think that if China wants to continue growing and adapt to the west, they need to pass new laws on copyright and enforce their patent laws better. I think right now when you have a market in China, which is so uncontrollable – it is easy to be copied even though you have patented your product.

The EXPO 2010 will be hosted by Shanghai. Norway will have an own pavilion. Have you or will you consider participating here?

Yeah, I think it is a very good thing for 3DP to participate in the EXPO. We do not necessarily need to be connected to the Norwegian pavilion. I think it would be better for us to profile 3DP as a local company to maximize our role in the market. It is always important to profile 3DP cleanly
so that people know what your product can do, where it is from and how they will benefit from using it. I therefore think it is smart to consider both the Chinese and the Norwegian pavilion.

After sale service is considerate a key sales point/point of difference for western firms in several businesses in China. Do you consider 3DP to provide superior after sale service to your competitors?

We provide after sale service from the office in China. If that is not enough, we will assist the Chinese office from our headquarters in Norway. It all depends on the size. For big installations we will send sufficient people from Norway to China. Many people think that our after sale service is superior to our competitors. This can be a point of difference for us. We experience that people are in general very happy for the after sale service provided by us. As long as they behave themselves and pay their bills then we will be more than happy to assist them with any questions or problems they may have.

Do you consider it to be a goal to be superior in after sales services compared to your competitors in China?

Yeah, it is much more than a goal - it is a necessity. When you are working with projector systems they need not just extra service but often it takes time to set them up and they are machines that have moving parts and heat – you know, things happen. Without a good customer support we will never be able to sell any of our products.

Do your customers in China value after sale services highly?

Yeah, that’s my impression. It is not often that we fly from Norway to China so I think that Leo and Teddy’s handling that part great. But I have seen that when Chinese customers are not satisfied, they are very firm in their dissatisfaction. So there is no room for mistakes, they expect things to be done properly.

What do you consider to be the strength of 3DP?

I would say technology and expertise. Keeping our products up to date through R&D. We are rich in peoples’ knowledge and we know how to apply them. 3DP is changing in many ways now structurally and hopefully structure and market development and business approach will develop with that. We have reached a pretty critical stage right now, we are changing from a small to a small/medium sized company and that means new challenges with everything from logistics to project management to support and clean up. Hopefully it would lead to a better-structured organization. People can then focus more strongly on what they are doing.
What do you consider to be the weaknesses of 3DP?

Well, as I was mentioning: The fact that we as a small company is growing into a larger one. It is important for us to make that change internally first so that the customers can perceive us as a bigger company with bigger ambitions.

What do you see as the possible threats that 3DP faces in China?

I think that our competitors in China are our biggest threat. And the fact that they have been in China longer than us makes it harder to penetrate the market. It takes a lot of time. We need to focus more on the control room market, but we only have two employees. Out of the 25 people working for this company there is only one fully dedicated to control rooms and that is me! If we want to partner with more companies to further penetrate the market in China, it would be of great importance for us to hire a new manager for the control room segment that has connections in the industry, preferably both internationally and in China. That’s what Knut is in the process of doing. When he or she is employed then we will start to look more closely on China. Right now we are just trying to keep our head above the water and the business going.

What opportunities are you aware of in the Chinese market?

The opportunities are good. China is moving extremely fast. If we become local enough and keep on tailoring the products it is no doubt that China represents a huge market for us. There are other competitors out there that are bigger and have more brand recognition, but not necessarily anybody that does it better than 3DP. We just need to get our name out there and convince the buyers to choose us.

Do you use a human relations firm to hire your Chinese employees?

I think they were hired through personal contacts.

Do you believe that the financial crisis will have any substantial impact on your operations in China?

I suppose so. I have not gotten any feedback from Leo or Teddy that they have lost any projects yet, but we need to assume that the crisis will have an impact on us. But we have very little business in China in the control room segment.

How often do you get feedback from your Chinese employees?

We are in contact whenever there is a case over there. We talk in sales meetings from time to time and have "Skype" conversation now and then. You have to remember that the control room segment with one person in charge has turned over a quarter of the company’s total business last
year. So this means that I don’t have a lot of time to communicate unless it is of bigger importance.

**How many resellers do you have in China?**

I do not know. I only know about “Lantech”. You need to ask Leo. We have had mainly partners in the control room market. ABB and Siemens. Ask Leo for the complete list of resellers.

**After having examined the answers from Eric Finsaas in detail we mailed him six follow up questions. The questions and answers are listed below:**

You said that you produced a turnover of 15 million NOK last year, is that in China alone? If not, how much did you produce in turnover in the China market? Do you have information on how many projects that were sold in China in 2008?

In control room the first delivery was this year, a three channel system projecting onto a flat screen on the wall and worth around EUR 75,000.- Otherwise most business has been simulation, this information you need to get from Leo at our China office.

You mention that your new product is meant to be a working screen, that you can pull up and access large processes etc. You also say that 15 % of efficiency can be lost through operator mistakes in one year. Can you give us any concrete example on how your product reduces operator mistakes and/or contributes to increased efficiency and productivity? In other words; how exactly does your product generate more monetary value for your end customer? Furthermore it would be useful if you were aware of any statistics or investigations made in this area.

The new product is a fixed working screen, not pulled up. It replaces the big screens normally used in control rooms (global displays) which can only be used to monitor events and alarms. Using the working screen (group display) means the operator can pull up different process diagrams, zoom in on areas of interest, access trend graphs, pop up video input from the factory (for example if a problem is seen with a valve, one can pop up the video feed from the camera covering that valve in the factory and look for physical signs of damage or malfunction), pop up other information such as excel sheets, user manuals, etc. This means the operators have a flexible screen that can be configured for the important things they have to see at any time. This is a powerful contribution to efficiency, making it possible for the operator to be more on top of the situation and to react more quickly and effectively if there is a malfunction or signs that a malfunction will occur. Also, in the event of a serious malfunction where several operators have to participate, the table and the working screen can be raised up so that the group of operators can stand and work together.
This is basically how the CLOV contributes to efficiency, cost savings and profitability. Have a look at the attached ABB publications; these will give you a lot of information. I have seen different figures quoted for operator mistakes, from 5 to 15%, but to find concrete documentation it would be necessary to speak with ABB and/or IFE in Norway.

PS - please do not distribute the attachments.

When you designed your "total solution" did you consult with ergo therapists? If so, do you have any contact information on the ones you worked with? We think any possible statement from experts that this design helps increase productivity could be useful in the Chinese market.

Ergonomics are also important for operator awareness and efficiency. CGM in Sweden is the manufacturer and designer of the mechanical part of the CLOV and the furniture that goes with it, you can contact Pierre Scharing at: pierre@cgm.se. His mobile number is +46 733229510

Have you any thoughts as to how you can ensure that your VARs market and sell your product in the manner you wish, how you intend to do this in the future?

This is one aspect we intend to devote significant time exploring. This has been ongoing in the simulation part of 3DP business from early days. In control room our main partners has been ABB and GCCD. We are working now on a business plan for going further into the control room market, but this means entering new areas of business through new Audio-Visual type companies. At this point the main targets are not decided, it all depends on the market area we approach, the type of players in that market and the requirements attached to selling the product (like the new MEGAWALL 2) in that market.

Do you have a comprehensive list over partner companies you have in China, and can you tell us a little bit about what exactly having a partner company entails, how you work together etc.?

We were also under the impression that Siemens worked with Barco, is this not a hindrance for 3DP to work with Siemens as well? For partner companies in China, you need to check with Leo. Otherwise it is not a hindrance to work with Siemens for example, even if they use Barco. The challenge is to get them interested.

Is your partnership with large companies like ABB working successfully in China? We got the impression from Leo that ABB was not an ideal partner in China and that more local companies were preferred. How do you think this will influence the risk of not getting paid for products sold in China?
ABB is a worldwide partnership. In China they wanted to order two demonstration systems last autumn but had to cancel due to financial crisis. So far they have not used the CLOV on any projects. So what Leo is aiming at is other control room business like the one mentioned in item number one above.
APPENDIX 3: Interview with Mr. Leo Liao of 3DP.

LEO LIAO
Office manager of 3D Perceptions China office

Date: 27.04.2009
Location: Shanghai, China
Text: English

Topic: General information about 3DP and its current activities, especially in China

How is the situation for 3DP in China now?

Because in the current situation a lot of projects are delayed, local firms cut budgets, the government spends less money on infrastructure, the government cannot build any new buildings. I think from the current product levels, because we do not have lot of sales at this moment, even more people would not help a lot. Unless we don’t go for the total solution sales, in the current situation we only deliver products, we won’t need more people I think. China is less influenced by the financial crisis but still things are down.

Do you have any numbers, graphs or reports to that effect?

No, I don’t have. Not yet.

The only product you have sold in the control room market is to Shanghai Power is that correct?

Yes, Shanghai Power is just a test unit for us, we have only sold to them. Now we only sell single products, we don’t sell many projectors, not integrated systems (total control room solutions, tables chairs, projectors, processor, wall). If I were to sell more projectors here I would need spare parts, stores, a lot of things, even repair engineers.

Last time we talked you said that you maybe had some more projects coming in, those have not come?

No, because a lot of projects are delayed, due to the financial crisis. That is the situation.
What would you think about setting up a WFOE in China?

If one starts up a WFOE it is easier to sell total solution sales locally, and to source some product parts and components here. Now we buy all the parts from Norway and that is very costly. Another advantage when we go to Megawall 2 sales, which is a new innovation from the home office, is that even though it is designed for control room use it can also be used as an AV product for the AV market (entertainment/video industry). In the AV market all the local companies selling AV product to the end user are small companies, so they buy only in RMB, they do not have US dollars, therefore WFOE would be better considering this market. If we do not have WFOE we have to use agent for exchanging money, and that makes it more expensive. It is very important to source parts in China.

Isn’t it more expensive to have a WFOE than a rep.office?

Yes, if you make money then of course. If you have profit you have to pay profit tax, with a rep.office you only pay the business tax, not the profit tax. A rep.office can’t do business directly.

Will you continue to use VARs if you get a WFOE?

Yes, sure. With the WFOE we can approach the customer ourselves. As it is now with a rep.office we have to use resellers, and they are not loyal to us. They have a lot of choice, can choose other products, other solutions, so they are not loyal only to us. The reseller only cares about lower costs, or more support or things like that. Most of all they care about discount; if they get more money reselling your product they will sell your product. If we get a WFOE we can expand to do more business with the end users and also small resellers that deal in RMB. In this way we can do more total solutions sales, package sales. Currently our resellers only buy some products from us and integrate them with other parts from other companies to provide a package solution to the end user. So this would not be competing with the resellers. The simulation market in China is very small compared to the control room market or the AV market.

What market segment do you think hold the greatest potential for 3DP now?

The potential in control rooms is very big, but for control rooms we have to educate the customer or maybe the reseller to not use cube displays, but to rather use the system we provide. So it will take some time to educate the resellers and end users. When the customer buys displays they think about projectors, they do not think processors or edge blend. Like when you buy a TV you think about the display, not the DVD and recorder etc. So we have to educate them about the product.

Can your product help with reducing efficiency lost from operator mistakes?

That is a selling point for this kind of product, but more in Western countries. In China I don’t think it is true that this is a selling point. In China they don’t care so much about the employees,
because it is easy to get employees, to get operators. In China it is different, the company will not invest money in operators, to make their job easier. They will only invest money in the decision maker, to help the decision maker achieve some good result.

**If your product makes the operator more efficient, increased productivity for the company, why don’t the Chinese decision makers believe that to be a good thing?**

The Chinese have a lot of people resources, they are not at this level at this moment. It is different in China, people are not resources. The big boss will not think about employees. It is more important for the decision maker that when their big boss visits their factory or plant or office that they can show the boss that they have some advantage. That they have new technology, so it is about having something that can help them. Bosses of power generation, power grid management are not only employees, but also government officials or employees, so they want to make decisions that can make them climb higher up.

**So this is not a selling point in China?**

No, not in China.

**What do you believe to be their selling points?**

In China it is important with status. Our product (3DP) looks good, it is good to look at. In meetings, conference meetings one wants to show the big boss on video when he has a speech, but if you use cube technology you will split the big bosses head, this is not good. To split the bosses head in several part is not good in a political sense. But our product does not split the head of the boss, so this is good, the decision maker will think this is good. The third is that our product is very modern, the control room design is very modern the eow (extended operator workplace) is very modern. So plants like Shanghai Power that has money wants the modern solutions, the same as in the West, they want to learn from the Western countries. So the decision maker thinks that you provide a more advantageous technology.

**Is it a selling point to say that this is a product that is being used in the West?**

Yes, yes, yes. These three points are good selling points in China. In China it is not so much about productivity level, we have to think another way than in Western countries. So the selling points is that it is better to look at and easier to keep the overview when you work, secondly that it makes the bosses look good and third that it is being used in Western countries and that you invest in new advanced technology. Then the decision maker will think that it is good if the product is stable. The decision makers know very little about the technology, they will think ok, this sounds good, and then they will do it. In China this is currently the selling points, we have to modify it to Chinese thinking.
In the Western countries 3DP consider themselves to be very good on after sales service, do you think that is one of your selling points here?

After sales service is very important. We provide a very good service, but we are only two people and Norwegian customer support do not come here often. Most of the jobs are done by us two people. We do up front sales (visits), sales, after sales, after sales service, we do everything for the company. The thing is we need more resources on after sales service, especially spare parts.

And to source this in China you need a WFOE?

Yes.

But is it a selling point in China that you have good after sales service?

Yes, and if you don’t do good after sales service the reseller will not buy from you any more.

Is it important that the decision makers can see the product?

Yes, it is important with the reference.

Is it maybe an idea to have some showpiece in your office?

Yes, it is very important that the decision maker can see what it looks like.

How many VARs does 3DP have in China?

We have less than six I think.

What are their names?

We have Lantech, Seastar, Huacrete, Eastcat, Golden Bridge, Secway, ABB, in Shanghai we have…….. Immersions.

Do you think we could meet any of these, Immersions for example?

No, not yet.

What about ABB, we talked about meeting them some time ago, do they have any people we can meet in Shanghai?

I contacted ABB, they are centrally controlled from Beijing. They have a show in May 7th, maybe we can go there, I can bring you guys. I think it is the auto industry.
Could we meet your contacts in ABB there?

Yes, yes, yes.

**How do you select the resellers, do you have any strategy?**

So far we select them if they know the industry and the people. Relationships are very important. Simulations and control rooms are very complex to sell, it is important that they know the business and have some relations background in this industry.

**The resellers you have now do they have contacts in the control room market arena?**

Sure, otherwise how could they do the business? We have different resellers for simulations and control room.

**Who are the control room resellers?**

Secway and Immersions.

**How do you train the resellers and customers?**

We train them in what our product can do and how to use it. We do not go to the end user. We train them in how to make the configurations of the product. We visit the reseller and show them how to design a dome or display. We have some demo products to show them. My job is to get relationships with the resellers, control them and make them more loyal to 3DP. Because the resellers have a lot of choice, if I have close relationships with the resellers they will call me first if they get a lead on a possible contract. We give them help on design, product configuration and bidding on the product and after they get the contract they will give the deal to us. That is how we do business here.

**When you say you control the reseller, how do you ensure that he markets and sells the product the way you (3DP) wants it to be sold, that he prioritizes your product?**

We give him the choice. First we tell about our products advantages, unique features, then you can control the end user to use this product. Another way is the price. We have some advantages over Barco and Christie, we have a little lower price compared to them. We are open, we can use any kind of projector, then the reseller can choose us, if they don’t choose our product then maybe next time. We try to give them good options and better price.
Do you think it is any use in China to mention your big clients in the simulator market when you are selling to the control room market? Is that something that can strengthen your reputation, that shows you know what you are doing?

No, it doesn’t matter. Even if we sell to NASA we don’t know what they are doing.

So you can’t just tell the end user that you have sold to NASA to strengthen reputation?

No, no we cannot do that.

What goals do 3DP have in China? Both short term and long term goals?

I think this is a strategy that should be the headquarters decision, I cannot make these decisions. The headquarter should have a strategy on how to deal with this market. It is not me who should make this long term and short-term goals, I cannot do this. Headquarter should have a strategy. They should decide what they want to achieve, and decide what resources they can provide. They should talk with us.

Are they saying anything now, are they talking with you about this?

No, not yet.

Do you miss more communication from headquarters?

Yeah, yeah, yeah.

Do you if 3DP is growing in China now, and how much?

It is stable.

Do you know how much percent of the company’s total revenue that is being brought in in China?

Revenue I don’t know, but China is very profitable for 3DP, I think 30 or 40 percent of profits are coming from China.

Your biggest competitors are Barco and Christie?

We have a local company competing, Huakong. Their technology is the same, they use different products to achieve the same purpose. So I think that headquarters cannot think, even with MEGAWALL 2, that they are unique. In Norway most of the people think that their product is unique, but actually their product is not unique anymore. The thing is they need to use a lot of
resources to expand their business, because their product is not unique. They don’t use any promotion or do marketing or provide more support to get sales, so that is difficult. The resellers have a lot of choice in choosing supplier.

**Do you think that 3DP needs to spend more resources to be successful in China?**

I think that they have to have some resources to spend on this market if they want to go.

**Do you think you need more people and resources than the two of you who are in China now?**

Of course, of course.

**Should 3DP use more resources in protecting their technology in China?**

No, I don’t think we need to spend resources on protecting the technology. There is no use, maybe they could spend more resources on developing new products, develop more selling points. Spend more money on advertising, because the product is not unique, it is common. Because you think you are unique, maybe in one area, but not unique anymore. If you use a lot of resources to protect resources you think are unique when you are not unique it is waste. The big companies can make these functions if they want, because they have more resources than us. Don’t spend a lot of money on protecting the technology, it is not important. We need more to develop more things that makes us different from the competitors.

**With Megawall 2 do you think 3DP has a better product than the competition?**

Sure, sure, sure.

**Do you know if 3DP is registered as a trademark in China?**

No, I don’t.

**What do you think 3DPs strengths are?**

I think that the brand is good, we have 10 years of experience in the simulator industries, and the product is very good. And we have a small organization that makes it easier to communicate. Christie and Barco have a lot of indirect communication. 3DP has very good ideas on the R&D, and we have better product functions.
What do you think 3DPs weaknesses are?

When we have new ideas, new products developed the product launch is very slow because we are a small company with little resources.

What opportunities do you see for 3DP?

It is very big potential in the control room market, like I said earlier. But first headquarters should have some strategy, tell us how many resources they will use here.

What threats do you see for 3DP?

First I think that maybe regulations can change. Like we need CCC certification in China, like the UL certificate in the US. So we have to make certain we know what this is. We have that for our products now, but we must get it for our new products. Another is that our competitors are so big, so they can change their products very fast, also that the resellers can change loyalties, change to buying from other companies.

Have you had any problems getting paid for your products so far?

No, our resellers take care of that part.

If you were to say any geographic area of China that 3DP should target, which would you say?

Beijing and Shanghai. For simulation; Beijing. The decision makers are in Beijing here. For control room and AV market most decision makers are in Shanghai.

When you were hired by 3DP, how did they do it?

I was hired through FESCO.

Your agreement is directly with the headquarters?

Yes.

How is your contract formed, you are paid from the headquarters?

Yes.
What kind of agreement do you have, is it fixed salary?

Yes. I don’t get anything more for taking more jobs. If they have some target it should be good for not only the headquarters, also for the employees.

Do you have any bonus agreements now?

No.

Are you paid overtime? If you work more do you get paid more?

No, there is no advantage for us. Why should I take more responsibility without any more reward?

So I just want to ask, there is nothing happening in the control room market now, no projects for 3DP?

No, because everything is delayed.

What about in simulations?

Just small sales now.

It would be very good to talk to Immersions, are you sure it is not possible?

I will try to help, but it depends on their big boss, it is difficult.
APPENDIX 4: Interview with Mr. Olav Sandnes of 3DP.

OLAV SANDNES

Marketing and sales director in 3D Perception, was the 3rd person in the company (2001–2009).

Date: 17.03.2009

Location: Shanghai, China

Text: Norwegian

Topic: History and views about 3D Perception

Kan du fortelle kort hva 3DP er?

Leverandør av projeksjonssystemer, som innebærer alt som behøves fra kilden, til bilde på en skjerm. Skjermen kan være både flat og buet. Vi involverer oss ikke i hverken materialet eller bildene som skal vises.

Kan du kort beskrive historien til 3DP?


Så det var simulering som var hovedsatsingen deres. I dag er dere mer diversifisert?

kontrollrom ordrene våre. Kontrollrom ligger på 20-25% av totale salg, noe vi ønsker å øke. MEGAWALL 2 er det første produktet som er spesialdesignet for kontrollrom med blant annet standard for å virke 24/7. Blant annet er kretskortet laget slik av hvis et går, trenger man ikke slå av enheten for å skifte det. Tideligere har vi kun brukt simulator-produktene til kontrollrom men det er nå forbedret. Vi prøver å møte kravene til oljeindustrien i Norge, ettersom det er noen av de strengeste i hele verden.

**Hva outsourcer dere i firmaet?**


**Hvordan beskytter dere kjernekometansen deres?**


**Hvor stort er 3 DP i dag med hensyn til antall ansatte, antall salg månedlig/årlig, og er tallene økende eller synkende?**


**Dere utvikler et nytt produkt som lanseres i mai, kan du fortelle litt nærmere om det?**

Det nye produktet er innovativt på mange måter, fullt lastet med alt det kan, og henvender seg helt oppe i pyramiden til de som trenger det mest avanserte. Samtidig har vi sett på det som viktig å lage plattformen billig, slik at vi kan plukke ut software moduler og at det da blir ”dummere og dummere” og være konkurransedyktige selv om vi selger det ”dumt”.
Går dere alltid inn i alle markeder med den nyeste teknologien?

Vi bruker ikke noe land for å melke kua, men når vi driver utvikling er vi litt spesielle, vi bygger med den nest siste teknologien, ikke den aller siste. Vi ser på det som viktig å være på leading edge, ikke bleeding edge. De nyeste og aller siste komponentene som kommer ut har som regel bugs i seg, mens de nest siste er testet av millioner av mennesker. Man slipper barnesykdommer når man kjøper ferdigtestede ting. Vi vil ikke være testkaniner, ettersom det kan koste oss dyrt.

Markedet vårt er ryktebasert. Det bruker vi aktivt i markedsføringen, avsanne ryktene. Folk vet at det kommer noe nytt fra oss, og de nye produktene er veldig smarte. Før trengte man 4 bokser, nå trenger man kun en liten boks – vi tenker utenfor boksen!

Hva er den største utfordringen med kontrollrom?


Hvor mange resellere har dere i Kina i dag?


Når startet 3DP opp i Kina?

Vi har vel vært i Kina stort sett hele tiden. En kontakt vi hadde fra Kongsberg gruppen ville veldig gjerne være reseller, nesten 1000 prosjektorer havnet i Kina. Dessverre hadde vi for lite kontroll og det endte med at vi ikke fikk vite om en del problemer, og begynte å få et dårlig rykte. Derfor ansatte vi Leo og Teddy.

Hvorfør ville dere inn på det kinesiske markedet?

Jeg teller byggekraner. Der det er byggekraner, der kan man se etter business. Og i Kina, var det mange byggekraner. Og når det i tillegg er 1,4 mrd mennesker, da må man inn.
Hvordan har utviklingen i Kina vært?


Hva er målet til 3 DP i Kina fremover?

Det er nok ikke urealistikk i dette markedet å tenke på å komme opp i 50 – 100 millioner. Dagens tall er ca 5 - 10 millioner. Tror potensialet i Kina ligger mye i kontrollrom, men innsen for simulering, og særlig flyssimulering, vet vi at (forut for krise) for å håndtere innenriksflyvningene i Kina, må man ha 10 000 nye piloter hvert år. De må utdannes gjennom simulerer, og man må vedlikeholde gamle piloter også. En ny simulator må settes i drift hver 6. uke. Så i simulering, og også transport på hav, og innenfor kraner, og cargo håndtering etc. Innenfor kontrollrom vet vi at rundt et kullkraftverk settes i drift hver måned her. Den største vekstbransjen innenfor kontrollrom i både verden og i Kina er security og overvåkning. Se på Fudan flyplassen for eksempel, med utallige kameraer og kortlesere. Det er ikke markedsstorrelse eller tilstedeværelse, eller våre produkter som er problemet, men markedskanalene.

Hvor mange konkurrenter har 3DP i Kina? Hva kjennetegner konkurransebildet?


Hvor finnes de fleste kundene deres?

De fleste kundene våre er i Europa og USA, der vi ligger i 2-3 millioner dollar i omsetning. Vi tror at Midtøsten kommer sterkere nå og kommer til å gå forbi. Vi har utstyr liggende både i Anchorage, USA, Magadan i Sibir, Russland, Cape town, Sør-Afrika, Amazonas, New Zealand, Papa New Guinea. Til nå har vi solgt over 8000 systemer rundt i verden vil jeg tro. Vi har nesten ikke solgt noe i Norge selv om all teori tilsier at man skal ha et hjemmemarked. Vi trenger egentlig ikke vite hvem kundene er engang. Vi driver markedsføring mot sluttkundene, men ikke salg mot...
sluttkunder. Det er et sug i markedet at de etterspør turnkey systemer. Så videre må vi nok bli prosjektbaserte og kommer litt mer inn på det. Det stiller mye større krav.

Tradisjonelt hadde 3DP en organisk vekstmodell der overskuddet ble investert i ny vekst. Nå har dere begynt å ta inn venture capital. Hva er den strategiske tankegangen bak dette? Og hva vil dette ha å si for utviklingen innenfor kontrollrom?

Ja, vi har begynt å ta inn penger fra venture for å få kapital fort nok til å sette fart i kontrollrom businessen. Det krever mye, også har vi noen produkter der vi har en window opportunity som vi ønsket å ta. Vi var redde for at det skulle komme noen konkurrenter å gå forbi oss. Vi må ta oss råd til å investere i markedet, det er gjerne en større investering der enn i selve produktutviklingen. Vi vil kunne gjøre de investeringene vi tenker på, å ansette flere mennesker og også ha en service-stasjon her. Men vi vet ikke hvor enda. Shanghai og Beijing ligger langt fra hverandre, og Kina er også veldig stort utenfor disse to byene også.

**Hvordan tror du man skal gå frem for å få større fotfeste i disse markedene?**


**Hvordan har dere blitt påvirket av finanskrisen?**

Can you tell us a little bit about how you market and sell 3DPs product here in Japan?

We are selling mainly to simulator customers; we have a bridge simulator (Ship) and car simulator. There are many companies selling simulation products. We try to sell through them. We are also trying to sell 3DP products in the entertainment market. It is hard to market our products because there exist a lot of competition. It is always me (3DP) that has to contact the customers and visit them. Just in the entertainment sector there are over 300 competitors.

Do you think this approach differs from how they do it in Europe and the USA?

I think our approach is the same as in Europe or the US. We are looking for customers that need to upgrade or replace their current system.

Do you think some of the marketing/sales techniques you use in Japan would be suitable in China?

You know, Japan has come a long way and is already high developed technologically. China has not come that far yet, they are yet to discover the areas in which Japan is excellent. Therefore the competition is not that developed and it should be easier to find customers in China right now.

In what market fields do you experience the biggest interest for 3DPs products excluding the simulator market? Where do their products strengths shine most strongly?

In Japan I think in the entertainment sector. But the control room segment is growing. In Japan we have many competitors in the control room market, Sony, JBC, Barco, Christie, Panasonic and so on. The technology is already highly developed. The customers want to use those big brands instead of a small company like 3DP. It is therefore very difficult to penetrate this market. I think in the control room segment that 3DP has an advantage. Most of the other providers are using cube displays while 3DP is using their seamless technology in order to create a seamless image. But you
know, 3DP in Japan have only one guy, me! - and the workload is too much for one person. It is hard for me to compete with the other firms.

In China one of the main obstacles in selling 3DPs products seem to be developing guanxi or network. In Japan I believe you have the term keiretsu as something of the same? How do you believe 3DP can fastest possible develop their network, or perhaps go around this hindrance?

The Keiretsu functions as a big wall that hinders our ability to penetrate the market in Japan. It is important to keep in touch with the customers every week and every month. It is constant business, and service is very important. Many of the Japanese customers demands high quality in the products and they expect them to work no matter what. If they do no work, then they need to be fixed immediately. Especially Mitsubishi and Hitachi are difficult customers – very demanding. Sometimes they cut the business if we do not respond fast enough. Customers usually talk about requirements and demand that we visit them regularly. A key to getting around the Keiretsu is to give them a share of the profits. This is very Japanese, and big international companies do not like this procedure.

Do you have any opinion as to what you believe would be the most important aspect of a high – tech product to a Chinese end user?

I do not know, because I am Japanese! However, I think that efficiency and productivity is more important than design and ergonomically correct furniture. In the 1970-80s Japan started their modernization. Then Japan started to buy much equipment from the US and started to study technology. Now we understand the technology and can develop it much further. I think in China it is the same situation as it was in Japan in the 1970-80s now. They have just started to open their eyes to the technology and modernization of the Western world. In the control room market much more studying needs to be done for the Chinese companies to compete against our Western and Japanese companies. There are great possibilities in the Chinese market right now. I think that design and ergonometic furniture will be more important in the future in China. I think it will take about 10 years for China to develop and catch up with the rest of the world. The government in China has a lot of money right now and that is good news. In Japan, simulators are a niche market; therefore 3DP can take advantage and be the best. The big companies are more focused on their entire operations. It will be like this in China as well in the future. Therefore 3DP needs to specialize and create advantages for themselves right now.

How do you perceive 3DPs price, quality of product and after sales service to hold up against their competitors?

It is difficult to think about. Barco they are 100 people company. Christie has a big office here. The focus on selling projectors and different parts, we focus on the total solution. Therefore 3DP are more expensive than the competitors. The quality is in general very very good. 3DP are
currently behind on quality in Japan. I think that 3DP is far better than Barco and Christie, but not
the Japanese companies. I think we need more employees and more information from the
headquarters if we are going to improve. If a problem occurs, we need faster and better
communication with the headquarters. Norway is far away from both Japan and China! And not
many Japanese or Chinese customers speak English. If we can improve this we can acquire more
customers and be better at after sale services. It is the communication that is the problem.
Troubleshooting is very difficult. I think it would be better if 3DP had a Western employee with
me, because then they can face the customers and support me in order to show respect. That is
very important I think both in Japan and China.

Who do you consider their main competitors to be?

For control room: Barco and Christie. They have more resources and more employees.

Do you think that it is important to market 3DP products as Norwegian products?

Usually we say that the technology comes from Norway. I give the customers information about
3DP and why they are experts in this area. 3DP is famous around the world, so most people know
that 3DP stands for good quality. I do not think that Norway in particular is known for technology
but most Japanese know of Norway and the high standards of living there. However, Norway does
not have big companies like Volvo or Nokia, but people think of Scandinavia as the same, so
Norway benefits from that.

Do you have any advice for the Chinese employees on how they should improve the business
in China?

I think that the Chinese employees are doing the business their own way. 3DP should be aware of
the risk of loosing Teddy or Leo, because then they will loose their entire operation in China, same
for me here in Japan. 3DP is a small company and compared with their main competitors, they
need to grow in size in order to compete. Customers need support, so a larger office is needed in
Asia.

Do you have any contacts of friends within this business in China that you could put us in
touch with?

No – I am sorry.
APPENDIX 6: Interview with Mr. Zhou Dunren of Fudan University.

ZHOU DUNREN
Professor at Fudan University
Date: 14.03.2009
Location: Shanghai, China
Text: English
Topic: Political advices for the Chinese market, financial crisis in China

How will the WTO agreement affect Intellectual Property Rights in China in the near and not to distant future?

Intellectual property rights is something new in China, it goes against tradition. So therefore in the new commercial markets, few of the Chinese companies respect intellectual property rights. That is very bad, but they are learning gradually. On one hand we see violations for IPR, but on the other hand we see that more and more measures are being taken to ensure that IPR is at least partially respected. Now there are specific courts here in China that deals with the law issue itself, so if your IPR has been violated you can initiate a lawsuit. By doing this you can protect yourself to some degree.

For the Norwegian firm my advice is this: make some assessments themselves to see what parts of the product they don’t insist on keeping secret. Then some core parts of their technology they protect. There is some Belgian company that produces some parts in different zones, abcd, so that some employees have access to zone c but not zone d and so forth. Also they provide two or three days a year for special training class, telling them that they have to observe the rules and respect IPR. Also they have to sign some sort of special contract that must be based on Chinese law. So you still need some legal advice.

it is important to build the IPR consciousness and to build the respect for IPR, that is going to take some time. I would advice the Norwegian company to take care, but I don’t want to scare them. Careful steps are what is important. When you sell the whole machine consider whether they can take it apart and understand the whole technology from that, if there are some intangible values you keep them to your own guys. Maybe there is some technological know-how they cannot copy.

Here in China most of the infringements on IPR are based on fairly low technology and outside appearances. So if you can keep your core technology it is still workable here in China. In other words it all depends. The other side is I’m ashamed to say that some of the Chinese people are not very honest. So you cannot take their word for granted. If they say: We have never copied
anything you still have to take precautions. So maybe the conclusion is that if you are cautious I
don’t think there is a big infringement.

Is there any particular part of China that is worse for IPR, that maybe you should avoid?

That is relative. Here in Shanghai there is stronger law enforcement. On the other hand if you go to
inland city and your technology is very sophisticated the guys you hire will not be able to copy
your technology, so it will still be safe. Here in Shanghai it may not be safe, they are very
sophisticated. So it is two sides of a coin. One thing that is for sure is that if you check all foreign
businesses in China, how many have left, how many have stayed? If many of them stay that is a
good indication that IPR theft is maybe not so bad, or maybe never happened in some cases. So the
possible losses from copying can maybe be tolerated?

Do you see any advantages to be explored for small firms under the financial crisis?

That is very hard to say. Many companies ask me this. There is no guarantee; I cannot be better
than others to predict the future. But my feeling is this now…given the situation right now there
are two things with the Chinese economy: One: the government interference is faster, stronger,
more aggressive, given the nature of the government of our society. Much easier in China to throw
down a 100 million. Also both the government and the people in China have savings. So at least in
theory, given these two factors now, the Chinese economy can survive the crisis, there is no doubt
about that. What is more interesting is this: during the second part of this crisis, China needs to
restructure its economy, deal with excesses and troubles. 4 trillion USD is nothing else than some
anaesthesia to prepare the Chinese economy for an operation. If the operation goes well the
Chinese economy will be healthy. There are positive investments, but there is some doubt as to
whether the government is really decisive. They need to go against some interest groups, the
SOEs, to open the market more, give more market access. This would be in favour of the middle
and small companies. So my judgment is 6 to 4, one cannot be too optimistic. Cautious optimism
is called for.

We have been told that the southern Chinese are more concerned with productivity than the
northern Chinese, maybe not so receptive to this technology, and that therefore it might be
better to sell in the north and in Shanghai. What do you think about this?

That could be true, companies are cutting down on their budgets now. On the other hand China
invests in huge projects, like the energy grid. So they have to monitor many places now, also in the
south. Another thing is a computer balancing the power grid, which can save a lot of energy. So if
one part is overloaded and the other is light loaded, the computer balances this. But in all this you
need monitors, so this is maybe a good idea. The same is true with traffic, with more sophisticated
monitoring of that and the railway, these projects are loaded with money. So the question is you
have to build connections and these guys are bad guys, bureaucrats, but you need connections. Not
necessarily outright bribing, but some ways must be used. Maybe they should use consulting companies. Networking is very important, the government can buy from you or someone else, and the government don’t know what is the better solution. Their decision is not completely based on commercial benefit, but also benefit for them. But there is possibility there. Go around, talk to people, show them brochures and raise some interest. Don’t scare them or overpromise, keep the good stuff for later.

**Does the government look favourably or unfavourably upon small technology intensive firms?**

Small companies account for 99% of number of companies; they have 60% of employees. So it is become more and more important, exactly like in the USA. The small companies are the hirers, the big companies downsize. And this is for all companies in China both foreigners and domestic companies.

It is easier for small companies to establish themselves now than before the crisis. Originally only big companies were welcome. Now they have to look at medium/small companies. Especially if their product line have big growth prospects they will be welcome. You should also talk to Espen Lund from the Norwegian bank here.

If there is some new technical gadget that can sell there is definitely opportunity. It is also probably easier to get employees now. There is some Norwegian teleconferencing company here that you should ask about this now.

**Is there any official policy shift that is positive for small companies?**

Many of the members of the Peoples Congress are asking for a shift in official policy regarding small companies. So maybe some Chinese friends can check on the Internet, I think very soon we should see some policy shift now. Within a month or two perhaps some things, or some promise will come out about possible actions. These are the major topics now, talked about in all news-channels. This is very easy to check. So this is maybe a good time for small companies to consider China.

Your company is Norwegian guys; they are honest guys. They should remember that if anyone is overpromising, they should watch out for him. There are many different kinds of Chinese; maybe they are overpromising. Fortunately at least one manager is Chinese, so maybe this makes it easier.

**Do you see any currency risks?**

The RMB should not appreciate much against the dollar. Even though there is a lot of talk about it I do not think that the RMB will be allowed to fully float, I do not think the Chinese government will take this step. The exchange rate will be more or less stable.
One more thing to remember is that there are so many foreign firms in China now, financial and political stability is good for them. So this means now that this is more guarantee that there will be stability. Also we don’t have free media, so they don’t talk things down or up so much like the newspapers in the West. This also indicates more stability.

**Do you think the Expo will help the Shanghai economy?**

That definitely will help, but how much that will help now is not up to Shanghai. It depends on the outside world, how many will come. When we applied for the Expo we did not foresee anything like the tsunami today. Let me put it this way: Shanghai is in a better situation than the rest of the China, because of the Expo, but you cannot overpromise.
APPENDIX 7: Interview with Mr. Martin Nickelsen of the 17-group.

MARTIN NICKELSEN

General manager of the 17-group

Date: 17.03.2009

Location: Shanghai, China

Text: Norwegian

Topic: How to deal with Chinese agents and end customers.

Can you give us a short version of your job description, your operation here in China and why the 17–group was founded?

Vel, poenget med at vi er her er rett og slett for å ha et tilsyn med agenten vår TechWay. Så min jobb er å ha tilsyn med agenten, og vi her tar oss også av markedsføring, være på utstillinger og den type ting, agenten er ikke så opptatt av markedsføring. Vi driver også med sourcing, og der går vi ikke gjennom agenten. Men det er ikke satt skikkelig i system enda. Når vi etablerte oss her så var det for å være et felles brohode for bedrifter som ville satse i Kina, men ikke hadde ressurser nok, eller ikke ønsket å bruke mye ressurser på å følge opp en agent på egen hånd. Og man ville introdusere skipsutstyr på en samlet måte i Kina, verftsindustrien hadde våknet opp med hensyn på eksport til Kina etter at Deng Xiaoping åpnet opp.

Så 17 gruppen startet opp et limited company i Hong Kong, der er det ingen da og fra det startet vi et representative office i Kina. Så for de som er medlem av 17 gruppen er det et krav at de bruker agenten vi har valgt ut, med mindre de etablerer eget kontor her nede, da kan de selvsagt velge agent fritt og holde oppsyn selv. Så agenten har sitt netværk mot kundene våre, som da er verftene. Det er de som har den direkte kontakten, det er ikke jeg blandet inn i det hele tatt. Leveringen finner imidlertid sted gjennom direkte kontrakt mellom bedriften i Norge og verftet her da. Det vi opplever er at det er veldig mange vestlige som da bestiller sine båter her, og de vil gjerne ha norsk utstyr i sine båter her nede. Det samme gjelder gjerne i offshore, de vil ha norsk eller vestlig utstyr da i sine rigger, Norge har et veldig godt røykte innessom denne sektoren altså, opprinnelseslandeffekten er god. Men vi har ikke noe særlig å gjøre med offshore da. Mye av grunnen er også at kinesere ikke gir etterservice, kanskje bedriften til og med er forsvunnet, derfor foretrekkes vestlige.

Når det gjelder agenten er kanskje vel mye av makten samlet hos agenten, det er han som har serviceenginnerer i sin stall som våre medlemmer bruker, og som har den direkte kontakten med kundene som sagt. Så man kan spørre seg, hvis vi bryter med agenten en gang i fremtiden hva skjer da? Men jeg skal ikke legge skjul på at de fleste av medlemmene er veldig glade i agenten, det er ingen krigssituasjon.
How long have you worked for the 17 – group?

Jeg har jobbet her i 5 år, men har vært med på medlemssiden før da.

Does the 17 – group do any business in the offshore sector? Building of oil – platforms etc?

Nei, per dags dato gjør ikke vi det. Jeg har noen kontakter der, men vår business foreløpig er innenfor shipping. Dette er blant annet på grunn av TechWays holdning, de vil jobbe mot verftene, men også bedriftenes kapasitet hjemme. Nå har det jo vært flere veldig gode år og da har de på en måte hatt nok med å møte etterspørselen fra shipping.

Why do firms join the 17 – group, what are the most common reasons?

Fordi vi har et tog som går på en måte, vi har et ferdig oppsett som fungerer. Og hvis alle kriteriene passer inn tar vi inn mye medlemmer basert på det, men det er klart at hvis et medlem vokser veldig mens de er hos oss er de jo fri til å starte opp sitt eget, når babyen er klar til å gå så please walk! Men det er to års bindingstid da, og mange er fortsatt medlem hos oss selv om de har egne operasjoner nå, vi fungerer jo også litt som en lyttepost. Våre medlemmer jobber gjerne world wide og kan ikke bruke så mye tid på å konsentrere seg om Kina som jeg kan gjøre, så jeg sender ut informasjon jeg kommer over til de medlemmene jeg mener kan være interessert i det. Kineserne har nemlig ingen kultur for å drive informasjonsarbeide. De elsker å snakke om positive ting som har med penger å gjøre. Dårlige nyheter deler de ikke! Det jobbet vi veldig med med agenten, dårlig informasjon er jo mye viktigere enn dårlig informasjon, det er jo det du lærer av! Dette forsto ikke agenten før vi hadde jobbet mye med dette. Vi jobber fremdeles mye med dette, det er veldig tungt altså.

Why do they leave?

Fordi de blir så store at de ikke ser noen merverdi med å være med, alt det som 17 gruppen ga dem ordner de med selv. Men har de vært inne i Kina er det ingen som totalt trekker seg ut, de er her på en eller annen måte. Samlet har det vært ca. 40 grupper innom 17 gruppen fra vi ble etablert i 1984.

The company we are writing for use local agents and are focusing their activities towards land installations, however they have a strength in the offshore market through place saving technology. How could they enter the offshore market do you think?

Penger. (Nickelsen gnir fingrene mot hverandre), kineserne gjør jo gjerne sånn. Men det er jo også godt mulig at agenter man eventuelt jobber med ikke skjønner hva offshore er. Er det shipping, er det fiskebåter eller hva? Men her tror jeg ikke at de skal bry seg så mye om hva som skjer på verftene, her er det rett og slett viktigere å jobbe opp mot de oljeselskapene som skal ha ting
bygget her. Du må inn hos oljeselskapet, snakke med de, legge igjen visittkort, avgjørelsen skjer på toppen her. Mann må inn tidlig altså, gjerne før de har bestemt hvor de overhodet skal bygge. De legger til rette for hele prosjektet gjerne før de forhandler med verft. De kinesiske selskapene er vel Sinopec, Sinoc og China Petroleum.

Dere sier at de jobber med NASA og ABB, det er verdifull ballast å ha med seg. Hvis de jobber med slike selskap kan kundene tenke at hvis dette selskapet jobber med de, så kan de også gjøre det. Så er det viktig for selskapet å få tak i en agent som har venner i disse oljeselskapet, det går veldig mye på netverk altså. Et selskap som var med i 17 gruppen før jobber mot offshore, NORAC heter de. Og de gjør business her da. Det hender jo at TechWay snubler over kontrakter til NORAC og da gjør de gjerne business på den spesifikk kontrakten.

Forøvrig er det jo slik at det er oljeselskapene som til syvende og sist bestemmer hvem de vil ha utstyret levert fra, og nå etter krisen er det kjøpers marked i forhold til verftene, kineserne har jo bygget veldig mange verft de siste årene. Så hvis deres selskap klarer å selge seg inn til oljeselskapet er det gjerne de som blir valgt da.

**How do you ensure that the agent markets the product the way you want him to and sells you product the way you want them to be sold?**


**Do you think it is easier or more difficult for a small firm to establish themselves following the financial crisis?**

Det er nok lettere, det er lettere å få tak i arbeidskraft. Kineserne er nok ikke så kravstore nå, det finnes jo kinesere som har både tre og firedoblet lønningsene sine de siste årene, det er jo ikke tilfelle nå. Nå må de kanske gå litt nedover på stigen igjen, de fleste kinesiske firmaene har jo sagt at deres folk må forberede seg på å gå 10 – 20% ned i lønn de neste to årene. Lojalitetsfaktoren på dyktige folk er jo nesten null. Og hvis de er ilagt karantene følger de jo ikke dette, de begynner jo hos konkurrenten umiddelbart. Det er bare noe som står på papiret, og du må i så fall ha tallfestet et oppgjørsbeløp hvis de skal ha karantene. Men i praksis følger de jo ikke dette uansett.

**What would be the key issue for a small company that wishes to grow in the Chinese market the coming few years?**

De trenger gode referanser, og de trenger en person som kjenner markedet de skal inn i, for eksempel en person som kjenner oljemarkedet dersom de skal inn der da. Og selvfølgelig trenger de en viss kulturforståelse, oppføre seg som om de kommer fra et møblert hjem hvis de skal jobbe

**How would you view further resource investment in China for a high tech company in the present macroeconomic climate?**

Mange vil vel si at det er negativt, men jeg vil si at det er positivt. Hvis du har cash da. Nå som det er dårlige tider er det mye lettere å komme inn hos folk, bruke tid på å snakke med potensielle kunder og bygge kontakter. Hvis folk har lite å gjøre tar de seg gjerne tid til å snakke med deg og husker deg når de skal bruke penger senere.

**What can one do to protect IPR if one is present in China?**


**When would a WFOE be a better solution than a representative office for a small firm?**

Hvis du skal kjøpe og selge internt i Kina må du ha et WFOE. Hvis du skal handle i RMB må du ha ditt eget selskap, så sann sett er det jo en klar fordel. Men du må jo investere mye penger da, nærmere en million NOK mener jeg. Og det forandrer seg gjerne fra måned til måned nesten, og du må tenke nøye igjennom hvor du skal lokalisere. Men det gir en bedre standing i Kina å ha en WFOE her i Kina. Forovrig er det viktig å tenke nøye gjennom hva du har i formålsparagrafen din, for å endre dette tar et halvt år.

**Do you see guanxi as important for small companies? Is it more or less important than for big companies, and is it more or less important for high-technology companies?**

Ja altså, du må jo ta det veldig trinnvis da. Når du skal selge ting i Kina er det gjerne først noen møter der du bare prater om vær og vind, man bør absolutt ikke buse på med salg første møtet. Så det å bygge relasjoner er viktig, kanskje enda mer viktig for små firma ja. Hvorvidt det er viktigere for høyteknologifirma vet jeg ikke.
What strategies would you suggest to avoid being entangled in corruption and still turn a profit?

Bruk av agenter er veldig utbredt, iblant er det agenten som skjønner at du har en kontrakt i lomma. Da er det gjerne sånn at du har tilbudt et salg for 50.000, så da tar agenten seg av forhandlingene derfra og plutselig har du en kontrakt på 62.000. Da gir agenten deg beskjed om at du får 50.000 av de for det har du jo sagt ja til, resten betaler du til agenten som special commision. Hva agenten gjør med de resterende 12.000, eller mark – up’en har du ingen kontroll på. Kanskje tar han alt, kanske deler han ut, det vet du ikke. Sannsynligvis deler han ut noe, men tar mesteparten selv. I oljeselskaper er vel kontroll med korrupsjon bedre også. Men i Kina er det noenlunde ordnede former på det her, i Vietnam er det mye verre. Der er det helt texas, i Bangladesh er det også helt vilt.

Sånn rent avslutningsmessig lister Nickelsen opp betingelser for å være medlem i 17 gruppen:

Hvis dette selskapet er interessert i å være med i 17 gruppen er det mulig altså. Da kan de komme inn uten å bruke TechWay og jeg kan skaffe de en skikkelig agent, men da må de kutte ut nåværende agenter da. Betingelsene er jo da at de må betale en inngangsbillett på 150.000 som de ikke får tilbake og det er bindingstid i to år. Utover det kan jo jeg tipse de om litt kontakter jeg har i oljebransjen privat da, det gjør jeg gjerne.
**APPENDIX 8:** Interview with Mr. Mark Schaub of King and Wood.

**MARK SCHAUB**

Mark Schaub specializes in foreign direct investment, M&A, compliance, intellectual property and private equity investment in China. He has worked 10 years at King and Wood Law Firm.

**Date:** 19.03.2009  
**Location:** Shanghai, China  
**Text:** English  
**Topic:** Legal advice on doing business in China

*How could a representative office, legally conduct business activities?*

Well, normally a rep office shouldn’t be doing business, though many of them do. They can’t import and shouldn’t even enter into contracts. Normally they would just represent the mother company, I don’t really see why they (3D Perception) work through agents to tell you the truth. So if the mother company work through agents they might work as a liaison, so I guess an agent is somebody who has a very similar function to a rep office: Someone who would organize a contract, but not fulfil a contract. So rep offices don’t work through agents that often because it’s a little like double work actually. A rep office can also run around talking to people, nobody is going to stop you in practice, trying to find someone to buy your products. Distributors might be something that might be more usual, a distributor that enters into contracts on their own, selling the products on his own behalf, and the rep office might function as some kind of liaison, maybe provide some training, maybe some backup. That’s how a representative office might help a company like that.

*Would it be possible for a company with representative office to hire local employees themselves, and then assign them to work for the representative office in China?*

Hiring people themselves is even worse than a rep office doing it. Anyway, normally you would like to outsource the HR function anyway. If you just want to use an employment agency such as FESCO as a hiring entity then you just pay a small commission so I don’t really see it as a disadvantage to do it this way.

*So it would not be possible to hire someone through Norwegian channels?*

I don’t think you can really do that, or I mean, I’m sure people do do it. But the best way would be to find the employee yourself and then just pay FESCO to do the actual hiring for you.
What kind of taxes would the rep office have to pay?

Normally they pay taxes on a deemed income basis. That means that if you spend a million dollars a year on this then they’ll deem that approximately 10% is your profit and then they’ll tax that 10% and you have to pay tax. So it’s really pretty simple, but you should get somebody, a lawfirm, to do it. The biggest problem with rep offices is often that people don’t think they have to pay taxes and then they have that problem. So I don’t think it’s that complicated I think it is pretty easy to do.

Does the Paris Convention for the Protection of Industrial Property (1985), the Patent Cooperation Treaty (1994), and the Agreement on Trade-Related Aspects of Intellectual Property Rights, offer any real form of legal protection for foreign high-technology firms operation in China?

Not really, no, it does not. Normally you rely on the laws here, I think it’s difficult to say, I think the problem is there is a few things that are different from the West, but many companies when they come to China think that it is a very demanding environment for IPR so they just don’t do anything. So that makes it very difficult.

For example, many companies don’t even register their trademark, so if I registered that as my trademark why would I be doing something wrong? I definitely wouldn’t do anything wrong under Chinese law. In the west it is on a first to use basis, but it doesn’t work like that in China. So maybe if 3D Perception as you say rely on being cutting edge in the Western market, they should do that here as well. They should register their trademark though. I doubt they are relying on peoples’ good will in their home market. Things move so quickly here that the court system is not a good solution either maybe. But a trademark only costs 500 euros to register.

And these guys don’t seem to have the problem most people have, because they operate in a world without patents and secondly they are a very niche player. This is often more a problem for the main markets and fast moving consumer goods. So the biggest problem would maybe be an ex – employee. I can’t understand why IP should be a reason for this company not to do business in China.

3DP is considering establishing a WFOE in China, what would be the benefits from that versus a representative office? They are also considering cutting out the agents and VARs, what would be your comment?

Well obviously it is the way to go if you want to do direct sales, but until you have a large enough volume of sales that you want to have a company here to act as a trading company you might as well just have a representative office. With a company here you could also have some of these simulators here so that people can have a look at them. In a Waigaoqiao, that is a free trade zone,
where some people that have some very expensive equipment can set up their equipment there to showcase their product and have a training room, you don’t have to pay taxes or VAT. It’s a good place to have your equipment if it is very expensive or changes often, so it’s basically a logistics place. If they are really keen they might want to set up a waigaoqiao type of entity. But I don’t know how much money they want to spend there, so maybe for the 5 first years they might just want to stay with the rep office. So if they want to establish a WFOE I think the best solution might be to establish a Waigaoqiao type of company where they can do both showcasing and training as well as direct sales. I think it is improbable that they can get rid of all the resellers, it seems unrealistic to me that a small Norwegian company can cover the whole of China, it is a big country after all. A waigaoqiao company can also directly income stuff. So based on the information I have that would probably be the way to do it. Especially if they think it’s important to have a demonstration model. If you look up American Manufacture Waigaoqiao, google it, you could write them an email and visit them, see what they have done like.

The rules for everyone changed in 2008 - uniform Company income tax of 25% now. Exceptions are very few and complex (ie difficult to advise fully in a few sentences.)

Are there any particular things to consider when you apply for your business scope?

Well, it is pretty simple for your guys. They just want to sell and do after sales. If you were doing manufacturing that would be more difficult or if it was a restricted area, but for this I don’t foresee any big trouble.

The company’s Country Manager in China handles all contact with the company’s agents in China, in fact the home office has no control over who these agents are or how they operate. Is this a common strategy in China?

They should sack him, that’s ridiculous. There is no cultural thing, no “face” in this; they should fire him, that’s ridiculous. In most distribution arrangements you try to get his mark up plan, who he is selling to, so that is for the distributor who buys your product. So if it is your own employee that doesn’t disclose this information that’s leverage. So if this guys walks out the door, they have nothing. They have a sales office and don’t know who they are selling to, it has nothing to do with cultural stuff, that’s just ridiculous.

As I mentioned an ex – employee would be perhaps the biggest problem and that could be this guy. I’m not so worried about the IP, I’m more worried that the company doesn’t seem to have spent much time on their representative office. I wrote in the book (China: Art of Law), that if the management doesn’t visit China, if you are not involved it doesn’t matter if you own it, it’s not yours. If you don’t know who you are selling to you’re not really the boss.

The country manager might be a good guy, but I think somebody from Norway either living in China, based that would be the best I think, or regularly visiting here is necessary otherwise it’s
not your company. Most Chinese people have some image of being the big leader, not all Chinese are like this, but if this is a small company and you allow them to think this way then they will think this way. But if you treat them as a team player, they know they have a boss, the Norwegian boss comes here that is a good thing. I wouldn’t trust a Chinese guy I don’t know very well, even in our law firm many employees leave the firm at the drop of a hat for a slightly better offer. I don’t think loyalty is a very strong Chinese characteristic.

For a high tech thing I don’t think the Chinese are the best at selling these things. It might be better to have a Norwegian travelling around selling it, of course he should have a Chinese with him, but people still tend to favour foreign products. Even speaking Chinese is not a core issue, of course it helps, but a Danish firm actually changed their Danish engineer in China for a engineer from Hong Kong, which I didn’t even know existed, I had no idea you could get an engineer from Hong Kong, but he went around and there were a lot of complaints. So what the clients actually preferred was a foreign engineer. You know, if the Chinese love Chinese so much, why don’t they buy the Chinese products? Of course it would be ridiculous to have a hundred Norwegians running around, but if you want to be serious you should at least have some Norwegian spending have the time down here.

If the Chinese manager doesn’t give you very direct answers that’s very interesting. Foreign companies always forgive everything because sales are going up, but in the end of the day it’s the products that sell, not the person. Like for example if you read the China CEO book all the CEOs talk about how important relations and guanxi is, but the reason they bring it up is because it gives them a big advantage over any other guys coming in to replace them. End of the day if you are the CEO of Coca Cola it doesn’t matter who you are, as soon as you lose that job you are a nobody. If I get that job, then I’m suddenly very important. So it is a very bad idea putting all your eggs in one basket, it’s not a very corporate way of doing things although people make a lot of excuses for it here in China.
APPENDIX 9: Interview with Mr. Carl Arthur Solberg of BI Norwegian School of Management.

CARL ARTHUR SOLBERG

Professor at the BI Norwegian School of Management. The author of the book “International Marketing”.

Date: 24.03.2009
Location: Oslo, Norway
Text: Norwegian

Topic: Tips on international business, especially small technological companies

Hva er ditt fulle navn?

Carl Arthur Solberg.

Hvor lenge har du jobbet som professor på BI?

25 år, men ikke alle årene som professor.

Hva er ditt spesialfelt innenfor forskning?

Internasjonalisering og strategier.

3D Perception er en såkalt ”Born Global” bedrift, er det noen modeller du mener er spesielt egnet å bruke for en slik bedrift?


Er det mulig å bruke Solbergs 9 vinduer i en analyse av en born global bedrift, og hvordan kan man eventuelt vinkle bruken?


3D Perception selger sine produkter til value added resellers i Kina som customizer produktene til sluttkunden, dette er forøvrig deres forretningsmodell i alle markeder. Hvilke fordeler og ulemper ser du ved en slik forretningsmodell?

Jeg tror nok at med så få ansatte så er dette den beste måten å gjøre det på. Det virker som at de har et diversifisert reseller apparat, som har begynt å bli litt sånn glad i dem. I Kina vil det dreie seg om å identifisere kunder og å gjøre seg deilig hos dem.

Hvilke strategier for å unngå korrupsjon vil du anbefale et lite selskap som jobber i emerging markets?


3D Perception har nettopp hentet in venture capital, med påfølgende endringer i styret. Hvordan kan dette påvirke bedriftens holdninger og forankring i forhold til risikomarkeder?

** Hvordan bør en høyteknologisk bedrift som 3D Perception gå fram for å beskytte sin kjernekompetanse når de selger til bedrifter i Kina? **

Det kommer an på hvor kjernekompetansen ligger. Siden kjernekompetansen ikke nødvendigvis ligger bare i produktet men også i å innstallere det og få det til å fungere på en fornuftig måte.

**3D Perception opererer i et marked der de er svært utsatt for kopiering. Har du noe syn på hvordan de best kan differensiere seg for å unngå å miste kunder/markedsandeler?**


** Vi har intervjuet flere personer om hvordan strategi man bør følge i Kina, et av tipsene som dukker opp jevnlig er at man bør ha en nordmann som jobber fast i Kina for å ha kontroll på situasjonen heller enn kun å ansette lokale. Hva tror du om dette? **

Ja det er helt sikkert fornuftig. Det er et kostadspørsmål ettersom lønnen vil være betraktelig høyere. Det er et pengespørsmål.
Tror du det er verdt den ekstra kostnaden?

Det kommer an på hvilke andre måter de kan beskytte seg på.

Hva bør 3D Perception være mest oppmerksomme på når det gjelder å operere i et marked som Kina?

Veldig viktig å passe seg i forhold til kulturelle aspektene. Forutsatt at produktet er godt, fungerer, lett å bruke, prisen ligger der den skal, de har gjort hjemmeksa si osv. Er alt dette på plass kan det allikevel skjære seg fordi man ikke har skjønt den kulturelle biten. Men det er også viktig å skjønne hvordan situasjonen i kjeden er. VARs er kjøpere, de får kontrakten. Det er viktig å komme på en såkalt liste hvor du er preferert. At du er nummer 2, 3 eller 4 og har vært igjennom screeningen. For denne typen produkter er det mer enn top of mind; må du ha visse kvaliteter og funksjoner, de må tilfredsstille kravene, har du ikke det så hjelper det ikke om du er top of mind. Den kvaliseringsrunden må de nok gjøre selv hos sluttkunder, ikke hos VAR's'ene. Hvilke sluttkunder kan mest sannsynligvis stille de kravene vi er best på å tilfredsstille? Hvordan skal vi finne disse sluttkunderne?

Ser du noen fordeler eller ulemper med at de har brukt "piggybacking" som strategi i mange tilfeller?

Jo lettere man får tilgang til informasjon jo bedre. Har man relasjoner også er jo det veldig bra. Men det er viktig å være oppmerksom. En av de ansatte har kommet fra Barco, det er veldig bra med tanke på at han da har mye kunnskap og antageligvis kontakter. Men det kan også være skummelt. 3D Perception kan selv kanskje være utsatt for tilsvarende, man må finne ut hvorfor de gikk derfra. Var det pga lønn, eller at de ikke likte sjefen i Barco? Jeg tror at du har et godt utgangspunkt, men at det er viktig å se hvordan man kan knytte disse ansatte opp mot bedriften for å unngå å miste dem.

Hvordan tror du finanskrisen kommer til å påvirke små teknologibedrifter fremover?

Det er åpenbart at ting ikke går i oppoverbakke, men bortover og kanskje litt nedover. Det kan kanskje være viktig å ikke trekke seg ut, men holde seg parat, så man er klar når ting kommer i gang igjen, for det gjør det jo kanskje, eller helt sikkert, det er bare et spørsmål om når. Her har du også problemet som kan oppstå med den stakkars venture kapitalisten som står og venter på pengene og tror han får det til neste år eller om to år og ikke får det før om fem eller seks år. Han kan begynne å gå lei. De som er problemet og spesielt kanskje for born globals hvor det er mye usikkerhet, er at en stor kapitaleier stiller krav til ledelsen som er enten umulig å innfri eller som er irrelevante i forhold til situasjonen de er i fordi de ikke har den innsikten som er nødvendig for å utvikle bedriften videre på en fornuftig måte. Det er nok en stor utfordring i tillegg til finanskrisen.
3D Perception operer hovedsakelig på bedriftsmarkedet. Er det noe man burde være spesielt oppmerksomme på her?

Dere får lese gjennom boken til Biong og Nes. Det som kanskje gjelder spesielt for slike bedrifter på et slikt marked kan være de lange beslutningstidene det tar før man endelig går til innkjøp av et slikt produkt. Her kan korrupsjon ha noe å si, kanskje noen har fått en ny instruks fordi det har kommet inn nye penger som man ikke har kontroll over. Når det gjelder små bedrifter er problemstillingen den samme. Problemet er større for små bedrifter ettersom beslutningsprosessen er relativt kompleks. Det er nok det jeg kan supplere med.

En måte å redusere "legal" risiko er å avtale at en eventuell disputt skal løses gjennom rettssystemet i et tredjeland. Hva er ditt syn på en slik løsning for en liten bedrift med begrensede ressurser?


Har du noen andre tips du vil gi ettersom de er små, kun 25 ansatte og de har begrensede ressurser, samtidig som de har et høyteknologisk produkt og operer i fremmede markeder?
I forbindelse med introduksjon med markedsføring i Kina måtte det være at ting tar tid. Det tar kjempelang tid. Man må være tollmodig. Det er det ene, det andre er at selv om de har to kinesere der ute, dette vet de sikkert, men de må ikke bare at ting tar tid, men de må ta seg tid, til å være der, bli kjent med netværket, og forstå tingene. Jeg tror ikke det er nødvendig å ha en mann der selv, det spør på de to ansatte der, men de må ta seg tid til å være der, kanskje en eller to måneder av gangen, lære både disse to og kjenne, og deres netværk å kjenne, og vær der en stund, reise med dem, drikk med dem, bli kjent! Vær der når det gjelder, det du kan løse med telefon til Sverige, er det ikke sikkert du kan løse med en telefon til Kina, og hvertfall kan du ikke løse det om du ikke har vært der lenge og har den tilliten som er nødvendig. Det er rådet jeg har å gi, og da må du sette av tid og penger til det, for ting tar tid.

I forbindelse med de to ansatte i Kina, har vi også tenkt på dette med at 3D Perception er veldig utsatt for bureaucratic amnesia dersom de forlater bedriften.

Ja, så fint ord da! Bureaucratic amnesia. Det gjør de helt klart, så de er veldig sårbare. Og da gjelder det å ha utviklet innsikt i lokale forhold mer enn bare akkurat der.
APPENDIX 10: Interview with Mr. Henning Kristoffersen of BI Norwegian School of Management.

HENNING KRISTOFFERSEN
Expert on China from BI Norwegian School of Management and Fudan University.

Date: 18.04.2009
Location: Shanghai, China
Text: Norwegian

Topic: How the Chinese market differs from the western, with focus on guanxi and Chinese vs. Western employees.

Du beskriver guanxi som at det er nesten noe magisk i Kina, vi lurte på om du kunne si noe overordnet om hvordan man som et vestlig firma skal takle guanxi:

Poenget er vel at i Kina så er det veldig toft forretningsmiljø her, det er rett og slett liten tillit blant aktørene i forretningsene her, det er veldig mange grunner til det; Man stoler ikke på myndighetene, ikke på de ytre rammene osv. Det man stoler på er sine egne kontakter basically. Så da er det sånn at det må du forholde deg til enten du vil eller ikke. Hvis du skal hit er du nødt til å ta dette på alvor, og du må skaffe deg kontakter som kan hjelpe deg, du må ikke være naiv i forhold til det. Det er veldig mange sånne ting som er utfordringer uansett hva du er ute etter i markedet. Jeg tror det er en rekke utfordringer på den biten ved å komme inn her. Men den største utfordringen uansett tror jeg vil være markedet og salget her for det produktet. Det første jeg tenker på er kopiering.

Som mange andre firmaer har 3D Perception den ideen om at IPR beskyttelser ikke fungerer i Kina så derfor har de det ikke.

Hvis de har det er det det fint, og hvis ikke er det ingen krise i forhold til Kina. Det ville jeg ikke brukt fryktelig mye tid på det, det er en vurdering de må gjøre. Om du har det kan du bruke det som et selling point, men det er overhodet ingen garanti for at ingen kopierer det! Det er på en mate hvordan de skal kopiere seg for å selge produktet og få en posisjon, for de må jo regne med at produktet blir kopiert, så de må sikre seg en posisjon. Det er det jeg ville brukt tid på å prove å tenke ut hvordan man kan gjøre det. Her kommer alt dette med nettverk, guanxi, mulig partnere osv, inn da, på den biten. Det er nok det første de må vurdere. Hva skal man fokusere på, hva er the selling point?
Guanxi og korrupsjon ligger Ganske nærmere hverandre. Når blir det korrupsjon og hvordan skal man takle korrupsjonselementet i Kina?

Der tror jeg du får liten hjelp i Kina. Du må finne din egen grense. Hva du mener er akseptabelt å gjøre i Kina. Det er klart at det er ganske opplagt korrupsjon om du har et salgspersonale som har rode konvolutter med penger som går frem og tilbake det er jo problematisk, og det er mange selskaper som ser gjennom fingrene på det. Det er i salgsleddet det gjerne er problematisk og om du skal inn i et nytt marked, hvordan skal du få innkjøperne til å kjøpe ditt produkt? Hvis det finnes noen tilsvarende løsningen som kinesiske selskaper selger og de ikke er helt fremmede for å betale et innkjøpet et eller annet, så er det vel ikke noe annet råd å gi enn at dette finnes, det må du bare være klar over også må du må en mate finne ut av hvordan du skal takle det, hvordan du skal klare å komme deg inn i markedet uten å drive med korrupsjon, og hvor langt du er villig til og mener det er forsvarlig å gå med tanke på hva du kan tillate i Norge osv. Men du får ikke noe hjelp fra det kinesiske markedet, du må ikke være naiv der, men det er en stor utfordring, spesielt når du skal inn med et nytt produkt, som selvfølgelig truer et eller annet, for du skal jo få noen selskaper til å velge en annen løsning enn den de har, og da kan du jo støte på det i kina at en del innkjøpere har goder fra kanskje de andre produktene de allerede har, og for dem er det ikke sikkert at det er noen fordel for at det kommer inn et nytt produkt som er bedre, for de har sin kickback på det andre produktet. Dette er en del av businessen i kina og det er ganske knote. Da kommer du igjen inn på at du må ha dine egne guanxi som kan hjelpe deg. Så det å tro at guanxi automatisk er korrupsjon er feil for det kan være det, men det kan også være det som hjelper deg til å ikke være korrump. For du finner da en kanal som er ren. Det er en utfordring.

De har to kinesiske ansatte. Gjennom disse har de kontakt med VARs. De har ingen vestlig ansatte i Kina. Hva tror du om fordelen og ulempen ved dette?

Fordelen er klart, du trenger kinesere. De skjønner hvordan opplegget fungerer og de har connections osv. Det du taper er kontroll, du taper kanskje også litt kredibilitet eller prestisje i forhold til produktet, for ved å ha en vestlig her sender du også signaler om at du investerer, og en vestlig person kan brukes mye i wining og dining, som ikke er uvesentlig her i kina. Du hjelper de lokale ansatte, for de vet hvordan du kan bruke den vestlige. Du kan gjøre en forskjell. Mange vestlige CEOs sier at de gjør ingen praktisk business her, de rapporterer tilbake til HQ hjemme så de vet hva som skjer og de gjør den dining wining biten, de er maskotter eller utstillingsdukker. De gir prestisje til produktet. De to tingene kan være nok til at man skal vurdere å ha en expat her, men det koster jo voldsomt. Men jevnlige tilstedeværelse er viktig.

Har imaget til et produkt mer å si i kina enn selve attributtene?

Ja det tenkte jeg litt på fordi hos oss i Norge er det nok at produktet er ergonomisk riktig osv. I Kina betyr ikke dette noen ting, at arbeidstakernes omgivelser er bra. De sitter på en bøtte og jobber. Jeg tror ikke dette er noe å spille på, det er nok lenge til Kina kommer dit at de vil investere på det nivået der. Men det kineserne kanskje vil investere i, kan være å spille på det teknologiske,
International Marketing Thesis 2009 - 3D Perception

det siste, det moderne. Det vet kineserne å sette pris på. Det blir litt sånn prestisje biten i det. Det man kan spille på er at man kan tiltrekke seg de beste arbeiderne, at de jobber på det hippeste stedet. Arbeidsmarkedet er slik at de beste i Kina er det kamp om. Og kineserne tenker også sånn at de vil gjerne jobbe i selskaper hvor de føler at de er I front, her lærer jeg masse og utvikler meg. Der er det nok potensial!

Er det slik at Nord-Kinesere bryr seg mer om image, mens søør-Kineserne bryr seg mer om produktivitet? Shanghai ligger utenfor.

Det rimer ikke helt med førsteintrykket mitt. Jeg vet at i Bejing er det litt sånn at de er kongene i kina, det er politisk sentrum og de har høyt bilde av seg selv som her i Shanghai. Jeg tenker at shanghainesere er veldig sånn brand bevisste, de er veldig på å tjene penger. Image er nok fryktelig viktig. Sør er jo den store produksjons fabrikken. Der ligger all produksjon av klær osv. Så har du Hong Kong som er veldig moderne igjen. Det er vanskelig å generalisere. Generelt sett tror jeg at face faktoren er viktig, kineserne er interessert i å betale en god del for prestisje, sosial anseelse, mye mer enn vi gjør i Norge. Jeg tror de må finne noen sånne ting som treff.

Tror du Kineserne er villige til å betale for et slikt produkt som 3D Perception selger, eller er de veldig prisbevisste?

Jeg er skeptisk siden dette er et litt sånn back-office produkt, og jeg tror at pris betyr ganske mye, jeg er redd for at dette er litt dempende på muligheten for å selge det på same måte som i vesten. Men jeg tror uansett at de må prove å selge det som høyteknologisk og kult. Man må nok selge inn at dette kan brukes I markedsføringen av dette selskapet. At de da kan tjene på sitt salg ved å ha dette produktet.

Vi tror at det kan lønne seg å gå inn på energy grid control center ettersom de er i enorm vekst i kina. Har du noen kommentarer der?

Det har du rett i, det er en industri i kjempevekst. DNV for eksempel holder veldig mye på med den biten av Kina. Det høres helt riktig ut.

Hva bør 3D Perception tenke på i forhold til face, hva bør man være forsiktig med å gjøre?

Kan det være en ide å stykke opp produktene, ikke selge totalløsningen, men kun enkeltprodukter?

Ja, kanske. Dette produktet i seg selv er jo et veldig teknologisk produkt. Det er nok kineserne mer interessert i enn akkurat den design biten, og spesielt skandinavisk design, det kan være vanskelig, det treffer ikke altid kineserne med simpelt design. Jeg tror dette med facefaktoren, det høyteknologiske osv, er noe de kan bruke. Men hvordan er ikke lett å si.

Etterservice er nok smart å satse på, ikke-kopierbare tjenester man legger til i pakken. Man må selge inn verdi.

3D Perception får lite informasjon tilbake fra sine to fulltidsansatte kinesere og de har ikke presset noenting på det heller. De vet ikke hvor mange VARS de har, og de vet ikke helt hvordan produktet blir markedsført eller solgt. De mangler litt kontroll. Hvordan kan de sjekke opp dette og få en store kontroll uten at de kinesiske ansatte mister face?

For meg så høres det ut som om de ikke har så mye å tape. Jeg ville nok tatt skikkelig tak i forhold til å finne ut av hva disse gjør, jeg ville ikke tenkt så mye på hverken face eller kultur, men bare prøvd å ta tak I disse ansatte og prove å virkelig finne ut av det, og kjøre litt hardere. Det er tross alt deres egne ansatte. I dette tilfellet ville jeg sett bort fra de kulturelle betenkelighetene. Generelt sett så er det nok mange kinesiske ansatte som ler godt av den totalt manglende oppfølgningen som er fra vestlige selskaper, også har de full lønn fra et selskap og gjør lite eller ingenting, også har de fem prosjekter på si. Det vet man jo ikke. Hvis 3D Perception virkelig vil investere her ville jeg tatt tak i dette, og fått full oversikt over hva som skjer og hvordan det skjer.

Mange vestlige sverger til å ansette kvinner her i Kina. Hva er ditt syn?

Jeg tror det er tilfellet ja. Jeg er sikker på at hvis du hadde kjørt en statistikk, ville du funnet ut at kinesiske kvinner er mer lojale og har flere år i bedriften enn kinesiske menn. Men det er ikke sikkert dette er den viktigste kategorien å se på selv om nok er statistisk fakta at det er sann. Men hvis du skal drive salg, aktiv markedsføring osv, ville jeg nok ikke satt kjønn som det første kravet, jeg ville heller sett på hva slags personer dette er. Faktoren kan du ha i bakhodet, og skulle det være sann at du hadde to like så kan du la det telle, men det skal ikke være det første du tenker. Men det er verd å tap å alvor. Og hvis du ikke skal ha vestlige her og om kontrollfaktoren er viktig og du skal vite hva som skjer, så er nok ikke dette så dumt. Også i forhold til å skrive rapporter og rapportere og levere så er det nok litt mer opportun og kjappere og det der med å ta fem prosjekter til og sånn, det skjer nok mye mer med menn enn med kvinner.
Hvordan kan 3D Perception unngå en situasjon der de ansatte forsvinner og tar med seg all kunnskapen?

Ja disse to er jo også de første mistenkte til å kopiere dette produktet om det er mulig, og det er masse historier på at det også skjer. Det er litt tricky om hvordan dette skal gjøres og jeg tror man må finne den riktige kombinasjonen av positiv incentiver, de er tjent med å være med dette selskapet og få til at det ligger vinning i det for dem, dette er et bra partnerskap og de tjener med på dette, kombinert med kontroll. Man MÅ ha kontroll. Igjen må man vurdere, hvor mye har man å tape? Jeg tror jeg ville kjørt en strategi med en god balanse av positive incentiver i tillegg til økt kontroll, og så det tredje; gjøre seg mindre avhengige av dem, så man har andre. Om det er kinesere eller vestlige eller en kombinasjon tror jeg er lurt, ha kontrollere kontrollørene på en måte. Du kan ikke legge alle eggene i en kurv som de har gjort her. Stikker disse to så er jo game over. Hvis 3D Perception mener alvor nå, så må de nok begynne med en skikkelig strategi på dette området.

Bør 3D Perception gå hardt inn med nye ressurser dersom de skal lykkes, eller kan de fortsette som de har gjort til nå?

Hvem betaler for dette? Hvis de tenker privat vs. myndigheter som betaler, så er dette en viktig faktor som man må ta på alvor. Om de selger til militæret som er statlig, så er pris ett annet tema enn om de selger til et privateid firma. Dette er også noe som må vurderes på et strategisk nivå. Dette virker ikke som et massivt produkt, det virker som det er viktig å gjøre de riktige tingene fremfor å gjøre de største investeringene, sånn sett er de heldige. Jeg tror de kan prøve å gjøre mye uten å investere så voldsomt mye mer, så lenge de gjør det riktig og satser seriøst og fokuset. Det høres ikke ut som om du trenger massive investeringer.

I Norge vil de ansatte føle det ubehagelig med for høy grad av kontroll over seg. Tror du dette er annerledes i Kina?

Tror du at det er bedre for et lite firma å investere og etablere seg i Kina nå som det er finanskrise?

Jeg tror det er mye som er opportunt nå i Kina, det er kanske viktigere for større selskaper på en måte, for du har kontorlokaler som faller med 30-40%. Det som kan være viktig for 3D Perception er at arbeidskraft blir ikke så arrogant, det kan være en fordel. Så har du biten med investeringsviljen til dem de skal investere til, er det public eller privat? Jeg tror de offentlige i Kina gjør det slik at de ikke øker budsjettene sine, men de minker dem heller ikke. Jeg tror fortsatt det er investeringer i offentlig sektor som egentlig kanskje ikke har så mye å si, finanskrisen blir nok derfor en periode hvor de burde fokusere på det offentlige i stedet for det private ettersom de private vil stramme inn. Spesielt siden produktet ikke nødvendigvis vil bli prioritert ettersom det ikke er helt nødvendig.

Hva vil du se på som de største hindringene for å etablere seg i Kina, og hva tror du har endret seg til det positive eller negative?

Jeg tror ikke det er så mange hinder for å etablere seg, jeg tror kina er spesielt opptatt av å ikke få flere selskaper som forurenser. De vil ha selskaper som er høyteknologiske, de vil ha teknologi. Det er ikke så viktig med kapital lengre for det har de. Sånn sett tror jeg nok dette selskapet her i værstefall er nøytralt, i bestefall positivt ettersom det er et høyteknologisk selskap som bidrar med noe inn i Kina. Jeg kan ikke se noe negativt, det er mer business utfordringer.
APPENDIX 11: Interview with Mr. Timothy Hilton of Accurpress.

TIMOTHY HILTON
The owner and CEO of Accurpress International Sales Ltd.

Date: 19.04.2009
Location: Taicang, China
Text: English

Topic: Challenges with the Chinese market and tips for 3D Perception

Introduction – Can you tell us a little bit about your company’s history and the status today?

The founder of the company was my dad. He is the one who did the missionary work and travelled around in the early days. He is a bit of a homebody though so the company mainly grew in the north – American market. So in 1998 I talked to him and said that our dealers told us that we had 25% - 30% market share, and asked him how we were going to grow from then on out. And our entire staff was smaller than other companies R&D staff, our competitors in other words. So he said that we could either branch out to new products, which are very risky, or we could enter new markets. So we decided to enter new markets, we acted very quickly and hired a guy as international sales manager. First we targeted Mexico and he (manager) really opened the market and things started to really take off. So a little over a year later the sales manager said that he wanted to go global, really expand. But I said 1 or 2 countries was all we could manage at that moment; we didn’t have the resources to go global. So then we targeted Korea, where we had been locked out of the markets in the eighties. And because we had failed in Korea in the eighties they didn’t want us there. The agents told us that they couldn’t trust that we would stay, they didn’t want to spend money on building our brand. So they told us to go to China, and if we made it there we should come back. Because if you can make it in China you can make it in Korea you know. So in 2001 we went to Beijing and participated in a show there, and that worked well. Prior to that out manager had met a guy from Shanghai so we went there and talked with people. Back in Canada I talked with the sales manager and we decided to go with one of the companies in Shanghai. It was also very convenient because Shanghai is a direct flight. So this company at that time we could have bought for the value of the assets, but the rest of my family did not want to buy such a big company even though the entire operation was in place.

Therefore we went to Taicang, managed our costs very tightly because we compete with local builders. Business the first years was slow, but then I came into contact with an Indian who contacted me. Since India is really growing we chose to target India as well, I will measure our progress in that market as moderate. Now 25% of our products are sold to India. The rest of products we produce here in China are sold in China. We are also a very small company
competing in a very competitive market and our competitors are huge. We have a tiny factory, only a 100 staff, in a very small town in China terms. But we are really focused on making very good machine, and actually now, even in the downturn we have hit a wave. Things are really starting to take off. Have you ever done speed boating? When you are in a powerboat you have to double horsepower for every knot increased after 12 – 13 knots. Until you start planing, then it becomes linear until windage becomes an issue. So from 1992 to 2004, when I took over, I basically revolutionized the company. But thinks didn’t take off, until suddenly things changed. Suddenly we were making crazy progress and doubled our output with no extra efforts. But all the changes I had made beforehand led to us reaching “planing” speed so to speak. And now we are reaching that point in China after five years. But it took us three years to turn profitable.

You are expanding even though we are in perhaps the biggest economic depression in a very long time, why?

Well, a couple of things. We have been chipping away on the customers of the large European and American manufacturers. We have been doing this for the last years and now are starting to chip away at the lunch of the American, European and even Japanese manufacturers. The domestic buyers like that we have a top selling American brand name and that we are better in the small details and in how our service people do the installs that sort of thing. We actually started building our new factory before the financial crisis, so there it is basically a question of no turning back. We also decided to loan some extra money before the financial crisis and set that aside, even though we didn’t actually need it at that time. Now, in retrospect this was a good decision, we haven’t had the cash flow troubles several competitors have had.

What do you consider to be the biggest challenges in entering China?

Well, I think a common denominator is the initial inertia. Even though we are a great brand name in America people would say, so what? This is China. If I buy your product will I end up with an orphan machine? What guarantees do I have that you will still be here? This is a different market; I don’t care what you have done before. I have to be confident I can get service on the machine 3 years from now, ten years from now. So then we had to explain how we built our entire company on service and our company philosophy etc. And then some people get captivated, when you talk to people either they believe in you or not. As a sales person you are the only contact they really have with the company. So they measure you, are you honest, are you competent, are you confident, do you have a passion for the product, how well do you know it. And then maybe they transpond the product on to you, so in many cases it all comes down to you. Because they can’t walk around the product, watch it, touch your product in the entry phase for your company. It doesn’t exist in physical form in China, or if it does not in large quantities. So we put a lot of time into training on our employees, to sell and close the sale of the product. And this is one point where we differentiated us from our competitors; their people are often not well trained and competent. Because it is such a cutthroat market they cut it to the bone you know. So here we have created an edge for ourselves.
Is dealing with initial inertia more difficult for a small/medium-sized company?

Certainly. Because you tend to have a certain amount of money to spend when you are small, so it becomes a real fight to hang on to the cash and make things work. But then again, we have seen some big, big companies fail. One direct Italian competitor in Shanghai, they are huge, completely failed. Another company in Ningbo spent huge amounts of money here in China. A Canadian one, and they failed due to internal conflicts. The managers, brothers, came here in turns and gave different orders and contradicted each other each time. They have really tarnished their name here due to the nature of their failure. And I could go on and on with bitter stories of failure in China. Big does not guarantee success. Big or small it depends on the players that is what it comes down to.

Do you attend trade shows regularly?

Well, when you go into a new area it works kind of like a fruit tree. The first sale in a new area is really hard. But if the first sale, the first product in this area is good, then word of mouth starts. And suddenly that first product has babies. And from that first sale you suddenly have products sold in the whole region. But it all depends on the first seed, the first product. If that seed is bad you can sour the whole area.

Have you experienced any significant cultural differences in dealing with the Chinese?

Well, Neil, our vice president is what we call a banana, yellow on the outside, white on the inside. But he says he’s not either, but he has a high level of confidence. He knows the culture well, and is an extremely competent. Neil has this charisma about him; he wins peoples respect very quickly. This has helped us a lot. So a lot is based on personality, and everything comes down to leadership. Everything comes down to leadership. Great people are what makes a company work.

The product offered by 3D Perception offers a superior ergonomic solution as well as a clearer overview of the work situation. Would you think these are strong selling points when selling to Chinese customers?

Absolutely. If you look at the towers going up at Pudong they use the best for the best technology. And that is true for the whole china. They are really using the cutting edge stuff. They want the best stuff at good value; if you don’t deliver good value they will copy you.

Regarding the ergonomic point it is all about persuasion, you have to know the customer. If you come in as a business consultant, showing that you understand the business, and then connect the dots. Ask the customer to explain to you his business, his needs, his frustrations, what he would really look for in a product, is there any opportunity where you would really want to be more efficient in space or personnel etc. And then explain how your product can help him in increasing efficiency and whatnot.
But if the resellers are not properly trained this product is just not going to get to the right people. There has to be intensive training, there has to be intensive focus there has to be some great leadership and there’s going to have to be some real passion about it. Then it will happen. But if they don’t have control over their operations down here, then this smells like bad fish to me. If they want to be here somebody has to be here from the home office. I used to sit like a trained monkey while my sales people talked to the customer. But because I went there I lent some gravity to the situation, the president of the company being at the meetings really helped.

Any marketing techniques in general that works in China?

I would say that the actual selling is perhaps 80% - 90% the same regardless of country, you have to know your product, you have to get in, get to meet the customer 6 or 7 times to be certain of having a sale, most of the times it’s a battle. Getting to know the person, getting your arguments across about your product, refuting the arguments of the competition, proving that your company is up to the job, respond quickly and accurately to queries, these things all mean a lot and eventually word starts to get around. Especially in the high – tech community people talk to each other. Once it starts rolling, once things are in place it can really start mushrooming, it can really grow fast.

How much is the product doing the selling and how much is the person doing the selling?

I would compare selling to baking a cake. There are so many factors to making a great cake, so many things that can go wrong. It’s the same thing with selling. If you are late for an appointment, if you are not well prepared, if you aren’t fully aware of the competition and what they are selling, if you didn’t take the time to do a little bit of learning about who you are visiting. How long have they been in business, what do they manufacture, what are their requirements, who are their competitors, what do they need from you. You know, if you haven’t done some of that homework so that you show that you know what you are doing, these are all part of the whole selling experience. If you don’t do that right then it won’t happen. Percentagewise it depends on the product. If it is Pepsi or Cola then the product doesn’t matter much right, it depends on how you sell it to the store. But the specialized product that your guys are offering you need to get the customer to see what your product can do, so that you hit on the key things the customer is interested in and trigger the interest enough so that the company will have a look at it. You need to think about how to grab their attention, trade shows is one thing, magazines is one thing and then you need to know how the resellers work. Do they know? No, then they have a job to do there obviously. They need to know if they are selling their product successfully, and how they are selling it.
At the moment they are in China with a rep. office and are considering establishing a WFOE. What do you think about that?

It sounds like a wise thing to do. There is too much riding here for it to be a black box, it is imperative to have control. Also I have trained a guy in my business to just go around visiting companies that might need our product. Because there are so many different areas where our product can be used, and it seems like it is the same thing for this company. So I think they should do the same thing here. Suddenly after many, many visits something opens up. And we visit this company with sales pitch, our vice – president also likes to meet people face to face. Explaining to them why our product is good for the customer. So I think you need to have both, both contacting lots of companies and also sitting down and explaining things in detail.

How do you deal with corruption in China?

You are certainly not going to stamp it out. It is there, and it is a real problem. I know that a lot foreigners like to hire women as their managers because they will stay longer, they are less prone to steal IPR, and less prone to divert sales into their own pockets and less prone to start other companies on the side or to move out and steal the whole company. A lot of companies have found that that is a good way to go. What we have done has worked well for us, we are in a small town with only 30,000 people. So if someone does something criminal to us, steal our IPR everyone will know. They can’t hide, because we hire local people. If someone steals from us the whole family loses face, their son or daughter is a thief. This protects us to some extent I think. Something else that has worked well for us is to get hammered with our clients, partners and employees. When you are that drunk together with somebody it makes you vulnerable and after that there is more of a feeling that you won’t betray each other, to some extent at least.

Another interesting thing when you do business in China is how the different regions talk each other down. The southern Chinese will say, “you can’t trust the Shanghainese! They are snakes!” and the Shanghainese will say “you can’t trust people from Guangdong, they are crooked”! So basically you have to make your own judgements.
APPENDIX 12: Interview with Ms. Yingni Zhuang of Shincon.

YINGNI ZHUANG
Managing Director of Shincon Consulting and Trade

Date: 25.04.2009
Location: Shanghai, China
Text: English

Topic: Challenges for western firms coming to China and how to overcome them

For a small high – tech firm, what would you consider to be the biggest challenges in entering the Chinese market?

There are two factors. Number one: They need to hire the right people to do the right job, that is really, really important. Not only someone you can trust, but someone that has been in a foreign enterprise for a long time, so that they know how to manage the business, Chinese business in a Western way. For example, recording data, communicating with the HQ, reporting back, giving them the strategy they need in China. This has to be in place. The people they hire need to know the customer services etc. If only the technical is in place the job they need done here is not being done fully. So they need to hire someone that knows both the technical and the customer part. Or maybe they should hire one to manage the technical part and one to be in part of services and reporting back. My job is to hire the right people to manage the technics people to follow through projects, follow up the training and each project while I take care of the hiring and communicating with Norway on the strategic part?

Should this ideally be a Western or a Chinese person?

It should be either a Chinese person or a Western person. Actually the best choice is a Chinese person, but who has lived overseas, someone who really know the Western way, not the Chinese who has been working in a foreign enterprise, but someone who has the western management mindset. That is very, very important. That is the key, that is the priority. That is the first choice. The second choice is someone who is foreign, but who have been in China, who knows China, know Chinese people, knows how to manage Chinese, if you don’t have the first choice that is what you go for. Because the first choice can be a bit difficult to find, but the second choice is nearly as perfect. Right now it seems like they have the technical part covered right? But the main part is missing if they are not achieving substantial sales, someone who can connect, and give them control here. No matter what you need an eye here, a hand to control the China market. For
example a manager should be able to identify the perhaps five strategies they need to cover in China, see what they already have covered and see what should be done to cover the rest, and with very little cost. Often it doesn’t need to be that much cost, that much expense. But they could do some adjustments to cover it. For example they should have weekly phone meetings, and then once a month a monthly report. Covering maybe five important parts, for example covering each projects, status reports for each project including the data like how much revenue is coming in. The highlights and lowlights, what is doing really well, this is something the manager thinks is doing really well, what will sell really well because it is super for the markets? What are the lowlights, what have one not been doing well, think about some solution to that. Then the personnel, is each and every employee doing the job well enough? In China the market is really big for staff, you can find all sorts of personnel. You need to look at the personnel, are we paying them to much and they are not doing there job? Or are we paying them too little, someone must manage the local staff here and report on revenues. And then you look at this month and see what you have to look at right, figure out what needs to be done to meet conditions 5 months ahead or two years ahead. Look ahead of time, find the strategy for the future. They need someone to give them data every month, who can let them know strategically thinking what is in missing and what is not and also have some control. That person gives control for the HQ and let them know what the market is doing. The management aspect is the most important part. The people are key.

Number two: The Chinese market is really big, so for any technical company it has to be something that China needs right now. You cannot compete on something that China is really good at. You have to look at your sales team. Number one is to have a manager who is very Western, who also can communicate back. But also someone that can manage the China employee and can communicate with local people, who knows how to hire local people, Chinese, that can communicate with local customers. You have to really grasp the market, but again that comes back to the people. When you select a market segment you have to hire people that have good connections there, who can work together. China is all about relationships, connections, so you have to pay good money for people who have connections. Then they will expand the network for you, easily.

**When you are helping Norwegian firms establish themselves here, what tends to be the biggest cultural problems?**

That is a really good question. I think my working experience with Norwegians is very different from working with both Americans and Chinese. It is a very unique culture. You are less direct than Americans, maybe not as result oriented as Americans. Norwegians have very firm ideas about how to handle relationships; it is a very developed country with a strong culture about how to handle people relationships and how things should go. Norwegians can be very persistent in their thinking sometimes, not flexible enough for a multinational culture environment. I am not saying Norwegian culture is bad, but it is a culture that really needs to take more risks in China. Because China is really growing fast, they have to learn to let managers they hire here really do the job, they are hired to do, they have to trust them. But there are many examples of Norwegians and
Chinese managers not really communicating. Many Norwegians think they are doing the right thing by not checking with the Chinese, they assume that if they are doing something wrong the Chinese will tell them. So I think it is smart to have meetings with Chinese office employees and ask: are we doing something wrong, is this working? Because the Chinese will not come to you and say that this isn’t working. If you ask their opinion they will open up more and more, but Norwegians think that if there is some problem of course you should tell them about it. Chinese do not work that way, you need to go to the Chinese and talk to them. You need to really push them to tell you if you are doing something wrong.

So the assumption that your co-workers and employees will tell you if there is something wrong…. is definitely faulty! The right thing to do is to go to the Chinese employee, have a meeting and say: “Let us know what we are doing wrong”. You have to be very honest about it, have an open environment that pushes them to share what is on their minds. That is the biggest problem.

Another problem is that Chinese managers that go to Norway often feel that they are not being taken good care of when they visit the headquarters. Chinese people are very relationship oriented people. Western people are more work place oriented, and if we become friends we become friends, but work is work. For Chinese people it is more like this; if they really like you, like you a lot, then they will work extra for you for free, but if they don’t like you, or something you are doing bugs them they will do what they can to make things difficult for you. So if you feel that something is difficult here in China, you have to think about that something may be wrong with the relationship here. So you have to arrange a meeting, maybe take another Chinese in the company out to dinner in a very casual manner. Don’t confront, have a dinner or something like that, and then ask specifically how the project you are having difficulties are going. Say that you feel frustrated because you told the employee/co - worker you are having troubles with to do something and somehow he is not following your order and ask the Chinese employee if he knows why this is going on. Then he will give you the tips on how to deal with it, so always remember to learn from the Chinese, have certain Chinese people that you can trust and they will show you the way. Always remember that. You cannot learn this culture easily, you have to go through a Chinese friend to learn that. And he will tell you honestly if your employees are upset etc. Also, when your employees feel that they can trust you they will tell you everything.

So Norwegians tend to assume that you get information directly?

Yes, don’t make that assumption.

When you invite partners/resellers to dinner or such. Are there any particular mistakes Norwegians do?

Make the dinner casual, not too formal. If you make it too formal, not casual enough, the Chinese will be sitting straight, be nervous the entire meal. I mean, Westerners think that the more formal
something is the more respectful it is. Chinese people like it more relaxed, when they can just
drink some beer. Try to serve some casual food, and not dressing up so much. If you make the
environment relaxed the Chinese can be more real with you. So that is a mistake Norwegians
make, because they want to treat the Chinese well and show, and the make the dinner very formal,
which is the opposite of what they should be doing. Don’t make it over fancy, it should be
humorous, maybe talk about family, some more private stuff. That way the Chinese won’t feel that
you are making a wall between you.

A Canadian CEO I talked to say that he sometimes just got drunk with his customers or
employees. What do you think of such an approach?

Yeah, yeah, yeah, that is very true. Probably not so good if the wife and kids are present, but it can
work very well man-to-man I think. Always remember to bring some gifts, bring something from
Norway. That’s another thing, don’t bring a book with pictures of Norway, Norwegians tend to do
that. Bring something that is useful for them, some makeup for the wife or something else that the
wife will really like. And then some liquor or something like that for the guy. That is much better
than Norwegian pictures that they will just put on a shelf and not look at, then they will be really
happy. Another great thing to do to bring you closer together is if you here that someone in his
family is sick or not feeling well to visit and bring some food, maybe some vitamins. Bring
Norwegian fish oil! They would love that, you would win that persons heart with doing stuff like
that. That is a great trick, Chinese are really happy about stuff like that.

This firm sells product that are ergonomic, space – saving and looks good. They also
heighten the operator’s efficiency. Are these good selling points in China? Which of these
points to you believe to be most important?

This is also a good question. I have not seen Chinese companies that care about this, because
China labour is really cheap, but more and more local companies are starting to care about this.
However I don’t think it’s in the market yet. Space saving is something they really care about,
anything that can save money for the Chinese in any way is a selling point, whether it is space or
something else. Ergonomics, not sure about yet, that is more for the future, long term. Chinese
companies are often really focused on short-term results. But if you find multinational companies
here, they are very focused on ergonomics.

After sales service is very important, that is always good. But you have to remember that all
salesmen say that their company is good at this, you have to think about something about your
technology that other people are not good at. So many in China are good at after sales service,
always sell in what points you are better at than you competitors. That is the highlights! What can
catch the consumer’s eyes? If other companies are bad at after sales service this is a great selling
point. They should do a survey, what are the common complaining points about the other
companies? That should be your selling points.
For such a firm as 3D Perception, what marketing techniques would you recommend?

It comes back to what we talked about earlier; you have to pay to get the right people! Simple as that. It may sound like there should be other options, but you have to pay good money to get the right people. I mean the right people in terms of having connections, having been in sales in China for many years. It doesn’t have to be exactly this industry, but they have to have connections. People who maybe have graduated from classes where these people come from. People who have graduated from the right institutions in terms of knowing people. I am telling you, if you have one person, one salesman or manager, that have connections in the right places it is better than having an army of dozens and dozens of people.

Are you saying that it is maybe not so important that these people know the technology and know the product?

Exactly, they have to know something about the market, but most of all sales are about connections in China. In China sales channels are about connections. Hire the right people on the basis of what they have achieved in China. Then it is important to hire the right manager first, because the right manager can select the right people, he should select them on things like how many sales have they done in China, and what kind of sales, big or small? They have to have a manager here that knows how to manage the Chinese, that has been in China for a long time, that knows Chinese, knows sales, know how to hire the right people. That would mean that the company could expand very quickly, but that person would have to make judgements every day, judgments that work about who to hire, what to adjust etc. Selecting this manager you should also discuss salary and give him a budget. Give him a set salary and give him another big salary fluctuating on the basis of the sales that is coming in. Giving incentives is very, very important. Don’t give him or the sales personnel a set salary, in China a set salary would never work. Once one does that, like f.eks 15% based on the sales they are doing their motivation is totally different. If you have fixed salary everything looks peaceful but you will never have sales.

In China sales bonus should be between 15 – 30%, if it is below that it will not work. So when you hire your manager give him a good salary, and then, if he is very experienced and has contacts, 30% bonus on every base deal. Then he will hire the right people, that is the key. Hire your leader men that you can trust and let him/they select their people.

Would you consider having a good reputation/be well known to be of use within this business in China?

I don’t doubt that at all. Maybe not this year, but next year China will keep booming. I have great faith in that. So if 3D Perception prepare themselves now, be ready in a year or two they can do really well if they hire the right people. Maybe they really should consider hiring an expat. Our firm would support you if you came here as an expat for them Sindre, you should try it! I have so
many connections I could give you, within the Energy sector I do have connections. I could introduce you to friends and anything you might need.

In the simulator business they have been selling to firms like NASA in the US, is that something to use when they sell their product?

Definitely, definitely, absolutely. In China when a firm is buying things they really want to know how much capacity you have even if it is not within the exact same market. So anything that you have of customer lists, experience everything that you have that shows that you are a power, that you have capability is good. This is the mindset: if you are really good at something like that (simulator) then I have faith that you can do this as well. It shows that you have a good team. So even though you are new in this market you are capable, that they can have faith in you.

Do you think it is easier of more difficult for 3D Perception to establish themselves now than before the crisis all things considered?

This is another really good question. I think the financial crisis is a great opportunity to hire people and get ready. Not many people agree, but I really believe it. I have interviewed tons of people for preparation. Not many people are preparing, but I believe this is the time. Like Intel just laid off tons of people here, 2800 people are loosing their jobs in Intel right now. People that are used to working for a foreign company and many of these know western business culture. How often do you get the chance to get these kinds of people maybe on only half the salary? Because they need jobs now, the financial crisis gives you a great chance. I and several of my friends are hiring and preparing for a boom, this is a time to hire people and preparing them for sure. On the negative side buying power in the market is much less of course, that is obvious. Unless the product is a must have you cut it out of your buying list. Non – survival products are difficult to sell right now. But the positive part is that China will likely be out of this sooner than most other countries, I have no doubt, so prepare! The market will be even stronger than only two – three years ago. This is the time to hire people, get them familiar with the company culture, the technology, getting them trained and give them incentives to stay in the long term. If they have faith, this is the time to do it. Only keeping one or two people here is not worthwhile, either do it or get out. They should take some risks, I’m not saying high risks, but hey should hire maybe one or two more people at least. Hire a very good manager from some multinational company that is downsizing. Like from Intel maybe 50 managers are being fired now, only maybe 10 of those will get work immediately, the remaining 40 will go without a job for six months plus. What a perfect chance! This is the perfect time to go through the pool and find the perfect candidate. No matter what this is the time for them to prepare.

For a product such as this; how much is the product doing the selling and how much is the person doing the selling?

Ten years ago I would say 80% person and 20% product. Now it is 50/50. If the product were extremely in demand you wouldn’t need salesmen right?
At the moment 3D Perception is in China with a rep. office and are considering establishing a WFOE. What do you think about that?

A rep. office cannot sell anything legally within China. To sell products within China you need a WFOE, otherwise you need to invoice overseas and then you can’t trade in RMB. So that might make things more difficult. I think a company like this if they are doing after sales service and have more than 2 – 3 customers they have to have a WFOE by the end of the day. The problem with WFOE is the extremely high tax, that is why people are really struggling with the decision on whether to have a rep.office, WFOE or joint venture. A joint venture is the only solution if you don’t want to spend huge amounts of tax, but then you have to have someone you really trust. The joint venture tax is much lower. So if they start hiring and preparing now they should develop one Chinese person they can extremely trust, if you do find someone like that then you can give them maybe 20% share in the joint venture but then he should sign a paper that says these 20% really belongs to the company. A fake venture so to speak, that is perfectly legal. For long term, if you want to win over your competition a joint venture is the only solution.

Western people complain a lot about joint venture?

Yes, that is why I am not proposing a real joint venture, but a fake joint venture with a person you can really trust. This is how many of my foreign friends do it here in China. So they must sign some contract that says the 20% they “own” is only for registration purposes.

Would this hold up in court?

Yes of course, it is legal, you have an agreement. That agreement holds. You should only take this option if you have someone you really trust, other than that the WFOE is the preferable solution. But you can really cut your cost with a joint venture even though it might be a hassle, your tax expenses will be cut in half. If they find a good manager they can trust in China, this would be a good decision.

How should they deal with corruption both within the workplace and otherwise? And how can they control their employees in China?

Also a very good question. One strategy is to send them to Norway for 3 months training, acquaint them with Norwegian culture and the business. The reason for this is that if you bring people in for training for 3 months or more you can force them to sign a training bond. What this means is that any technology they have learned in this company is illegal for them to share or to use, this is legally binding. Moreover you can force them to sign that they agree to bind themselves to the company to no less than 6 years in a row. If they decide to leave before this they can be forced under the contract to pay a huge fine, you can make it two or three million RMB, not many people know about this option. This is one of the ways we kept people in Intel when I was in HR there.
For any staff you hire you must sign a Chinese contract through FESCO, this is very important. There you must highlight that if any employee steals IPR he will be subject to a huge fine, China law will protect that. I know of cases where people have been put to jail for this. If we hire a manager we usually don’t hire from Guangzhou or Shanghai, not because they are bad people, but because of the culture in those places. Let me just say that their ground is not always firm.

**We have heard that can be preferable to hire women managers, what is your opinion?**

I don’t really support that, I have known some great male managers. There is some truth to that men are more likely to strike out of their own, but I don’t think that should be a deciding factor. In my experience it is more likely that a woman from Shanghai will cheat, than men from other provinces. It is sad to say, but that is my experience, it has something to do with the culture.

**Is this very resource demanding?**

Well, it will take a lot of time, but in the end it will be pushed through.

**And this will also hold up in court?**

Of course, it is a training bond, a legal bond. However you have to sign the training bond contract when you send them to Norway. Most people will sign such a contract. In the contract it must say very clearly that he cannot use the technology and that if he does it he must pay a fine of two or three million or go to jail for a long time. Few will risk that. You should also make them sign a contract about not giving or receiving bribes. I can help you form a contract that employees should sign, I’ve set up a lot of such contracts.

You should also have audits. I use open audits every half – year. I do this in a very transparent way, everyone in the company knows that these audits are held. I tell them in open staff meetings that these audits will be held every half – year, it is not singling out one person. I even have myself audited. In this way no one feels singled out or mistrusted, I think it is the best way. Of course, if I suspect someone I tell the auditors to pay extra attention to that person, but this is not something that the person in question will ever know. My experience is that if you have this kind of system, and you pay your employees based on the results they achieve, and pay them well when they perform well this problem gets much less. As I said, you have to use some sort of incentive scheme in China.

**What mechanisms for control would you recommend regarding VARs? Do you have any advice as to how a firm in this sector should go about choosing their VARs?**

I will take this question to one of the managers in my firm, he knows this area very well, and I’ll get his answer to you. He is travelling now, but I will call him. He is the one who selected ABB as an agent for Intel among 17 others among other things; he is an expert on this.
APPENDIX 13: Interview with Mr. Arne Knutsen of TTS Marine.

ARNE KNUTSEN
CEO of TTS Marine Shanghai

Place: Shanghai, China
Date: 28.04.2009
Text: Norwegian

Topic: After sales service, Chinese work culture, Chinese employees

Du har tidligere nevnt at ”når kineserne skjønner service, da får vi problemer”. Hva mener du med det?

Hvis vi ser på kinesiske verft, så er det typiske at de ønsker å få skipet bort fra kaia, for da er det ikke deres problem lengre. Så i mange tilfeller, kan du se der de sniker og lurer til ting bare så det skal se greit ut for en kort periode, og når du blir kvitt det, er det ikke deres problem. Det gjelder garanti og etterservice, ettersalg osv. For kinesiske bedrifter har det aldri vært noe interesse å levere et produkt tenkt på et livslangt løp. Når vi leverer noe, vet vi at vi skal serve det i 30 år, og det må vi ta hensyn til. Vi vet også at hvis vi ikke fikser det her, blir det dyrt. På tegnebordet koster det 1 krone å fikse, i verkstedet koster det 100, og hos kunden koster det 1000. Vi har et ansvar for produktet, selv etter kunden har fått det og begynt å bruke det. Vi selger på det. Vi kan fremdeles ta 50% høyere pris, fordi kunden vet at han kan komme tilbake til oss hvor som helst i verden og når som helst i ettertid. Det er veldig vanskelig å serve det fordi du aner ikke hvor det er.

Tror du det er overførbart til 3D Perception og andre markeder, eller er det spesifikt for shipping markedet?

Det er veldig spesielt for shipping markedet fordi skip ligger jo ikke på en plass, de farter rundt hele tiden. Det er veldig vanskelig å serve det fordi du aner ikke hvor det er.

3D Perception mener at en av deres største styrker er after sale service. Er det et sterkt selling point i Kina?

Ja, det er det. Du har en del kinesiske redere som seiler rundt på jorda, og de vil ikke kjøpe utstyr av kinesere.

Hvorfor tror du ikke Kina har skjønt dette?
Det har med mentalitet å gjøre. De har levd av å levere billige produkter. En del av våre produkter leverer på 0, ettersom vi vet at vi kommer til å tjene penger på det de neste 20 årene. Det er klart at i dag selger vi mange enkle produkter i Asia. Vår kvalitet er nok ikke nødvendigvis høyere enn mange av de andre, det er satt i sammen av mange av de samme delene og det er enkel teknologi. Det er så enkelt og lite beskyttet at når vi skulle ha ny leverandør i Korea, i stedet for å lære opp et nytt verksted så gikk vi til en av våre konkurrenter, så slapp vi opplæringen. Det sier litt om hvor lite beskyttet det egentlig er. Du selger ikke teknologien, du selger på den behandlingen du får i ettertid. Det er klart at en del kinesiske bedrifter i dag, om de kunne ha levert inn service, ville de hatt en helt annen mulighet til å komme inn på markedet. Der de kanske allerede ligger mye lavere enn oss i pris. Koreanerene begynner å komme, og kineserne følger nok etter.

Hvor lang tid tror du det vil ta?

Det er umulig å si. Vi må bare passe på at vi alltid er littegranne bedre. Men det er ganske spesielt syns jeg, når mye av det utstyret som blir levert av norske bedrifter. Det er helt unikt syns jeg at vi skal kunne sitte på berget i Norge og levere produkter som egentlig er utrolig enkle. Noen ganger så lurer jeg på hvordan dette går til.

Dette er snakk om vestlig høyteknologi, hva tror du er gode selling points for i Kina?

Rykte er veldig viktig. Det er en grunn til at markedet i Kina er et av de beste markedene på Lamborghini og Ferrari. Det går på at om du bare har nok penger og du ønsker høyteknologi, vil du alltid gå for det med det beste ryktet. Dette gjelder nok også på bedriftsmarkedet.

3D Perception leverer til både NASA innen simulatormarkedet og Norsk Offshore innen kontrollrom - markedet. Tror du de kan bruke dette i sin markedsføring i Kina?

For teknologi, har du jo ikke så mye annet du kan vise til enn tideligere kunder som er fornøyde, jeg vil tro at dette er noe av det viktigste du har. Det vil jeg tro er svært viktig. Har du et navn, og er godkjent hos visse kunder, kan det gi deg et konkurransefortrinn.

Tror du det vil lønne seg for en liten bedrift som 3D Perception å ha en vestlig ansatt i Kina?

Jeg tror det er to scenarioer denne bedriften kan foreta seg om de ønsker å lykkes; Det ene er å sende en vestlig ansatt som de stoler på til Kina, og la han være knutepunktet for de andre ansatte der. Det er ikke veldig viktig at han er ingeniør, som oftest får du ikke både en god teknisk som samtidig er god med mennesker. Det viktigste er at han har kontroll. Det andre alternativet vil nok være billigere, men vil ta lengre tid. La den kinesiske ansatte komme til Norge i ett til to år, la han få lære kulturen i bedriften og dine kolleger ordentlig. En mulighet er også selvfølgelig begge scenarioene samtidig. Det er svært viktig å opparbeide tillit, å binde dine kinesiske ansatte til bedriften. Man må lage virksomheten til et sted der de har lyst til å være og kan utvikle seg. Jeg

Du har en svært lav turnover i din bedrift, bare 1 – 2%. Hva gjør du for å holde på dine ansatte?


Om Kinesiske ansatte:

Man kan ikke forvente noe særlig feedback fra dine kinesiske ansatte. Det ligger ikke i deres kultur. De sier ingenting til sjefen, kun det de tror han vil høre. I utgangspunktet er væremåten til en nordmann og en kineser veldig forskjellig. Det de tenker i Norge er som oftest veldig forskjellig fra det de tenker i Kina, mye mer enn man tror. Kineserne er bedre enn nordmenn i alt det tekniske, men de har ikke lært hvordan de skal bruke det i praksis! Det de trenger å lære er hvordan de skal runne et prosjekt, hvordan de skal bygge opp ting, hva skal de gjøre, hva jobben deres er hele veien. Rett og slett management og væremåte. Kinesere er i utgangspunktet verdens dårligste i feilsøk. De er veldig flinke i alle de forskjellige områdene, men å kombinere de, gjøre det til en helhet, det er utenkelig.

Om kvinner i management:

Du opplever ikke at p.g.a rollemønsteret i Kina at kvinnene står noe tilbake fra menn på management?

De er litt like norske kvinner, spør du om de kan gjøre den og den jobben, sier de nei fordi de ikke kan det enda. En mann vil si ja, da han vet at han kan lære det. En typisk ting med kvinner er at de aldri vil si at de kan noe før de virkelig kan det. Dette er vel en kulturlighet heller enn en kulturforskjell. Jeg maste i månedvis på en av kvinnene i bedriften som nå er manager før hun tok jobben.

Tror du det er viktig med teknisk kompetanse eller management ferdighetene til sine ansatte?


Har du noen generelle råd for hvordan man skal velge resellere i Kina?