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Future Communication Channels in China

A Case Study at Sandvik Mining and Construction in China

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Acknowledgement

This master thesis has been written during the fall of 2010. It has been conducted as the concluding part of my Master of Science in Industrial Management and Engineering education. The study has been undertaken at Sandvik Mining and Construction, Shanghai, in cooperation with the division of Production Management at Lund University Faculty of Engineering.

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Lund, December 2010

Jakob Johansson

Abstract

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Purpose: The Chinese mining industry is the third biggest in the world in terms of scale and magnitude. Due to the growing importance of the Chinese market, Sandvik Mining and Construction is investing heavily in China. As a result, there is a need for a new marketing plan for China. The marketing efforts will increase much, but since the marketing department has been relatively undeveloped, there are of today few existing communication channels towards the customers. SMC wants to identify new communication channels for the region. To find new non-traditional channels an external part is desirable to identify new channels to get new fresh ideas. This thesis aims to identify new communication channels for SMC in China; this includes investigating the channel, the resources needed to implement it and the expected effect. Potential channels are identified based on the information gathered of the Chinese market, the company and its surrounding.

Method: The thesis is based on a case study at the sponsor company. The data is collected partly from qualitative interviews with relevant personnel at SMC in Shanghai and Sandvik Group in different parts of the world, and partly through desk studies. The sources are literature on the subject, relevant reports and various websites.

Conclusions: The author introduces a number of potential communication channels adapted to the Chinese market, the mining and construction industry and the company. Internet- and mobile based communication channels are identified as attractive for SMC, this includes SMS- and MMS marketing, e-shots, online reputation management and social media channels such as social networking sites, microblogs and video-sharing sites. Another identified area of interest is location-based communication which includes TV, written media and transportation-related channels at railway stations, trains, airports, flights and billboards.

The Chinese mining and construction market is already one of the biggest in the world and will continue grow. To fully utilize the opportunities that the market provides, SMC must continue to develop its marketing efforts and expand its arsenal of communication channels. The presented channels cover different fields and reach customers all over the country in different ways.

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1 Introduction

This chapter sets the framework for the thesis. The chapter includes background information of the thesis and the company, problem discussion and purpose as well as delimitation and disposition.

1.1 Company & Market Presentation

1.1.1 The Sandvik Group

The Sandvik group is a high-technology engineering group with advanced products in selected areas. The company was founded in 1862 by Göran Fredrik Göransson and has today grown to 44,000 employees with representation in 130 countries. The company has annual sales of approximately SEK 72 billion.¹

The Sandvik group mainly consists of three different segments:

- *Tooling*: Tools for metal cutting in cemented carbide and high-speed steel as well as components in cemented carbide and other hard materials.
- *Mining and Construction*: Equipment and tools for the mining and construction industries.
- *Material technology*: Products in advanced stainless materials, titanium, special alloys, metallic and ceramic resistance materials and process systems.

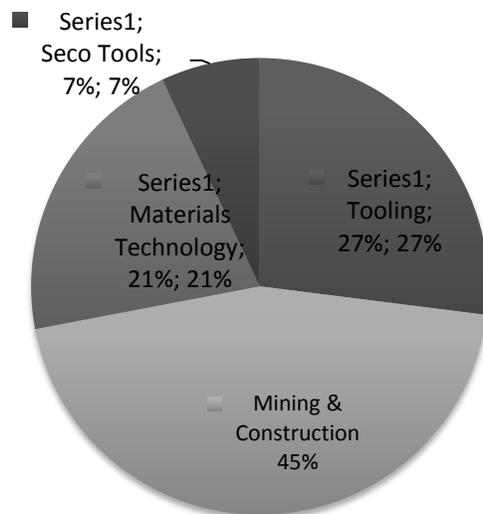


Figure 1-1: Sandvik Group Sales 2009²

¹ Sandvik World 2009/2010

² Sandvik World 2009/2010

The sales of each segment can be seen in figure 1-1. In addition to the segments, the group is also divided up in six region divisions; NAFTA, South America, Europe, Asia, Africa and the Middle East, Australia.

1.1.2 Sandvik Mining and Construction

Sandvik Mining and Construction (SMC) is a business area within the Sandvik Group and a leading global supplier of equipment, tools, service and technical solutions for mineral exploration, mining and processing of rock and minerals in the mining and construction industries. The products are deployed primarily in mines and in construction operations worldwide. The total global market for 2009 was estimated to amount to about SEK 230 billion. SMC aim at providing solutions for the customers through the whole mining process, from exploration and development of a new mine, to deliveries of equipment and services to new and existing mines. In the construction industry, SMC provide products and services for areas such as quarrying, tunnelling, demolition, recycling and other civil engineering applications. Sandvik Mining and Construction is active in three customer segments:

- Underground Mining
- Surface Mining
- Construction

1.1.3 China

The growing importance of the Chinese market is no secret. It is the most populous country in the world and with an average economical growth rate of 10 percent for the latest two decade it is also the fastest growing economy. China has despite the global recession continued to grow and recently passed Japan as the second largest economy in the world³. China is today the second largest market for the construction industry and might grow to become the largest within 10 years. SMC is increasing its focus on the country and is working closely with customers and partners to develop products and services that fit the local market.⁴

The company entered China in 1985 with registered capital of 100 million RMB. Today, Sandvik China has 25 representatives, 10 production sites and 1,800 employees in China. Its sales network covers more than 70 cities. In February 2010 Sandvik opened up a new mining and construction assembly centre in the Shanghai Jiading Industrial Zone that passed a plant in Finland to become SMC's largest production facility in the world. Apart from serving local customers 45 percent of the products will be exported. Asia is now the group's second largest market area. Sales amounted to M SEK 12,427, corresponding to 17 percent of Sandvik's invoicing.⁵

Due to the growing importance of the Chinese market, SMC is working with adapting to the Chinese customers. Recently Sandvik opened up a new research and development

³ www.economist.com/blogs/freeexchange/2010/08/china_0, 2010-08-18

⁴ Sandvik World 2009/2010

⁵ Sandvik World 2009/2010

centre in China. The purpose is to focus on product development for the Chinese market and, by opening up in China, take advantage of the local competencies⁶. SMC recently made a large restructuring of the China-region. From being a relatively small office, large recruitment has been made and new bigger office spaces has been acquired.

1.2 Problem Discussion

Because of the growing importance of the Chinese market, SMC is increasing its focus on China. To attract new customer SMC is implementing a new marketing plan for the China region. The marketing plan is being developed with the help from a public relations and communication firm. The marketing efforts will increase heavily, but since the marketing department has been relatively small and undeveloped there are few existing communication channels towards the customers. SMC wants to identify new communication channels for the region. To find new channels an external part is desirable to bring new untried ideas. From this point SMC will evaluate them and further look in to the interesting channels to adapt them and the content to SMC's desire.

1.3 Purpose

This thesis aims to identify new communication channels for SMC in China, this includes investigating the channels, the resources needed to implement them and the expected effect. Potential channels are indentified based on the information gathered on the Chinese market, the company and its surrounding. The result is a number of suggested channels. The thesis is intended to provide enough information to help the marketing department answer the question: *Is this channel of interest to SMC in China?* Notable is that the main purpose of this thesis is not to answer this question since the answer is dependent on the potential content of the channel. Further investigation will be needed for some of the channels before they can be implemented. Additionally, the thesis will also provide SMC with communication channels that the marketing department at an initial stage suggested as interesting, but are not attractive to SMC according to the author. The output will mainly be an oral and written presentation with a summary of the identified and analyzed communication channels. One presentation will be held at SMC's office in Shanghai for the marketing department. A second presentation will be held at Lund Institute of Technology with supervisor and opposes present, this presentation will also be open for other students and stakeholders.

1.4 Focus and Delimitation

The thesis only aims to investigate new channels for SMC in China, thus, no channels that are to be implemented on a global level has been analyzed, neither has channels that are relevant to the whole Sandvik Group.

A large number of channels have been identified, some that are not well suited for SMC. However, this thesis will only analyze the ones that the marketing department has, after discussion, suggested as relevant. Furthermore, the aim is only to identify the channels, analyze what content that can be included, what resources that are necessary and what

⁶ www.chinamining.com.cn

potential audience the channel has. Thus the thesis will not get involved in how the channels are used apart from naming examples of potential content. Additionally, only communication channels towards potential and current customers are identified. No focus is put on finding channels to attract future employees or investors.

1.5 Target Group

The marketing department at SMC in China is the sponsor and has, in interaction with authors, taken initiative to this thesis. The result has been presented continuously with a final oral presentation in the end of November. Therefore, the thesis is mainly aimed towards the academic target groups. The academic target group is mainly senior students with business or engineering background.

1.6 Disposition

Chapter 1 is the introduction to the thesis where the company and the Chinese market are presented as well as the problem discussion and delimitation.

Chapter 2 describes the methodological considerations that have been done as well as the implications of these on the study.

Chapter 3 provides an introduction to the theories and models that will be used in the thesis.

Chapter 4 provides an environment analysis of SMC on a micro and macro level.

Chapter 5 presents the current communication channels that are used at SMC in China today.

Chapter 6 is the main part of the thesis. The chapter presents the identified channels, including the resources needed to implement them and what potentials they have.

Chapter 7 is dedicated to present all conclusions drawn in this study.

2 Methodology

This chapter will define and present possible, as well as chosen, methods for this thesis. Different research approaches as well as data collection methods are discussed. Finally, the chapter ends with a discussion of validity, reliability and how criticism of the sources has been handled.

2.1 Methodological Approach

The methodological approach refers to the overall approach for the whole study, the whole chain from the initial formulation of the objectives to the final results of the analysis. Which methodological approach that is most suited for the study depends on the purpose of the study and the amount of existing knowledge in the specific area.⁷

- *Descriptive* approach is used when basic knowledge of the area already exists. The aim is to strengthen the existing relationship without explaining the context in the field. Thus, the focus is to describe, not to understand or interpret.⁸
- *Explorative* approach is used when there is little existing knowledge in the field. The aim is to obtain knowledge and understanding in the field. It is common in case studies, that is, when the study is done in the environment that is being studied.⁹
- *Explaining* approach investigates causality within the area, how different factors are related and what the outcome is.
- *Predictive* approach is used when the aim is to provide forecasts about what would happen given certain conditions.¹⁰
- *Normative* approach is concerned with identifying the best decision to take.

At an initial part of the study an explorative approach is used. There exists little knowledge about the unexplored communication channels for China at SMC while the aim is to understand and obtain knowledge about new channels for SMC. A case study is conducted at SMC's office where certain people in the organization are interviewed. When the new communication channels are identified, a predictive approach is used. A meeting is held with the marketing department where the ideas are presented. Feedback is given concerning which channels to focus more on. The aim in the second part is to predict the resources needed to implement the recommended channels and the effects.

2.2 Research Approach

The research approach of the study has to do with the basic technical design, how we technically should proceed to draw the desired conclusions.

2.2.1 Qualitative and Quantitative Methods

There are two comprehensive approaches in research, qualitative and quantitative methods.

⁷ Höst et al. (2006) , p.29

⁸ Andersen (1998) , p.18

⁹ Davidson & Patel (2003), p.12

¹⁰ Lekvall & Wahlbin (2001), p.197

- Quantitative methods seek to quantify data and investigate representative samples. A quantitative approach is often used when there is a great amount of measurable data. When using quantitative methods it is necessary to have a good knowledge of the area to be able to develop the investigation and interpret the result.
- Qualitative methods are often used when the studied phenomenon is difficult to measure or when the access of information is limited.¹¹ The focus is more on describing meaning than illustrating statistical conclusions. Typically for qualitative methods is that the analysis and data collection is performed simultaneously. Qualitative methods are more flexible than its counterpart since it allows the interviewee to shift in direction and focus on what seems to be most important and relevant.

Since little knowledge of the field exist on beforehand and the desirable data in this thesis is limited and difficult to measure, a qualitative approach is used. In depth interviews are necessary to understand the business and its surrounding due to its complicated nature. The ideal type for qualitative methods is inductive. It has got a flexible design and a closeness, sensitivity and transparency to the informant. Interviews, observations or questionnaires are commonly used. In qualitative data collection words are more important than numbers. The results are Empirical grounded and there is an understanding of the social reality. The selection of informants is done intentionally based on theoretical or empirical relevance.

2.2.2 Case Study

In qualitative studies the research is obliged to collect it through non-experimental studies since the possibilities to do experiments are limited. Among non-experimental methods, the most common are surveys and case studies. Case study is an empirical methodology used to understand a phenomenon by using perceptual triangulation that normally uses several methods and tools for data collection from different entities. The methodology includes both qualitative and quantitative approaches¹². Yin¹³ argues that a case study is preferred when examining contemporary events, and is especially suitable when the research questions are “why and how”, as opposed to a survey research where the questions instead are “who, what, where, how many and how much”.

In this research there are two different case studies. The first will be an extensive study of SMC’s different segments and regions to understand the current methods of communication. To identify the new communication channels, a multiple case study is done on a number of business-to-business companies active in China and in the rest of the world to find out what channels they are using.

¹¹ Wallén, (1996)

¹² Gimenez (2000), p. 315

¹³ Yin (1994), p.6

2.3 Data Collection

Data can be collected in several different ways depending on the source and purpose of the data. In this research, the information concerning the company, the market and the customers exists as knowledge among individuals related to the industry. The possible ways of extracting this knowledge is either through interviews or questionnaires. Alvesson¹⁴ writes:

“Questionnaires may be appropriate in order to get information about simple and relatively fixed issues, where the meaning can be standardized and quantified, such as physical length, biological sex, income, formal education, chronological age and year of employment. When it comes to more complex issues, respondents usually interpret formulations and response alternatives in varying ways, far beyond the control of the researcher“

The information desired is complex and the sources of the data are limited. Additionally, the researcher has little previous knowledge of the area and therefore interviews are preferable. Interviews are done with personnel from SMC in China to analyze the company and its surrounding. Additionally, interviews are done with people from different parts of the Sandvik group to analyze used communication channels in other parts of the group.

To get information regarding communication channels at other companies, their marketing strategy is analyzed through desk studies. To obtain information of how to adapt the findings to the SMC and its market, literature studies have been done. The approach that has been used can be seen in figure 2-1.

¹⁴ Alvesson (1996), p. 561

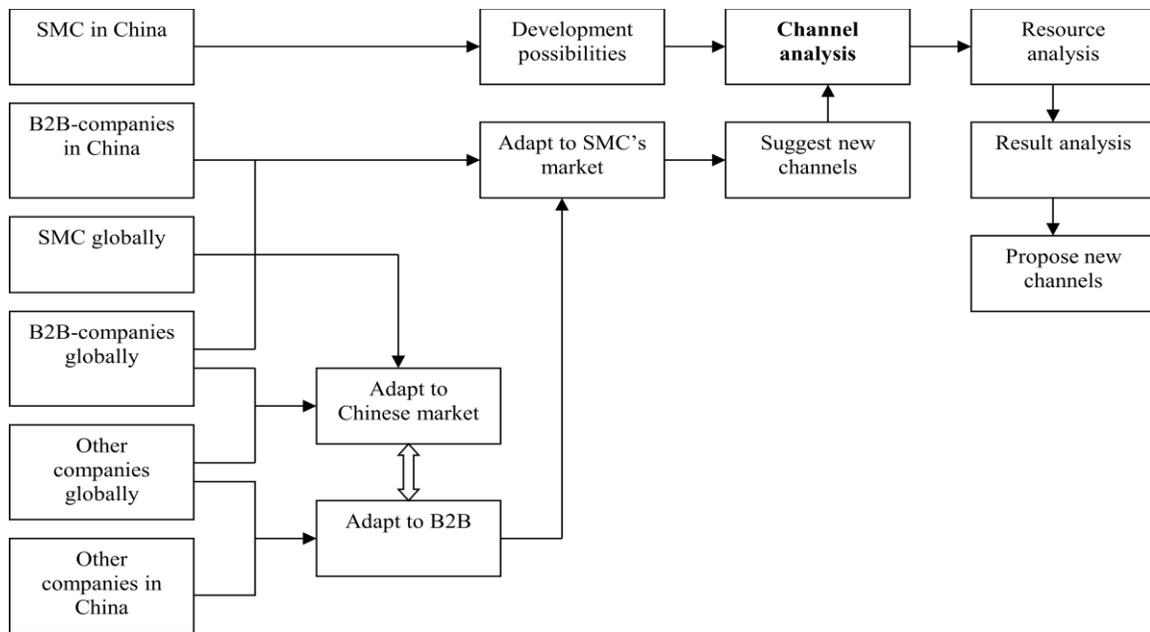


Figure 2-1: The channel identification process

SMC's communication channels in China has been identified and analyzed to see if they can be developed. Communication channels of business-to-consumer companies has been identified and adapted to the business-to-business market, while global companies' marketing channels has been adapted to the Chinese market. Business-to-business companies' channels have further been adapted to SMC's market. This has lead to a number of suggested channels that has been analyzed based on what resources are needed for implementation as well as expected result. Feedback has been given from the marketing department concerning which channels to focus on. Finally a limited number of channels have been proposed.

To analyze the customers, internal tools has been used; For example, to find the geographical areas of metal mining sites, SMC's mine database is used. Coal fields have been found through extensive researches on internet and from reports by China Coal Resource. Additionally, two interns also contribute to the thesis by conducting a competitor analysis.

2.3.1 Primary and Secondary Information

The data collected can be divided in two different categories; primary and secondary data;

- *Primary data* is collected especially for the study. It helps to ensure the relevance and allows the researcher to gain better control over the reliability of the information.

- *Secondary data* is information available from previous studies. It is especially important to consider the reliability and objectivity of the source when it's secondary data.¹⁵

In this thesis, the primary data mainly consist of the interviews. The secondary data used consist of the desk study.

2.3.2 Interviews

There are mainly three types of interviews that can be conducted when carrying out a research project; structured, semi-structured and unstructured.

- Structured interviews are very standardized; the researcher reads the questions word by word and follows the script strictly. The aim is to ensure that each interviewee is presented with the same questions in the same order to ensure that the answers can be compared. Structured interviews are commonly used in quantitative researches and are especially useful when looking for specific information since it keeps the data concise and reduce research bias.
- Semi-structured interviews are based on an interview guide that consists of a list of questions or themes. There is certain flexibility in how the guide is followed. The follow-up questions depend on the answers. Semi-structured interviews are more common in qualitative interviews. The type is preferable when the topic is subjective to the participants.
- Unstructured interviews are similar to a conversation and can originate from one question. There is no order or script, but sometimes the researcher uses a checklist of topics to cover. Unstructured interviews are commonly used in case studies where the researcher wants to find as much information as possible about the topic. Since the dialog is not limited by a protocol, the interview might reveal information that would not have been exposed using a structured or semi-structured interview.

In this research, two different types of interviews with different purposes are conducted. At an early stage, in-depth interviews with representatives and partners of SMC are conducted to understand the business, the market and the customers. Interviews are also conducted with representatives from the marketing department from different segments and regions within Sandvik to investigate new communication channels for SMC in China. The goal in both types of interviews is to obtain as much information as possible, thus a semi-structured or unstructured interview are preferable. However, the field of study is narrow and to prevent the interview from taking a direction that would not serve the purpose of the report the interviews are semi-structured.

Depending on the location of the interviewee the interviews are either performed via personal meetings or over the telephone. The interviews are well prepared and an interview guide is constructed in advance. The guide continues to develop during the research as the data collection is a continuous process, it is also adapted depending on the interviewee's position. Before starting, the purpose and structure of the interview is

¹⁵ Ejvegård (1996), p. 81

explained to minimize the risk of misunderstandings. The questions are constructed to enable the interviewee to speak freely to obtain as much information as possible. Notes are taken continuously and all answers are followed up and clarified. The interviewees are handpicked from relevant departments based on recommendations from the presidents of the departments.

2.3.3 Desk Study

Desk study is a research method where the answers are found in secondary data. In this thesis, three separate desk studies with different purposes are conducted:

1. As a complement to the interviews, basic knowledge of SMC's activities and the mining and construction industry is built up through information from Sandvik's intranet and webpage combined with information material and business intelligence reports.
2. To investigate new communication channels information is found in:
 - Companies' websites, annual documents and press releases
 - Reports and articles in newspapers, trade journals and business journals
 - Online marketing portals and various blogs
3. To study how to adapt the identified channels to the country and the market information is found in:
 - Reports from McKinsey Quarterly, Boston Consulting Group, the Economist etc.
 - Literature concerning business-to-business marketing and marketing in China such as: "*B2B Brand Management*" by Philip Kotler, "*Business Marketing Management*" by Michael D. Hutt and "*Social Media and Marketing in China*" by Sam Flemming.
 - Articles in newspapers, trade journals and business journals
 - Business-to-business online communities and blogs, such as www.b2bmarketingzone.com and www.b2bm.biz/knowledgeBank
 - Government reports

Additionally, a theory study is conducted concerning the tools that are used in the research, such as: Porter's five forces and the PESTEL analysis.

2.4 Induction and Deduction

There are mainly three different strategies for producing knowledge; deduction, induction and abduction.¹⁶

- Induction is used when a conclusion is drawn based on empirical data that is collected without prejudices. Inductive methods are commonly used in areas where little theory exists.
- Deduction is used when the study aim to verify or reject an existing theory based on the collected data.
- Abduction is a mix between the deductive and inductive method. The conclusion is made simultaneously as the empirical information is gathered. The researcher

¹⁶ Holme & Solvang, (1997)

is allowed to go back and forth between empirical data and existing theory, thus it is possible for the researcher to see new relations in the collected data.

The goal in this study is to gather data concerning the company, the market and different communication channels and draw conclusions about what fits the company the best, thus an inductive method would be the most appropriate method. However, the empirical information that is gathered is continuously interpreted with support from relevant theories. The theory and conclusion that is made is thus not solely based on empirical findings and could therefore not be classified as a pure inductive method. Since the methodology is something of a mix between the induction and deduction, abduction is used.

2.5 Credibility

During the collection of data there is always a certain degree of uncertainty. Therefore, to ensure a certain level of credibility, it is important to take two aspects into consideration; reliability and validity. To make sure that the research is reliable and valid it is possible to use triangulation.

2.5.1 Reliability

Reliability refers to the measuring method's ability to resist influence from various coincidences. A reliable study would provide the same results when being repeated matter less of who is conducting it.¹⁷ To ensure a high level of reliability the followed questions are asked:

1. Will the measures result in the same value when repeated?
2. Will other observers achieve similar observations?
3. Is there transparency in how sense was made from the raw data? Is there a risk of observer error?¹⁸

In this research, the aim has been to combine different types of data to increase reliability. As mentioned earlier, the interviews are well prepared with an interview guide constructed in advance and a good knowledge of the subject. The interviewee is informed about the purpose of the research and the interview. Notes are taken during the interview, and are sent back to the interviewed to make sure that everything is interpreted in the right way. Different groups within the company are interviewed to spread the sources. A risk when interviewing people from other cultures is that the researcher and the interviewed might have different ways of communicating and thus can interpret things differently. This is particularly true in the case of China. The term "mei mianzi" is very important concept in China and means "to lose face". Chinese people have a great respect for each other and do not want to cause anyone else to lose face. This easily becomes a problem in interviews since people do not want to risk criticizing anyone else and therefore tend to avoid talking about negative issues, thus, important information might be left out. Another problem concerning mei mianzi is that people do not want to lose face by not knowing the answer to a question they are expected to know. The office in

¹⁷ Arbnor & Bjerke (1994)

¹⁸ Saunders et al (2006)

Shanghai has been growing at a rapid phase, meaning that many of the employees are fairly new and does not have a very deep knowledge of the customers and the market. Still, people might present answers to certain questions as fact, when it actually just is guesses. Therefore it is necessary to double check many of the questions with different sources to be fully sure the information is correct. Additionally, the communication in Asian countries is more indirect compared to that of western countries. This means that everything is not always spelled out. This is important to be aware of as a foreigner. Information is easily missed, therefore it is extra important to clarify uncertain answers.

A large amount of the data is gathered from Chinese sources. Translation tools such as Google translate are used to overcome language barriers. The translation such tools provides is seldom fully correct, thus there is an increased risk of misinterpreting the information. To minimize the risk of mistranslation, Chinese-speaking colleagues have been asked in the cases of uncertainty.

2.5.2 Validity

Validity is concerned with the underlying data of a study and whether the selected research method is measuring what it is intended to measure.¹⁹ In general, it is difficult to ensure high validity in a qualitative study. A practicable method to increase validity is to try to reflect the studied area from as many different areas as possible. To maximize the validity the researcher should take every opportunity to obtain different perspective, different evaluators and different theories. There are three different types of validity:

- Construct validity refers to establishing the correct operational measures for the concepts being studied, meaning: if the study investigates what it was set out to investigate.
- Internal validity refers to the degree of confidence that the results gathered within the case are true.
- External validity refers to the degree of confidence that the results can be generalized. If the result can be used in other situations.²⁰

Due to lack of information concerning the market, and especially the customers, several assumptions has been necessary to make during the study.

2.5.3 Triangulation

As mentioned earlier, Triangulation can be used to improve both reliability and validity. Triangulation is a combination of two or more theoretical perspectives, methodological approaches, data sources, investigators or data analysis methods. There are four different types of triangulation:

- Data triangulation involves gathering data from several sampling strategies on different times, social situations and people.
- Investigator triangulation refers to the use of more than one researcher when gathering and analyzing data.

¹⁹ Ejvegård (1996), p. 69

²⁰ Arbnor & Bjerke(1997), p. 231

- Theoretical triangulation refers to the use of more than one theoretical position in understanding data.
- Methodological triangulation refers to the use of more than one method for collecting the data.

In this thesis, methodological and data triangulation has been achieved mainly through by gathering data from various sources using different methods; such as interviews with different individuals within the company as well as gathering secondary data from different sources.

2.5.4 Objectivity

Objectivity refers to how much personal valuations and opinions affect the conclusions.²¹ In a qualitative research process, information is gathered with a pre-understanding of the problem, thus, the result might be affected by the researcher's prejudices. Prejudices about other cultures can be deeply rooted, this is perhaps especially true in the case of China. The prejudices about another culture will affect both the material being used for the study as well as the study itself. It is important to carefully choose sources that show different cultures sides of the situations. It is also important to be aware of the fact when interpreting materials, finally one must also have it in mind when drawing conclusions.

In a qualitative study that is largely based on interviews one must also consider the interview subjects' objectivity concerning the topic. To ensure objectivity different people from different groups is interviewed to avoid subjective ideas from individuals.

²¹Björklund & Paulsson (2003), pp. 59-60

3 Theory and Models

This chapter provides the theoretical foundation on which the thesis is built. The purpose of this part is to provide the knowledge and terminology necessary to analyze the Chinese market and understand business-to-business marketing in China. Traditional marketing theories as well as common business models are explained.

3.1 Tools for Market Research

To understand the company's market and its surrounding Porter's Five Forces analysis and the PESTEL analysis is used to study the market on a micro- and macro level.

3.1.1 PESTEL

The PEST analysis is a tool to get an overview of the macro-environment of a firm. PEST is an abbreviation of Political Economic Social and Technological. The method splits up the four different macro environmental factors to be analysed separately:

- The Political factors refer to how and to what degree the government intervenes.
- The Economical factors include the economic growth, interest rates, exchange rates and inflation rates.
- The Social factors include cultural aspects, education, population growth rate and demographic information such as age and gender distribution.
- Technological factors include research & development activity, automation, technology incentives and the rate of technological change. The technological factors influence barriers to entry, minimum efficient production level, outsourcing decisions, quality, costs and innovation.

The PEST analysis is often extended to a PESTEL analysis by including laws and environmental factors.

- Environmental factors include ecological and environmental aspects such as weather and climate. It also includes the growing concern of environmental awareness.
- Legal factors include different laws, such as consumer laws, employment laws, health and safety laws and antitrust laws.²²

3.1.2 Porter's Five Forces

Porter's five forces is a framework that is used to describe how attractive a market is to be active in. The model describes five forces that determine the competitive intensity of the market. When the competitive intensity is high the market is unattractive and the profitability is low. Porter developed the model in 1979 to describe the micro environment of a company. The micro environment refers to the forces that are close to the company and affect its ability to make profit. The model can be used to analyze a market in a starting point.

²² Johnson, et al. (2008)

- The threat of new entrants is high when it is easy to start a new competitive business. Profitable markets attract new companies and thus provide a high threat of new entrants. If there are barriers of entry involved, such as high technology, it is difficult for new competitors to enter the market.
- The intensity of competitive rivalry is often the most important force that determines the competitiveness of the industry. The intensity depends on the number and size of the competitors. Other factors such as if the current competitors have invested much capital in the market also affect the intensity.
- The threat of substitute products is high when it is easy to switch the product to other similar products. It is mainly determined by how many substitute products there are on the market and how similar they are.
- The bargaining power of customers is high when there are few customers who have several options of what to buy. It describes the ability customers have to put pressure on the firm.
- The bargaining power of suppliers is high when there are few suppliers of important products and when it is difficult to switch supplier.

3.2 Business to Business Marketing

Business-to-Business marketing, often abbreviated to B2B marketing and also known as business marketing, refers to the process where companies create customer interest in goods or services, where the customers in turn resell them, use them as components or use them to support their operations. There are several differences between business marketing and consumer marketing. The latter is normally aimed at large groups through mass media and retailers, while the marketing process in business marketing is more personal. In business marketing the target market for the product or service is smaller and has more specialized needs. The customer is more aware of the product range and put more consideration into the buying process. Long-term purchases are more common in business-to-business markets. Additionally, business customers tend to demand more service back-up from the suppliers. Since the target group is narrower and easier to define, the promotion planning is relatively simple when the media, information seeking and decision-making habits of the customers are identified. The customers usually seek information concerning products through specific trade shows and trade magazines. The typical marketing communication methodologies include advertising, public relations, trade show attendance, sales collateral and branding and interactive services such as website design and search engine optimization. Business marketers tend to put a smaller part of the budget on advertisement.²³

Depending on the product of the business-to-business company the purchasing behaviour and complexity differs for the customer. In figure 3-1 this is illustrated in the risk-value purchasing decision matrix where four categories are separated depending on the financial value and the risk associated with the product.

1. Low-risk and low-value purchases are similar to consumer purchases, there is typically a single person making the buying decision that often have a less important assignment within the company.

²³ Hutt & Speh (2004)

2. Low-risk and high-value items such as raw materials normally involve a mix of technical, purchasing personnel and senior people. This is necessary to ensure a good quality as well as a good price.
3. High-risk and low-value items often involve a mix of specialists since the risk involved is due to the product and not due to the price of the product.
4. High-value and high-risk products are the most different from consumer purchases. It is usually the top management who is making the final decision with the help from several specialists. Since the products and services are expensive and important for the customer they tend to be more reluctant to change suppliers and therefore take more consideration concerning potential consequences from the decision.

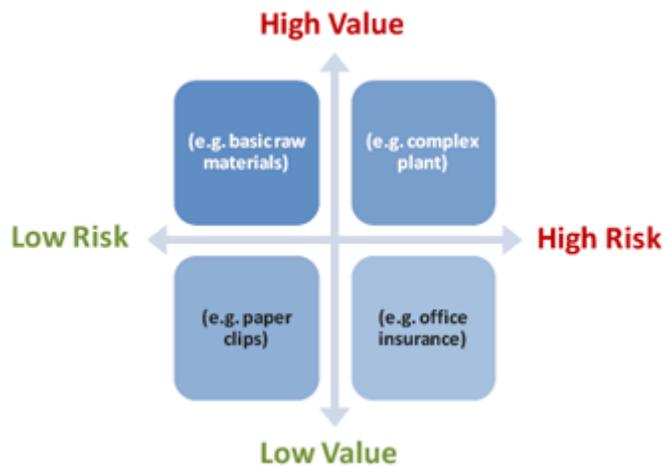


Figure 3-1 The Risk-Value Purchasing Decision Matrix²⁴

In the case of SMC, the product is in the 4th square; the products are expensive and complex. There is high demand on the product, thus it is a high risk involved in the purchase.

3.2.1 The Marketing Mix

Marketing is a wide term and refers to several different activities. In the 1960s Jeremy McCarthy suggested a model called the marketing mix to describe the different aspects of marketing. The marketing mix consists of four elements called the four P's:

- *Product* represents the product or service that is being sold and how it differentiates from competitors' products.
- *Price* represents the process of determining how much the customer should pay for the product.
- *Place* represents the distribution channels to the customer, that is, the location where a product can be purchased.
- *Promotion* is the process of reaching the target market and convincing them to buy the product.²⁵

²⁴ www.b2binternational.com/library/whitepapers/whitepapers04.php

²⁵ McCarthy & Perreault (2008)

Additionally, the promotion-part can be divided in the marketing communications mix, which is compromised of:

- *Advertising* refers to any paid presentation and promotion of ideas, goods, or services. It reaches large, geographically dispersed audiences. While the overall costs often are high, there is a low cost per exposure. By advertising the company builds brand image while consumers perceive advertised products as more legitimate.
- *Personal Selling* refers to the process of persuading buyers to purchase products through personal communication. It is the most effective tool for affecting the buyers' purchase decision. It is relationship-oriented, and the personal interaction allows for feedback and adjustments. It is the most expensive of the promotional tools.
- *Sales promotion* is special time limited promotions to increase sales. It is a good way of attracting attention and offer strong short-time purchase incentives. On the other hand it is not an effective way of building long-term brand preferences.
- *Public relations* are about maintaining public image. It can take many different forms such as news stories, events or sponsorships. It reaches many prospects and is a relatively inexpensive communication method.
- *Direct Marketing* sends its message directly to the buyers without the use of intervening communication media. It has four distinctive characteristics: it is non-public, immediate, customized and interactive. It could go through for example telephone or mail. It is well-suited to highly targeted marketing efforts.²⁶

Since this thesis aims to investigate the communication channels for customers, this thesis will only focus on the promotion part of the marketing mix. In China, the sales department usually plays a larger and more important role within the company compared to in western markets. This might be because of the importance of relationships in business decision-making in China. Often it is the sales people who must establish the connections and befriend the customers. Relationships in business tend to imply long sales processes where patience is necessary continual learning and on-site presence. From the marketing communication mix, little focus is put on personal selling and sales promotion since the sales department covers these areas. Due to the high cost and complex nature of SMC's products the marketing is not focused on generating direct sales, but on branding.

3.2.2 Branding

A brand is the identity of a specific product, service, or business. A brand can take many forms, including a name, sign, symbol or slogan. Branding refers to the process of creating brand awareness among the customers and getting the customers to associate the brand with a product or service that has certain qualities or characteristics. It helps customers remember and recognize the brand of company and is crucial since customers

²⁶ www.davedolak.com/promix.htm, 2010-07-28

will not consider a brand if they are not aware of it. Branding can be done through all of the channels in the marketing communications mix.²⁷

Branding is a new but important activity for companies in China. A research by Boston Consulting Group suggests that brands are more relevant for Chinese consumers than for their counterparts in Europe or the United States²⁸. The report argues that because of the lasting reluctance that Chinese consumers have to online commerce, the importance of brands and their ability to gain trustworthiness is especially important online.

3.2.3 Influencer Marketing

Influencers are individuals or organizations that have influence over potential customers. Influencers can be potential customers or third parties. The third party influencers exists either as part of the supply chain; for example retailers or manufacturers, or as value-added influencers such as industry experts, journalists or academics. Influencer marketing is a marketing technique where these individuals or organisations are identified and targeted. The expected effect is that they will influence potentials customers to buy the company's products. This can be done in mainly three different ways:

- Marketing towards the influencer to increase the brand awareness among the influencers.
- Marketing through influencers to increase market awareness of the company amongst target markets.
- Marketing with influencers, and thus turning the influencers into advocates of the firm.

When talking about influence it is normally not spread through arguments and coercion, but instead spread through loose interactions between relevant parties. Influencer marketing can be done through word of mouth marketing.

A technique that is becoming more common is to use social media to do influence marketing. By analyzing for example social networking sites or microblogging sites it is possible to identify influencers by looking at individuals who has a lot of influence on others. Social medias can then be used to create a common forum for the influencers to interact with potential customers.²⁹

3.2.4 Word Of Mouth Marketing

Word of mouth refers to the passing of information between individuals; it includes any form of human communication, such as face-to-face, telephone, email and text messaging. Depending on the product, word of mouth is the primary factor behind 20 percent to 50 percent of all purchasing decisions. It is more important when the customer is buying a product for the first time, it also has a larger impact the more expensive the product in question is³⁰. With the increasing use of the Internet as a research and

²⁷ en.wikipedia.org/wiki/Brand_management, 2010-08-02

²⁸ Michael & Zhou, China's Digital Generations 2.0, The Boston Consulting Group, May 2010

²⁹ Brown & Hayes (2008)

³⁰ www.mckinseyquarterly.com/A_new_way_to_measure_word-of-mouth_marketing_2567

communications platform, word of mouth has become an even more powerful and useful tool of marketing. Traditionally, word of mouth has been seen as something that marketers had little possibility to affect, something that comes naturally from creating satisfied customers. This is called organic word of mouth marketing. The typical ways of enhancing it is through improving the products or services, offering better service and by listening to customer's feedback. It is a slow process and it requires the company to have high quality products and excellent service.

During the latest few years, more and more companies are working with amplifying the word of mouth – so called word of mouth marketing. This is when the companies develop strategies to get people to talk about the company, its products or its services. The most common examples include;

- Creating communities
- Providing new tools to enable people to more easily share information
- Gaining attention through marketing activities such as experimental marketing
- Influencing opinion leaders

What makes word of mouth a great tool of marketing is the inbuilt trust that exist between the communicators. Researches show that individual are more willing to believe information that comes from an unrelated source compared to more common forms of promotion methods.³¹

Word of mouth is complicated and has various origins and motivations, but according to McKinsey there are three different forms that can be identified: experiential, consequential and intentional.²⁹

- Experiential word of mouth is what comes from the customer's experience with a product, especially when it differs from what the customer was expecting. It is the most common type of word of mouth and accounts to 50 to 80 percent of all word of mouth activity. It is also the most powerful type because the customer is more emotionally engaged in the topic. It comes in both negative and positive form; complaints when the product does not live up to the expectation, and praises when the product is better than expected.
- Consequential word of mouth comes from marketing activities. The impact of the advertisement is usually higher when it is passed on as word of mouth compared to the direct effect of the advertisement. This is because marketing campaign that creates word of mouth communication has higher campaign reach and influence.
- Intentional word of mouth is when the company tries to create an interest in for example product launching using celebrities. The form is less common than two earlier mentioned, this is partly because it is more expensive while the impact is difficult to measure.

³¹ Grewal et al. (2003)

According to a survey conducted by the Keller Fay Group³², the number one influence on purchase decision among business-to-business executives in the United States is word of mouth. Half of those surveyed said that word of mouth would both get them to buy and pass along the word themselves. In another survey of business-to-business decision makers by Forrester Research, 84 percent of respondents said word of mouth recommendations influence their purchase decisions³³. On average, about 40 percent of business to business customers globally are highly likely to recommend companies and products according to a study by Zuberance³⁴

In general, word of mouth tends to be more important in emerging markets. Customers have less resource if the product would not work properly, which increases the cost of a bad selection. Regulation on advertising is weaker compared to that of developed countries which makes fake claims more common. Consequently, customers become more sceptical about messages delivered through sponsored communication channels. China is an emerging market with a collective culture and a growing usage of Internet. SMC has high-priced products at a market where there is much communication between the customers. Therefore, word of mouth is likely more powerful in China than in developed countries. A survey observed that 66 percent of Chinese consumers rely on recommendations from friends and family, compared with 38 percent of their US counterparts.³⁵

Today, word of mouth is not a common tool of marketing in the mining and construction equipment business. This provides an opportunity. The incremental gain from outperforming competitors with for example high-cost trade magazine advertisement is relatively small. That is because all mining and construction equipment companies actively use the same channel in their marketing activities. At the same time, the increasing volume of information that is available and is exposed to the customer is high. As customers become overloaded with information, they become more sceptical about traditional company-driven advertising, and increasingly prefer to make purchasing decisions independent of what information they get from the companies. With so few companies actively managing word of mouth the potential is high. It is also relatively cheap way of marketing in that the marketing itself is carried out by customers.

For a company with business customers the most important characteristic of the communication channel is not to spread the message to as many as possible, but to reach as many as possible of the few important decision-makers and influencers. An important advantage with word of mouth marketing is that it can easily spread among people with the same interest in the same industry. It might be through the working-place, networks or friends.

³² "Driving Word of Mouth Advocacy Among Business Executives: The Experiential Marketing Connection" report, conducted by the Keller Fay Group and sponsored by Jack Morton Worldwide

³³ www.Forrester.com

³⁴ www.zuberance.com

³⁵ www.mckinseyquarterly.com/Marketing/Sales_Distribution/Chinas_new_pragmatic_consumers_2683?gp=1

3.2.5 Content Marketing

Building a trustworthy brand by providing useful content to the receiver is often referred to as content marketing. It is a way to get a good reputation and build brand-loyalty among customers. The purpose of the information is not to advertise the company's own products or services, but to inform target customers and prospects about key industry issues, sometimes involving the marketer's products. Usually the information is distributed to a selected audience; this can be current customers or people who simply have subscribed to the information. Content marketing can be in the form of magazines, newsletters, white papers, video, emails and events among much else. The argument for content marketing is that the company hopes that educating the customers results in the brand's recognition as a thought leader and industry expert. A company might use content marketing to reach a variety of business goals, such as thought leadership, lead generation, increasing direct sales and improving customer retention.³⁶

3.2.6 Viral Marketing

Viral marketing is in many senses similar to word of mouth marketing; it relies on other people spreading a message onwards. Viral marketing techniques uses social networks to spread brand awareness through self-replicating viral processes, much like the way a virus is spread. The idea is to create a content that individuals want to spread to as many people as possible. Viral marketing content often take the form of videos, images, text messages or games. Often the content does not have anything to do with the company's product; instead it is just a way to increase brand awareness. To optimize the effect of viral marketing marketers try to identify authorities or individuals with high social networking potential.³⁷

3.2.7 Search Engine Marketing

Search engine marketing is one of the best marketing techniques when it comes to increasing the online visibility of a website, and is critical to any company that wants their website to be seen and found by their target audience. The two most common methods of search engine marketing is Search engine optimization, from now on referred to as SEO, and paid search advertisement.

Search engine optimization refers to the process of increasing the visibility of the site by adapting the webpage better to search engines to get a better search rank. Search rank is the position of the link in search result; a high search rank means that the site gets listed far up in search result. SEO considers how search engines work and what customers search for. Optimizing a website may involve editing its content and HTML-code to increase its relevance to specific keywords.

Paid search advertisement is a method of placing online advertisements at search engines. Search advertisements are targeted to match key search terms. The marketing method is cost-effective since it only targets people that are searching for something specific. The

³⁶ www.contentmarketinginstitute.com, 2010-09-03

³⁷ en.wikipedia.org/wiki/Viral_marketing 2010-09-04

advertiser can target key terms that are relevant to the company and its product. When a customer is using a search engine to identify and compare relevant purchasing options, the advertisement will be visible.

3.2.8 Social Media

Social media are web-based channels for social interaction, by using highly accessible and scalable publishing techniques to turn communication into interactive dialogues. One of the key characteristics of marketing in social media is that it is not possible to completely control the message through social media, instead one participates in the conversation in the hopes to contribute and influence in favourable way. Social media can have a large impact on customers buying decisions, but only if it is presented by someone they have come to trust. Therefore a carefully designed social media strategy is crucial for any directed marketing plan by trying to use authority-building techniques. According to the 2010 Trust Study³⁸, using social media is most effective if marketing activities revolve around genuine authority building. Someone performing marketing within a company must honestly convince the customers of their genuine intentions, knowledge and expertise by providing useful and accurate content. If this is done trust can be developed naturally. In this way, social media is used to conduct content marketing. Social media can reach a broad target group; it is possible to reach decision-makers, influencers, future employees as well as investors.

3.3 Cultural Differences

For a global company that targets markets in different countries it is necessary to adapt to the culture. This is especially true for marketing since people perceive things differently and communicate in different ways. To be successful on a market it is necessary to understand the cultural differences. Since the company is Swedish, the global marketing team is compromised of mainly Swedish employees and the author of this thesis is Swedish, this part will mainly deal with differences between China and the western world in general and Sweden in particular.

3.3.1 Communication

People communicate in different ways in different parts of the world. Edward Hall³⁹ identified a difference in terms of low and high context communication. High context and low context communication refers to how much a speaker relies on things other than words to convey meaning. Context has also to do with how much one have to know before being able to communicate with someone. China has, like many other Asian countries, a high context culture. This means that people do not always say what they mean; instead they leave much to the audience to interpret. In China people are more reserved which is considered as active behavior in collectivistic cultures. Before being able to communicate effectively, they need to build up an interpersonal relationship to find the right level of context. Sweden on the other hand is a low context culture. Verbal messages are direct; one spells things out exactly. Communication is seen as a way of exchanging information, ideas, and opinions.

³⁸ www.edelman.com/trust/2010, 2010-09-10

³⁹ Hall (1976)

The difference in communication is especially important to be aware of when collaborating between different cultures. When individuals from high context and low context cultures collaborate, there are often difficulties that occur during the exchange of information. Misunderstandings are common and information is often lost since people from a low context culture assume that all information is spelled out.

3.3.2 Personal Relationships

Personal relationships tend to be more important in businesses in emerging market, partly since the concept of branding is still emerging while there is a history of quality problems from local suppliers. Often, doing business through personal relations is the only way to ensure a good quality for the price. Especially in countries like China and Russia where there is little culture of free information. In China the concept of “Guanxi” further extend the importance of relationships. Guanxi describes the basic dynamic in personalized networks of influence, most often in a business context. Guanxi is important in the business world because a buyer might chose a supplier solely based on Guanxi. While the direct translation of Guanxi is *relations*, the meaning of Guanxi is much deeper than just superficial friendship. When Guanxi exist between two parts, the individuals are friends outside the working life; they care, or pretend to care, for each other’s families and their wellbeing. The most important aspect of Guanxi from a business perspective is the obligations it brings; services and favours whose size is determined by the depth of the relationship. By accepting a favour from someone else, one also accepts to pay back the favour. Failing to repay a service means that the person lose face. The person is then obliged to compensate in another way if he or she wants to keep the relationship, this by for example giving a gift.

A consequence of Guanxi is that Chinese businessmen avoid doing business with people they have not established Guanxi with. Furthermore, establishing Guanxi takes time. To get involved too deep in a relationship with someone who turns out to be unworthy can lead to losing face, which contributes to the fact that many are cautious to establish Guanxi with someone they do not know. In order to establish Guanxi with a person, one may need to be introduced by a mutual friend.

In many ways, Guanxi can be seen as a currency to trade with. To give gifts is a typical way to trade with Guanxi. A service can be paid back with a gift, and in the same way a gift can be paid back with a service. Since many business deals are characterized by Guanxi, they also involve gifts. Gifts related to business deals are called something else in the western world; bribes. Similar to the western world, bribery is illegal in China. However, it is socially acceptable to maintain Guanxi with the help of gifts, this of course leads to much controversy in China. As the Chinese market has opened up to the outside world, the business culture has also been influenced by western values. To use Guanxi in international environments is getting less common, but it still permeates the Chinese market.

3.3.3 Hofstede's Cultural Dimensions

Hofstede, an influential organizational sociologist, has under his studies of interaction between cultures identified five dimensions of cultural difference. These five dimensions are important to understand when marketing in different countries. Hofstede bases the dimensions on empirical studies on 116,000 individuals from 66 different countries. Hofstede points out that the dimensions not necessarily applies to every individual in a country, but can be used to get a general idea of the country. The five dimensions are: Individualism, Power distance, Uncertainty avoidance, Masculinity, Confucian dynamism. Hofstede has developed an index to measure to what extent a certain dimension applies to a culture.

Individualism and its opposite, collectivism refers to the relative importance of individuals' compared to the group's interest. In collective cultures, people tend to prioritize the group's interest before the individual's. People see them self as a part of a group, while the group looks after the individual in exchange for loyalty. In China the culture is significantly more collective compared to the western world. People tend to do more things together with other people in groups. The family is very important, and people are expected to take care of the older family members. It is common that the whole family is living together.⁴⁰

Power distance describes the extent to which people in a culture accept power differences. In a culture with high power distance, the power difference is large between the superior and the subordinate. The superior has a lot of authority and makes the decision while the subordinate follows without questioning. The concept of power distance is crucial when marketing in China since it is more important to target the superiors. In cultures with less power distance, the superiors delegate more responsibility to subordinates. Thus, more decisions are made on a lower level.

Uncertainty avoidance deals with a people's tolerance for uncertainty and ambiguity, thus also describing in what degree people are prepared to take risks. Distinction is made between high and low uncertainty avoidance. Cultures with low uncertainty avoidance are more positive to changes and new opportunities. In cultures with high uncertainty avoidance people prefer structure, consistent routines and does not take big risks. Whether China has high uncertainty avoidance or not is debatable. According to Hofstede's index, which can be seen in figure 3-3, China has an uncertainty

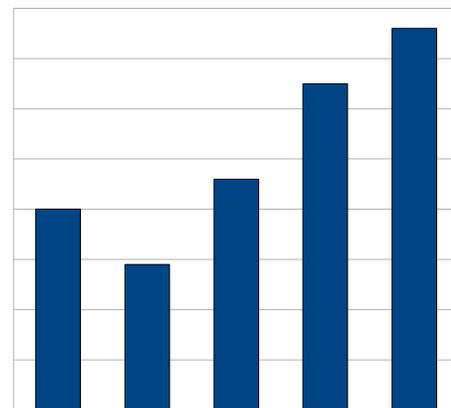


Figure 3-2: Uncertainty Avoidance

⁴⁰ Triandis (1995)

avoidance of 40 on a scale from 1 to 120⁴¹. It is important to point out that risk is valued in a different way in China. People are more reluctant to be the first mover, and are more prone to copy working concepts.

Masculinity describes how a culture values traditional masculine or feminine ambitions and values. The term explains what motivates people and what goals the individuals have. In a country with high masculinity people value power, material property and money as the most important. In a country with low masculinity people instead value quality of life, social significance and well being of others higher. The masculinity is high in China according to Hofstede. This can also be noticed in the Chinese society where it is commonly said that “*it’s all about the money*”. The concept of masculinity is important in marketing because it explains what people are attracted to. In a country with high masculinity it is more important for a brand to be associated with power and economical wealth.⁴²

Confucian dynamism is the fifth and last cultural dimension that Hofstede has identified. It describes how patient people in a country are. A distinction is made between long-term oriented and short-term oriented cultures. Long-term oriented cultures exhibit a lot of patience, have long-term goals and have great respect for tradition. In short-term oriented cultures people have more short-term goals and want to get the profits quickly. China, whose culture is strongly influenced by Confucian ideas are extremely long-term oriented. People have long term goals and values patience, perseverance and thrift high. For outsider it might seem like the business development is slow in a country like China.

⁴¹ www.clearlycultural.com/geert-hofstede-cultural-dimensions

⁴² Hofstede (1991)

4 Environment Analysis

This chapter aim to analyze the macro- and micro-environment of Sandvik Mining and Construction to understand how to reach the customers.

4.1 Macro Environment

In order to understand how to reach the customers within a market, it is vital to understand how the market is affected by its surroundings. To understand the macro-environmental factors affecting SMC in China a PESTEL analysis is used. The analysis will focus on such factors that are perceived as relevant to SMC's business. Due to the complex and authoritarian nature of the Chinese government and politics, the law and political part will be integrated.

4.1.1 Political

The Chinese government has much influence on businesses in China. The political influence is noticed both in the large amount of state owned enterprises and the impact of government policy making. The governmental interference is perhaps most obvious on the Internet, which is highly regulated by the government. In November 2000 the Golden shield project was launched, a massive surveillance and content control system often referred to as the Great Firewall of China. Since then several large global sites have been blocked such as Facebook, YouTube and Twitter. The main reason for the project is to minimize criticism of the government.

All businesses in general in China are dependent on government policy making. This also applies to the mining and construction equipment industry as well, where the largest customers are state owned enterprises.

The government is putting more focus on the safety situation at mines in China. Up until July 18th coal mine disasters in China had killed 351 people during 2010 according to China's work safety administration.⁴³ Recently the government introduced a new regulation to reduce the injuries in coalmines, which states that the mining management must visit in the mines themselves to ensure the safety. The management in coal mines often stress the safety at their own mines, but the fatalities in the industry speaks for itself; 2631 in 2009. The new regulation hopes to increase the safety by forcing the managers to risk their own safety.⁴⁴ Small mines account for a disproportionate amount of accidents, in 2009 they accounted for 70 percent of the accidents and fatalities, but only 35 percent of the coal production. The latest few years the government has continuously been working with consolidation of small and medium sized mines to create bigger firms that has the capital to ensure a better safety. In this way, the government also hope to increase centralization and decrease waste of resources as well as environmental pollution.⁴⁵ Independent analysts estimate that China has closed down between 20,000 and 50,000 small and medium sized mines. In the Shanxi province the number of coal

⁴³ english.eastday.com/e/100802/u1a5367212.html, 2010-08-04

⁴⁴ www.dn.se/nyheter/varlden/chefen-gruvade-sig-for-att-ga-under-jord-1.1176195, 2010-09-25

⁴⁵ www.chinamining.org/News/2010-08-26/1282785623d38606.html, 2010-08-26

firms was slashed to 1130 from 2200 in 2009. From 2000 till 2007 the number of gold mines shrank from 2000 to 800. In 2010, the central government continues to promote coalmine consolidation nationwide and around 8000 small mines will be closed.⁴⁶ Effort has also been put to close down the more dangerous mines, but this has not been fulfilled due to shortage of coal and an increasing demand for energy.⁴⁷

Because of the high competition in the metals industry and continuously increasing prices, the government has strengthened the management for mine exploration and mining of metals. Thus, the licenses needed for mining has become more difficult to receive.⁴⁸ This means that there likely will be fewer new entrants on the market, hence, it will be more important to focus on the existing customers and build long-lasting relationships.

China is becoming more open to foreign investment in the coal industry, especially in modernization of large existing mines and the development of new ones.⁴⁹ More capital will be pumped in to the market meaning that more customers will be able to afford SMC's products.

4.1.2 Economical

During the latest decade, China has grown from a global manufacturer to a consumer market. For 20 years ago, the main incentive for large global companies to move to China was the cheap production costs mainly due to low-priced labour. However, the country recently passed Japan to become the second largest economy in the world⁵⁰. Due to the fast economical growth a huge middle class has emerged. No longer is the country seen as a manufacturer, instead the interest for the Chinese customers has spread throughout the world. The country has also become the largest consumer of energy and raw material in the world, and is today the second largest market for the construction industry and might grow to become the largest within 10 years.⁵¹

During the latest 15 years China has been growing steadily with an average growth of 10 percent during the latest 30 years.⁵² With the help of a huge stimulus package the country managed it through the financial crisis comparatively easy. China's GDP growth was 10.3 percent in the second quarter in 2010, a slowdown from 11.9 percent in the quarter in 2010. As the economy is growing China is developing. Huge amounts of money are invested in infrastructure projects. The country is becoming more easily reached, making new areas attractive to invest in. Areas high on resources become more accessible which enables new mining projects, and thus creating more customers for SMC.

⁴⁶ Interview Grace Zhao

⁴⁷ www.uk.reuters.com/article/idUKTOE61D00V20100214 2010-10-11

⁴⁸ www.chinaszm.com, 2010-09-14

⁴⁹ beijingenergy.com, 2010-09-14

⁵⁰ www.economist.com/blogs/freeexchange/2010/08/china_0, 2010-08-18

⁵¹ www.guardian.co.uk/business/datablog/2010/aug/03/us-china-energy-consumption-data, 2010-09-14

⁵² [www.hudong.com/wiki/percentE4 percentB8 percentAD percentE5 percent9B percentBDGDP](http://www.hudong.com/wiki/percentE4%20percentB8%20percentAD%20percentE5%20percent9B%20percentBDGDP), 2010-09-16

The fast economic growth in the world and especially in China pushes the demand for mine resources in the nonferrous metals industry. Although the production of iron in China is continuously increasing, it still cannot meet the even faster growing market demand. In 2010 the government decided to invest additionally 5 billion RMB to strengthen the country's mineral exploration and an additionally three billion RMB for conservation, intensification and utilization of the mine resources.⁵³

China will overtake Japan to become the world's second-largest advertising market within five years, according to a report. The report on the entertainment and media industry by PricewaterhouseCoopers predicts a sustained upturn in advertising growth in China while Japan is largely static.⁵⁴

4.1.3 Social

The demographics of China are characterized by a large population with a relatively small young segment, much because the one-child policy that got introduced in 1979.

There is a heavy urbanization taking place in China; in 2009 the rural population accounted for 53.4 percent of the total population, compared to 64 percent in 2001 and 74 percent in 1990, as can be seen in figure 4-2. The UN forecast that half of the population will be living in urban areas by 2015. Parallel with the decreasing rural population and increasing urban population, the country's main focus of its industry and economic activities has also moved from rural to urban areas. The majority of the population lives in the eastern parts of China. This is important for the mining industry since most mines are located in rural areas.

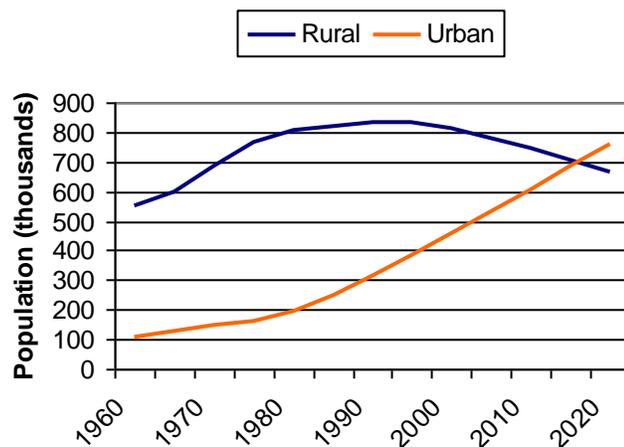


Figure 4-1: Population distribution

4.1.4 Technological

Ever since Premier Zhou Enlai established Science and Technology as one of the Four Modernizations in 1976, the Chinese government has placed stronger focus on science and technology as a part of the socioeconomic development of the country. Science and technology has been growing rapidly with large investments in agriculture, medicine, information technology and space science.

⁵³ www.reportlinker.com/p0315835/China-iron-ore-mining-industry-Updated.html, 2010-09-17

⁵⁴ www.independent.co.uk/life-style/house-and-home/china-set-to-overtake-japan-in-advertising-market-report-2006227.html, 2010-08-20

The most important development within the technological sector in China is the digital growth, and particularly the spread of the Internet. As can be seen in Figure 4-2, China had more than 420 million Internet users by June 2010 and the number is expected to grow to 469 million by the end of 2010.

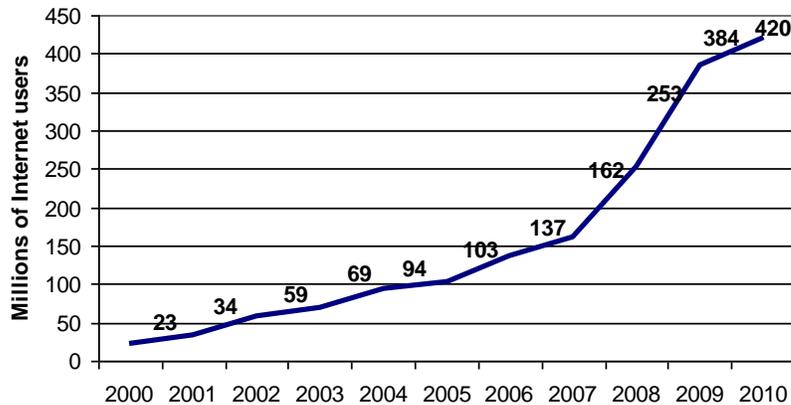


Figure 4-2: Internet users in China

Internet users who access the Internet via mobile phones reached 292 million in September 2010, an increase of 43.34 million from the end of 2009.⁵⁵ Due to the enormous population the penetration rate is still not more than 31.8 percent which points to the fact that there is still more growth potential. McKinsey quarterly forecast that over the next five years the numbers of Internet users will almost double, hitting 770 million people, or 55 percent of the population⁵⁶. The number of Internet users varies much between urban and rural China. The number of users in rural China is currently 110 million, though more than 60 percent of the population lives there. To address the problem, the government is investing more in the infrastructure of wideband information network, broadcasting network and Internet in rural parts of the country. Other measures include the wider application of information technology in the rural production and modernizing traditional production.⁵⁷

Over 80 percent use Internet from home. The average Chinese Internet user is online 18.7 hours per week compared to only 16.1 in the United States⁵⁸. China's internet users are on average very young; 66.7 percent of them are younger than 29 years old and 35.2 percent of them are teenagers. The major interests are instant messaging, social networks, gaming and streaming videos.

According to a study by Boston Consulting Group *“More than 80 percent of Chinese digital consumers use instant messaging, read news online, and stream or download music via the Internet. Three-quarters stream video content, and more than 50 percent use search engines and play games online”*.⁵⁹

⁵⁵ www.chinadaily.com.cn/china/2010-07/15/content_10112957.htm, 2010-08-25

⁵⁶ www.mckinseyquarterly.com/Riding_Aσίας_digital_tiger_2667, 2010-09-28

⁵⁷ www.chinadaily.com.cn/china/2010-09/26/content_11346843.htm, 2010-09-28

⁵⁸ english.gov.cn/2010-02/27/content_1543530.htm, 2010-09-27

⁵⁹ Michael & Zhou, China's Digital Generations 2.0, The Boston Consulting Group, May 2010, 2010-08-25

The potential of the Internet market is massive; China’s online ad revenue for 2009 reached 19.33 billion RMB and is expected to reach 25.27 billion RMB by 2010.⁶⁰ Traditional media is increasingly being substituted for digital media. Simultaneously online advertisement is taking share from magazines, newspapers and TV, and is projected to 20 percent of total advertisement in China by 2012 compared to 8 percent in 2008. The development has a huge impact on the future of advertisement; Consumers are increasingly using Internet in their purchasing decisions. The influence from social network contacts and friends has a larger impact than from traditional marketing messages or information from company web sites.⁶¹

Yvonne Zhou from Boston Consulting Group points out that *“Any company committed to engaging Chinese consumers will need to grasp the trends and implications of the country's Internet-usage patterns. Understanding the underlying needs and tastes of the different segments of China's digital consumers is vital to crafting an effective approach to communicating with them. Companies that fail to do so are at grave risk of losing touch with one of the world's most important growth markets.”*⁵⁸

Chinese mobile phone subscribers

The numbers of Chinese mobile phone subscribers are growing equally rapid, as can be seen in figure 4-3. As of October 25 2010, China had 833.30 million mobile subscribers, an increase of 86.09 million in the first nine months of 2010⁶².

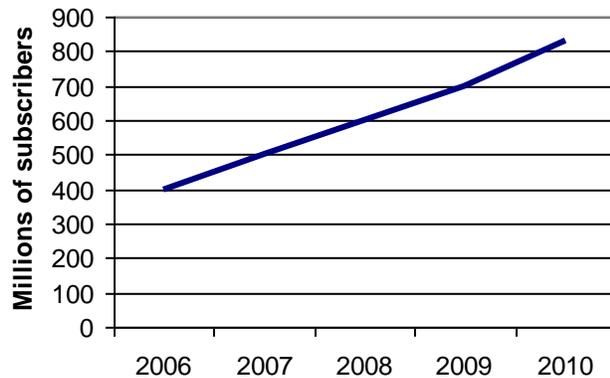


Figure 4-3 Chinese Mobile phone subscribers

In September, the largest mobile carrier in China, China Mobile, said its total mobile subscribers amounted to 590.8 million, including 15.3 million 3G subscribers, making it the world’s biggest phone company. The second largest mobile carrier, China Unicom had a total of 162.1 million, with 10.6 million 3G subscribers, while the third largest, China Telecom, had a total amount of 83 million subscribers.⁶³

The number of users accessing Internet with their mobile phones grew to 292 million in September 2010.

The digital development in China is built on Internet and mobile-communication infrastructures that extend throughout the whole country. This coverage solves one of the

⁶⁰ www.news.alibaba.com/article/detail/business-in-china/100366474-1-china-percent2527s-online-ad-market-2010.html, 2010-08-25

⁶¹ www.mckinseyquarterly.com/Riding_Aσίας_digital_tiger_2667, 2010-09-28

⁶² www.interfax.cn/news/15492, 2010-11-01

⁶³ www.reuters.com/article/idUSTOE69J06V20101020, 2010-11-01

main communication problems; how to reach people in rural parts of China. Digital technology opens up for a fast and cheap way of communication with these potential customers.

4.1.5 Environmental

China environmental problems are among the most severe of any major country and are mostly getting worse. The environment has traditionally been neglected during China's development. Instead the focus has been on economical growth and a cheap solution to the growing need for energy. In an article in *Nature*⁶⁴ the authors argues that public environmental awareness is in general low because China's investment in education is less than half that of developed countries in general. In recent years more focus has been put on environmental issues, mainly in the form of environmental reform. China is now the world's leading investor in renewable energy technologies and produces more solar panels and wind turbines than any other country. However, Chinese industry scores very poorly in energy efficiency. According to the World Bank, energy efficiency utilization in China is approximately 10 percent compared to international standards. In addition the energy consumption per tonne in major domestic energy-consuming industries vary from 25 percent to 90 percent higher than that of developed countries. According to the Eleventh Five-year Program for National Economy and Social Development, China will reduce the per unit energy consumption GDP by 20 percent between 2006 and 2010. China needs to aggressively reduce energy consumption and increase productivity, meaning energy saving has become a top priority for many enterprises and officials.

The mining industry is the fourth most energy intensive industry in China. If efforts are not made to reduce energy usage the energy cost for mining is expected to increase from the current level of 15 percent to 50 percent of the total mining cost within 10 to 15 years according to a study by SMC in collaboration with a number of mining companies. It does exist potential methods to enhance energy efficiency; only 5-10 percent of the energy used in mining is directly linked to the value-adding components. The remaining portion relates to energy losses, energy used to power different auxiliary systems and energy to extract and process rock without useful content. By decreasing the energy usage within these fields it is possible to halve energy usage in 10 to 15 years.

The coal consumption in China has been rising the latest eight years, and in 2008 China consumed almost 40 percent of the world's total coal consumption. The country relies on coal for 70 percent of their total energy needs and the consumption is expected to nearly double in the next twenty years.

The environmental issues in the mining industry are problematic but are getting more attention. Recently several scandals have hit the mining industry. China's largest listed gold producer was responsible for the worst environmental accident in years at a copper mine in Fujian Province that poisoned almost 2000 tons of fish.⁶⁵ In another scandal, several villagers living near the biggest gold mine in China has gotten cancer since the

⁶⁴ J. Liu & J. Diamond, China's environment in a globalizing world, *Nature* Vol 435, 30 June 2005

⁶⁵ www.english.eastday.com/e/100730/u1a5362597.html, 2010-07-30,

mine opened up 10 years ago. The residents accused the mine of discharging heavy metal into the drinking water. According to the report: *“even the most beautiful women hide their feet and legs in the hottest days because they appear to have rotted from the polluted water”*.⁶⁶ Because of the pollution, cancer is today the most common reason for death in 30 cities and 78 counties in China.⁶⁷

The focus on environmental issues will likely increase much in China in the coming years. The environmental work will have a large impact on the mining industry, especially since the industry is heavily affected by government decision, and thus also on SMC’s business. As can be read in The Sandvik World 2009/2010; *“Sandvik Mining and Construction actively works on issues concerning the environment, health and safety, both within its product development and manufacturing processes”*. With a large focus on environmental issues, SMC will gain much from a more environmental friendly attitude.

4.2 Micro Environment

The micro environment refers to the elements close to a company that impact the company's ability to serve its customers. To understand the micro-environmental factors affecting SMC in China, Porter’s Five Forces will be used. The analysis will focus on such factors that are perceived as relevant to SMC’s business.

4.2.1 The Customers

SMC’s customers can roughly be divided in mining customers and construction customers.

The Mining Market

The Chinese mining industry is the third biggest in the world in terms of scale and magnitude. The country has around 80,000 state-owned mining enterprises and 200,000 private enterprises. China’s influence on the rest of the world has grown much the latest few years:

- According to the Energy Information Administration, China is the largest consumer and producer of coal in the world.
- In 2008 China produced 35 percent of the worlds iron ore, making it the largest iron ore producer by far.⁶⁸
- In 2007 the country passed South Africa as the world’s biggest gold producer.⁶⁹
- The country produced more than 70 percent of the world's tungsten, is the largest producer and exporter of rare earth metals, the largest producer of tin and a world leader in the production of antimony. It is also the third largest silver producing nation.⁷⁰

⁶⁶ www.english.eastday.com/e/100902/u1a5427048.html, 2010-09-02

⁶⁷ www.chinadaily.com.cn/china/2007-05/21/content_876476.htm

⁶⁸ U.S. Geological Survey 2009, www.minerals.usgs.gov/minerals/pubs/commodity/iron_ore/mcs-2009-feore.pdf

⁶⁹ www.english.eastday.com/e/100818/u1a5399139.html, 2010-08-18

⁷⁰ www.nationsencyclopedia.com, 2010-10-02

Customers Location

China's mineral resources are spread throughout the whole country, but the distribution varies from region to region in mineral types, amount and quality. The eastern part is mainly high on raw materials. The northern parts are rich on mineral resources, while there is little in the south. Additionally, with even terrain, several networks of rivers with close proximity to the sea and advanced infrastructure the region provides convenient transportation conditions. The central parts of China are the major base for industries such as energy and raw materials. In 2007 this region's output of oil and coal accounted for more than 50 percent of the total in China⁷¹. The western part is rich in non-ferrous metal resources and is a major reserve area for non-metallic mineral resources. However, the region has a vulnerable ecology, therefore environmental protection is crucial when exploiting minerals there.

The most of China's coal as well as large state-owned mines exist in northern China. According to a report by UBS Investment Research⁷², Inner Mongolia passed Shanxi during 2009 and became China's largest coal producing province. Heilongjiang has the biggest coal base in the north-east part of China, while Huaibei and Huainan in Anhui is the largest coal bases in the east. The coal from mines in the southern parts of China tends to be unsuitable for many applications due to the high level of sulfur and ash in the coal.

More than 43 percent of China's total growth in the first quarter of 2010 was from investment in fixed assets, such as roads, buildings and machinery. These fixed assets rely heavily on steel, which is mainly produced from iron ore⁷³. The largest iron ore production is in the northeastern parts of China with Hebei and Liaoning as the biggest producers. Hebei with approximately 358 million tones and Liaoning with 130 million tones compared to the total iron ore production in China of 880.17 million tonnes.⁷⁴ By the end of 2009, there were 3637 iron ore mines in China.⁷⁵ Although, the large mines that SMC is targeting are significantly fewer; SMC has identified 102 iron mines in China, of which 61 mines are using SMC products⁷³.

As for gold, the biggest production is concentrated in the eastern parts of China, mainly in the provinces Shandong, Henan, Hebei, Shaanxi, Heilongjiang and Liaoning. Zhaoyuan in Shandong province has the biggest gold production of any cities in China; 60 gold mines and a production of 15 percent of the country's total annual produced gold. In recent years there has been an increase in gold production western provinces such as Guizhou and Yunnan, but it is still on a small scale compared to the eastern parts.⁷⁶

⁷¹ www.chinamining.org/Investment/2007-06-28/1183013840d5869.html, 2010-10-08

⁷² Asia Coal Sector

⁷³ www.atimes.com/atimes/China_Business/LE06Cb01.html, 2010-10-08

⁷⁴ SMC report: China Iron mines - SMC customer production performance

⁷⁵ www.reportlinker.com/p0315835/China-iron-ore-mining-industry-Updated.html, 2010-10-11

⁷⁶ en.wikipedia.org/wiki/Gold_mining_in_China, 2010-10-12

Actors in the Mining Industry

The Chinese coal industry is fragmented among large state-owned coalmines, local state-owned mines and smaller private owned mines. The three biggest state-owned coal companies produce almost 15 percent of the domestic coal. Shenhua coal is the world's largest coal company and holds 9 percent of the market in China. While the smaller coalmines have a large portion of the market, they have difficulties due to low capital, inefficient management, outdated equipment and poor safety records.⁷⁷ The largest gold producer in China is the state-owned China National Gold Group Corporation (CNGGC), which accounts for 20 percent of the total gold production in China.

The Construction Market

The construction market is mainly comprised of quarries, hydropower stations, tunnelling projects and other civil engineering applications such as demolition and recycling. The hydropower stations, tunnelling projects and cement groups are mostly large state owned enterprises while the quarries are smaller private owned enterprises. There are also a number of small construction companies that use the machines to do a lot of different construction jobs.

The quarries comprise the largest part of SMC's sales on the construction side closely followed by tunnelling projects and hydropower stations. The cement groups contribute less to the sales, but are expected to become a more important as customers due to an industry trend where more and more cement groups become customers for products such as crushers because they want to do a larger part of the concrete production themselves. The demolition and recycling stations only makes out a small part of the total sales.

Similar to the mining market, SMC target the large enterprises that can afford high-quality products. Smaller quarries, for example, tend to focus more on price and therefore prefer products from cheaper domestic manufacturers. Large consolidation is done among the quarries, where small enterprises are forced to merge together to form larger enterprises that can ensure better safety environmental protection.

The construction customers are spread out throughout China. Hydropower stations are mostly located in the southwest parts of China that is rich on mountains and rivers.

Identifying the Target Group

To find out how to reach the customers, it is important to understand who the customers are and how the decisions are made.

SMC produce high technological solutions with a high level of quality and service and therefore the prices for SMC products are in the higher range. SMC mainly target large mining and construction customers that prioritize quality and high technology instead of low initial price. As an example, SMC's development plan is to reach a 10-percent market share among the top 50 metals and coal mining groups in China.⁷⁸

⁷⁷ www.eia.doe.gov/cabs/China/Coal.html, 2010-10-11

⁷⁸ Interview Jiajun Wu

SMC's customers can be divided in state- and private owned enterprises. Additionally, the private owned enterprises can be separated in to small, medium or large enterprises. The state owned enterprises tend to be relatively large. The decision making process differs greatly between the different types of customers. While the process might differ from company to company it tends to be somewhat similar. In state owned enterprises the process is often centralized. The participants in decision-making process are in general divided into three layers:

- Bottom level: The users and operators of the tools and machines.
- Middle level: Personnel with special skills and knowledge such as engineers and purchase managers.
- Top level: The management.

The decision-making process is illustrated in figure 4-6. The on-site users of the machines give a report to equipment department of which products they need. The equipment department cooperates with the finance and tech department to make a plan for what kind of machines that will be bought for the coming period. When the plan is finished an announcement is made to suppliers of what products that are needed. All sellers that fulfil the demands come to a bidding meeting to show their products. The bidding meeting is divided up in a technical part, where the technical support informs the customer about the technical details for the products, and a commercial part where the price, delivery time and payment term is agreed. The final decision is made by the top management, however, they do not always know much about the product, instead they get the information from middle management and consider the price, quality, reputation etc., thus the relationship towards top management can play a very important role in the decision making process. However, the sales department normally target bottom- and middle level by building relationship with them to influence the top management.

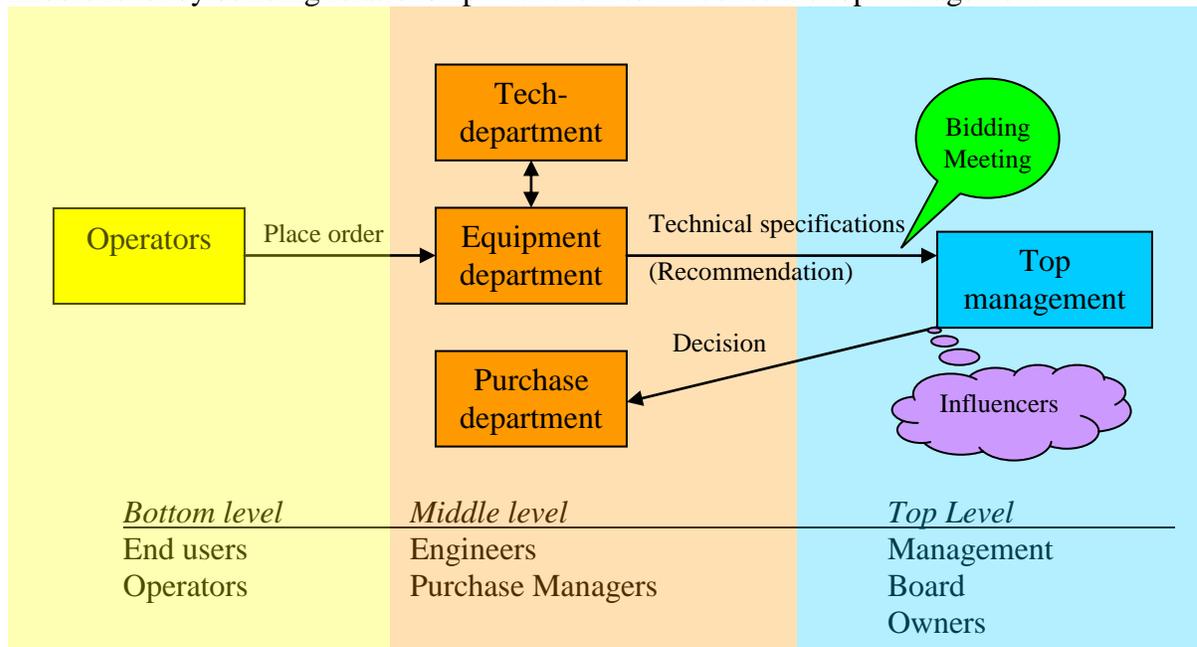


Figure 4-3: Decision making process for SMC customers

For private owned enterprises, some larger companies are more decentralized and let the on-site people take a bigger part in the purchase decision. In small and medium sized enterprises the decision process is simpler and fewer factors are being taken into account. It is normally the top management or machine owner who makes the decision immediately. Normally, the private owners will buy if they trust the supplier. It is a fast centralized decision where relationship is very important. Private owned enterprises focus more on the price compared to their state owned competitors. State owned enterprises are often larger and has more capital and can therefore afford a high initial cost. They are also less price-aware since they are not spending their own money.⁷⁹

Globalization and consolidation among customers has led to an increased demand for total solution instead of just individual products. More effort has been put in placing sales and service organizations close to the customers. The aftermarket accounts for as much as 50 percent of the total invoicing.⁸⁰

4.2.2 Substitute Products

The mining and construction tool market is complex. The competitors have different products that fill the same purpose, thus the definition of substitute products is difficult. The substitute products exist among the competitors that also sell the same type of products, therefore the threat from substitute products will be included in the Competitors.

4.2.3 Competitors

The competition on the Chinese market for construction and mining tools and machinery can roughly be divided in large global companies and small local enterprises. The customer focus differs between the two groups; the large global companies focus on expensive quality products for large mining- and construction firms, while the small local enterprises have more focus on cheaper products for smaller customers. The local producers are today incapable of competing with the quality level of the international manufacturers. Since SMC entirely target large customers, the local competitors provide little competition yet of today. However the local enterprises are rapidly growing in size, simultaneously, they invest more money in technological development. With better technological solutions they will soon be able to compete for the larger customers with higher demands on quality, and thus become a larger threat to SMC. The business area is rather special since there is no demand from the end customer. The customer buying the steel or coal is not affected by what kind of machines that is being used.

The main competitors for the construction and mining industry globally are also the main competitors in China:

- *Atlas Copco Construction and Mining Technique* is a very similar company to SMC, both in size and product range. The products are generally smaller equipment and handheld devices rather than large machinery such as SMC's products. It is a "leading supplier to large infrastructure projects, including in

⁷⁹ Interview Wency Xie

⁸⁰ Sandvik World

particular power plant and transportation link construction projects, as well as global mining companies”⁸⁰. In China, Atlas Copco has over 2000 employees with less than half working in the mining and construction industry. They have nine companies and five factories operating in China with over 150 contracted distributors.⁸¹

- *Caterpillar* has a long history in China. The company sold its first products there in 1975 and opened an office in Beijing in 1978. Today, Caterpillar has invested in eleven manufacturing facilities in China. In 2008 Caterpillar had more than 10,000 employees and total revenue of \$9000 Million in Asia of which \$5700 million came from machinery products. Caterpillar's independent dealer network includes five dealers for greater China who provide sales and product support to customers in every province of China. In 2008 Caterpillar had more than 10,000 employees in Asia.⁸²
- *Joy Global* is a relatively small company that employs about 11,000 people with its headquarters located in the US. With about 10 percent of the sales in China the company's products are focused solely towards the mining industry with two separate product areas for surface and underground mining. They currently have six facilities in China, all based near Beijing.⁸³
- *Metso Minerals* employs 27 000 people globally, and 2600 people in China. In 2009 net sales in China reached \$538 Million, where 25 percent of the net sales were from the mining industry and 15 percent from the construction industry.⁸⁴
- *Bucyrus* produces products for the mining industry. Their surface mining equipment is used for mining coal, copper, iron ore, oil sands and other minerals while underground equipment is used primarily for mining coal. 52 percent came from machines and 70 percent of the machines sold were for the coal industry. 11 percent of the total sales were in the China region.⁸⁵
- *FLS Minerals* employs about 10,500 people worldwide with 4000 of them in the minerals department and the company's revenue was EUR 3107 Million in 2009, of which 40 percent was contributed from the minerals industry. In 2009 16 percent of their mineral-product order intake came from Asia.⁸⁶

4.2.4 New Entrants

The advanced technology and high amount of capital that is needed to produce advanced products makes it very difficult for new competitors to enter the market. The new entrants are almost exclusively local manufactures. Today these provide limited competition for SMC since the technology level cannot be compared to the international brands'. Instead they focus on cheaper products for smaller private owned mines. Bigger mine operators have greater purchasing power and a greater need for more effective, high qualitative and modern equipment. Since SMC exclusively focus on large enterprises new entrants is of little threat today. However, the local manufacturers are growing fast and with

⁸¹ www.atlascopco.com.cn, 2010-11-02

⁸² www.china.cat.com, 2010-11-02

⁸³ www.joyglobal.com/Joy-Global, 2010-11-02

⁸⁴ www.metso.com/corporation, 2010-11-02

⁸⁵ www.bucyrus.com, 2010-11-02

⁸⁶ www.flsmidth.com/en-US/About+FLSmidth/FLSmidth+at+a+Glance, 2010-11-02

governmental support they will become more dangerous competitors in ten to twenty years.

4.2.5 Suppliers

According to Lars Josefsson, President of SMC, the company has become increasingly dependent on the performance of its suppliers: *"We must ensure that we work with the best globally active suppliers. We also expect our key suppliers to make a significant contribution to our customers' value. This is the only way to ensure the long-term success of both Sandvik Mining and Construction and our suppliers."*⁸⁷

Nevertheless, the bargaining power of the suppliers has little importance in the areas of interest in this thesis.

⁸⁷ www.sandvik.se, 2010-08-13

5 The Current Communication Channels

To identify and develop new communication channels it is crucial to understand the current channels in use. This includes who the current channels reach in order to target areas where SMC might be lacking marketing activities today. It is also necessary to know the current channels in order to develop them to better fit SMC's purpose. This chapter aims to describe the channels of communication that SMC is currently using in China.

It is crucial to understand why a business-to-business company like SMC should do marketing. With large expensive products targeted towards big companies, the goal of the marketing is not direct sales but creating brand as well as product awareness and building customer relationships. When the customer is in the decision-making process, the marketing SMC has done should optimize the chances of the customer picking SMC products, this is done by influencing decision-makers as well as influencers.

The marketing by SMC is done from mainly two levels; a global and a local level. While SMC on a global level is responsible for corporate, brand and product advertising on an international basis, local advertising is the responsibility of the local office and the dealers. The communication channels on the local level are today rather limited.⁸⁸

Trade Magazines

As stated in the Sandvik Dealer and distributor catalogue, “*in the majority of worldwide territories, the trade and technical (or business-to-business) press is the primary advertising medium*”. This also applies to China where advertisement in trade magazines represents the largest channel of advertising. It is done in related trade magazines and journals such as construction, coal and metal magazines, but also in specialized areas like cement magazines. The biggest focus is on creating brand awareness and to let the reader know what SMC is and what the company can offer. The general attitude is that the advertising should be placed in media with a readership that matches the profile and geographic location of the customer base, with a content that is somewhat linked to the market. As to where the advertisement should be done, it depends on the products or services that are aimed to be sold. New mining products should for example be targeted towards buyers and decision makers, while construction-related services should be targeted at influencers and purchasers. Trade magazines are the most obvious channels of communication since it is the only media that directly reaches large parts of the targeted group. Additionally, advertisement has also been done in other mass media, such as the English newspaper Shanghai daily.⁸⁹

Customer Magazine

SMC distributes a customer magazine that is edited by the global marketing group and translated on a local level. The magazine is called Solid Ground and is a global magazine concerning business and technology from Sandvik Mining and Construction. The purpose of the magazine is to create a relationship with the customer by providing interesting and

⁸⁸ Interview Kristina Zang

⁸⁹ Interview Elaine Zhang

useful material, advertise products and provide solution to common problems. The magazine is published three times a year, and the first issue was distributed in 2009. It is a typical case of content marketing where SMC provide the customers with cases and the solutions that other customers around the world has encountered.

Dealers

The dealers are individual companies that buy SMC's products and sell the equipment to the end users. As can be seen in figure 5-1, there currently exist 18 authorized dealers in China spread over 18 provinces. Five of the dealers only work for SMC, the rest is working with earth mobile industry in general and products such as excavators, reloaders, etc, but do not sell any products from SMC's competitors. 15 of the distributors are very big with an annual turnover from 100 million to 500 million RMB. SMC provide the dealers with support in events and marketing activity. When SMC want to develop the marketing in a certain area, the dealer in the particular area will coordinate the activity. SMC will handle the marketing directly in the provinces without dealers. Each dealer is responsible for the local market for SMC's business, but if the sales department at SMC were to find a new customer without the dealers help in the area, SMC can sign the deal without the dealer. If the dealers find a potential customer and develop a close relationship, but the customer want to sign the contract with the manufacturer, SMC will provide the dealer with provision if they have fulfilled the requirements and are responsible for the deal. The distributor network started for not more than two years ago. When a new dealer is authorized, the first step for them is to find new customers since SMC does not provide the dealers with any of the existing customers. If old customers change demands to such that SMC cannot fulfil the deal, the dealers will be asked to participate. The dealers work a lot with customer relationship retention while the sales force provides the dealers with technical support.⁹⁰

⁹⁰ Interview Stanley Li

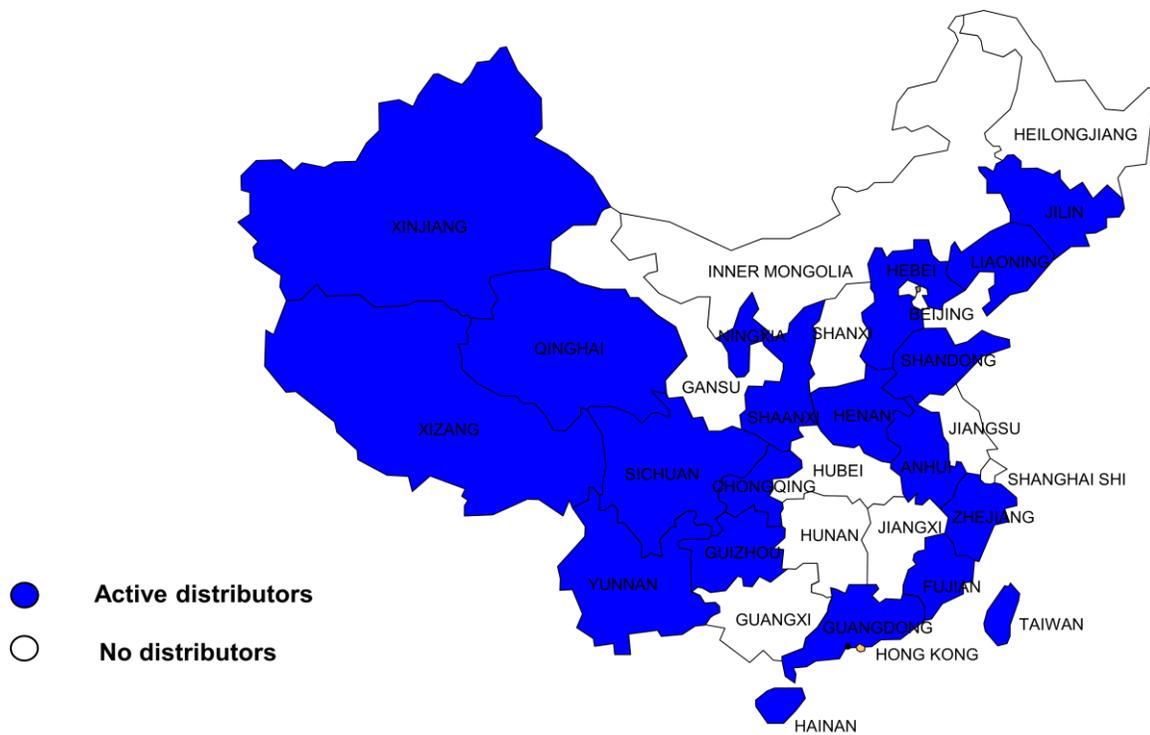


Figure 5-1: Map of dealers in China

Events

In many western markets, exhibitions, trade shows and conferences are often seen as a waste of time and money. In Asia, and particularly in China, the situation is the opposite. In most industries, exhibitions, conferences and similar events can be essential for a company to succeed in the market. In China, with concepts such as Guanxi, personal relations are significantly more important compared to western countries. Different sorts of events are great ways of maintaining old customers and making initial contact with new customers. They have the advantage of establishing face-to-face contact, something that Chinese buyers value much, and can serve as a good way of moving potential sales relationships forward relatively quickly. Western businesspeople might argue that Chinese businesspeople tend to over emphasize the importance of different events, but one must realize that companies that fail to attend key exhibitions can create a negative impression with customers just by virtue of being absent.⁹¹

SMC in China recognize events of different sorts as a good way of meeting new customers and maintaining customer relations, therefore much effort is put on participating in different events throughout the country. The events that SMC attend during 2010 are:

⁹¹ Interview Jenny Yu

- *Bauma China* is the leading international trade fair in China and Asia for all sectors of the construction-machinery industry. It is originally a German concept where it is the largest fair in the world. It is relatively new in China and is held every year in November in Shanghai. This is a typical opportunity for SMC to show solutions and new products for customers within the construction and mining industry.
- Beijing Coal expo is an international exhibition with focus on underground and surface mining. SMC exhibits a number of machines on display on a rented area of 360 square meters. There are many visitors but only a small part of them are potential customers, whereas the most are from north China.
- *World Expo 2010*: During the world expo in Shanghai, SMC holds an event targeted mainly at current customers. The theme is innovation in action and the goal is further promote customer relations.
- *Mindful Mining Summit* is a conference organized by SMC where the main focus is, similar to the expo-event, on old customers. SMC shows new technology, industry trends and what the company will focus on in the future.
- *Xilinhot Coal Expo* is an exhibition in the small town of Xilinhot in Inner Mongolia. The town is a big centre for energy due to massive coalmines in the area around the town. The numbers of visitors are limited, but a large part of them are potential customers for SMC. While part of the focus is to maintain existing customers, it has also turned out that private owners in Inner Mongolia are interested in SMC's products much because of the high quality, but have yet little knowledge about SMC. People attending from SMC are marketing people, sales people, material handling and other product managers.
- *CNS - construction customer day* is an event where SMC show the efficiency of the products for construction customers. The event consists of a three-day onsite display with focus on different customers. The focus on the first day is Asian customers, mainly from Korea, Japan and China. The second day is targeted towards domestic cement customer. The third day is for domestic customer invited by local distributors.
- *Dealer's events*: The dealers need to submit the marketing plan about one year in advance. SMC sponsor the dealers on planned event where they market SMC products. The dealer events are usually small events targeted at smaller areas or the province where the dealer is active. Sometimes the events are only for SMC products, but often the dealers might exhibit other products as well.

Public Relations

Public relations are mainly handled together for the whole Sandvik Group. The public relations are mainly divided in two areas:

1. Building media relations on a local and national level. The focus is on mass media and financial media, while the segments work with related industry magazines. The main method is to use media contacts to announce news and events related to the company. A press release is sent, and either the press release is posted directly or a media enquiry is created to get more information for the article. In the case of larger news, media is invited for a press conference. Sandvik also works with becoming a spokesperson in safety issues. Typical newspapers that Sandvik is

- working closely with are *China Business Daily* and *Shanghai Morning Post*.
2. Collaborating with universities to attract future employees. Being a business-to-business company, Sandvik is today unknown to most students. To cope with this Sandvik is working with a number of universities in the country as partners to gain more attention from university students. Six in Beijing, three in Shanghai and two in Jiangsu.

There is little focus on customers; instead the main focus is on investors and future employees. The work with public relations is today rather limited in the China region; social media is barely used at all since the large international channels are blocked in China, while media is not used to reach customers apart from the cases of pure advertising.⁹²

Internet marketing

Sandvik is today working with two different methods to promote the website on search engines:

- Search engine optimization, an unpaid solution to optimize the content of the website so it will get a high rank in search engines.
- Google Adwords, a service provided by Google search engine that shows an advertisement when the user is searching for specific keywords.

These are activities that are done on an international level where the solutions are adapted to Google since it is the dominant search engine in the world. The situation is very different on the Chinese Internet market, where Baidu is the dominant search engine, partly due to Google.cn being blocked by the Chinese firewall. However, there is nothing done to adapt to the Chinese Internet users.

SMC is also involved with several social media sites. SMC has a group on Facebook with possibilities for members to interact with the company, where news and product releases are continuously published. SMC has a group on LinkedIn, a business-oriented social networking site where customers as well as employees can interact. LinkedIn is mainly used for professional networking and thus more focused on career matters rather than customer relationship. SMC has a channel on Youtube where videos are continuously posted, mainly videos of products as well as videos about Sandvik. SMC has a microblog on Twitter where similar content as on Facebook and LinkedIn is posted, mostly news and new product releases.

⁹² Interview Katherine Bi

6 New Communication Channels

In this chapter new communication channels will be identified, presented and analyzed.

To identify new communication channels, the first question to be answered is: What implications do the identified aspects and characteristics of SMC's situation and environment have on marketing in general and the communication channels in particular? A number of potential communication channels and important characteristics of the marketing methods can be identified from the information gathered in the previous chapters:

- The goal of SMC's marketing is mainly to create brand awareness, not direct sales.
- Internet and mobile communication is spreading throughout China at an incredible speed that enables communication to every part of the country, even rural areas. Marketing through Internet and mobile networks is a cheap, fast and convenient way to reach a large amount of people involved in the decision making process.
- The mining sites are often located in rural areas. For the mining industry there are clusters of large customers in areas that are rich on minerals. Thus, local marketing in certain rural areas can be cost-effective.
- The decision-makers, mainly the owners and managers, are often not located on the mining or construction site. However, partly due to the new regulations, they do have to visit the working site regularly. Thus marketing related to transportation in the specific areas would likely reach the targeted group. For large mining enterprises, the offices tend to be located in larger cities. Additionally, due to the collective culture in China people tend to live with their families, therefore people are more reluctant to move to new areas for work and instead are prepared to travel to get to the mining sites.
- Relationships are important in Chinese businesses and the mining and construction market is a relatively traditional industry. Thus, using channels where relationship is built and maintained is crucial.
- China has a collective culture, and there is much communication between customers while the impact from influencers is high. The decision-makers are difficult to find and identify through normal communication channels. Thus, methods such as word of mouth marketing and viral marketing are suitable.
- There are severe problems with safety at many of the mining and construction sites.
- The awareness of environmental issues is increasing, thus marketing through environmental-related forums has potential to get much positive attention.
- With large consolidations being done in the industry, the buyers are becoming larger but fewer.

In this chapter, the communication channels that SMC finds to be of relevance will be presented. SMC is already working with safety and environmental issues as well as relationship building channels. Therefore less focus will be given to these topics.

The main questions to be answered concerning each new channel are:

1. What new communication channels can be established for SMC in China? What information can be passed through?
2. Why should the communication channels be implemented; what will be the expected result for implementing the new communication channels? Who and how many does the channels reach?
3. How is the new communication channels implemented; what are the costs involved and what resources are necessary?

At an initial stage, a summary of potential communication channels was presented to the marketing department at SMC in China. The channels that was perceived as relevant to SMC was picked out, only these channels will be presented in this report. All of the channels that were picked out are investigated. However, some of the channels turned out to not be attractive for SMC at an early stage. These channels will still be presented in this chapter shortly with arguments concerning why they are not well fitted for SMC. A list of the channels that was presented at the initial stage can be found in Appendix 1.

6.1 Customer Database

The starting point of any business-to-business segmentation is a good database. A well-maintained database is a priority to obtain marketing excellence in a business-to-business company. The database should, as a minimum, contain the obvious details of correct address, e-mail and telephone number together with a purchase history. Ideally it should also contain contact names of people involved in the decision-making unit, though this does present problems of keeping it up to date. For SMC it is natural to keep track on in which fields the customer is active. On the most basic level if the customer is working with surface mining, underground mining or construction. More detailed information, such as the material the customer is working with, for example coal, copper, or iron ore is also of interest. For customers in the construction-segment, the industry of the customer is the most important, for example quarries, hydropower stations or cement groups. Due to the importance of the customers' location, information concerning the geographical location should also be included, mainly for the operating sites, but also, if possible, for head quarters and offices.

Today SMC has no well-developed customer database. While information concerning the customer exists in various ways, the content is limited and not organized in a way that allows the information to be used in a conveniently in the communication with the customers. The information should be kept in an easy accessible list, of course limited to certain people. The list should be of a format from where particular information is easy to extract.

While a customer database is not a communication channel per se. It indirectly works as a communication channel due the use of the information it contains. It is a necessary tool for several of the proposed channels that are to follow in the chapter. SMC's customers can be divided in many groups depending on the source of interest. The customers should be possible to segment depending on the location, the industry and the particular products of interest. By having a well-developed database, information that is relevant only to a

particular group of customers can be targeted only to those. The effect will be customers that only get information that is of their interest. The information could be organized as follows:

- Segment: underground mining, surface mining, construction
- Location: Which province and which part of the province
- Size: Production amount, turnover, employees
- Type of organization: State or private owned enterprise
- Type of resource: Copper, steel, cement group etc.
- Decision makers: name, contact information, position, location

The customer database should not only include current and old customers, but also potential customers. The same amount of information might not be able to be gathered for all customers, but this does not have to be a problem. If the potential customers are at least possible to specify in certain areas, they can still be targeted with relevant information.

The information can be used to promote new products, distribute newsletters and send information concerning upcoming events. Apart from being used for communication with the customers, a customer database is also useful for other parts of the company. It could be synched with the current financial information database to give a great overview of the customers. It can also be used to create synergy effects for the sales department, where better cooperation can be done between individual sales personnel.

The information for a customer database already exists within the company; among the sales department and dealers etc. The only problem is to gather this information and organizing it. Individual sales personnel as well as dealers might be reluctant to share this information due to fear of having customers stolen from others, but if the information is restricted this does not have to be a problem. Guidelines should be put up of how to use the database that restricts certain usage.

6.2 Internet Communication

According to a survey done in 2010 by McKinsey and Co. *“56 percent of Chinese consumers said they regarded online advertising as credible, up from 29 percent in 2009. Similarly, 70 and 67 percent of Chinese shoppers said they found retailers’ and manufacturers’ Web sites, respectively, credible. (In the developed world, by contrast, consumers prefer to get product information from third-party sites.) The fact that online information is so highly regarded in China makes the Internet extremely important for shaping consumer opinion. On average, 25 percent of mainland shoppers said they never buy a product without first checking the Internet, compared with half that percentage in the United States. For big-ticket items, the proportions can be significantly higher in China, approaching 45 percent for autos.”*⁹³

While this survey is targeted towards consumers, what is described is an attitude that exists in China, an attitude that likely exists among business-customers in China as well. If an individual tend to rely more on the Internet in the buying process in his or her

⁹³Mckinseyquarterly Report: Chinas new pragmatic consumers

personal life, the same individual naturally has the same attitude in the business decision-making process. Internet as a communication channel in China is becoming more and more important. By using digital technology it is possible to reach throughout large parts of China. This is an advantage in the mining industry where a large part of the mines are spread out around the country in rural areas. To investigate how to harvest the opportunities arising from Internet communication, focus will be put on each relevant channel.

6.2.1 E-shots

E-shots are electronic pages that are targeted towards particular receivers, segmented based on specific topics, such as geographical area or type of industry. E-shots are most commonly sent through emails. The messages that can be delivered through the channel can be articles, pictures or even movies. The information content could also be a list of links to articles, news or other information. A similar service is being started up at SMC in Australia. With a well-structured customer database, e-shots are easy to implement. To send an e-shot to a particular customer group, the first step would be to identify the receivers; news concerning a product release that is mainly of interest to soft-rock mining can be sent only to the decision-makers of enterprises active in the area. The second step would be to adapt the message for the targeted group. The last step would be to sort the database based on the information that is to be sent out and finally send it to the specified group. For this sort of usage, a basic e-shot application is easy to develop and implement for a software engineer. The most basic item is a sender email that makes it clear to the customer who the sender is. E-shot can be further developed to automatically include the name of the receiver to make it more personal for the customer, while still using a pre-created template for a professional layout.

Outsourcing

The e-shot service could also be outsourced. As an example, Eshot.net offers a web-based service with both an option to edit mails based on HTML or, if the sender has little knowledge of HTML, an easy to use editor program. The mails can be edited in any way the company want. Contacts can be implemented as well as sorted based on number of categories. It is possible to set defaults for a number of elements:

- Personalizing the messages through the 'To Name' field and by adding extra data fields such as locality or product name
- Set the 'From Name'
- Set the default 'Reply-to' email address, which will be the address recipients will send to if they click the 'Reply' button in their email application.
- Set the unsubscribe message and link text

It is also possible to administer various optimization functions such as orphan record management, cache settings and delete bounced records.

The service offers reports based on messages that have already been sent, comprised of a summary for comparison and detailed reports including full transaction history for each contact. The reports enable one to identify certain contacts that have a high read or

click-thru rate. Similarly, it is possible to find those contacts which HardBounce, or never read messages.

The cost of the service is based on the number of contacts. An extract of the price list can be seen in Table 6-1. Apart from the start-up cost, there is no additional cost per email.

Number of contacts	Cost per year
500 contacts	1,145 RMB
5000 contacts	2,287 RMB
10,000 contacts	4,299 RMB
20,000 contacts	8,019 RMB
30,0000 contacts	11,177 RMB
300,000 contacts	57,205 RMB

Table 6-1: Price list for Eshots.net⁹⁴

Regulations

Being a Swedish company with mail servers located in Europe, it is necessary that the e-shots follow EU directives. Directive 2002/58 on Privacy and Electronic Communications, otherwise known as E-Privacy Directive, is a EU directive on data protection and privacy in the digital age. The relevant directives are found in chapter 13:

“Unsolicited communications

1. The use of automated calling systems without human intervention (automatic calling machines), facsimile machines (fax) or electronic mail for the purposes of direct marketing may only be allowed in respect of subscribers who have given their prior consent.

2. Notwithstanding paragraph 1, where a natural or legal person obtains from its customers their electronic contact details for electronic mail, in the context of the sale of a product or a service, in accordance with Directive 95/46/EC, the same natural or legal person may use these electronic contact details for direct marketing of its own similar products or services provided that customers clearly and distinctly are given the opportunity to object, free of charge and in an easy manner, to such use of electronic contact details when they are collected and on the occasion of each message in case the customer has not initially refused such use.”

“4. In any event, the practice of sending electronic mail for purposes of direct marketing disguising or concealing the identity of the sender on whose behalf the communication is made, or without a valid address to which the recipient may send a request that such communications cease, shall be prohibited.”⁹⁵

For SMC this means:

1. Only use mail addresses from existing customers and other people that has agreed upon the subscription
2. Only market similar products
3. Offer a possibility to unsubscribe

⁹⁴ www.eshots.net, 2010-10-30

⁹⁵ www.eur-lex.europa.eu, 2010-11-02

4. Show a valid “from” email-address

Neither one of these requirements pose much of a problem to an e-shot service. The gathered emails are from customers that SMC has had previous contact with. Additionally, the subscription should be offered on the homepage and through other channels such as social media-sites and microblogs. SMC’s products are relatively homogenous and the mails would be targeted. A valid “from” email-address and possibility to unsubscribe are things that are easy to implement in the mails.

E-shots targeting the Chinese market should also follow the Chinese regulations surrounding email; “*Regulations on Internet Email Services*” that was implemented in 2006 to cope with the large amount of spam-mails being sent in the country. Apart from similar regulations as in the EU directives, it is necessary that all commercial email must be labeled with “AD” in the subject line, or “广告”. Additionally, before sending messages containing commercial advertisements, the company is required to obtain recipients’ consent prior to transmitting such email messages.⁹⁶ This is however a controversial regulation since it is not stated that an opt-in is necessary. An informal consent is valid, and, in the case of targeted informative mails that are not direct advertisement where the company has obtained the mail address in a legitimate way, the regulations are not necessarily breached. A legitimate way is for example if the company got the email for the customer himself.

Conclusion

The amounts of people that are reached with e-shots fully depend on the gathered contact information to the database. With an option to subscribe to the e-shots, people outside SMC contact database would be reached. In order for these people to start subscribing to the service, they would have to become aware of its existence which would need another communication channel. The most convenient channels for this purpose are Internet-based ones that would allow the customers to subscribe to the e-shot immediately, such as social media, the homepage and microblogs. However, people who would become aware of the e-shots through these channels are obviously already involved in a SMC communication channel that provides them with news. Another way to use e-shots is giving potential customers the option to subscribe to it at different events, thus making it a way to get the people involved in SMC and its products. The main opportunity that e-shots provide as a communication channel is not finding new customer, but enhancing the communication with the current customers. The current customers would get more involved with the company and become aware of new products relevant to them.

6.3 Social Media

On a market where customer relationship, word of mouth and trust is critical, it is crucial to utilize the opportunities that social media provides. Social media can enhance the word-of-mouth and improve relationships by providing a social forum where SMC, customers and influencers can interact. Additionally, social media can reach a broad target group; decision-makers, influencers, future employees as well as investors. While social media is a convenient and cheap channel of spreading messages and

⁹⁶ www.anti-spam.cn, 2010-11-02

communicating with customers, it involves some risks. Since it is a public channel of communication, anyone can interact and post almost anything they want, including negative information concerning SMC and its products. Another problem is whether SMC's customers actually use social media. While it is a great way to reach future employees, that is, students and white-collar workers as well as certain influencers, the decision-makers might not be active on such sites that are more popular among young people.

6.3.1 Social Networking Sites

Facebook dominates the online social networking market globally with over 500 million unique and active users⁹⁷. Facebook is a common communication channel for business-to-consumer as well as business-to-business companies where the companies can interact with customers in a convenient way for free. Most of the large competitors on SMC's market, including SMC, are today using Facebook as a communication channel. It is a convenient channel of communication because it is free and easy to implement while it can reach an enormous amount of people. It has great potential to be a channel for content marketing as well as viral marketing since customers, influencers and partners are gathered at a common platform where information easily can be transmitted. It increases the word of mouth communication, an important aspect on the Chinese market. However, Facebook is blocked in China since July 2009⁹⁸, and is likely to continue being so⁹⁹. Although the social networking market in China is still attractive. There are approximately 420 million Chinese online users¹⁰⁰ and studies show that about 92 percent of these use social media¹⁰¹. After Facebook got blocked in China several alternatives emerged: RenRen, Kaixin001, QZone and 51.com are the largest, but there are also several other smaller networks targeting specific groups.

RenRen

RenRen is a social network almost identical to Facebook. The business model, interface and design are copied from Facebook. As mentioned earlier, online gaming is one of the top activities among the Chinese Internet users, and by having an open platform that allows people to contribute in the game making process, RenRen today has the most and best games among the competitors, a huge advantage on the Chinese online social network market. Much like Facebook, RenRen focused on top universities at an early stage and spread from there. Thus, the majority of the users are students. However, the name change in 2009 from 'Xiaonei', which could be translated to "inside-campus", to 'RenRen', meaning "people's web" or "everyone's web", signals a change in the targeted group. The site has done heavy advertisement to attract new users outside the campuses.

Public Homepage

Recently RenRen has added a function called Public Homepage, it is a platform where the users can interact with organizations and companies and get information about

⁹⁷ www.facebook.com/press/info.php?statistics, 2010-08-21

⁹⁸ www.bbc.co.uk/news/10449139, 2010-08-23,

⁹⁹ www.chinatechnews.com/2010/07/09/12320-the-end-of-social-networking-sites-in-china, 2010-08-23

¹⁰⁰ www.english.peopledaily.com.cn/90001/90778/90860/6870247.html, 2010-08-23,

¹⁰¹ www.readwriteweb.com/archives/despote_banning_twitter_92_china_uses_social_media.php, 2010-08-

celebrities, medias and much more. The function is similar to the fan-page on Facebook where it is possible for the administrator of the page to post microblog-like posts and share albums, journals, music and videos. Users can post comments on the page, and by adding the Public Homepage as a friend users will get automatic updates of all activities on the page. The layout of the page can be edited to fit the company profile. The numbers of Public Homepages are still limited; as to this date only 64 companies have a registered Public Homepage. The reason is that RenRen only allows a limited number of Public Homepages to be signed up each day, currently set to 100 new sign ups per day. It is free to create a Public Homepage, but in the application it is necessary to include information concerning the purpose of the homepage, how it will be maintained, who it will attract and contact information. The published content is continuously checked by the administrators of RenRen and might get deleted if they believe it does not comply with the relevant provisions of the public homepage. It is necessary to constantly update the page with new relevant material to avoid the risk of getting the page closed. Only one RenRen-user is allowed as administrator, therefore the company should either have a shared RenRen account or a single person who is responsible for the published content.

Advertisement

What makes advertisement on social networks special is the fact that it enables the advertisement to be adapted to specific target groups depending on the gathered information from the host network. Advertisement can be done on RenRen simply by buying banners and specify what kind of users the banners will be visible to. RenRen has several different ways of separating the target group from others. However, it is solely based on the information that the users decide to share, thus, people who do not share enough relevant information are easily missed out. The different ways of separating the target groups are:

- *Location*, RenRen enables the advertiser to target advertisement based on the location of the customer, either by country, province or city. This is a great way to adapt to people living in areas where there are clusters of customers. Since it is possible to specify which area to target, it has potential to be an effective way to advertise events in a particular area. Through the advertisement, the user can become a fan or RSVP to an event directly. From that point, it is easy for the company to interact with the individuals and create a relationship.
- *Age, sex and relationship*; the three perhaps most obvious demographic factors. The relevant target group for SMC tend to be slightly older males, while the relationship is of little importance in this case.¹⁰²
- *Keywords* can be specified that are based on the users given information. The advertiser can specify words related to the industry, the position or related interests.
- *Education*, both the level of education and the particular schools the individual has attended.
- *Occupation* is an efficient way to filter the target group if it is possible to specify the companies that are relevant.

¹⁰² Interview Witty Zhang

- *Interest in* is only useful if the target group tend to be interested in the product outside of their working environment.

Additionally, it is possible to adjust the target population and to control the maximum daily spending, the running time and cost per click.¹⁰³

It is extremely important to specify the target group for a company with such a comparatively small group of interest as SMC. The larger part of the RenRen users have little interest in SMC or their product, thus, it is a waste of money if it is not possible to separate the target group from the rest in a convenient way.

RenRen has a well-developed system to track how well the advertisements perform. There exist a number of monitoring tools including basic ad manager areas as well as downloadable data about each separate campaign. The most important information is obviously click through rates (CTR), actions, action rates and cost per click (CPC). By observing the data it is easy to tell whether the advertisement method is effective. Therefore, a good way to approach the method is by experimenting with the advertisement method on a smaller scale where less resources and time is consumed to see the potential.

An important aspect to have in mind when running advertisement campaigns on social networks is that the performance will likely degrade over time because the cost of reaching each individual user increases incrementally. This means that the first people who respond to the advertisement tend to be the ones that are most responsive to advertisement in general, thus, once the first group of easy targeted individuals are reached, it will get more expensive. As such, it is important to monitor the progress continuously. If there is a decrease in click through rate it might be time to target a new group or switch advertisement. At a certain point all advertisement loses the effectiveness, thus, at least one person should be responsible for the monitoring of the advertisement. By following the previous argument there is an incentive to run short campaigns to maximize the effectiveness.

Most marketers would agree that the main attraction with social networks as a marketing channel is to build relationships, this is better done by creating an interactive environment for the users and the company. A banner for a manufacturing company with expensive products will naturally not lead to direct sales. It can, however, create brand awareness among the potential customers.

¹⁰³ www.renren.com, 2010-08-25

Kaixin001

Kaixin001 mainly target Chinese white-collar workers who have Internet access at work. The main focus of the site is game playing rather than social networking. As can be seen in figure 6.1, the average user of Kaixin001 spends more time on the webpage compared to other communities and tends to visit more pages. While the user base is an attractive group for business-to-business companies, the marketing possibilities are not that great since the larger part of the users spends most time playing games rather than interacting on the site. The site is particularly popular among users in the cities of Shanghai Beijing and Chaoyang. SMC targets specific customers that are located in more rural areas, not just white collars in general.

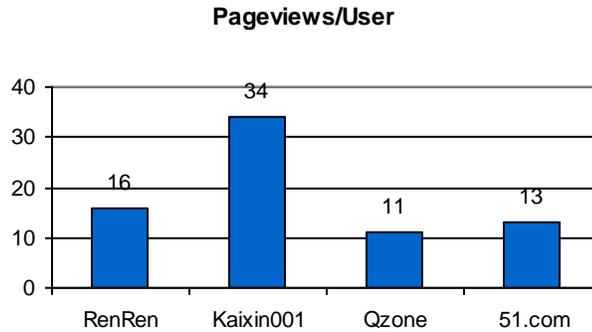


Figure 6-1: Social networking sites' page views

The primary advertising done on Kaixin001 is product placement followed by banner advertisement. It is possible to create groups on Kaixin001 for companies to interact with the customers. As mentioned earlier, a large part of the users are office workers who use the site to play games, this is obviously not appreciated among the management. At Sandvik the website is blocked for use, will this be the situation for many other working places in China too? Most likely it will, thus the attractive target group will be lost.¹⁰⁴

Qzone

Qzone claims to be the largest online social network in China with approximately 388 million users. The reason for Qzone's large number of users is because Tencent, a giant on the Chinese Internet market, owns it. Therefore, it draws traffic from QQ Messenger, an instant messenger program similar to Windows MSN messenger owned by Tencent, with 523 million active users. However, the classification of Qzone as a social network as well as the number of users is controversial. The network does not allow social interaction in the same way as the other sites, while a large amount of the registered users are inactive profiles that are taken from QQ Messenger. The number of active users is not published, but is according to the site mostly comprised of teenagers. There are no possibilities for companies to create profiles on the page as of today.

51.com

51.com achieved an impressive growth by targeting low tier cities in China early. As of June 2009, 51.com has over 160 million users. In total, the users generate about 350 million page views, upload over 10 million photos and write over 3 million blogs per day. On lately the growth has slowed down and it has despite its huge user base the lowest traffic ranking of the four networks mentioned in this thesis. The focus has been on the rural market where there previously have been less competition, thus the site has lost

¹⁰⁴ www.kaixin001.com, 2010-08-26r

urban educated demographics to competitors such as RenRen and Kaixing001. The more urban focused sites are now turning the attention to the rural areas and will provide competition on a larger scale on the rural market. 51.com probably will not have much chance to compete on the urban market.¹⁰⁵

Wealkink

Wealink differs from the previous social networking sites by focusing on business people and career, much similar to LinkedIn. Companies has the option to create their own profile with a presentation and basic information such as industry type, company size, year it was founded, website url etc. The company can post information and news while job offers can be listed separately. The user has the option of becoming a fan of the company, and thus getting updated news about the company in question. The network is growing fast but is still in a developing phase.

Comparison

The different social networks have very different target groups. Kaixin001 focus on older white-collar workers in the larger cities. RenRen has, like Facebook did, previously mainly focused on students in larger cities but is now focusing more on other groups as well. Qzone has a focus on teenagers and 51.com on a young rural group. While Kaixin001 has the most interesting group from a business-to-business marketing perspective out of the big networks, it is difficult to reach the users since the main interest among the users are the various games. Qzone is the largest of the sites, but the number of active users are still unknown and the majority of the users are teenagers; a not very interesting group for a business-to-business company.

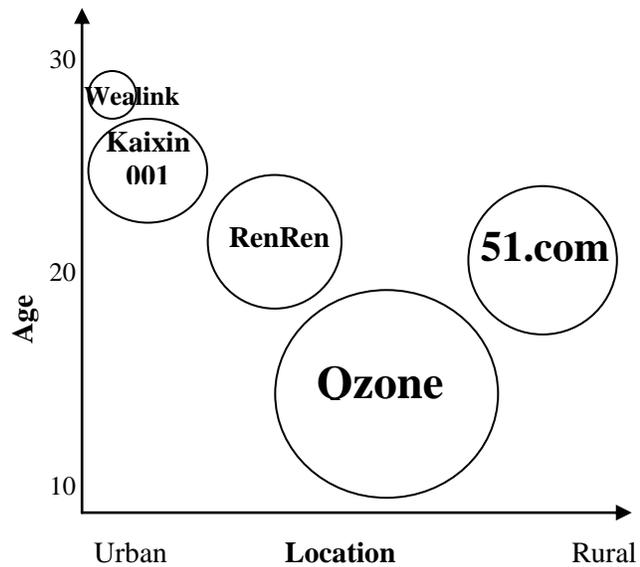


Figure 6-2: Social networking sites comparison

51.com is popular among the rural population, which is an advantage when trying to reach mining companies which are located in the more rural parts of China.

So far, Kaixin001 and Wealink have convenient tools that allow the company to interact with the users in a natural way - an important aspect in a culture where business relationships are important. RenRen also has a fan-page function that is somewhat similar, but with a more complicated procedure of getting started. The three of them have the same format, where the company has a profile where information, news, job listings etc. can be posted and where the user can subscribe or become a fan of the company to

¹⁰⁵ www.51.com, 2010-08-26

constantly get updated. The functions are free, relatively easy to set up and require no technical expertise. The information that can be distributed through online social networks can take many forms. Short texts, videos or links to websites and articles of relevance are the most common, much like microblogging. Sandvik has been working with this kind of channel before, both on Facebook and LinkedIn, the two pages that four of the Chinese sites are copies of. A disadvantage with social networking sites, and especially RenRen, is that it is necessary to update

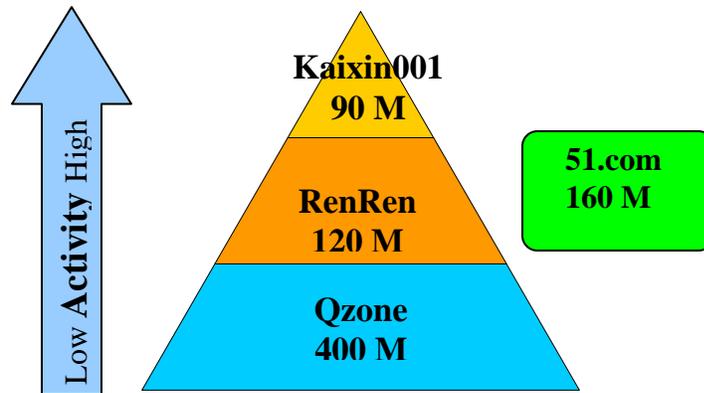


Figure 6-3: User number and activity comparison

them continuously. Due to the similarities between the Chinese versions and the English originals the updates on the pages could be done by simply translating the information posted on Facebook and LinkedIn. However, much of the information that is put on Facebook is only relevant to certain parts of the world. If excluding these posts the updates might not be enough to fulfil RenRen’s requirements of continuous updates. It might be necessary that someone is put in charge of updating the page at least once a week with relevant news to the customers.

Advertisement is possible on all the sites, but RenRen has a huge advantage. No other site allows the marketer to target a specific group as easy as on RenRen. Unfortunately, with the options existing today it is difficult to separate the potential customers for SMC. Although, the channel do have potential as a communication channel for SMC and it is worth keeping an eye on the updates of the factors for the future. If RenRen were to implement a function that enables the advertiser to specify an industry it could be a great tool to reach the target group.

Conclusion

Using social networking sites as a communication channels are cheap and easy. Nevertheless, it is utterly pointless to waste even the smallest amount of time and resources if the channel does not reach any people of interest to SMC. This is an issue that has been targeted on an international level concerning both Facebook as well as Twitter. It is difficult to say if SMC’s customers are using social networking sites. The focus of most of the sites is at young people, which do not correspond to the typical profile of SMC’s customers. But this does not mean that there are no older users. The numbers of users are high and constantly growing. With 92 percent of the Internet users using social media, a large part of SMC’s customers are probably doing so as well. Additional, it must be pointed out that rules that apply in the western world do not necessarily apply to China. While older people in Europe and the U.S. might not be very

active on social networking sites, this might not be the case for China. The Internet market is developing rapidly in China and there is still little knowledge of the users' behaviour. With a collective culture it is likely that Chinese Internet users in all ages are more positive towards social networking sites.

SMC has much to gain from establishing communication channels through social networking sites at an early stage. Since the social networking sites are still relatively untouched by competitors it is possible to attract people involved in the mining and construction industry without any competition. It is easier to attract attention as a first-mover compared to as a follower. By building up a large user-base at an early stage it is possible to create a viral effect. For this reason, it is a good idea to use several social networking sites. Matter less of which site that becomes the dominant one SMC would have a lead.

6.3.2 Microblog

Microblogging is similar to blogging with the difference that the content is much smaller, often just a sentence, image or video. A microblog is searchable and can be subscribed to by other users that get updates when new content is published. Commercial microblogs often focus on short news and product releases. It is an ideal way to rapidly spread information and communicate with others with similar interests. It is a great channel for content as well as viral marketing that, due to the word of mouth marketing possibilities in China, have the potential to be well-spread. It enables the company to interact with the potential customers and get insight directly from the customers themselves. Microblogs also has a useful role in communicating with the public and as a tool to gather public opinions. SMC has realized these possibilities and is today using Twitter on an international level. Unfortunately, Twitter got blocked in China in 2008 and has continued to be so ever since that. However, China's government actually embraced microblogs earlier this year with the Communist Party newspaper, the People's Daily, launching a microblog of its own. With a growing Internet-market in China combined with an increasing interest in microblogging, the format is still a great way to communicate with customers. There are several other portals except for Twitter from where SMC can communicate with its customer through microblogging.

- *Zuosa* was one of the earlier microblogs on the Chinese market and one of the few that never got shut down by the government. Zuosa looks a lot like Twitter but has several features to make it more usable for Chinese users including suggested hashtags, a link to a page with all the blogs in the near area and the ability to post other content types such as images and links to music.
- *Sina* one of the top-20 websites in the world based on traffic. In China, Sina is known as Weibo and is better known for its blogging platform that is one of the most read in the world. It has establishing itself as the leading Chinese microblog platform with 20 million users in the first half of this year, which is forecast to further rise to 50 million by the end of 2010 and up to 120 million by 2012. The large number of users is much thanks to the userbase it is connected to because of its activities outside microblogging¹⁰⁶, this gives it a huge advantage over the

¹⁰⁶www.callcenterinfo.tmcnet.com/news/2010/07/20/4908811.htm, 2010-08-30

independent Chinese microblogging platforms like Zuosa. Another important aspect on the heavy regulated microblogging market in China is the site's close relationship with the government due to its years of self-censoring. There is a risk of getting content published on Sina deleted without explanation if it contains anything that might be perceived politically sensitive.

- *Sohu* is one of the largest Chinese Internet portals, and will give top priority to its microblogging service. The microblog is still relatively small, but with large-scale marketing campaigns the company hopes to be able to challenge Sina's leading microblog.¹⁰⁷
- Netease's microblog *163*, is also relatively new on the market. Netease is, just as Sohu and Sina, a large player on the Chinese Internet market. The company is famous as an email provider with a more than 1.9 billion users.
- *Taotao*, QQ's microblog, is being developed which could prove to be large competitor on the market due to its enormous user-base, the largest in China.

There is yet no clear winner among the microblogs in China. While the user number is not public for many of the sites, it is well known that Sina is the biggest. Nevertheless, Sohu and Netease have much potential while Zuosa is still going strong. As the market is expected to grow at a high speed much can happen. According to the Data Center of China Internet¹⁰⁸, China's total microblogging accounts are expected to reach 65 million by the end of this year. The most important microblog is today Sina since it has the largest reader-base, but it might, arguably, be worth using Sohu, Netease and even Zuosa as well. The format is the same, and the extra-time it takes to copy the already created content to the other sites is negligible for the millions of extra people that are reached. Sina, Sohu and Zuosa similar to Twitter, has a limit of 140 characters in each post, while NetEase has limit of 163 characters. Other microblogs are relatively small today, and the risk of international sites getting shut down is large due to their unwillingness to self-censor. Taotao is still in the beginners phase and thus very small, but it is worth keeping an eye due to the great potentials.

Microblogs in China still risks of getting content blocked. Not only is the content on individual blogs, mostly in case of political subjects, blocked, but other microblogs apart from Twitter has been shut down as well. In July 2009 the microblog Fanfou.com was shut down by the government due to a major campaign to tighten Internet controls. In July 2010 The Guardian reported that Sohu's microblog was down: "*one of the country's top four microblog sites is now down for maintenance, and the other three show a "beta" tag as if they are in testing, though they have been operating for months*"¹⁰⁹. Later in the week NetEase's microblog was down as well. However, all sites that were reached for comments denied government intervention.

The concern that has been expressed at SMC concerning microblogging on the Chinese market is the lack of human resources. It is possible to outsource the service. Companies

¹⁰⁷ www.chinadaily.com.cn/bizchina/2010-09/29/content_11365681.htm, 2010-09-29

¹⁰⁸ www.china.org.cn/e-company/index.htm, 2010-10-18

¹⁰⁹ www.guardian.co.uk/technology/2010/jul/15/china-blogs-shut-down, 2010-09-29

like *ServiceIn China* work with translating English twitter accounts and its content to Sina's microblog. It gives feedback reports, such as information concerning what other users are saying about SMC. Additionally it works actively with finding users that are interested in SMC's products. Whether this sort of service is necessary for SMC is questionable. The company already has the competence to translate all material from the current Twitter account, which does not have to be a time consuming job since the information is limited to 140 characters. One might also argue whether feedback reports are needed for a business-to-business company like SMC; how many users are really writing about SMC?

One person should alone be responsible to update the microblogs to avoid miscommunication. Updating one or several microblogs does not have to take much time since content is already created on an international level. Hopefully, the content could be better adapted for the Chinese customers, not only by translation, but also china-related news. This is however not a necessity.

6.3.3 Video-sharing Sites

Youtube.com is the largest video-sharing site in the world and a common marketing channel where companies share videos with the public. SMC is no exception and is today hosting a Youtube channel where videos of products are posted regularly. In China, Youtube is, similar to twitter and Facebook, blocked. The interest for video-sharing sites are still huge though. During 2009 the number of online video users in China climbed over 32 percent to 309 million, meaning over 80 percent of China's Internet users were visiting video-sharing sites. The large video-sharing sites had a record high 120 percent growth during 2009. Ad spending in China's online video category grew to nearly \$200 million, a 70 percent increase over 2008, and iResearch predicts it will continue to grow 60 percent to 80 percent annually for the next three years¹¹⁰. Video-sharing sites are natural channels for content as well as viral marketing. Having videos showing the performance of SMC's products can be of great value for customers that are interested in getting a better understanding of the products and wish to see them in action. Since there are no other sources of SMC's videos it is difficult for Chinese Internet users to get access to these videos. Additionally, with the video-sharing phenomenon spreading throughout China, the effect of viral marketing has great potential.

Tudou was the first successful copy of Youtube. With large investments the site rapidly grew to be the largest video-sharing site. Youku, a competitor of Tudou, instead focuses on professional content, partnering with local television stations and production companies to obtain programs and movies. By the end of 2008, Youku had signed up over 70 percent of local television companies. After Youku started taking bigger market shares Tudou changed strategy. They still encourage user-generated content, but the main focus is now on TV programs and movies. Today, Tudou attracts more than 200 million unique users every month, while Youku attracts slightly more.

¹¹⁰ www.adage.com/china/article?article_id=145872, 2010-10-19

70 percent of the content on the Chinese video-sharing sites are TV programs and movies, while user generated content only takes a share of less than 30 percent. There are two reasons for this. User generated content is less common in China than in the western countries because the culture of producing your own videos does not exist in the same way. Also, the technology needed to produce good-quality videos is not as common in the private household. In the U.S. the television materials are tightly controlled by the television stations, which are unwilling to sell copyrights to video-sharing sites. In China there are almost 200 television stations with more than 2000 television channels as well as thousands of film and television production companies. Thus, the material in China is more scattered which enables video-sharing sites to buy up much of the copyrights. This makes the Chinese video-sharing sites something very different from Youtube; instead of just being a video-sharing site it is a substitute to the television. With the forming of a large Internet television database, more and more young students and white collars are shifting to watch television online.

As mentioned, Youku is the biggest video-broadcasting site in China right now. However, since the site almost exclusively contains television programs and movies, it is not as much of a video-sharing site as Tudou. Therefore Tudou is a more natural forum for SMC to be active at. As with all social media, the question is whether the customers actually use video sharing sites. This, however, is not as important for a video-sharing site since the customers do not have to be members or active users of the media to get access to the content. The videos posted on Tudou could be spread through other channels as well; hence, the site has the potential to reach any customer with an Internet connection.

6.3.4 Online Reputation Management

"Proportionally, Chinese consumers rely on the Internet in making purchase decisions much more than their counterparts in the West", Charles Edouard Bouée, Roland Berger's Asia President.¹¹¹

Online attention has the power to build up or significantly damage a brand very quickly. Almost 60 percent of Internet users in China said that consumer review sites, discussion forums and blogs influence their purchasing decisions, compared with less than 20 percent in the US.¹¹² With a growing use of Internet, more people are browsing the Internet for information. It is important for a company to be visible online. This does not have to be related to paid advertisement, but can be about existing in searchable areas. This is particularly true for a large country like China, where many of the users prefer using local search engines and encyclopedias to international ones. Meanwhile, everyone is allowed to publish content on the Internet. While Internet is a fantastic channel to promote the company and its products, it also provides risks in the form of negative publicity.

¹¹¹ www.rolandberger.com, 2010-11-13

¹¹² www.physorg.com/news198765866.html, 2010-11-13

To ensure that SMC brand is not getting negative publicity online without having a fair chance to defend against criticism, the marketing department should actively search for information being published about SMC and its products in forums, blogs, microblogs and online newspapers comments. This includes assigning someone who is responsible to respond to everything published about SMC or related issues in as non-commercial informative way.

Online Existence

SMC has to start working with increasing the online existence in China. Today SMC has little presence on the Chinese web. In figure 6-4 this becomes very obvious, where the first page of a search for “Sandvik Mining and Construction” at Chinas leading search engine Baidu results in links to sites that, in most cases, are unrelated to SMC. None of the first links goes to SMC’s website, and all the sponsored links goes to distributors or competitors.



Figure 6-4: A search for "Sandvik Mining and Construction" at baidu.com 2010-11-15

The reason for this is that SMC usually works with organic search engine optimization that is focused on Google’s search engine. The problem is that Baidu’s search engine functions in a different way form Google. There are three major differences:

- Baidu uses meta information. Meta information is not visible on the page, but can be used to specify page description and keywords. While Google lowered the importance of this factor to almost nothing, Baidu still uses metadata. It is crucial that both the content as well as the meta information of the homepage is translated to Chinese. Today SMC’s homepage is not even fully translated.
- Baidu uses a different feed submission. Although Google, Yahoo and Microsoft agreed on Google’s sitemaps as a standard, Baidu has a different standard that could be translated to “Baidu’s News Protocol”. SMC is using Google sitemaps which is not optimal for increasing the search rank on Baidu.

- Baidu sorts the links in a different way from Google where the quantity of the links is more important than the quality.

SMC has to adapt the webpage to optimize the search rank for the Chinese market as well. SMC also has to invest in search engine marketing. Both of these activities are handled by the global IT department, therefore no more focus will be put on this area in this thesis. However, something that can be handled on a local level to increase the search rank is increasing the online existence. This includes being active at:

- Online Encyclopedias such as Hudong, Baidu Baike, Chinese Wikipedia
- Consumer review sites, by creating a profile of the company at the leading consumer review site, for example koubei.com and dianping.com. It is debatable whether SMC's customers use these sites to look for products, but in any case it will still increase the search ranking.
- Large portals, buying soft article on authoritative portal websites like sina.com, sohu.com, 163.com, is a great way for branding.

Since Chinese customers relies much on Internet in the buying decisions, being visible online is crucial to SMC. Being a company with high quality products, there are likely lesser customer complaints compared to competitors with cheaper products. Therefore, SMC should not be afraid of increasing the online existence. There are few costs involved in increasing the online existence and manage the reputation. The process will be time consuming in an initial phase, but maintaining the online reputation will become easier as the important online channels are identified.

6.4 Mobile Marketing

Mobile marketing can refer to two different categories of marketing; the traditional meaning is related to marketing done in a moving fashion, for example technology road shows or moving billboards. A second and more modern meaning is marketing done through mobile devices. In this thesis the focus will be on the second meaning. The Mobile Marketing Association defines Mobile Marketing as:

“Mobile Marketing is a set of practices that enables organizations to communicate and engage with their audience in an interactive and relevant manner through any mobile device or network”.¹¹³

Mobile marketing is growing all over the world. Over 130 Billion texts are sent each month, up from practically nothing in 2000. According to multiple analysts, mobile marketing advertising will increase from just a couple hundred million dollars in revenues in 2008 to three to five billion dollars by 2012.¹¹⁴

Today there are more than 800 million mobile phone subscribers in China, making it the biggest mobile-market in the world. The numbers of subscribers are suspected to continue grow as the mobile network expands and as more people can afford their own mobile phones. In many regions where fixed line access is not available or is too expensive a lot of people use their mobile phones for communications access. E-mail, Internet and even

¹¹³ www.mmaglobal.com/news/mma-updates-definition-mobile-marketing, 2010-10-25

¹¹⁴ www.mmaglobal.com, 2010-10-25

television are all accessed through the mobile device. Communicating through mobile phones is a convenient way to reach customers located far away in the country. Additionally, mobile is integral to daily life. As such, it poses an opportunity to instantaneously engage with customers. It is a great way to both differentiate from the competitors as well as getting attention from customers in a fast, easy and convenient way.

There are a number of different methods that mobile devices can be used for marketing purposes. The most common channels are SMS and MMS and mobile web marketing, lesser common ones include marketing via Bluetooth or infrared and location-based services.

6.4.1 Mobile Marketing via SMS

SMS is the most common mobile marketing tool because it is a cheap and easy way for the users to receive the information. Mobile marketing via SMS is a growing phenomenon in the entire Asia but is getting much criticism due to high amounts of spamming. In Europe and the U.S. mobile operators have made guidelines of how to use mobile marketing which had led to a much more positive view on mobile marketing among customers. SMS is now the most popular channel of the different mobile marketing methods with several hundred million advertising SMS being sent every month in Europe alone. According to the *MMA Consumer Best Practices Guidelines*¹¹⁵ that is followed by all mobile marketers in the US and Europe, it is necessary that the customer approve of continuous SMS advertising. The mobile operator also demands a double opt in from the customer and the ability to stop the service at any time. In China this sort of guidelines has not been followed very well, consequently, SMS-based spam has been a large problem much because of the operators selling their member databases to third parties. In 2007, 353.8 billion spam messages were sent to mobile phones, up 93 percent from previous year, which is about 12.44 messages per week per person. Spam-SMS became banned in March 2008. Nevertheless there are still companies that are selling mobile phone numbers illegally. According to a survey done by Synovate, 44 percent of the Chinese mobile phone users say they are receiving too much advertising on their phones.¹¹⁶ When using SMS as a communication channel it is therefore important that all regulations are followed and that the customer does not feel disturbed or annoyed by the information since the effect likely only will be negative.

Push and Pull Approach

There are two approaches that are possible to take when using SMS as a communication channel, either a push or a pull campaign. A push campaign refers to the information being “pushed” towards the customer, whereas in a pull campaign the customer demands the information himself. With a push approach it is possible to reach more customers, but on the other hand there is a larger risk of the receiver feeling that they are being spammed.

¹¹⁵ www.mmaglobal.com, 2010-10-25

¹¹⁶ www.synovate.com, 2010-10-30

For SMC, that has a small and specific customer group, to use a push approach as a channel of communication the telephone numbers of the receivers must be gathered and stored in some way. The customer database would fill this purpose. The impact of the service would fully depend on how extensive the database is. A pure push-SMS-campaign is seldom very effective; customers tend to be more interested in the content if they have chosen to take part of it themselves. To avoid making the customers feeling spammed, the start of the subscription could be initiated with an introductory message with information concerning the service. From the first message, the receiver should have the option to continue or stop the service. Further, the messages should be few and informative with content that is interesting for the designated group. The subscription should be easy to abort; for example by replying “stop” to the sender.

Pull-based marketing campaigns where the user initiates the dialog is the least disturbing way for the customer as well as the most cost effective way to create a two way communication with the customers¹¹⁷. This makes sense since every message that is sent is received by a receiver that is actually interested in the content. Using a pure pull approach would mean that the customer would have to actively subscribe to the service. It can be initiated by offering a subscription service on Sandvik’s homepage where the interested customers can fill in their number, or by sending a text message to a dedicated short code of SMC to start the subscription. The disadvantage of this type of pull-approach is that only the customers that are already exposed to another channel will be reached. This group of people are likely those that are engaged in SMC, and thus receive the information from other channels, such as the website.

To create an SMS-based mobile marketing campaign, there are several mobile application service providers that can help; everything from marketing firms that use mobile techniques to agencies that exclusively work with mobile marketing. Preferably the firm should be a Mobile Marketing Association member to ensure that they use a code of conduct. There are mainly two different ways to do SMS-marketing, either by using short codes or by long dedicated numbers.

Short codes

SMS-based marketing is normally done with so called short codes. Short codes are telephone numbers designed to be easy to remember and therefore are significantly shorter than normal number. Many companies use short codes to run their mobile marketing campaigns because they allow receivers to text back to any messages received. The short codes are used to either send SMS or MMS text messages from mobile or fixed phones. Like telephone numbers, short codes are unique to each operator, but it is common that different companies share a short code. Short codes are leased on a monthly basis by SMS service providers. The mobile operators monitor the service to make sure the marketer follows the stated purpose of the short code.

The cost of using short codes depends on different factors. The biggest difference in price depends on whether it is a shared short code or dedicated short code. Shared short codes

¹¹⁷ www.imediaconnection.com/content/21582.asp, 2010-10-26

are the most cost effective solution since the cost of leasing the short code is shared with other companies. Running a mobile marketing campaign with a dedicated short code is more expensive since it is necessary to pay for exclusive use of the specific short code. There are two choices to dedicated short codes, either a cheaper random short option, or a vanity short code. The vanity short codes are dedicated short codes that can be requested as a particular number, brand name or associated word represented as a number. Vanity short codes can be very effective in helping customers remember the number, but naturally this option cost more.

There are several different mobile application service providers that are specialized in putting up short codes, for example *Clickatell*, *Txtlocal*, *Routomessaging* and *Involvemobile*. The prices are in the same range for all the mentioned companies. As an example, Txtlocal offers a shared short code that can be used for both SMS and MMS with a setup fee of approximately 500 RMB with a monthly cost of approximately 1,000 RMB. A dedicated short code has a monthly cost of approximately 8,500 RMB. Additionally, the cost per SMS sent is about 0.52 RMB¹¹⁸. When using short codes, it is also possible for the company to charge the subscribers for the text messages being sent from them to the short code, this option is on the other hand not of great value in marketing.

Long number

An alternative to short code is to send SMS messages through a long number. These are often internationally available and longer than normal numbers. It is suited for a close-circle messaging where companies want to send out large amount of messages, or do not want their customers and employees to pay for outgoing SMS. The disadvantage of long numbers is that they might be difficult to remember and does not give as good of impression as short codes. On the other side, long numbers are in general much cheaper than short codes. Similar to short codes, long numbers can be dedicated as well as shared. A company can buy their own long number, in difference of short codes that are rented. Txtlocal offers shared long numbers at an annual cost of 250 RMB, and dedicated numbers for 2500 RMB. There is no startup cost, and the cost per SMS is, similar to short codes, 0.52 RMB per SMS.

Bulk-messages

Apart from using long numbers and short codes, it is also possible to send bulk-messages. Bulk-messages are text messages sent from random numbers. The costs involved are usually very low and only depend on the amount of text messages sent, meaning there is no startup cost or annual cost. It is a good option when marketing single events or happenings since it is easy and cheap. Bulk-messages are usually sent from an email. By signing up at mobile application service provider the service can be initiated. For bulk-messages there are no automatic way to sign up for a subscription, instead everything has to be done manually. By using for example the customer database the numbers of customers and other relevant receivers can be stored. When messages are to be sent the list is simply copied to the mail. Having a well-developed customer database with

¹¹⁸ www.txtlocal.co.uk, 2010-10-27

information concerning the customer would be of great advantage since the text-messages could be directed to the receiver that the content is relevant to. Customers that are interested in the subscription could either sign up through a function on the website or by sending a mail or a text message. The drawback of the technique is that it will take much time to micro-manage the list since someone has to manually add the new subscribers.

Since SMC's customers are relatively few in numbers, the related costs are cheap due to the SMS only being sent to the small group of interest.

Summary

The different ways of doing SMS marketing offers different advantages and disadvantages. Short-codes are better fitted when there is expected to be a two-way communication with the receiver. Bulk-messages might be preferable for single events where no replies are expected. Long numbers can be used in a similar way as short codes and would enable the service to be used outside China.

The service is ideal for content marketing, and can be used to enhance brand awareness, collect customer information, promote events or just provide the customer with information. The content is limited to 160 characters, making the information similar in size to that of microblogging. The content that SMC is publishing on Twitter as well as Facebook is easy-read and interesting news concerning the company, thus very fitting for SMS-communication as well. An easy solution would thus be to use the same information in the SMS-messages as in microblogs. Since the content is only compromised of text, putting the messages together is easy. Similar to a microblog, a SMS could include invitations to access information online.

By using a customer database SMS-messages can also be used to create awareness of events in specific areas or for particular groups of interest. For example could information concerning SMC's participation in the Xilinhote Coal Expo be sent out to coal miners in Inner Mongolia.

6.4.2 Mobile Marketing via MMS

MMS is an abbreviation of Multimedia Message Service and enables mobile phone users to share not only text messages, but also messages including images, audio and video. Nearly all new phones produced with a color screen are able to send and receive standard MMS messages. Sending MMS-messages is more expensive than SMS. On the other hand, it is possible to send more rich content with MMS. MMS is a growing, but still uncommon communication channel for advertising, thus it is a great way to differentiate not only from the competitors, but also from other advertisement. Thus, naturally, there is less risk of a push-campaign being perceived as disturbing among the receivers. Since the targeted group is very small for SMC the cost per message is not a big concern.



Figure 6-5: DI500 drill rig

Using MMS in marketing is very similar to SMS; it is possible to use short codes, long numbers and bulk-messages. However, not all services that enable SMS allow the user to send MMS. Short code can usually use both SMS and MMS, but for long numbers it is necessary to sign up for a MMS-function. For a shared long number the pricing range is about 600 RMB per year. For a dedicated long number it is about 9000 RMB per year. The cost per MMS is about 1 RMB each from *Txtlocal*. The messages are limited to a size of 100 KB, which can be compared to figure 6.6 of SMC's DI500 drill rig, which is about 25 KB. A problem when sending picture- or video content with MMS is that the screens used often are very small. Unless the picture or video is adapted to smaller screen it might be difficult to see the content.

SMC can use MMS for content as well as viral marketing. MMS can be used as a channel to send pictures and videos of new products with additional information in text format, or content that is of interest for the customers and/or that the customer wants to spread.

6.4.3 Mobile Web Marketing

The number of people in China who accessed the Internet on a mobile device doubled last year with the introduction of 3G services. For many of these users that cannot afford a PC their mobile phone will be their main tool for accessing the Internet. According to Nielsen's Emerging Digital Trends Report¹¹⁹ people in the Asia-Pacific region are the most active users of mobile Internet. According to the study 71 percent of Internet users have logged on from their phones in the last 30 days.

Mobile Internet is primary about accessing mobile sites, and secondary about www-sites. Mobile sites are such that are specifically designed for mobile phones, the content is adapted to people that are on the go while the layout is designed for the smaller mobile phone screen. As earlier mentioned, there are today 292 million users in China accessing the Internet with their mobile phones. As an example, 10 percent of Kaixin001's users access the site with their mobile phones. It is important to adapt the online content for mobile phone users since normal www-sites cannot open properly on mobile phones. The words are often too small, and the user has to move from one side to another on the small screen.

For as little as a year ago, the price of adapting a mobile-optimized website or smart phone application was high and a major reason to not adapt the websites content. Today there are several different tools that enables people to adapt a site themselves, costing anywhere from free to up to 600 RMB per month or more depending on the needs. Instant Mobilizer and MoFuse are examples of this. The most convenient way to handle the combination of a mobile and www-site is to only have one URL, and have the site detect the user agent from the browser. The site can then deliver a WAP-site for mobile phones, a normal site for PCs and a small-screen-optimized site for smart phones. Implementing a mobile-adapted website is something that due to the required competence should be done

¹¹⁹ www.nielsen.com, 2010-10-27

on an international level, and therefore not something that will be further investigated in this report.

6.5 Transportation

As mentioned earlier, most mining sites are located in rural areas. Meanwhile, the owners and managers of the larger enterprises have headquarters in larger cities. The management has to visit the working sites regularly, partly due to new regulation stating that they must enter the mines themselves to ensure the safety of the employees. Consequently, they spend much time travelling. Thus, an efficient way to reach the decision-makers in the mining industry is to target transportation. Furthermore, engineers and other influencers that travel to the sites will also be reached. To harvest this opportunity in the most efficient way the first step is to identify the transportation routes that are most common to SMC's group of interest. The second step is to analyze which communication channels involved in these routes that are most fitting for SMC.

6.5.1 Areas of Importance

The first step is to identify a number of key areas in China where a large customer base exist. Since construction customers are spread out throughout the whole country while mining customers tend to cluster around areas high on resources, the focus in this part will be on mining customers. Of particular interest are the provinces where there are yet no dealers active. The northern parts of China are rich on resources, particularly in Inner Mongolia and Shanxi, the number one and two source of coal. Neither one of the provinces has active dealers specialized on the market. Hebei is the by far biggest source of iron ore, and is at the same time an area where SMC has little presence today: not more than approximately 16 percent of the market share. Of interest is also Zhaoyuan in Shandong province that has the biggest gold production of any cities in China with 60 gold mines and a production of 15 percent of the country's total annual produced gold. These areas that have a high concentration of potential customers will be analyzed to find more precise spots of where to most effectively communicate.

Inner Mongolia

Inner Mongolia is an autonomous region located in the northern region of China. It is the third-largest subdivision of the country spanning about 1,200,000 km² or 12 percent of China's total land area with a population of about 24 million. The coal industry has been growing rapidly in Inner Mongolia and the province recently passed Shanxi as the largest producer of coal.¹²⁰

There are ten public airports in Inner Mongolia. At present eight airlines participate in the operation of the Inner Mongolia air market, and 26 air routes link Inner Mongolia with 28 municipalities. Inner Mongolia has three arterial railways. During 2005 there was a mileage of 7689 km with more than 30 million passengers. Many cities of Inner Mongolia are connected to the Chinese railway network giving access to the region from neighbouring provinces. There are 16 national highways as well as 51 provincial highways. There is a mileage of 79,029 km highways including 1,001km expressways.

¹²⁰ news.xinhuanet.com, 2010-10-15

The increasing production and export of coal has put much pressure on the traffic between Inner Mongolia and Beijing. The motorway, part of the Beijing-Tibet expressway, is heavily used by trucks transporting coal from Inner Mongolia. In August 2010 this led to a 100 km long traffic jam that continued for nine days¹²¹. To cope with this problem a new railway line is being built from Beijing to Baotou to ease the pressure of road traffic.

The province is rich on coal and has a number of spread out areas where the most coal is concentrated. Coal production is distributed in ten prefecture-level cities in the province with a much higher concentration in six. The total coal production of the province was 637 million tonne in 2009. The areas with the highest concentration of SMC customers are:

- Ordos city, one of the twelve prefecture level divisions of Inner Mongolia. It is extremely rich in natural resources, having one sixth of the coal reserve in China. Along with the strategic moving towards west of Chinese coal industry, the coalfield has become the key for the construction of the national coal industry. The city's prefectural administrative region occupies 86,752 km² and covers the bigger part of the Ordos Desert, while the urban area itself is relatively small. The region borders Baotou, the largest city in Inner Mongolia, to the north. From Ordos airport Air China and China United Airlines has connections to Beijing, while China Southern Airlines has connection to Xi'an and Taiyuan, with an annual throughput of 472,656 people in 2009. The airport is newly built and is still under development¹²². The main railway station is in Dongsheng. The railway connects to Beijing to the east through Datong, and Hohhot in the northwest through Baotou.
- Xilinhot, the capital of the prefecture level division *Xilin Gol*, is a major centre for coal mining due to the coal-rich surrounding areas. It is an area with high customer concentration due to the large amount of mining activities and the relatively small population. The city is located 610 km from Beijing and 620 km from Hohhot, the capital of Inner Mongolia. The city has an airport with regular flights to Beijing from Air China and daily flights to Hohhot from Shandong Airlines. During 2009 it had a passenger throughput of almost 125,000 persons. All train traffic goes through Hohhot, with trains leaving daily.
- *Wuhai* is located in the central Inner Mongolia. The city's economy is heavily based on coal mining with its 30 million tons of coal reserves. Wuhai lies on a major Yellow River train route, connecting a large number of cities in Inner Mongolia, central and southern China. Travel time from Beijing by train is approximately 20 hours. An airport was opened in 2003 from where there are Hainan Airlines flights arriving and departing to Hohhot, Xi'an, Guangzhou and Beijing. In 2009 the airport had a passenger throughput of over 7 million.
- *Tongliao* is a prefecture-level city in eastern Inner Mongolia with an area of 59,535 km² and a population of over 3 million. It is rich on mineral resources

¹²¹ www.bbc.co.uk/news/world-asia-pacific-11062708, 2010-08-23

¹²² www.flightstats.com, 2010-10-15

with a coal reserve of 20 billion tons¹²³. Tongliao railway station is listed on the 40 largest national railways hubs while Tongliao airport has an annual passenger throughput of 2.5 million, with flights to Beijing and Hohhot with Air China and Shandong airlines and to Dalian with Grand China Express.

- *Chifeng* borders Xilin Gol to the north and west. The city has an area of 90,275 km² and a population of 4.48 million. The area is rich in coal, oil, gas and metals, namely iron, gold and silver. It has over 70 mineral deposits and a coal reserve of 24 million tons. Chifeng airport had a throughput of more than 1.5 million in 2009, which is expected to grow to 2 million in 2010. There are non-stop flights to Beijing, Hohhot among other cities. There are eight provincial and national highways linking Chifeng with surrounding cities. From Chifeng there are direct trains to Beijing, Harbin, Shenyang and Dalian among others.

¹²³ www.northeast.gov.cn, 2010-10-15

- *Hulunbuir* is a prefecture-level city in north-eastern Inner Mongolia. It spans an area of 264,000 square kilometres and has a population of 2.7 million. Its administrative center is located at Hailar District, which is also its largest urban area. From Hailar Dongshan airport Air China and Hainan Airlines has flight connection to Beijing, Hohhot and Shanghai. 2008, the airport had a total passenger throughput of 342,416 passengers. The main train station is the Hailaer Station where the railway connects to Beijing, Harbin, Hohhot, Baotou,¹²⁴

1. **Ordos City**
2. **Xilin Gol**
3. **Wuhai**
4. **Tonglao**
5. **Chifeng**
6. **Hulunbuir**

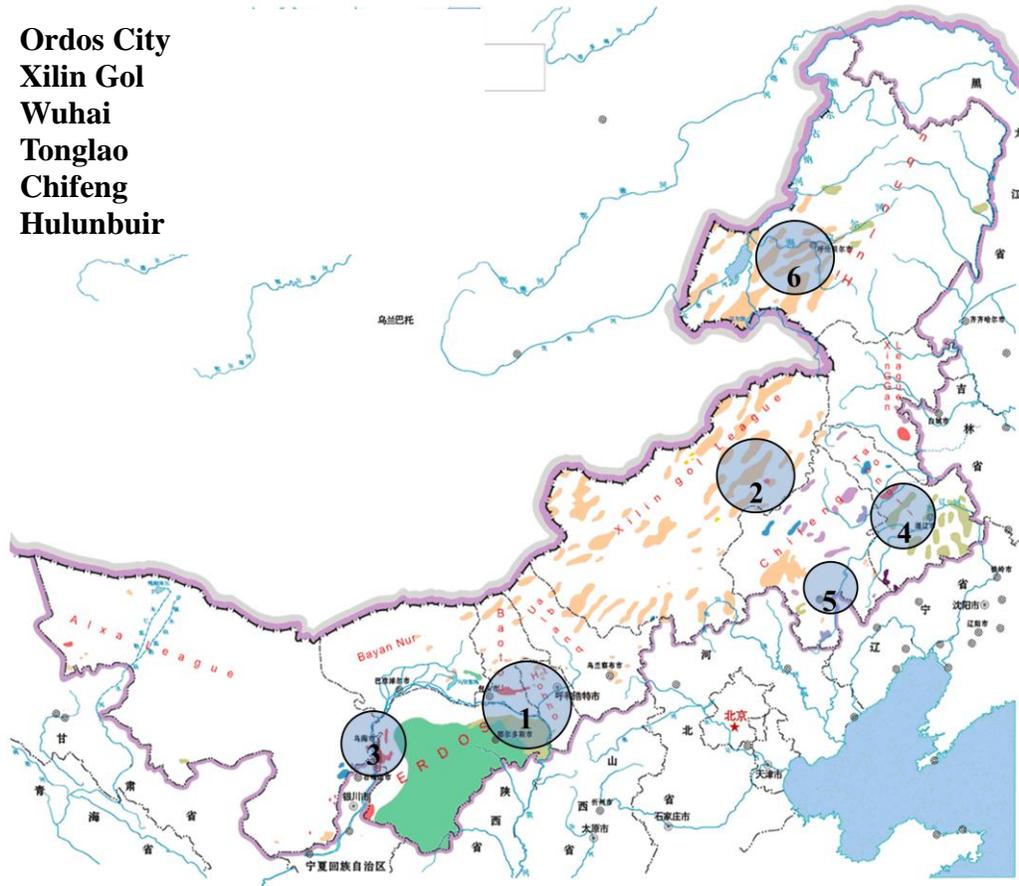


Figure 6-6: Areas of interest in Inner Mongolia

The identified areas in Inner Mongolia can be seen in figure 6-6. The province is large and the mining sites are spread out and often far from the larger cities. Long-distance transportation such as train or flight are thus the most convenient way for individuals to transport to the sites. Likely, mining owners and managers are reluctant to use the highway due to the long distances combined with the increased traffic. It is difficult to guess which routes that is most commonly used by the decision-makers, but it is possible to identify certain hubs where a large part of SMC's group of interest is to pass; this is mainly airports and train stations in connecting points as well as areas that are rich on resources. Baotou and Hohhot are important hubs of transportation that connect several of

¹²⁴ www.sxcoal.com/nmgcoal, 2010-10-14

the areas by railway. Additionally, Hailar Dongshan airport, Ordos airport and the airports in Xilinhote, Wuhai, Chifeng, Tongliao is of interest.

Shanxi

Often referred to as “the home of coal” Shanxi is a province in the northern parts of China. It has a population of 35 million spread over 156,800 km². Industry in Shanxi is centred on heavy industries such as coal and chemical production, power generation, and metal refining. Shanxi has extensive rail infrastructure to the surrounding provinces. The railway network connects to major cities such as Taiyuan, Shijiazhuang, Beijing, Yuanping, Baotou, Datong, Menyuan and Jiaozuo. The province also have extensive railway network to coastal cities such as Qinghuandao and Qingdao. Shanxi's main aviation transport hub is Taiyuan Wusu Airport. The airport has flights connecting Shanxi to 28 domestic cities including Beijing, Xi'an, Chengdu and Chongqing. There is also airports in Datong, Changzhi and Yuncheng which has domestic routes to other mainland cities.

The coalfields covers an area of 62,000 km², accounting for 40 percent of the total land area of the province. In 2009 615 million tonnes of coal was produced. The coal resource is mainly distributed in six coalfields, namely: Datong, Ningwu, Xishan, Hedong, Qinshui and Huoxi. These coalfields are spread out over the province. The key areas where the mines are located can be seen in figure 6-7 and include:

- *Datong*, a prefecture-level city in the northern Shanxi Province in China, with a population of approximately 3.11 million. It borders Inner Mongolia to the northwest and Hebei to the east and is located a few hundred km west by railway from Beijing. The Datong Coalfield is almost 1800 km² and located 20km southwest to Datong City, with total reserves of 71.8 billion ton. Currently, there are:
 - 15 mines owned by Datong Coal Mine Group with an annual output of 50 million tonnes,
 - 7 city-operated mines that produce 5 million tonne output annually,
 - And a number of town and village-operated mines with annual output of 39 million tonne.

From Datong Airport Air China has flights to Beijing, while China Eastern Airlines have flights to Shanghai and Guangzhou that leaves two to three times a week. Due to the large coal export, Datong has a developed railway system that connects the city to 25 other cities in China. Three long-way bus stations are available in the city: Datong Bus Station, Datong North Passenger Transport Station and the Datong Xinnan Passenger Transport Station. Coal mining is the dominant industry of Datong, consequently it has developed a reputation as one of China's most polluted cities. While coal will continue to dominate, Datong has been identified as one of the key cities requiring redevelopment, with part of this being in environmental cleanup, rehabilitation and industrial refocusing. Datong is a pilot city for rehabilitation studies following years of pollution.

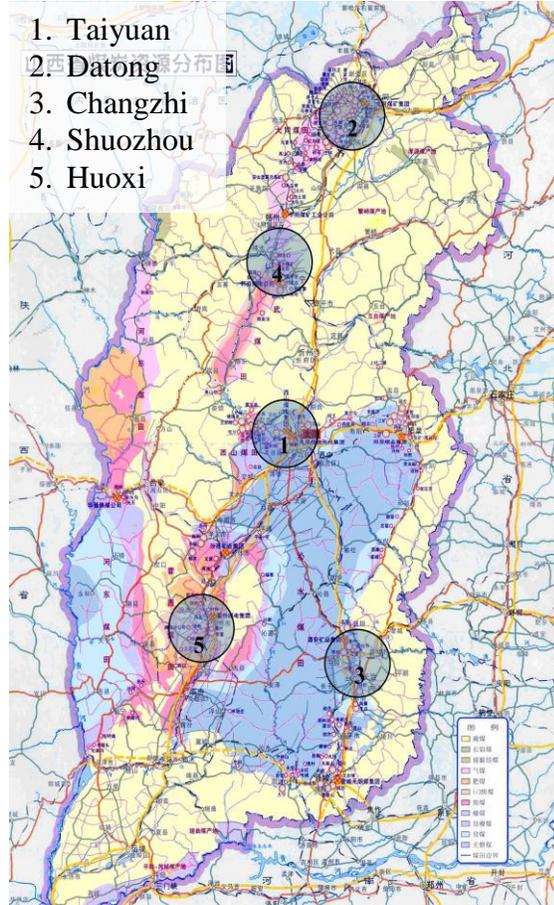


Figure 6-7: Areas of interest in Inner Mongolia

- *Changzhi* is a prefecture-level city with a population of half a million. Qinshui coalfield is located near Chanzhi, while Hedong coalfield is located south-west of the city. The national Tai-jiao Railway goes through 8 counties, connecting Taiyuan and South Tongpu Railway in the north, and Zhenzhou, Xinxiang in the south. From Changzhi airport China Southern Airlines has flights to Beijing and Guangzhou while Hainan Airlines has flights to Shanghai.
- *Taiyuan* is the capital of Shanxi and the largest coal-mining centre in China. It has a population of 3.4 million. Xishan Coalfield is located in the west of Taiyuan. Trains from here link large cities such as Beijing, Shanghai, Tianjin, Guangzhou, Xian, Chengdu and Baotou. The newly constructed high-speed railway has shortened the travel time between Taiyuan and Beijing to less than three hours on a distance of 600 km. There are a lot of express highways conveniently connecting Taiyuan with the major cities in and outside, the province. As mentioned earlier, the largest airport in Shanxi is located in Taiyuan with both domestic and international flights.
- *Shuozhou* is located in the northern parts of Shanxi between Datong and Taiyuan. It is bordered on the northwest by Inner Mongolia. The city has population of approximately 1.25 million and an area of approximately 5,737 km². The Ningwu coalfield is located near Shouzhou. The mining area used to be exclusively

dominated local small mines but after governmental consolidations large enterprises are being formed.¹²⁵ With bigger customers with more capital to invest, the area is growing in importance for SMC. The Dayun Expressway passes through it, and it has five specialized train lines. It connects directly to Taiyuan and Datong. The closest airport is Datong airport.

- Huoxi coalfield is located in the south-central part of Shanxi, south of Taiyuan. The coalfield is spread out over an area of 170 km from north to south and 70 km from east to west covering several smaller cities such as Lingshi, Huozhou, Linfen. The railway goes through a large part of the cities in the area and connects to Taiyuan in the north, making it an attractive route for advertisement.

The transportation in Shanxi differs much from Inner Mongolia, mainly due to the size of the province but also because it located in a more central part of the country. With a well-developed railway network, train is a more preferable transportation method than flights compared to the situation in Inner Mongolia. The large railway stations in Datong, Taiyuan, Changzhi are important, partly for being important transportation hubs and partly for the large coal fields in the areas. People going to other areas of Shanxi likely pass either of these areas on the way. Shuozhou is another important area since it has got large coalfields, while all trains going between Datong and Taiyuan passes here. The trains going south from Taiyuan to Linfen reach several areas that are rich on coal. Since there are many small cities in this area with coal operations, the train itself might be a more attractive channel of communication than the small stations.

The airports in Taiyuan, Datong and Changzhi are also worth to mention. People from outside Shanxi are likely to reach either one of these airports. Taiyuan, being the biggest one with the most central location is of most interest.

The highway going from south to the north of Datong is the backbone of Shanxi Province. It goes across the whole province and is the most important highway in Shanxi. It goes through Taiyuan, past Linfen, among others, and continues to Xi'an.

Hebei

Hebei province completely surrounds Beijing and Tianjin municipalities. It borders Liaoning to the northeast, Inner Mongolia to the north and Shanxi to the west. Hebei is rich on both coal and iron. It alone stands for almost 40 percent of the whole country's iron ore production¹²⁶. The major iron mines are in areas around Handan and Qian'an.

Hebei surrounds Beijing, hence many important railway lines radiating out of Beijing pass through Hebei. The Jingguang Railway, going from Beijing to Guangzhou, is one of the most important: it passes through several major cities like Baoding, Shijiazhuang and Handan on its way through Hebei from north to south. Other important railways include the, the Jinghu Railway, from Beijing to Shanghai and the Jingbao Railway from Beijing

¹²⁵ www.chinastakes.com/2009/9/shanxis-nationalizing-of-coal-mines-riles-zhejiang-investors-government.html, 2010-10-14

¹²⁶ SMC report: SMC in China Iron mines - SMC customer production performance

to Baotou in Inner Mongolia. Under the 11th five-year plan, Beijing and Hebei are collaborating on a new passenger railway. The RMB 82.6 billion network will add 844 km to the system. Current railway systems for Hebei trains are also being upgraded and will soon be able to travel at speeds of between 160 and 200 km per hour.

The recent expressway boom in China has not left Hebei behind. There are expressways to every prefecture-level city of Hebei except Chengde, with a total length of approximately 2,000 km. The total length of highways within Hebei is around 40,000 km.

Shijiazhuang's Zhengding Airport is the province's center of air transportation, with domestic and international flights.

- Handan* is located in the southern parts of Hebei, located close to the border to Shanxi, and less than 150 km north-east of Changzhi. It is 163 km away from Shijiazhuang, the capital of Hebei. The province has a population of 1.5 million for the urban city centre and almost nine million for the entire prefecture-level city area of 12,000 km². The area surrounding Handan has rich reserves of coal and iron. SMC has identified three large mining sites in the area. The Beijing-Shenzhen expressway runs through the city, and passes Shijiazhuang on its way to Beijing. Highways 107 and 309 intersect at the city. From Handan airport there are flights to Shanghai, Guangzhou, Dalian and Chongqing. As mentioned earlier, Handan is on the much-trafficked Jingguang Railway line connecting it to Beijing in the north.
- Qian'an* is a city district of Hebei under the administration of the Tangshan city. It has an area of 1208 km² and a population of approximately 700,000. The city has over 20 kinds of mineral deposits, of which the main metal mineral is iron. It has iron reserves of 2.72 billion tons and thus is the largest reserve of iron ore on county-level in the whole country. The railway is well developed and passes Tangshan to major cities like Beijing, Tianjin and Shijiazhuang. The closest airport is a newly opened one in Tangshan, which has daily flights to Shijiazhuang with Hebei airlines.



Figure 6-8: Mining sites in Hebei

The railway and highway traffic is important in Hebei since it is closely linked to both Beijing and Tianjin in a highly populated area. Since Qian'an is located about 130 km from Tianjin and 170 km from Beijing, the airport of Tangshan is less important due to a well-developed railway system. Handan is located in a less populated area, with the

closest major city being Shijiazhuang that is about 170 km north of it. Being farther away from major cities, it is more likely that the transportation is by flight.

Shandong

Shandong is a province located on the eastern coast of China. It has a population of 94 million and an area of 156,700 km². In recent years, Shandong has had a fast economic development, especially in the eastern parts of the province. It is now one of the richest provinces in the country, much because of it being the largest producer of precious metals such as gold and diamonds. Much of the gold production is concentrated to the city of Zhaoyuan that has the largest gold production of any cities in China with 15 percent of the whole country's total annual production. In 2002 the city was named "China's Gold City" by China's gold association. Zhaoyuan has a population of 572,000, of which non-agricultural population is about 100,000. Gold resource in Zhaoyuan is spread all over the city, where about 60 mines are currently active. The closest train station and airport is located in Yantai, almost 100km away from Zhaoyuan. There are also airports in Weifang and Qingdao that both are about 130 km from Zhaoyuan¹²⁷. Being a developed province that is one of the richest in China, it is likely that mine owners and managers are located in the province. Since both the airport and train station is located relatively far away from Zhaoyuan, many of the mine owners most probably go the motorway.

With the important locations identified, the next step is to analyze the difference communication channels that exist.

6.5.2 Highway Advertisement

Putting billboards alongside highways is a great way to increase the impact of the billboard since passing drivers typically have little to occupy their attention. Strategically placed billboards in the area have the potential to reach a large number of customers. The areas attractive for SMC are in provinces where customers are likely to use the highway: Shanxi, Hebei and Shandong. The most interesting locations in these provinces are near large mining centers and transportation hubs where a large amount of people passes by.

In Shandong the most relevant location is near Zhaoyuan. However, the city is not very big and only reaches the limited number of customers that are located in the area. In Hebei, both Qian'an and Handan has potential to be good locations for highway advertisement. Unfortunately, no information has been found concerning billboards in these areas. Possibly, the area around Handan might have few billboards due to restrictions on billboards in the areas around Beijing for the Olympics 2008.

In Shanxi the most crowded areas are around Taiyuan. Being the biggest city in the region and the largest coal-mining centre in country it is likely that large portions of decision-makers are located there. By placing the advertising on billboards near Taiyuan it reaches both people travelling from Taiyuan to the coalfields in different parts of the province as well as people passing by Taiyuan from the north or south. Additionally, the largest airport is located in Taiyuan, thus people coming from outside of Shanxi are likely

¹²⁷ www.zhaoyuan.gov.cn/en, 2010-10-21

to pass the billboards as well. Attractive locations for SMC are on the highway north to Datong and Shuozhou, south to the Huoxi coalfield-area and south-east towards Changzhi. The highway billboards range from 80,000 to 400,000 RMB per year depending on the location. In figure 6-9 some of the billboards' location, price per year and amount of traffic per day are illustrated on a map of the surrounding area of Taiyuan. What can be noticed is that the price and the amount of traffic do not necessarily correspond; remarkable is the fact that the two locations with the most traffic have the lowest price per year. This is because there are other factors involved as well, for example how fast the traffic passes by and how visible to billboards are. The highway billboards signs are normally 18m*6m and most often includes the logo of the company.¹²⁸ It is difficult to guess how many customers that these billboards can reach. For this, it is necessary to develop the customer database to find the location of the mines as well as the individuals.

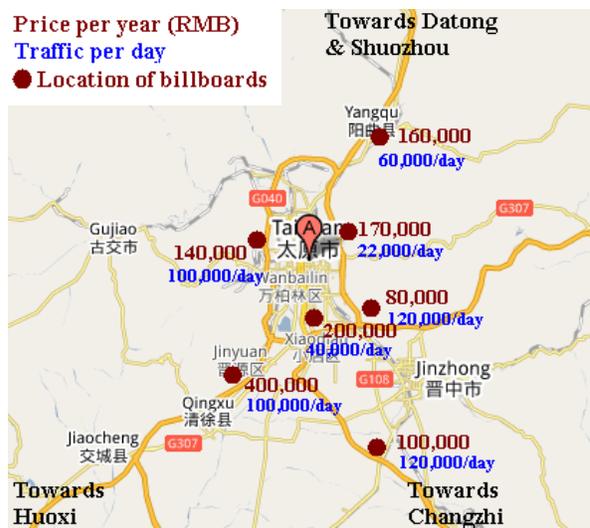


Figure 6-9: Price example of billboard advertisement in Taiyuan¹²⁸

¹²⁸ www.media.360mt.com, 2010-10-30

6.5.3 Flight and Airport Advertisement

Advertisement at airports and on flights has the potential to reach a very attractive group to SMC. As can be seen in figure 6-10, almost 60 percent of the Chinese commuters are the decision makers of corporations and the government according to a study by Sinomotor¹²⁹. Mine owners and managers are a typical group that can afford to travel by flight and, due to much long-distance traveling, are likely travel by flight often.

Audience Profile

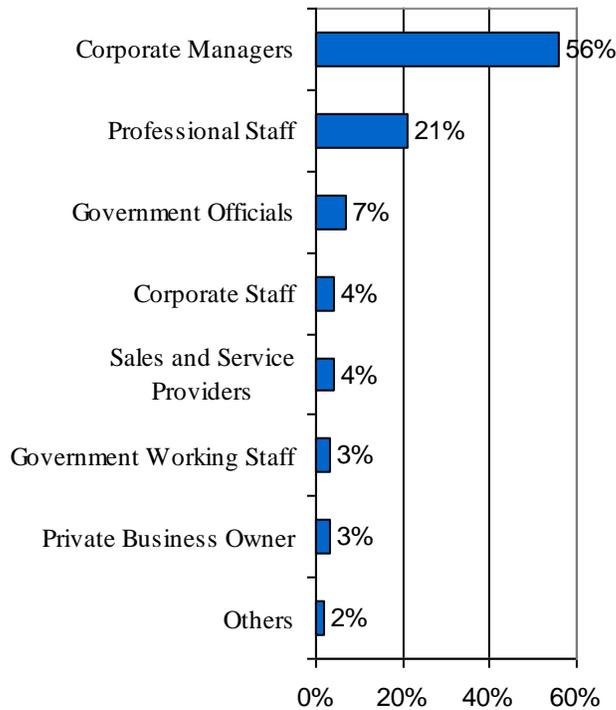


Figure 6-10: Airport audience profile¹³⁰

If the advertisement is placed at strategically chosen airports and flights a large group of customers can be reached through different advertisement methods:

- In the airplane: Advertising on the flights is an effective way of getting attention from the customers. Due to little visual and auditory stimulation the advertising gets a high level of exposure. The channels include: Airborne Television, inflight magazines and pillow cover towels. Typical for inflight advertisement is that it is done at a specific airline company, and not for specific routes. Therefore it is important to identify which airlines that are the most important for the areas of relevance.
- At the airport: The average waiting time at airports is 83 minutes¹³⁰, making the level of exposure of advertising located at the airport high. The channels mainly

¹²⁹ www.sinomonitor.com, 2010-11-04

¹³⁰ www.sinomonitor.com, 2010-11-04

include different forms of digital frames and billboards.

Pillow cover towels

The pillow cover towels, as can be seen in figure 6-11, serves as a great channel of communication towards the travelers since the influence last the whole journey - providing the longest visual impacts of all media analyzed. Its closeness to the traveler is another advantage. The information that can be included is anything that fits within the 30 * 20 cm size, which could be logos, information or pictures. As can be seen in figure 6-12, the price ranges from approximately



Figure 6-11: Pillow cover towels

15,000 RMB to 34,000 RMB per month per airplane, with an average of 150 seats per airplane and nine flights per day. Meaning it theoretically could reach over 40,000 travelers, which however is unlikely since the airplanes are seldom full while several of the commuters travel more than once.

Pillow cover towels price comparison

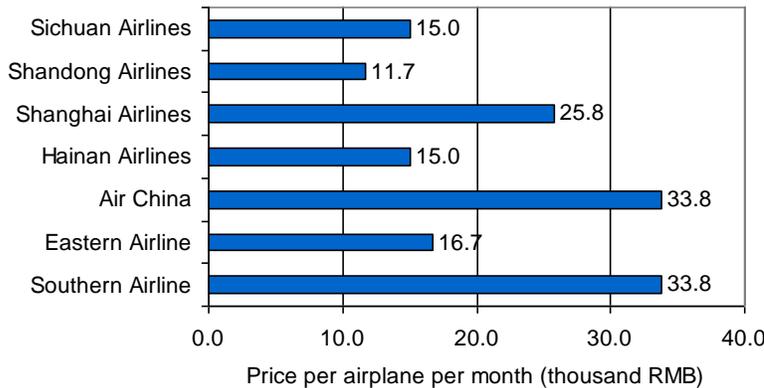


Figure 6-12: Pillow cover towels price comparison¹³⁰

The most airlines have a minimum renting period of three month to one year for a minimum of 10 to 46 aircrafts depending on the company. Southern airlines offers aircrafts depending on the airport, however, none of the identified airports of interest are in the list. Air China offers package deals based on the airplane model and its coverage. As can be seen in appendix 2, Air China is the airline company with the most flights to the identified areas. It is the fourth biggest airline measured in passengers, as seen in table 6-3.

Airlines	Minimum month	Minimum aircrafts
Southern Airlines	3	N/A
Eastern Airlines	12	100

Air China	Package deals	Package deals
Hainan Airlines	3	10
Shanghai Airlines	3	60
Shandong Airlines	12	46
Sichuan Airlines	3	20

Table 6-2: Pillow cover towel specification¹³⁰

Airlines	Total Aircraft	Aircrafts with TV	Passengers Per Month	Flights Per Month
Southern Airlines	333	261	5,000,000	37200
Hainan Airlines	220	73	4,100,000	28340
Eastern Airlines	245	189	3,460,000	29380
Air China	217	160	3,330,000	28270
Shanghai Airlines	72	60	1,080,000	7200
Shandong Airlines	46	39	910,000	6070
Sichuan Airlines	41	37	810,000	5403

Table 6-3: Airline comparison¹³¹

Air China offers six different packages, A to F, that cover different destinations. The most relevant package for SMC is Package A which includes several of the identified airports. Package A and its coverage can be found in Appendix 3. It reaches travelers to Xilinhot, Datong, Chifeng, Tongliao, Taiyuan, but also other important airports such as Urumqi and Baotou as well as large hubs such as Beijing, Guangzhou, and Shanghai.

It is possible that the airlines could offer advertising on targeted routes since the same airplanes tend to go the same routes, this, however, has not been investigated in this study. If using a package approach it is crucial to conduct a more extensive study of where potential customers might travel since the identified areas of interest in this report are very limited in number. The results might show that other airline companies have more flights to important areas for SMC in the rest of China.

Inflight Magazines

There are a number of different inflight magazines distributed by the Civil Aviation Administration of China available on domestic flights in China:

- Aviation Today: Available on all corporate aircrafts of Air China, Hainan Airlines and Hong Kong Airlines. It is distributed to all first-class waiting rooms of 30 airports around the country.
- CAAC Inflight magazine: The most common inflight magazine in China, it is distributed to all economy class of all the major airlines, including all mentioned in this thesis.
- Air Travel Elite Passage: Distributed of all economy classes of China Eastern Airlines, Hainan Airlines, China United Airlines among others.

Additionally several of the airlines has their own magazines:

- China Southern Airlines: GATEWAY and ICON

¹³¹ www.chinaadresource.com, 2010-11-05

- China eastern Airlines: Eastern Air and Eastern Channel
- Air China: Wings of China and China Charm
- Hainan Airlines: Safari, Expression
- Shanghai Airlines:
- Shandong Airlines: New Air
- Sichuan Airlines: SCAL

It is not possible to target specific airport since the content is the same for all magazines of the same brand, matter less of which distances the airplane is taking. Of the airline magazines Air China is, similar as for the seat pillow, the most attractive choice. However, as can be seen in figure 6-13, Air China's two magazines, Wings of China and China Charm are relatively expensive compared to the numbers of readers it reaches.

Airline Magazines

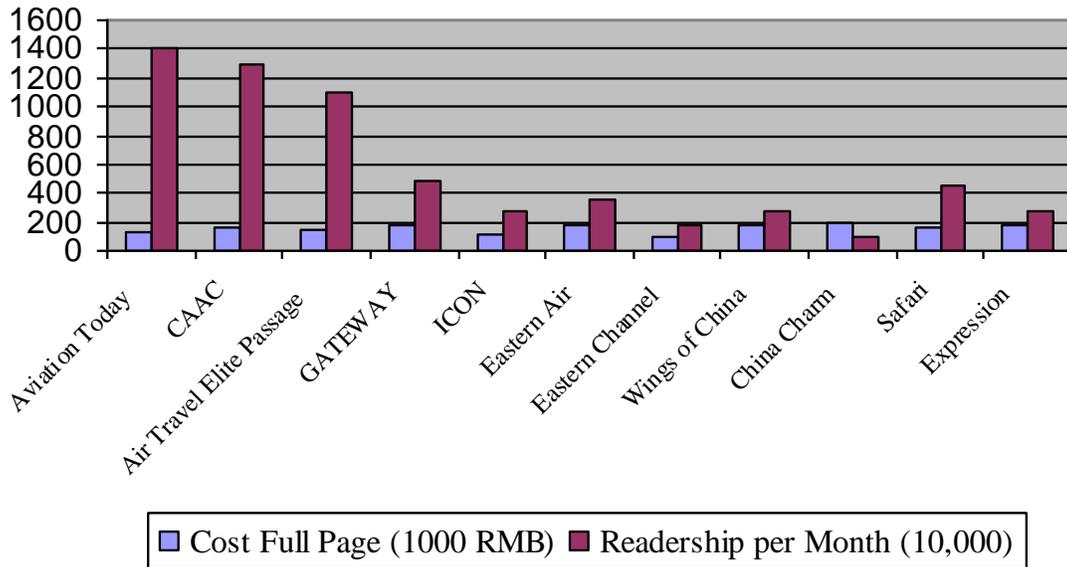


Figure 6-13: Airline magazines comparison¹³⁰

This becomes more obvious when looking at the cost of a full page per 10,000 reader in figure 6-14, where both of Air China’s magazines are the most expensive to advertise in per reader.

Cost of full page per 10,000 reader

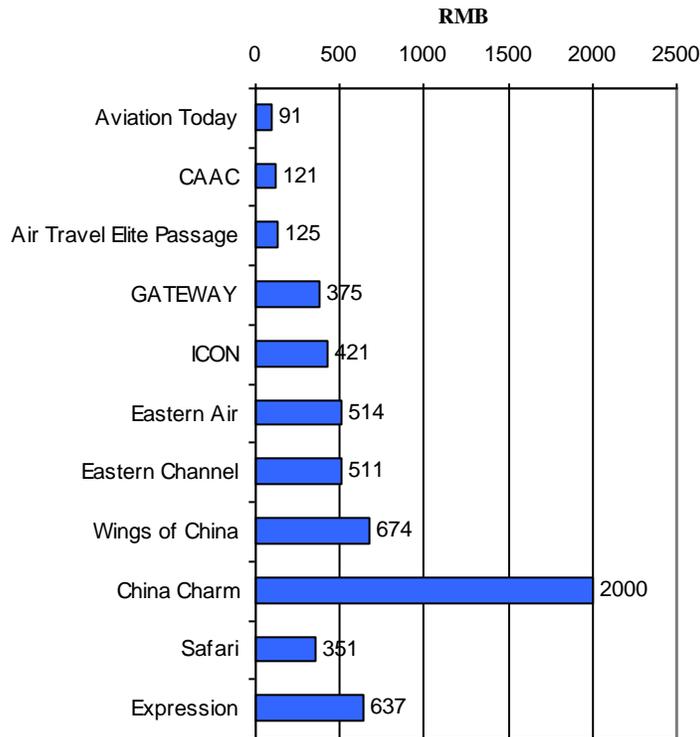


Figure 6-14: Airline magazine comparison¹³⁰

The three magazines from Civil Aviation Administration of China is the least expensive to advertise in per reader. However, what is relevant is not the total number of readers that is reached, but the numbers of readers that is of interest to SMC. These are unequally distributed throughout the country, which of course must be taken into consideration. Aviation Today targets traveler in first class. Whether SMC’s potential customers tend to travel by first class or not is unclear, but would be of interest to study.

The magazine size is 210*285 mm, and the flight magazines offer a variety of options, for example for CAAC, a full page costs 157,000 RMB, a half page 87,000 RMB, and a 1/3 page 62,000 RMB. The content can be a picture, information or logo of different sizes.

Airborne Television

Advertising on airborne television is done based on airline, thus it is not possible to choose which routes to target. All domestic and international flights over 45 minutes broadcast the advertising at least once, while shorter flights do not broadcast the

advertising at all. A list of prices for a 15 second clip that is broadcasted for a month is listed in table 6-3 for comparison.

TV advertising	Price 15 sec (RMB)	Passengers Per Month
Southern Airlines	336,000	5,000,000
Eastern Airlines	336,000	3,460,000
Air China	408,000	3,330,000
Hainan Airlines	188,000	4,100,000
Shanghai Airlines	111,000	1,080,000
Shandong Airlines	120,000	910,000
Sichuan Airlines	50,000	810,000

Table 6-3: Airborne television comparison¹³⁰

Again, Air China is the most expensive airline to advertise at. However it is also one of the airlines with most aircrafts equipped with TV. When taking into consideration the amount of passengers that are reached, it is the second most expensive, which can be seen in figure 6-15.

Price 15 sec per 1000 passenger

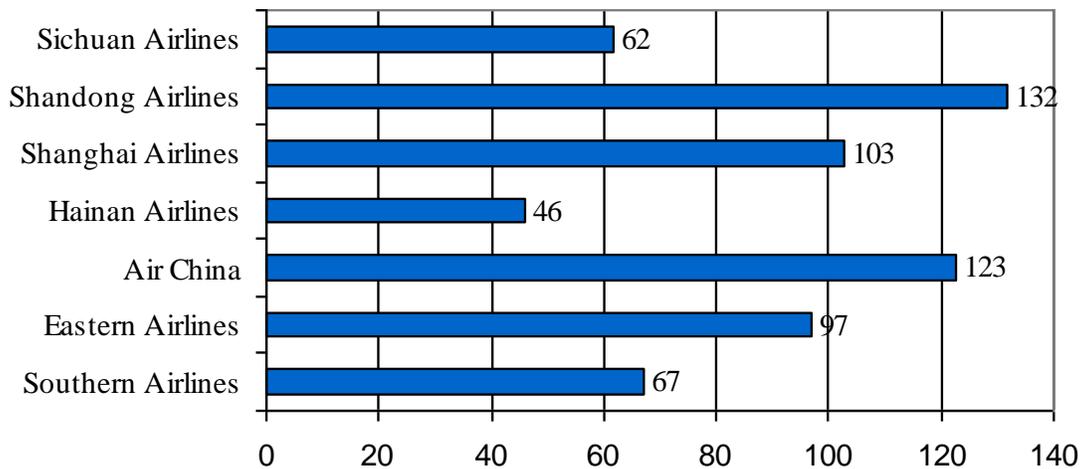


Figure 6-15: Airborne TV price comparison¹³⁰

Apart from 15 seconds clips, most of the airlines also provide 5 and 30 seconds clips.

Airport Digital Frame

Advertisement on airports has the potential to reach a great amount of people. As can be seen in figure 6-16, 93 percent of the commuters spend more than 45 minutes on the

airport and the average waiting time is 83 minutes, meaning there is plenty of time for the receiver to be influenced by the advertisement.¹³²

Digital frames are high definition LCD screens that can display digital picture advertisement with resolution up to 1920*1080 pixels. They are usually located areas with high pedestrian flow where people will stay for a substantial time, for example in departure halls, waiting areas and arrival areas. It is a practical and cheap solution compared to traditional billboards since the content can be uploaded directly on the screen. There are two typical digital frames:

- *Stand-alone Digital Frame:*
- The LCD is 70*108 inches. The image stays for 12 seconds with a frequency of up to 192 times per day. It is offered at 23 airports around the country.
- *TV-attached Digital Frame:* The LCD is 47*52 inches. The image stays for 12 seconds and is showed 192 times per day. It is offered at 26 airports around the country.¹³³

The prices differ depending on the type of the digital frame, where stand-alone frames are on average twice as expensive per screen compared to TV-attached frames. The price also differs depending on the airport and how many digital frames it has. It is only possible to buy advertisement on all digital frames of the same type at one particular airport. The least expensive alternative is TV-attached digital frames at Hohhot, which costs 10,800 RMB per week for 60 digital frames, which can be compared to 418 frames in Beijing for 248,000 RMB per week. The price list for both stand-alone and TV-attached digital frames at a variety of different airports can be found in Appendix 4 and 5. Unfortunately, price information on the identified airports has not been found, but can be requested from advertising companies.

Airport Billboards

Billboard advertisement on airports depends solely on the airport. The two most common billboard options are boarding bridges and large lightboxes. As an example, advertisement on a boarding bridge at Hohhot airport costs 600,000 RMB per year for an 8 m wide × 2.5 m high billboard, with a minimum time of 6 month. An

Average waiting time at airports

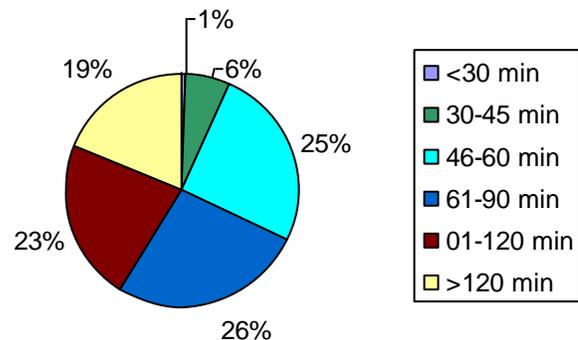


Figure 6-16: Average waiting time at airports¹³¹



Figure 6-17: Airport billboard example

¹³² www.sinomonitor.com, 2010-11-04

example can be seen in figure 6-17. Depending on the airports it is sometimes possible to position the billboard to target people from specific destination. The billboard is seen from the waiting hall as well as from other boarding bridges.

Lightboxes is another popular way to advertise on airports. Lightbox is billboards that are lit up around the frame. On Hohhot a 5.3 m wide × 2 meter high lightbox inside the airports costs about 150,000 RMB per year.

Flight and Airport Summary

Advertising at airports and flights reaches an enormous group of attractive customers to business-to-business companies; including businessmen, travelers and government officials. Naturally, it is an expensive communication channel. Airborne television is not a very practical channel for SMC to communicate through since SMC works little with video-clips in general. Therefore, the TV-related channels might not be a very attractive choice, especially due to the high price. Digital frames are a very convenient way to advertise since it takes little effort, nothing has to be printed; all that is necessary is to have the content in a digital format. The negative part about digital frames compared to normal billboards is that the message is not visible all the time, meaning that there is a larger chance that people passing by miss the content.

A huge advantage with advertisement on airport compared to inflight advertisement is that it is possible to decide where to advertise. It is possible to advertise at a specific airport where the concentration of customers is higher, for example at Changzi or Taiyuan airport. With inflight advertisement it is not possible to specify the routes, thus, money is wasted on routes where there are little to none audience of interest to SMC.

6.5.4 Train and Railway Advertisement

Railway transport is the most commonly used mode of long-distance transportation in the China. The railway system is almost exclusively handled by the Ministry of Railways, which is part of the State Council of the People's Republic of China. There are sixteen railway bureaus that work under the Ministry of Railway. There are also some local railway lines operated by local state-owned companies. By the end of 2009, the operating railway network covered a total length of 86,000 km¹³³, making it the second largest railway network in the world. In 2008 1.456 billion railway trips were taken.¹³⁴ The most interesting areas for railway and train advertisement are Hebei, Shanxi and certain parts of Inner Mongolia.

- Hebei is highly populated area with a well-developed railway system. Qian'an is closely linked to both Beijing and Tianjin while Handan is closely linked to the provincial capital Shijiazhuang.
- Shanxi is located in central part of China and has a well-developed railway system. Taiyuan Railway Station is the most important hub since it is located in the middle of the province as well as the capital and largest city of the province. It

¹³³ www.tieliu.com.cn/Article/2008/200807/2008-07-31/20080731112934_148062.html, 2010-11-14

¹³⁴ chinanews.com.cn/cj/gncj/news/2009/02-25/1578330.shtml, 2010-11-14

is located near the Xishan coalfield and is linked to large cities such as Beijing, Shanghai, Guangzhou, Chengdu and Baotou. The Datong Railway Station is also of interest. It is a coal centre and a large railway hub due to the large coal transportations and connects to 25 other cities. Chanzhi Railway Station is the most important hub in the southern Shanxi with large coalfields and well-developed railway system.

- In Inner Mongolia the Dongsheng Railway Station connects Ordos to Beijing to the east through Datong, and Hohhot in the northwest through Baotou. The Hohhot Railway Stations is a major hub in Inner Mongolia and the only line that connects to Xilinhot. Tongliao Railway Stations is an important coal area and one the 40 largest national railways hubs in the country.

Advertising on trains has several benefits. Similar to airplanes, the commuters spend much time on the train making it is easier to attract attention from them. While the management, mines owners and engineers who regularly visit the mines can be reached throughout the whole year, the on-site personnel will be traveling during peak times, such as Chinese New Year, national day. Train-related channels can be divided in advertisement at the railway station and on the train. Advertisement channels at railway station include billboards, light boxes and TV-screens, while the most common channel at trains are train magazines.

A problem with railway station advertisement is that it is not standardized, the channels differ much between different stations. Therefore it is not possible to obtain price information and details about the channels in general, instead it is necessary to investigate each railway station separately. As a price example, a large billboard at Tongliao railway station with an area of 266.2 m² costs 100,000 to 130,000 RMB per year. Advertisement on large digital screens that are 15 m wide × 8 m high at the Handan railway station costs 20,000 RMB per year.¹³⁵

Train magazines

The three biggest magazines for train travel are *Journey of Harmony*, *Inter-City* and *Fellow Traveller*. All of them offer a variety of different advertising methods. In table 6-5 the prices for a full page advertisement in each magazine it listed to get a perspective on price difference. All of them are in the same size, 210*285 mm.

	Views per month	Circulation per month	Full page ad cost
Journey of Harmony	18,000,000	200,000	96,000
Inter-city	1,600,000	30,000	48,000
Fellow Traveller	6,500,000	214,500	116,000

Table 6-4: Travel magazine comparison¹³³

Fellow Traveller and Inter-city covers mostly economically developed urban areas. Journey of Harmony is available at dense train lines covering Bohai, Yangtze river delta, pearl river delta and northeast and central China.¹³⁶ All of them cover Shandong, Hebei

¹³⁵ www.media.360mt.com/mediahtml/20/media-detail-20773.html, 2010-11-14

¹³⁶ www.chinaadresource.com/en/channel.asp?id=523, 2010-11-08

and Shanxi, while only Journey of Travel covers Inner Mongolia. Journey of Travel also has the most views per month making it an attractive option. However, inter-city targets the first class compartments while the other two mainly covers economy class. The mine owners and managers are likely to travel by first class, therefore Inter-city might be a better choice. Similar to inflight magazines, train magazines offers several advertisement options, where the size of the advertisement and the placement in the magazine has the largest impact on the cost. The prices are somewhat similar to the prices for inflight magazines. Therefore it would be interesting to further study how many customers that travel by train compared to flights.

There are of course more advertisement options for trains such as advertisement in different compartments ad on pillow cover towels. However, the advertisement is often long-term and targeted at specific trains. The prices are negotiated; therefore no examples will be included in this report.

6.6 Local Advertising

To be cost-effective when advertising for a small segmented group in a huge country like China, it is crucial to target the advertising in such a way that as many as possible of the receivers are customers and influencers. Therefore, the marketers must identify where the customers are in order to target the advertisement as precise as possible. As mentioned in chapter 6.6 the mining customers are much easier to target compared to the construction customers since the mining sites are concentrated in the areas with high natural resources.

The local advertising channels are in many ways similar to transport-related communication channels; it is focused on particular areas where the concentration of customers is high. In many ways the transport related channels are a type of local channels. In this thesis it is separated due to the fact that transport channels target a large area and is focused on the people travelling between different places, while the local advertising is focused on the people being active in one particular area. Local advertising is here divided up in the most common three groups: Written media, TV and Local transportation. Billboards have already been covered in chapter 6.6 and will get no further attention.

6.6.1 Written Media

Written media is media where the information is being transferred through written text. The interesting media for SMC is media that possibly attracts SMC's customers. Trade magazine and journals related to the industry are the most obvious channels. Apart from magazines directly related to the industry, it is difficult to know what potential customers tend to read. Newspapers are read by large amount of people, thus newspapers in areas where many big mining sites are located are likely read by a large group of people related to the mining industry.

Newspapers are comparatively expensive to advertise in. Shanxi Daily will serve as example. The magazine has a total circulation of 250,000 copies and is published seven days a week. The newspaper reports about provincial news, local city news, national

and international news. There are several size options for advertisement in newspapers, making the content to everything from small logos, or a short text to large pictures. The price ranges from 2,200 RMB for a black and white logo at 4 * 8.5 cm, to 110,000 for a full page advertisement that is 48 * 35 cm. The price is in general 40 percent higher for a color version. For advertising online at Shanxi Daily the price for a banner of 730*70 pixels on the top of the homepage costs 2500 RMB per day.¹³⁷ Price examples for Inner Mongolia and Hebei can be seen in table 6-6 and table 6-7.

Media Name	Media Positioning	Circulation	Full Page	Size
内蒙古日报社 Inner Mongolia Daily	Provincial, Integrated Media	350,000	110,000 RMB	48 * 35 cm
内蒙古晨报 Inner Mongolia Morning News	News, Society	150,000	72,000 RMB	48 * 35 cm

Table 6-5: Inner Mongolia newspaper comparison¹³³

Media Name	Media Positioning	Circulation	Full Page	Size
邯郸晚报 Handan Evening Post	Municipal, Evening News	110,000	90,000 RMB	50 * 31 cm
唐山晚报 Tangshan Evening News	Municipal, Evening News	120,000	80,000 RMB	48 * 33 cm

Table 6-6: Hebei newspaper comparison¹³³

6.6.2 TV

The advantage with TV advertisement is that it has the ability to convey the message with sight, sound and motion. TV offers the greatest possibility for creative advertising and can give a product or service instant validity and prominence. It reaches a large audience, usually much larger than the audience local newspaper reaches. While the importance of unconventional marketing channels is growing, television advertising continues to dominate in China as an information channel for products and brand awareness. The main disadvantage with TV advertisement is that it is expensive since it is difficult to target the core audience. TV advertising is mainly interesting for SMC on a local level. On national level, the potential customers represent a too small part of the reached group, making it economically unjustifiable. A five second commercial on CCTV 1 costs from 12,300 RMB to 77,900 RMB depending on the time. But even on local level TV advertisement is expensive. It is also time-consuming and expensive to create the advertisement. Today TV advertisement is not attractive communication channel for SMC.

Public Transportation

Public transportation mainly refers to metro and busses. This includes advertisement on as well as inside public transportation vehicles. In the first half of 2009, the public bus market made up 81.8 percent of the total mobile transportation market and the subway market made up the remaining 18.2 percent. The subway market is steadily increasing and will likely be the next area of growth in China's mobile TV market.¹³⁷

¹³⁷ ad.daynews.com.cn/

As of today there are subway systems in nine cities in mainland China, namely Beijing, Shanghai, Guangzhou, Shenzhen, Shenyang, Wuhan, Chongqing, Nanjing, Tianjin. 25 more systems planned to open up before 2015, including Datong and Taiyuan¹³⁸. All carriages and most platforms are equipped with digital screens that broadcast advertisement. A broadcast package consisting of a 30 second clip, sent 16 times daily for a week costs 40,000 in Chongqing, 83,000 in Nanjing and 900,000 in Shanghai¹³⁹. None of the targeted cities have a subway system today, but the channel might become attractive for SMC when subway systems open up in Datong and Taiyuan among others.

Of more interest is advertisement on busses. Advertisements in busses are similar to that of flight and trains. It is becoming more common for busses in the major cities to have digital screens. In Taiyuan, the price for a 30 second advertisement sent 15 times a day for a week ranges from 90,000 to 111,000 depending on the broadcasting time during the days.

Advertisement on public transportation vehicles, mainly on bus bodies, reaches not only the commuters, but also people in the vehicles surrounding. The mobility of public transport vehicles increases the number of receivers and frequency. When having long advertisement campaigns people will repeatedly be exposed to the advertisement at different location, thus increasing the repeat-effect of the advertisement. It has the potential to provide a strong visual impact because of the large pictures that are possible to use. It reaches a large group of people, making it a relatively cost-effective channel measured in numbers of viewers. The typical sizes for bus-body advertisement are 10 m width \times 0.8 m to 3 m height \times 2 m surface. For Taiyuan the price ranges from 30,000 RMB to 85,000 RMB per year, while Handan has prices from 8,000 RMB to 10,000 RMB.

¹³⁸ www.bloomberg.com/news/2010-05-13/china-to-spend-more-than-146-billion-to-triple-its-subway-tracks-by-2015.html, 2010-1116

¹³⁹ www.visionchina.cn, 2010-11-17

7 Conclusion & Discussion

This chapter concludes the thesis and discusses the result. This includes valuation of the work compared to the problem description, a summary of key results and an outlook towards the future.

7.1 Discussion and Criticism of the Findings

The result is different from what first was expected. This is much because the author has been working closely together with the marketing department. There has been a continuous discussion and most information has been shared orally, therefore this thesis should only be seen as a summary of the finding. The channels have been adapted during the process to SMC's needs, as a result some parts of the thesis have gotten different focus from the main questions that were initially set up to be answered. Nevertheless, the methodology has been followed without major changes from what first was planned.

The channels that have been presented are the limited number that was picked out from SMC's marketing department as interesting. During the process some of them have turned out to be not so interesting for SMC due to high costs and a small amount of reached audience of interest. The initial idea was to include the channels that turned out to not be of interest for SMC since the marketing department wished to know why these were not of interest. Several of these has been declared unattractive in discussions with the marketing department and therefore not been investigated further, thus they have not been included in this thesis. TV and written media have still been included in the thesis because it is the two most common advertisement channels in China.

The chapter *6.5.1 Areas of Importance* serve a larger purpose than just being a base for the channels suggested in this thesis. When SMC is increasing the advertisement around the country it is important to know where the customers are, even if the channels presented in this thesis is not used. SMC suggested that this part should gain extra attention. Therefore much focus has been put on finding the geographical locations of customers, even though it is not a communication channel in itself. This topic is also highlighted in *Customer Location* in chapter 4.2.1.

The communication channels that have been presented are extremely different; some would cost millions to set up and maintain while others are entirely free. Additionally, for some of the channels, namely the digital ones, the result of the advertisement can easily be measured, while it is extremely difficult for others. For certain channels it has not been possible to gather detailed information in a convenient way. The reason for this is that the advertisement industry is still undeveloped in the most parts of China. Consequently, there is seldom open information about prices and details, this can first be acquired when a deal has been initiated. This has especially been the case for some of the identified geographical areas where it has been difficult to find contact information to obtain more information. In these cases the result that has been presented is limited to examples of cost and potential number of reached audience. Before these channels can be implemented they of course have to be investigated further.

Nevertheless, the purpose of the thesis has been fulfilled since SMC wanted an introduction to new communication channels. From that point, the idea was from the very beginning to investigate the channels further.

7.2 Recommendations

The most important and urgent change to be done today is the implementation of the customer database. While the discussed channels can be implemented without a customer database, a customer database would give the company the needed information to develop new marketing methods in an efficient way. The suggested geographical locations for marketing in this thesis are based on limited information. A customer database would allow the marketing to be targeted in a more cost-efficient way. Since the costs are very high for some of the channels it is of great value to optimize the marketing by identifying the most important locations for advertisement.

The first channels to be implemented are today the channels related to social media. These are free to set up and can, in most cases, easily be maintained. They have the potential to reach a large amount of customers. They would also serve as positive brand-building since SMC will be the first mover. This will only have positive effects since social media is growing in popularity. The main argument against using social media is that SMC's specific customers might not be using the social media. While no study concerning this matter exists as of today, the statistics presented suggest that a majority actually do use social media.

Mobile marketing is another channel that definitely is interesting for SMC. Mobile marketing is well-fitted for SMC's purpose and the knowledge and resources needed is limited and easy to acquire. The result of the marketing can easily be measured, and if it proves to not be a success the wasted resources is limited.

The physical advertisement that has been discussed in this thesis; advertisement at trains, flights, airports, billboards, in written media etc, is expensive. It is also difficult to target towards the right customer group. These channels are the least attractive of the ones suggested in this thesis. However, many of these reach the customers in a very different way compared to the more direct and targeted channels. While the channels are definitely of interest for SMC, these channels are more complicated to analyze since they differ much depending on where they are located. At the same time, these are perhaps the ones that are most important to analyze due to the high price and the difficulties in measuring the result. This was realized at an early stage of the investigation, but SMC still wanted an investigation of the channels to find out whether they might have potential. Consequently, the results that this thesis has provided must only be seen as an example of the potential these channels have. SMC must do an extensive study of the customers before these channels are implemented. By implementing the customer database SMC would hopefully obtain enough information to geographically target the advertisement more effectively than in this thesis. Studies should also be conducted concerning which transportation methods that potential customers use. If they tend to travel by air it is necessary to find out which airlines that are most commonly used.

The Chinese mining and construction market is very important for SMC, it is the third biggest in the world and is growing at a rapid phase. It might soon grow to be the biggest in the world. New customers arise and due to the importance of influence in China. SMC has incredibly much to gain by building brand awareness among both the customers as well as influencers. To fully utilize the opportunities that the market provides, SMC must continue to develop its marketing efforts and expand its arsenal of communication channels.

8 References

Electronic sources

- Alexa, www.alexa.com
- Anti-spam, www.anti-spam.cn
- Flightstats, www.flightstats.com
- Beijing Energy, beijingenergy.com
- Business-to-business International, www.b2binternational.com
- China Coal Resource, www.sxcoal.com/nmgcoal
- Clearly Cultural, www.clearlycultural.com/geert-hofstede-cultural-dimensions
- China Internet Network Information Centre, www.cnnic.net.cn/en
- China Manufacturers, www.hktdc.com
- China Mining, www.chinamining.com.cn & www.chinamining.org
- China News, chinanews.com.cn
- China Railway, www.tieliu.com.cn
- Data Center of China Internet, www.china.org.cn/e-company/index.htm
- Davedolak, www.davedolak.com/promix.htm
- European Union Law, eur-lex.europa.eu
- Facebook, www.facebook.com/press/info.php?statistics
- Kaixin001, www.kaixin001.com
- MBendi Information Service, www.mbendi.com
- Mining info, magazine.mining.com
- Mobile Marketing Association, www.mmaglobal.com
- Northeast, www.northeast.gov.cn
- QZone, www.qzone.qq.com
- Shenzhou Mining Resources, www.chinaszmg.com
- Synovate, www.synovate.com
- The Central People's Government of The People's Republic of China, english.gov.cn
- WikiChina, www.hudong.com
- Wikipedia, en.wikipedia.org
- Zhaoyuan City, www.zhaoyuan.gov.cn/en
- 51, www.51.com

Reports

- Edelman Trust Study, www.edelman.com/trust/2010
- Forrester, www.forrester.com
- Grewal, R., Cline T.W. & Davies, A. (2003). *Early-Entrant Advantage, Word-of-Mouth Communication, Brand Similarity, and the Consumer Decision-Making Process*, *Journal of Consumer Psychology*, 13(3).
- Harvard Business Review, www.blogs.hbr.org

- J. Liu & J. Diamond, *China's environment in a globalizing world*, Nature Vol 435, 30 June 2005
- Keller Fay Group (2006), *Driving Word of Mouth Advocacy Among Business Executives: The Experiential Marketing Connection*, sponsored by Jack Morton Worldwide
- McKinsey Quarterly: *A new way to measure word-of-mouth marketing, Chinas new pragmatic consumers, Riding Asia's Digital Tiger*
- Michael D. & Zhou Y., *China's Digital Generations 2.0*, The Boston Consulting Group, May 2010
- Nielsen Company, www.nielsen.com/us/en/insights/reports-downloads/2009.html
- Report Linker, www.reportlinker.com
- Roland Berger Strategy Consultants, www.rolandberger.com
SMC Report, China Iron mines - SMC customer production performance
- Sandvik World 2009/2010
- Sino Monitor, www.sinomonitor.com
- U.S. Energy Information Administration, www.eia.doe.gov
- U.S. Geological Survey 2009, www.minerals.usgs.gov/minerals

Corporate sources

- Austria Beijing Guangyuan Media Advertising Co, www.zagy168.com/
- Atlas Copco, www.atlascopco.com.cn
- Atlas Copco Shenyang, www.shenyangcm.com
- Bucyrus, www.bucyrus.com
- CAT, www.china.cat.com
- China Ad Resource, www.chinaadresource.com
- Eshots.net, www.eshots.net
- FLS Smidth, www.flsmidth.com
- Furuwaka, www.furukawarockdrill.co.jp/en
- iMedia Connection, www.imediaconnection.com
- Joy Global, www.joyglobal.com
- Media 360, www.media.360mt.com
- Metso Mining, www.metso.com
- txtLocal, www.txtlocal.co.ukv
- VisionChina, www.visionchina.cn
- Zuberance, www.zuberance.com

News Media

- Affärsvärlden, www.affarsvarlden.se
- Asia Times, www.atimes.com
- Adage China, www.adage.com/china
- Alibaba, www.news.alibaba.com
- BBC, www.rbbs.co.uk/news
- Bloomberg, www.bloomberg.com

- China Daily, www.chinadaily.com.cn
- China Stakes, www.chinastakes.com
- Dagens Nyheter, www.dn.se
- Eastday, www.english.eastday.com
- InterFax China, www.interrfax.cn/
- Reuters, www.uk.reuters.com, www.reuters.com
- Shanxi Daily, ad.daynews.com.cn
- The Independent, www.independent.co.uk
- The Economist, www.economist.com
- The Guardian, www.guardian.co.uk
- China View, news.xinhuanet.com

Books

- Andersen, I. (1998), *Den uppenbara verkligheten*, Studentlitteratur, Lund
- Arbnor, I., Bjerke, B. (1994) , *Företagsekonomisk metodlära*, Studentlitteratur, Lund
- Arbnor, I., Bjerke B. (1997), *Methodology for Creating Business Knowledge*, Sage Publications Inc.
- Björklund M., Paulsson U. (2003), *Seminarieboken - att skriva, presentera och opponera*, Studentlitteratur, Lund
- Brown, D. & Hayes, N. (2008), *Influencer Marketing: Who really influences your customers?*, Butterworth-Heinemann
- Davidson, B. & Patel, R. (2003), *Forskningsmetodikens grunder. Att planera, genomföra och rapportera en undersökning*, Studentlitteratur, Lund
- Ejvegård, R. (1996), *Vetenskaplig metod*, Studentlitteratur, Lund
- Flemming, S. & Zhang, D. (2010), *Social Media and Marketing in China*, John Wiley & Sons Inc., Chichester
- Gimenez, C. (2000), *Research Methodologies in Supply Chain Management*, Physical-Verlag
- Hall, E.T (1976), *Beyond Culture*, Doubleday, New York
- Hofstede, G. (1991), *Cultures and Organizations: Software of the Mind*, McGraw-Hill
- Hutt, M. & Speh, T. (2004), *Business Marketing Management: A Strategic View of Industrial and Organizational Markets*, Thomson/South-Western
- Höst, M., Regnell, B. & Runeson (2006), *Att genomföra examensarbete*, Studentlitteratur, Lund
- Holme, I. M. & Krohn Solvang, B. (1997), *Forskningsmetodik - Om kvalitativa och kvantitativa metoder.*, Studentlitteratur, Lund
- Johnson, G, Scholes, K & Whittington, D. (2008), *Exploring Corporate Strategy*, Prentice Hall
- Kotler, P. & Pfoertsch, H. (2006), *B2B Brand Management*, Springer, Berlin
- Lekvall, P. & Wahlbin, C., 2001, *Information för marknadsföringsbeslut*, IHM, Göteborg
- McCarthy, E. & Perreault W. (2008), *Basic Marketing*, McGraw-Hill

- Saunders M., Thornhill A., Lewis P. (2006) *Research Methods for Business Students*. 4th edition, Prentice Hall
- Triandis, H. (1995), *Individualism and Collectivism*, Sage Publications.
- Wallén, G. (1996) *Vetenskapsteori och forskningsmetodik*, Studentlitteratur, Lund

Interviews

- Bernice Chellow, Vice President Marketing, Latin America
- Danny Kan, Product Line Manager, Shanghai
- Elaine Zhang, Advertisement Manager, Shanghai
- Grace Zhao, Sales Surface Mining, Shanghai
- Jenny Yu, Event manager, Shanghai
- Jeanette Svensson, Global marketing
- Jiajun Wu, Business Intelligence, Underground Mining International, Shanghai
- Jianyuan Zhang, Sales Surface Mining, Shanghai
- Kristina Zang, Marketing Vice President, Shanghai
- Katherine Bi, PR specialist, Beijing
- Martin Stenberg, Consultant Springtime, Shanghai
- Magnus Dahlqvist, IT Specialist, Sweden
- Robert Lackner, Marketing Australia
- Stanley Li, Channel Manager, Shanghai
- Tiina Heiniö, Communication & Marketing Manager Underground Mining, Finland
- Wency Xie, Business Intelligence, Shanghai
- Witty Zhang, Sales Construction, Shanghai
- Yi Yan, Sales Underground Mining, Shanghai

9 Appendices

Appendix 1: Initial suggestion of communication channels

- SMC in China
 - Homepage
 - Influencer marketing
 - Related media, industry magazines
- SMC Globally
 - Microblog
 - Social networking sites
 - Video-sharing sites
 - E-shots
 - Smartphones
 - PR campaigns
 - Search engine marketing
 - Search engine optimization
 - Partner university
- Industry
 - Customer testimonials
 - Machines on display
 - Safety expertise
 - Environmental related channels
 - Online reputation management
 - Customer database
 - Mobile web marketing
 - Sponsorship
 - Content marketing
 - Product placement
 - Online trade magazines
- B2B-companies in China
 - Interaction
 - Word of mouth marketing
 - Blogs
 - Digital screens
 - Relationship marketing
- Other
 - Television and radio
 - Written media
 - Billboards
 - Viral marketing
 - Crowd sourcing
 - Transport
 - Mobile Marketing
 - Instant messenger

Appendix 2: Flights and airlines from identified airports

Hebei Airlines																			Shijiazhuang
Juneyao									Shanghai						Shanghai				
Sichuan	Shijiazhuang								Beijing, Hohhot, Shanghai						Chengdu				
Hainan			Beijing, Hohhot, Xi'an, etc						Beijing, Hohhot, Shanghai						Beijing, Guangzhou, Dalian etc.				
Eastern								Shanghai, Tianjin							Baotou, Beijing, Wuhan etc.				Nanjing, Shanghai, Xiamen etc
Grand China Express								Beijing, Dalian, Hohhot							Tianjin, Hanzhou, Xi'an, etc.				Chongqing, Dalian
Shandong															Lanzhou, Qingdao etc.				
China United	Beijing								Beijing										
China Southern	Xi'an Taiyuan														Beijing, Dalian, Wuhan etc.				
Air China	Beijing	Beijing							Beijing, Hohhot, Shanghai						Beijing, Chengdu				
	Ordos	Xinhot	Wuhai	Tongliao	Chifeng	Hailar Dongshan	Datong	Changzhi	Taiyuan	Handan									Tangshan

Appendix 3: Package A, Pillow Cover Towel

Package	Aircraft Type	Aircraft Number (set)	Average Flight Number per Day	Average Seat Number per Aircraft	Unit price (10 000 RMB/aircraft/month)	Package price (10000 RMB/month)	Aircraft Total Number (set)	Package price (10 000 RMB/month)
A	Boeing 737	77	7	150	3.38	260.26	93	328.74
	Airbus 320	5	7	160	4.28	21.4		
	Airbus 321	11	7	185	4.28	47.08		

	Destination				
Domestic	Beijing	Shanghai Pudong	Guangzhou	Shenzhen	Nanjing
	Ningbo	Tongliao	Baotou	Huilin	Changchun
	Shanghai Hongqiao	Changzhou	Taiyuan	Yancheng	Kunming
	Chongqing	Chengdu	Dalian	Yuncheng	Wuhan
	Hangzhou	Huhehaote	Fuzhou	Shenyang	Yinchuan
	Zhangjiajie	Yanji	Yantai	Urumqi	Guangyuan
	Guizhou	Nantong	Shantou	Mianyang	Wenzhou
	Hefei	Xiangfan	Zhengzhou	Xi'an	Xining
	Xiamen	Jinggangshan	Nanchang	Ha'erbin	Qingdao
	Beihai	Dandong	Datong	Huangshan	Huangyan
	Xilinhot	Jingdezhen	Liuzhou	Qiqihaer	Quanzhou
	Daqing	Liuzhou	Chifeng		
International	Fukuoka	Hiroshima	Jakarta	Saigon	Nagoya
	Pusan	Sendai	Seoul	Singapore	Taegu
	Rangoon	Bangkok	Sapporo	Pyongyang	Narita

Appendix 4: Pricelist TV-attached Digital Frames

No.	Airport	Size (inch)	Sale as a Package	Installation	Number of media (set)	Picture Duration (seconds/time)	Frequency (times/day)	Rates (RMB yuan /week)
1	Beijing	52	Domestic	Vertical	171	12	96	168,000
			International	Vertical	247	12	96	88,000
			Whole Airport	Vertical	418	12	96	248,000
2	Shanghai	55	the Whole T2 of Hongqiao Airport	Vertical	152	12	96	150,000
3	Guangzhou	52	Whole Airport	Vertical	155	12	96	108,000
4	Shenzhen	52	Whole Airport	Vertical	107	12	96	58,000
5	Chengdu	52	Whole Airport	Vertical	177	12	96	58,000
6	Hangzhou	50	Whole Airport	Vertical	62	12	96	38,000
7	Wuhan	50	Whole Airport	Vertical	114	12	96	38,000
8	Chongqing	50	Whole Airport	Vertical	78	12	96	22,800
9	Xi'an	47	Whole Airport	Vertical	116	12	96	22,800
10	Haikou	47	Whole Airport	Vertical	70	12	96	19,800
11	Changsha	47	Whole Airport	Vertical	65	12	96	22,800
12	Kunming	52	Whole Airport	Vertical	60	12	96	19,800
13	Urumchi	52	Whole Airport	Vertical	35	12	96	22,800
14	Jinan	47	Whole Airport	Vertical	40	12	96	19,800
15	Tianjin	50	Whole Airport	Vertical	90	12	96	18,000
16	Zhengzhou	47	Whole Airport	Vertical	64	12	96	22,800
17	Wenzhou	47	Departure	Vertical	22	12	96	10,800
18	Nanchang	47	Whole Airport	Vertical	28	12	96	10,800
19	Fuzhou	52	Whole Airport	Vertical	39	12	96	10,800
20	Changchun	47	Whole Airport	Vertical	30	12	96	10,800
21	Guiyang	52	Whole Airport	Vertical	32	12	96	10,800
22	Hefei	47	Whole Airport	Vertical	25	12	96	8,800
23	Hohhot	47	Whole Airport	Vertical	60	12	96	10,800
24	Changzhou	47	Whole Airport	Vertical	13	12	96	8,800
25	Ganzhou	47	Domestic	Vertical	11	12	96	8,800
26	Jiujiang	47	Domestic	Vertical	6	12	96	8,800

Appendix 5: Pricelist Standalone Digital Frame

Weekly media										
No.	Airport	Size (inch)	Sale as a Package	Installation	Number of media (set)	Picture Duration (seconds/time)	Frequency (times/day)	Rates (RMB yuan /week)		
1	Beijing	82	T3 Domestic Departure	Stand-alone Vertical	48	12	96	280,000	400,000	
			T3 International Departure		72	12	96	150,000		
		108/70	T2 Arrival	Horizontally Freestanding	28	7.5	480	480	180,000	300,000
			T3 Arrival		30					
		108/82/70	T2+T3 Whole Airport	Vertical + Horizontal	178	-	-	700,000		
2	Shanghai	70	Hongqiao T1+Pudong Kits	Stand-alone Vertical	66	5	480	260,000		
			Hongqiao Airport T1 Terminal Arrival A+B		8	5	480	80,000		
			Pudong Airport Terminal T1+T2		58	5	480	180,000		
		70	Hongqiao Airport T2 Terminal Departure	Stand-alone Vertical	22	12	96	150,000	200,000	
			Hongqiao Airport T2 Terminal Arrival		8	10	192	100,000		
3	Guangzhou	108	Whole Airport	Horizontally Freestanding	12	7.5	480	80,000		
4	Shenzhen	70	Whole Airport	Stand-alone Vertical	50	12	96	118,000		
		70	Arrival	Horizontally back to back	18	12	96	10,000		
5	Chengdu	47	Domestic Departure Terminal check-in Area	Horizontal Suspended	31	12	320	16,800	98,000	
		70	Domestic Departure+Arrival	Stand-alone Vertical	21	12	96	30,000		
		65	Domestic/International Arrival	Vertically back to back	20	12	240	55,800		
6	Chongqing	63	Domestic Terminal entresol	Stand-alone Vertical	21	12	96	30,000		
7	Changsha	63	Whole Airport	Stand-alone Vertical	19	12	96	22,800		
8	Haikou	70	Whole Airport	Stand-alone Vertical	48	12	96	22,800		
9	Kunming	65	Arrival	Horizontally back to back	16	12	96	18,000		
10	Nanjing	60	Whole Airport	Horizontally Suspended back to back	14	12	96	18,000		
		50			4	12	96			
11	Qingdao	60	Arrival	Horizontally back to back	10	12	96	10,000		
		70	Departure	Stand-alone Vertical	10	12	96	10,000		
12	Xi'an	63	Whole Airport	Stand-alone Vertical	50	12	96	22,800		
13	Xiamen	70	Arrival	Horizontal back to back	16	12	96	18,000		
		52	Departure	Stand-alone Vertical	8	12	96	10,000		
14	Urumchi	70	Departure	Vertical	11	12	96	18,000		
15	Ningbo	63	Departure	Stand-alone Vertical	9	12	96	22,800		
16	Jinan	60/70	Whole Airport	Stand-alone Vertical	42	12	96	22,800		
17	Wenzhou	70	Whole Airport	Vertical	38	12	96	22,800		
		63		Horizontal back to back	6	12	96			
18	Fuzhou	70	Whole Airport	Vertical	24	12	96	22,800		
				Vertical back to back	10	12	96			
19	Guiyang	70	Domestic Arrival	Horizontal	8	12	96	10,000		
20	Hefei	63	Whole Airport	Stand-alone Vertical	10	12	96	18,000		
21	Harbin	70	Domestic	Stand-alone Vertical	20	12	96	22,800		