SWOT ANALYSIS OF THE LOGISTICS PROCESS OF
SHUN YUE CEMENT COMPANY LIMITED

Thesis
JIA NI CHEN
Degree Programme in International Business
International Marketing Management

Accepted ___.___._____ ________________________________
The objective of this thesis was to evaluate the operation of the logistics department of Shun Yue Cement Company Limited, China. The company is a middle-size company specializing in the sales and transportation of cement. However, the rapid development in the various areas of the logistics industry poses great challenges to the company.

The theoretical framework of the study consists of two major theories: business SWOT analysis and logistics process. The background research was conducted by means of both quantitative and qualitative methods. The qualitative method included a face-to-face interview with the supervisor of the logistics department and several interviews with the company’s customers. The quantitative analysis was carried out by means of questionnaires which were sent to the employees of the company.

The results of the study show that there are many important objectives for development in the areas like marketing, information system, customer service of Shun Yue Cement Company Limited. Based on the results, the company should focus on its operations in these areas to face the challenges of logistics industry in the future.

Keywords
Shun Yue Cement Company Limited, SWOT analysis, Logistics process.
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<table>
<thead>
<tr>
<th>Abbreviation</th>
<th>Description</th>
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<tbody>
<tr>
<td>B/L</td>
<td>Bill of Lading</td>
</tr>
<tr>
<td>CCA</td>
<td>China Cement Association</td>
</tr>
<tr>
<td>CLA</td>
<td>China Logistics Association</td>
</tr>
<tr>
<td>CRM</td>
<td>Customer Relationship Management</td>
</tr>
<tr>
<td>DMU</td>
<td>Decision-making Unit</td>
</tr>
<tr>
<td>EDI</td>
<td>Electronic Data Interchange</td>
</tr>
<tr>
<td>GPS</td>
<td>Global Positioning System</td>
</tr>
<tr>
<td>JIT</td>
<td>Just-in-time</td>
</tr>
<tr>
<td>OOS</td>
<td>Out of Stock</td>
</tr>
<tr>
<td>QC</td>
<td>Quality Control</td>
</tr>
<tr>
<td>SYCCL</td>
<td>Shun Yue Cement Company Limited</td>
</tr>
<tr>
<td>SWOT</td>
<td>A method used to evaluate the Strengths, Weaknesses, Opportunities and Threats in a business venture.</td>
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</table>
1 INTRODUCTION

The thesis will explore the strengths, weaknesses, opportunities and threats in Shun Yue Cement Company Limited logistics aspect and its logistics process. The research provides a situation analysis for the company to improve the development and gets ready for competitive market. The study was based on the two periods of work placement of the researcher.

Structure of the study

Firstly, the research objectives, problems and limitations of the study are presented to give a general view to start the thesis. Then in the second chapter, current situation and background of the logistics in China and basic information of Shun Yue Cement Company Limited are analyzed to focus on the thesis topic logistics process. In the theoretical part, the information that logistics process includes is going to be introduced in details, like the meaning of purchasing, ordering, warehousing, transportation, customer service etc.

Purpose of the study

Here are two objectives to begin this thesis study. One of them is mainly important for the company. It is to explore SWOT analysis of the logistics process of Shun Yue Cement Company Limited. Now modern logistics modes are changing rapidly. With the development of technology, logistics industry is now faced with a more complex situation and needs to become flexible. Through the analysis of the strengths, weaknesses, opportunities and threats during the logistics process, the
research results will help the company recognize and find out the great improvement and better their development more clearly.

In addition, cooperation, communication, leadership, teamwork and human resource management are key aspects for a company to operate well. Therefore a study on inner management of the logistics department of Shun Yue Cement Company Limited is very necessary during the time that they are working in the logistics process.

**Limitations of the study**

The whole thesis period lasts only 2 months during the second period internship of the researcher. Therefore it was a short time to do the research. Additionally the primary data was incompletely collected. This may not totally represent a wide phenomenon of current company’s development of the logistics process. However, the analysis could weaken the reliability evaluation of the thesis. Secondly, the questionnaires sent to the employees were 300 copies but only 284 of them were received because the copies were missing, not clearly, or didn’t return to the researcher.
2 CEMENT LOGISTICS IN CHINA

As cement market competition becomes more and more intensive gradually, logistics management will also become more and more important, even can be able to determine whether the company succeeds or fails in their future development. Therefore, cement industry must pay enough attention to do well in logistics work. In this way the corporate will own larger space to develop and compete in market economy. (CCA, China Cement Association)

2.1 Situation of cement logistics in China

In China, as the infrastructure facilities and real estate industry are developing at such a high speed, cement output always keeps a high growth rate as well. Taken as a whole, the cement production in China increased from 491 million tons in 1996 up to 1240 million tons in 2006 and the annual growth rate increased from 3.15 % up to 16.98 %. (CCA, China Cement Association)
Figure 1. National Cement Production 1995-2006 (CCA, China Cement Association).

Figure 2. National Cement Growth Rate 1996-2006 (CCA, China Cement Association).
Figure 1 and 2 show that the growth of cement production has accelerated noticeably. From 1995 to 2003, cement production has increased by 62% and in 1996, at then the rate was 3.15 but the rate fluctuated. Until 2003, the rate reached the highest position 18.9%. This is the situation that cement industrial structure is speeding up and accelerates structural adjustment. More new dry process production lines are flouring in China in recent years, gradually replacing outdated production techniques and equipment. On the basis of bulk cement, China is developing the importance, urgency, feasibility and suitable measures of modern cement industrial logistics. (CCA, China Cement Association)

2.2 Characteristics analysis of cement logistics

Developing cement modern logistics, except for the characteristics of energy saving, emission reduction and indirect economic benefit, it also can create the new value of cement modern logistics and direct benefits. Not only can it change the present situation of cement logistics fundamentally in China and realize cement industrial large-scale development, modernization, inter-provincial and transnational development, but also can provide the condition for accelerating structural adjustment in the cement industry field. (Multi-dimensional world 2008)

Nowadays, Chinese cement industry nationwide is faced with more and more pressure of market competition and big acquisitions from transnational group in the world. We can see, foreign cement syndication and modern cement logistics service providers join the field, as international modern logistics branches are established, it will be considered as a more tough challenge for our self-produced and self-marketing cement logistics in China. (Multi-dimensional world 2008)
The application of highly efficient modern logistics technology is becoming a new goal of realizing scientific development in cement industry to reduce the costs from producing to applying and accelerate energy saving and emission reduction. (Multi-dimensional world 2008)

2.3 The choice of cement logistics for cement industry

According to the order of every business aspect, cement industrial logistics can be divided into three parts. They are supplier logistics, production logistics and distribution logistics. (Cement Industrial Logistics 2006)

Figure 3. Cement industrial logistics process (Cement Industrial Logistics 2006).
Figure 3 shows the three parts of cement industrial logistics process and especially the first part supplier logistics and the second part distribution logistics have the biggest effect on cement industry. What logistics information management in cement industry should do is that according to sale information, cement companies should prioritize delivery schedules and meanwhile, exactly master the in-transit information of goods. Besides, it can avoid some logistics risks that may happen during logistics process. Advanced information management software always contributes to information record and management and can make reasonable distribution depending on the logistics information situation. (Cement Industrial Logistics 2006)

2.4 Basic information of SYCCL

Shun Yue Cement Company Limited, which can be called “SYCCL” for short, was founded in 1958 and it is located in the ancient battlefield in Huainan, Anhui Province, China. Western and Northern sides are surrounded by mountains. The location is only kilometers away from the Huai He River and its water directly pours into the Hong Ze Lake and finally goes into the Yangtze River. So the available raw materials, resources and the best natural conditions are very superior for exploiting and sustainable development. (SYCCL website)

SYCCL is a domestic and mid-sized company on Chinese markets. Its original core belonged to Huainan Mining Group Co., Ltd. Cement Industry Restructuring Auxiliary and was formed after stripping in 2005. The company is one of the most
famous companies in construction building material field in Anhui Province. At present, SYCCL has a branch company in Fu yang City and each company has its own factory for production process. The company owns three railway lines: the Fu yang line, Huainan line and South to North line, which are connected all through Anhui Province so the transportation is very convenient. (SYCCL website)

The products of SYCCL include a variety of construction materials, such as chemical plastics, sand, cement, lime etc. SYCCL is especially famous for their cement industry such as SR Portland cement, Low and Moderate heat Portland cement and Portland cement for road etc. The company imports materials like stones, sands, coal, chemical materials from variety of companies in all of the provinces. Besides, it has been accredited by the National Quality Certification and inspected by the State, designated as exempt products. (SYCCL website)
3 SWOT ANALYSIS AND LOGISTICS PROCESS

To research on how the cement logistics process in Shun Yue Cement Company Limited is carried out, what advantages the company may have, where are the good opportunities facing the company and what is the competition doing that the company should be worried about, the tools SWOT analysis and logistics process will be used in this study. The following chapters will explain them in details.

3.1 SWOT analysis

SWOT analysis is a strategic tool that can help companies analyze their situation and conditions they are faced with, summarize for their past and make a developing strategy and plan for future life and evaluate. “S” stands for strengths, “W” stands for weaknesses, “O” stands for opportunities, "T" stands for threats. Strengths and weaknesses belong to internal factors and opportunities and threats are external factors. It was firstly introduced by Learned and other famous experts in 1965 and widely used in strategic management field. (Mind tools-SWOT analysis 2009)

Table 1. Structure of SWOT analysis (Neni Manize, the SWOT matrix explained).

<table>
<thead>
<tr>
<th></th>
<th>Positive</th>
<th>Negative</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Internal factors</strong></td>
<td><strong>STRENGTH</strong></td>
<td><strong>WEAKNESS</strong></td>
</tr>
<tr>
<td>(Company analysis)</td>
<td>➢ Good now</td>
<td>➢ Bad now</td>
</tr>
<tr>
<td></td>
<td>➢ Maintain, build</td>
<td>➢ Remedy, stop</td>
</tr>
<tr>
<td><strong>External factors</strong></td>
<td><strong>OPPORTUNITY</strong></td>
<td><strong>THREAT</strong></td>
</tr>
<tr>
<td>(Environment analysis)</td>
<td>➢ Good future</td>
<td>➢ Bad future</td>
</tr>
<tr>
<td></td>
<td>➢ Prioritize, optimize</td>
<td>➢ Counter</td>
</tr>
</tbody>
</table>
SWOT analysis is an effective tool. Even though its structure is very simple, it can help deal with very difficult affairs. It can be used when you need to make a strategy of development for the company or analyze competitors and market position. (Mind tools-SWOT analysis 2009)

Internal factors analyze the company functions and activities and include strengths and weaknesses. When we analyze them, we can think about such questions as a start. Internal strengths and weaknesses usually mean the internal factors that the organization can control. For example, the organizational mission, financial resources, technological resources, organizational culture, human resource, product feature and so on. (Mind tools-SWOT analysis 2009)

Table 2. Internal factors and considerable questions before analysis (Mind tools-SWOT analysis 2009).

<table>
<thead>
<tr>
<th>Strengths</th>
<th>Weaknesses</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. What are you good at?</td>
<td>1. What are you not able to do?</td>
</tr>
<tr>
<td>2. What kind of new technology in the organization?</td>
<td>2. What kind of ability do you lack?</td>
</tr>
<tr>
<td>3. What can you do that others are not able to do?</td>
<td>3. What do others do better than us?</td>
</tr>
<tr>
<td>4. What’s the difference with others?</td>
<td>4. What kind of customers can we not satisfy?</td>
</tr>
<tr>
<td>5. Why do customers come?</td>
<td>5. Why do we fail recently?</td>
</tr>
<tr>
<td>6. Why do we succeed recently?</td>
<td>6. ......</td>
</tr>
<tr>
<td>7. ......</td>
<td></td>
</tr>
</tbody>
</table>
External factors include opportunities and threats, which indicate the factors in the business environment that the organization usually can’t control in the business environment. For example, it includes demand, competition, economy, politics, law, society, culture, technology, population environment and so on. These external factors usually can’t be controlled by the organization but have significant effects on organizational operation. (Mind tools-SWOT analysis 2009)

Table 3. External factors and considerable questions before analysis (Mind tools-SWOT analysis 2009).

<table>
<thead>
<tr>
<th>Opportunities</th>
<th>Threats</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. In the market, what kind of opportunities can suit for us?</td>
<td>1. What changes have taken place in the market recently?</td>
</tr>
<tr>
<td>2. What technology do we need to learn?</td>
<td>2. What have the competitors done recently?</td>
</tr>
<tr>
<td>3. What new services can we improve?</td>
<td>3. Can we catch up with changes of customers' demand?</td>
</tr>
<tr>
<td>4. What kind of new other customers can we attract?</td>
<td>4. As economy and politics change now and then, will they harm the company?</td>
</tr>
<tr>
<td>5. How can we become distinctive?</td>
<td>5. Is there something that will threaten the company's existence?</td>
</tr>
<tr>
<td>6. What is the plan for 5 or 6 years?</td>
<td>6. ......</td>
</tr>
<tr>
<td>7. ......</td>
<td></td>
</tr>
</tbody>
</table>

During SWOT analysis, some simple principles should be obeyed in order to make it successful and exact according to true facts. Firstly, have an objective understanding on the company’s advantages and disadvantages. Secondly, distinguish the company’s current situation and prospect. Thirdly, consider all things
in full-scale. Fourthly, compare with the competitors no matter they are better or worse. Finally, keep SWOT analysis simplified and avoid overcomplicating matters and over analysis. The strengths, weaknesses, opportunities and threats are found by using different analyzing methods for instant demand analysis, competition analysis, analyzing the company function etc. (Mind tools-SWOT analysis 2009)

3.2 Logistics process

“Logistics is the process of strategically managing the acquisition, movement and storage of materials, parts and finished inventory from suppliers though the firm and on to customers.” It requires right product in the right place at the right time. (Christopher 1994, 1)

Logistics is part of supply chains. It connects the relationship between producing and consumption. It is essential for planning and operating a distribution system successfully. The objectives are supplying the right products to the right places at the right times for the least costs. Logistics appears with the development of the economy and the appearance of goods and products, therefore logistics a traditional and old economic activity. (Attwood 1992, 2)

Traditional logistics management was formed from the Second World War and developed in 1950s to 1960s. Traditional logistics mainly regarded logistics as logistics indemnification system and a bridge of sale activity. Modern logistics has a goal of meeting customers' need and a strategic measure of taking manufacturing, transporting, selling etc. into consideration. Compared with traditional logistics, in
width and depth, modern logistics has more significant meanings. (CLA, China Logistics Association 2007)

Logistics process is a key to execution and achieving results. The objectives in general are accomplishing things and creating value. Detailed speaking, logistics process coordinates all activities involved in acquiring, converting and distributing goods from raw materials source to target group to satisfy customers’ need. And deliver the required levels of customer service in an efficient, cost effective manner. However, pleasing customers is not the only goal for logistics process, but also must operate productively to bring profits for the company. (Byrne & Markham 1991, 31)
From figure 4, we can find logistics process to include four big parts. They are purchasing and ordering, warehousing, transportation and delivery, reverse logistics at last. Every part is a key to day to day customer satisfaction for companies that produce or distribute goods. (Byrne & Markham 1991, 30)
4 PURCHASING AND ORDERING

Purchasing refers to those activities for buying materials and doing the buying process. Purchasing is one part of procurement and has the following goals:

- Offer materials to suppliers and essential services for the organization;
- Make inventory and investment costs and loss at a minimum level;
- Keep an adequate quality standards;
- Find competent vendors;
- Improve the competitive position of the organization;
- Set up a long-term relationship and corporation with customers;

When purchasing activities are made, the factors that influence the activities are supplier selection and evaluation, quality control, and forward buying. There are three basic requirements. First, reduce logistics costs and improve the logistics management. Second, provide best services to customers and satisfy their personalized demand. Third, Just-in-time (JIT) purchasing needs purchasers and suppliers to develop long-term relationships. (Bowersox & Closs & Cooper 2010, 81)

4.1 Supplier selection and evaluation

Choosing suppliers is one of the most important considerations before doing purchasing and procurement. The buying process is complex and the process includes decision makers and decision influences, which combine to form the
decision-making unit (DMU). Through the marketing analysis, a potential supplier can be selected through different kinds of public information and public channel to establish contact. These channels include initiate enquiry of suppliers and introduction, professional media advertisements, Internet searching etc. (Cooper 1994, 258)

In the process of choosing suppliers, firstly, the company should use a uniform standard registration system to manage the information that suppliers provide and identify all potential suppliers for items being purchased. A list of factors for evaluating each supplier should consider the place where suppliers registered, registered capital, production areas, equipment, staff, main products, main customers and so on. (Blanchard 1998, 62)

Through the analysis of the information and once the factors have been determined, technological capacity, stability of supplies, reliability of resources and comprehensive competitiveness can be evaluated. After evaluating the performance of individual suppliers, among many suppliers, move out of some obvious unsuitable suppliers to corporate more and finally can receive a suitable supplier record. The management should determine the importance of the factors to its particular situation. (Blanchard 1998, 63)

After the company and the suppliers reached an agreement of the price and consultation recognizes between both parties they need to sign "purchase contract." In the process of signing the "purchase contract", they primarily negotiate with the trade names, specification model, quantity, price, packaging, origin,
shipment, payment terms, settlement, claims and arbitration and after the agreement they write these into their "purchase contracts". This means the official start of export business. Under normal situation, the purchase contract in duplicate by both parties and it will come into force after they cover the company seal. (Stock & Lambert 1993, 500)

4.2 Quality control

Purchasing responsibilities are to secure the proper materials. The right quality specifications must be given to suppliers. Logistics quality control refers to using an advanced approach of quality management scientifically and revolving around quality to take a control of logistics process in system management, including guaranteeing and improving logistics quality, working quality and other activities such as planning, organizing, controlling etc. In every operating step, through the beforehand preparation of controlling, the supervision and track during logistics process, the summary and review of feedback control, collect necessary data and find out effective control. (Wise Geek 2011)

The advantages of quality control are to improve company’s reputation, reduce operating costs and increase service levels. Quality level can be specified to suppliers in the following ways:

- Commercial standards, design specifications and engineering drawings
- Material and method-of-manufacture specifications
- Performance specifications, function and fit specifications
- Brand or trade names, samples and market grades
Qualified products list and combination of above specifications

The disadvantages of quality control will lead to customers’ fluctuation, hidden trouble of operating competence, loss of professional skills and damages of corporate culture. The principle of quality control is to tamp foundation, focus on logistics process, improve customer service and keep sustainable development. The company’s logistics target is to accomplish customers’ satisfaction rate more than 95 % and reduce error rate less than 0.5%. (Blanchard 1998, 308)

In a logistics department, there are 4 goals for the department to consider. They are service quality, warehousing quality, transporting quality and customer feedback quality. The measures of quality control for a department to act contain three steps: (Quality Inspection Services)

1) In every step of logistics process, ensure the key points that need to be inspected in all procedures, like inbound and outbound quality check and quality issue handling.

2) Establish a Quality Control (QC) team and all team members should put forward problems, express and share suggestions with each other in a positive attitude.

3) The logistics department should evaluate and develop self-improvement every month in big meetings and the R&D department is responsible to hold quality assessment of each quarter.
4.3 Order processing and information system

Order processing and information system lays the foundation for logistics and corporate management information systems. They will offer considerable potential for improving logistics performance. (Stock & Lambert 1993, 515)

“The order processing system is the nerve center of the logistics system.” It initiates such logistics activities as: (Stock & Lambert 1993, 536)

1) Determining the transportation mode, carrier and loading sequence
2) Inventory assignment and preparing picking and packing lists
3) Warehousing picking and packing
4) Updating the inventory file, subtracting actual products picked
5) Automatically printing replenishment lists
6) Preparing shipping documents
7) Shipping the product to the customer

This system needs the company to do a lot of effective communications with customers. Slow speed, bad service, low quality and lack of communications can lead to loss of customers. According to the order of communicating with customers, order processing systems can be divided into 6 parts not only from a customer’s perspective but also from a company’s perspective. (Stock & Lambert 1993, 515)
Figure 5. Total Order Cycle: Customer’s Perspective (Stock & Lambert 1993, 516).

Figure 6. Dealing with order processing: Company’s Perspective (Bowersox & Closs & Cooper 2010, 297).

Order preparation refers to collecting necessary information of products or services and all kinds of other activities like sending requirement to purchase in a formal
way. It includes choosing suitable suppliers, filling in an order, determining the available stock and informing order information. The second step of order processing system is order transmittal. It can be transferred through manual and electronic modes, such as posting, e-mail, fax, expressage and so on. Then order entry and fulfilling can be conducted at one time to shorten the processing time. At last, the company will report and inform the order status to customers constantly to ensure a good service. (Stock & Lambert 1993, 516)

Information system is one part of logistics system. Original information during logistics process can be collected, stored, analyzed, handled, transferred and used by a person or a computer. It can realize the connection and cooperation between every link in logistics process and reach the final goal of logistics activities. (Wiley & Sons 1985, 171)

There are three components in logistics information system. They are data input, data management and data output. Data for a logistics management information system can come from many sources, such as the order processing system, company records, industry data and management data. The functions of the logistics information system include a customer service and communications function, a planning and control function and a coordinate function. (Christopher 1994, 103)
The firm can determine what strategic and operational decisions are made and what information is needed for decision making and in what form. Management must make strategic and operational decisions in each of the functions of logistics. (Stock & Lambert 1993, 538)

4.4 Making ordering and purchasing work more efficiently

Modern logistics industry gets to know more about customers’ demand both at present and in the future development. They try to satisfy and exceed customers, regard them as a center and do well in marketing work. Logistics industry has a good relationship with other members in a supply chain. They are interdependent and mutual benefit. It will improve and create both values and better the competitiveness of the whole supply chain. Effective purchasing management
results in the acquisition of high-quality materials. As the modern technology develops and market competition becomes more and more fiercely, some designs, skills, methods, services etc. also get more and more mature. Better management of purchasing activities can lead to increasing profitability. (Bowersox & Closs & Cooper 2010, 96)

Some traditional methods of order transmittal may affect the order processing progress. Later it will affect the achievement of the company and profit. The longer the lead time is from the supplier, the higher the likelihood of delivery will have problems. There is also less likelihood of customer return of finished goods due to product failure. (Stock & Lambert 1993, 493)

The absence of specifications, lack of engineering standardization and unavailability of supply sources will lead to noting to do with purchasing effectiveness. As technology develops faster and faster, equipment and systems become more and more complex and lead to losing effectiveness of certain part in a system. The environment for using product becomes worse. The temperature control, shocks, shakes, radiation and other factors will affect the product’s stability and reliability. (Stock & Lambert 1993, 493)

The method for dealing with order transmittal becomes more and more modern. Both manual type and electronic mode are used in modern logistics system. From a customer’s perspective, evaluating the reaction sensitivity about the demand of customers for a company is through the analysis of ordering cycle and stability to realize. Therefore, a company’s logistics manager should take a right evaluation
standard about logistics effectiveness. Besides, investment in supplier development is one way for purchasing to use to obtain the supplier base required for the future needs of the company. (Harding 1991, 25)

Continuous improvement will be a forever lasting goal for the sustainable development of logistics industry. Making full use of information technology during logistics process and service period, the basic information can help analyze and make decisions. It has been common practice for purchasers to develop short-term relationships with suppliers who can provide opportunities to reduce price or take advantage of temporary market situations. (Harding 1991, 24)

The length of ordering cycle time and the volatility often has a big effect on the costs and flexibility for the purchasers. So it will be regarded as an important reference when choosing suppliers as it directly threatens the company’s market competitiveness. Bad logistics Quality Control (QC) will lead to much loss, such as compensating for loss and costs, fees of recalling, reforming and resending the rejected shipment, time waste and opportunity loss. The challenge is to take advantage of the new possibilities and create values for the ultimate customer. (Bask & Vepsäläinen 1998, 83)

Finally, QC will threaten the reputation of the company and lead to some big problems of less ordering and purchasing and disadvantaged contract. When improving the quality of logistics, some wrong information may appear, such as wrong cognition of quality level, misunderstanding of devolution and high costs towards high quality. Risk assessment needs purchasers to determine the
probability of best or worst conditions occurring. Supply strategies should be developed for the predicted events and take advantage of future possibilities, opportunities and even threats to create competitive advantages. (Bask & Vepsäläinen 1998, 83)
5 CUSTOMER SERVICE

Customer service is the customer-oriented value and represents the output of the logistics system. Generally speaking, everything that can increase the satisfaction of customers will be included in customer service. Suppliers of raw materials, small parts, products offer the service of demanders. In broad terms, customer service can be regarded as a good measure for evaluating how well the system performs. When applied into logistics field, it refers to activity related, performance related and corporate philosophy related things. (Anderson & Kerr 2002, 18)

<table>
<thead>
<tr>
<th>CUSTOMER SERVICE</th>
<th>Pre transaction elements:</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>• Written statement of policy;</td>
</tr>
<tr>
<td></td>
<td>• Customer receives policy statement;</td>
</tr>
<tr>
<td></td>
<td>• Organizational structure;</td>
</tr>
<tr>
<td></td>
<td>• System flexibility;</td>
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<td>• System flexibility;</td>
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<td>• Management services.</td>
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<tr>
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<th>Post transaction elements:</th>
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<tr>
<td></td>
<td>• Installation, warranty, alterations, repairs, parts;</td>
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<td>• Product tracing;</td>
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<td>• Customer claims, complaints, returns;</td>
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<td>• Temporary replacement of products.</td>
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<td>• Stock out level;</td>
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<td>• Order information;</td>
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<td>• Elements of order cycle;</td>
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<td>• Expedite shipments;</td>
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<td>• Transship;</td>
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<td>• System accuracy;</td>
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<td></td>
<td>• Order convenience;</td>
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<td>• Product substitution.</td>
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Figure 8. Elements of customer services (Stock & Lambert 1993, 115).
In order to achieve cost-effective customer service, the first target for every logistics system is to satisfy demand of customers. The company should make a plan and check the inner service standard frequently. During the period, every employee should take a positive and ensured attitude to realize how they can serve customers better. (Christopher 1994, 35)

**Figure 9. A framework for developing customer service policies (Christopher 1994, 38).**

In the figure 9, there are six steps to develop customer service policies. To obtain customers and maintain the relationship are the keys of marketing management. Through service, promoting product value has more advantages than improving product property. The logistics process is directly communicating with customers. It affects the customer’s satisfaction from three aspects. In the logistics process,
through the distribution and delivery, the company will offer basic value-added services according to customers’ needs. What’s more, it will directly affect the ability of understanding the demand better. Finally, it may affect customers’ feelings, evaluations, opinions and comments towards products and related services. (Christopher 1994, 37)

5.1 Planning for better customer service

As competitiveness in logistics market becomes more and more fiercely and fiercely. Moreover, it has been changing from price to service competition. Valuing and improving customer service has become an important part for logistics companies to ensure the successful central position and competitiveness. To offer customers excellent services, the company should get to know the characteristics of logistics customer services first. In logistics industry, CRM (Customer Relation Management) has been widely used by many firms to develop a customer-centered organization. (Attwood 1992, 203)

Customer service runs through logistics operations and process. Firstly, everything should depend on customers’ demand. According to customer’s order and Bill of Lading (B/L), logistics service providers should perform duties unconditionally. At the same time when the business is running, the logistics service providers should have the ability of dealing with feedback from customers continuously and get ready for answering customers' inquiries. (Anderson & Kerr 2002, 36)
The factors that affect the quality of customer service are product availability, order cycle time, service level, ordering procedure, communications, ordering convenience, delivery reliability and consistency, personnel, packaging, advertising and so on. Later in the research part, a theme interview on customer service from these aspects will be described for explaining the factors in details. (Attwood 1992, 217)

An effective customer service strategy is based on an understanding of how customers define service. In order to master customer’s value, management should select a customer service strategy that suits the company’s objectives for long-range profit and return on investment through marketing research. It is widely used to guarantee customer service in daily business life. There are three approaches to realize this: (Stock & Lambert 1993, 146)

- Make a customer satisfaction and visit survey;
- Coordinate with customers to accomplish periodic and comprehensive evaluation;
- Hold regular forums with customers.

There are also other methods for satisfying customers and offer the best and thoughtful service for them. For example, get close to customers and care more about details. According to the changes of customers’ demand, set up new organizations, shorten the distance between the company and customers and build inner customer management rules. Details will be easy for customers to find benefits and meanwhile, will reflect the disadvantages and improve them. On the other hand, if the company can recruit and train the sale representatives whom
customers are satisfied with, they will have the ability of dealing with customer complaint, feedback, misunderstanding, inquiries, etc. as fast and perfect as possible. (Stock & Lambert 1993, 146)

Technological processing is the material basis of realizing customer service. First of all, managers in logistics department should react as quickly as possible and listen to their desires they want to express. Especially in logistics industry, attitudes and methods towards solving problems immediately are very important. The company must show their good faith, values and action. For instance, offer some personalized service or products and strengthen customers’ experience and improve the standard and quality of service. (Londe & Cooper 1989, 61)

From a customer’s perspective, customer’s value is one that the company offers to present them satisfaction and benefits as expected. Actively and considerately care about more things for customers, such as difficulties, embarrassment, help in need, misunderstanding etc. What’s more, putting forward reasonable solutions is the key part for coping with emergency and accidents. Only in these ways, will the company get respect from customers with true heart and set up a formal, positive and active relationship. (Londe & Cooper 1989, 134)
5.2 Developing customer accommodation strategy

Customer service has a direct impact on the market share. Good customer service can maintain customers and increase the loyalty and satisfaction from them. Loyal customers can help reduce business costs because they will play a role as an advertisement announcer with zero fees. Logistics customer service is a value-added product. (Stock & Lambert 1993, 111)

To understand customer’s value can help make arrangements and operational activities in daily business life and make marketing and functional strategies. Taken as a whole, the appearance of manufacturing industry and supply chain makes customer service firstly start and develop the most completely in modern logistics industry. (Christopher 1994, 41)

Providing service to customers costs money. When trying to reduce distribution costs, one of the big problems is to identify them accurately. Too much customer service will needlessly reduce corporate profits. Many companies have no effective customer service strategy, such as overlooking customer profitability, misreading the seller’s market, taking unrealistic policies etc. (Business link net 2011)

In the modern world, logistics industry often lacks the use of technological approach and couldn’t control, analyze and manage the information effectively. For logistics industry, the policymaker of the company is lack of knowledge, experience and clear mind like Customer Relationship Management (CRM). Moreover, during
customer service management there exist many factors of uncontrollability. (Business link net 2011)

Logistics industry should make sure their core business and advantages. Differential customer service can bring the company unique competitive advantages. Quality improvement, such as delivery on time, order satisfaction, correct invoice and the increasing production rate of the whole logistics system all can be very difficult for other competitors to simulate in a short run. Therefore, strengthening logistics management and improving customer service are effective methods. Customer cooperation is quite necessary for the company to master some basic information and these help improve future service. (Stock & Lambert 1993, 143)

Customer service level directly affects the corporate market share, logistics total costs and gross profit. If a product is not available at the time the customer requires it, the sale will be lost to the competitors. (Bowerbox & Closs &Cooper 2010, 62)

In China, the logistics customer service has series of existing problems. Firstly, inventory is too high. In many logistics industries, they prevent lack of goods mainly through safe stocks. From related data, it indicates that the quantity of safe stocks will probably come to more than a half than inventory of other manufactures under the condition of the changes of market demand and height. This is one of the most important factors that logistics costs in China stands very high. Whether it will cost how high or low during logistics process leads to the fees for customer service from logistics industry. (Business link net 2011)
Secondly, order cycle seems too long and flexibility is not enough to deal with emergency and needs from customers. On the other hand, late information sent to customers will threaten the satisfaction and influence loyalty. Customers usually dislike accidents. If they can be informed in advance, they will prepare better for the changes, other arrangements and adjustment, such as Out of Stock (OOS), delayed delivery etc. (Business link net 2011)
6 WAREHOUSING

A warehouse is any location where stocks of material are held through supply chains. Warehousing refers to storing products during all phases of the logistics process and it is an integral part of every logistics system. It has a relationship and link between producers and customers. Ever since production process began, warehousing has appeared at the same time. Warehousing is one of the most important parts in logistics industry and system and the key point for companies to planning and research before they produce their products. (Waters 2003, 283)

Warehousing has three basic functions: movement, storage and information transfer. Equipment can be categorized according to functions performed. They are storage and order-picking, transportation, storing and shipping. (Waters 2003, 284)

6.1 Decision strategies in warehousing

The planning goals for logistics warehousing system are preferential market economy, demand-oriented, coordinate construction and easy to operate. In order to realize these goals, companies must improve warehousing performance. They need to develop good strategies when making warehousing decisions. There are two types of warehousing, namely public and private warehousing. (Waters 2003, 286)
To accomplish warehousing management, there are some factors that can influence warehousing policies: (Stock & Lambert 1993, 268)

(a) The company’s philosophy and capital availability;
(b) Product characteristics, such as size, product lines, substitutability and obsolescence rate;
(c) Economic conditions, competition, seasonality of demand;
(d) Use of Just-in-Time programs and the production process being used.

The function of a warehouse is marketing-oriented. More developed the market economy is becoming, higher professional skill it requires. There are different products to be warehoused and they can be divided into three general reasons, namely economic, operational and service reasons. (Attwood 1992, 83)

![Figure 10. Sensitivity analysis chart (Attwood 1992, 86).](image-url)
Figure 10 shows an illustration of the reaction of the total distribution cost to differences in warehouse site. When making a decision about selecting a particular warehouse site, the company should collect data, develop plans and finally implement. Best sites for warehouses can provide the best service to customers in terms of delivery times and the least cost for delivering goods. (Attwood 1992, 85)

When companies make a warehouse site selection decision, an eight-step approach to a business location search can be applied to the process. A good warehouse layout can increase output, improve product flow, reduce costs, improve service to customers and provide better employee working conditions. Here are some principles of logistics warehousing system planning, such as simplifying process principle, graphic design principle, separation of message principle, flexible principle, and performance principle. (Waters 2003, 289)

Besides, five periods should be spent when planning a warehousing process. First of all, it is planning and preparation period. Next period is systematically planning and designing. Then come to the period of case evaluation and decision making. After that, it should be local planning and designing period. Finally, the warehousing strategies, a logical and consistent decision and planning should be implemented. (Waters 2003, 290)
6.2 Packaging

Packaging as one of the components in logistics system, has a close relationship with transporting, warehousing, delivery and distribution processing. Packaging is the end of production process but also a beginning of logistics activities. Therefore, according to the condition of logistics system after producing, a company considers packaging and meanwhile it also restricts logistics. Good packaging can have a positive impact on layout and design and overall warehouse productivity. Best package should consider a lot about customer service, costs and convenience. (Bowersox & Closs & Cooper 2010, 269)

Packaging serves has two basic functions. They are marketing and logistics. If more specifically speaking, there can be six functions. They are containment, protection, apportionment, unitization, convenience and communication. Packaging can help protect goods. During the period of transporting the goods, it may be under attack and damaged by pressure. Therefore it needs to be packaged in order to prevent external natural or manual factors. When designing the packaging of goods, the company should analyze carefully some key factors that will affect the products. Then focusing on these possible risks when transporting, design packaging of goods. (Bowersox & Closs & Cooper 2010, 272)

Packaging should be convenient for logistics tasks. If the size of package is too big, it is not convenient for delivery and transporting. If too small, it will significantly reduce the effectiveness of delivering. Moreover the company should consider the differences between varieties of delivering tools and transportation channels in
order to manage the goods and operate the logistics process better. (Stock & Lambert 1993, 326)

What’s more, good package design can accelerate sales promotion. Dupont Law tells us that 63% of consumers purchase goods because of its package. So packaging of goods is the appearance of the company. Beautiful and popular package design can increase the sales rate in a sense and improve market reputation of the corporate, especially from aesthetic requirements. At last, it is convenient for customers to consume and improve the level of customer service. The package should be suitable for customers to purchase, carrying and warehousing. (Stock & Lambert 1993, 328)

6.3 Warehousing assessment and future strategic planning

Warehousing plays an important part in a company’s logistics system. It provides customers with an acceptable level of service and a desired level of customer service at the lowest possible costs. It develops with the development of business and has experienced different periods from original manual warehousing to intelligent storage system through the support of different kinds of advanced technology. (Blanchard 1998, 77)

Effective and reasonable warehousing can help companies speed up the flow of goods and material, reduce distribution costs and guarantee the successful process. Meanwhile warehousing can realize good control and management of
logistics if a company is to take advantage of quantity purchase discounts on raw materials or other products. (Blanchard 1998, 78)

A warehouse is a long-term risky investment. Because of its customized design, goods may be difficult to sell. Long production runs lead to larger inventories and increased warehouse requirements. The problems existed during warehousing may be low utilization rates, uncertain dimensions, invisible effects and advantages. As these situations may sometimes appear, some resources will be idle however. Reasons may be several aspects. (Attwood 1992, 105)

The firm may not fully prepare investigation and analysis of warehousing construction and planning well. However, it will lead to mistakes of decision making. The company’s decision makers may not have enough cognition of improving the mechanization and automation during warehousing process. Besides, the employees couldn’t be trained well about mechanical operation and repairing. Lack of professional skills, they will not use the equipment reasonably and effectively. When planning and designing a warehouse, they will not consider maintaining and developing afterwards. This will limit the use of equipment and improvement of mechanization. (Attwood 1992, 106)

Under a new situation of the world, the future development of warehousing has some opportunity trends. First of all, regard customers as center. A successful company always would like to keep in touch with customers and listen to their feedback. Warehousing task should store or send suitable goods at a suitable time and through a suitable method. On the basis of satisfying customers’ demand,
realize values. On the other hand, a successful company keeps a real partnership with suppliers and customers. Only in this way, can they benefit from sharing information, discussing on plan and win-win contract. Running an effective and quick warehousing is the key point of realizing the goal. (Zhong Zhi Online 2008)

In order to deal with the increasing demand of warehousing at such a high speed, warehousing must improve its automation. Order batch tends to smaller and frequency tends to higher. The reasons may be due to easier acquirement of information, achievement of new technology, and realization of direct-to-store and direct-to-customer plan. (Zhong Zhi Online 2008)

In a long period, management departmental regulations form a serious divisional management system. This may limit the development of warehousing and distribution. Besides, a competitive and orderly market of warehousing hasn’t been set up and this situation will lead to the smooth of warehousing channels and highly effective operating. As the world is changing very fast and so are external factors and situations, new technology should be applied. But if the company doesn’t often update equipment and management system following changes and facts, gradually the company will lose the original market and leave warehousing idle. (China Railway Logistics 27/12/2010)
7 TRANSPORTATION

Logistics involves a movement of goods from point-of-origin to point-of-consumption. This kind of activity is called transportation. Transport is responsible for the physical movement of materials between points in the supply chain. It moves a company’s products to markets at a certain long distances due to geography factors. Another main function is for warehousing in a short time. There are some major business decisions affected by transportation, like product decisions, market area decisions, purchasing decisions, location decisions and pricing decisions. (Waters 2003, 309)

Transportation service has some characteristics. One of the most important impacts of transportation is customer service and the most important transportation service characteristics are dependability, time-in-transit, market coverage, flexibility, loss and damage performance and the ability of carrier. There are a lot of methods for transporting goods from one place to another one or other areas, such as rail, air, water, pipelines, motor. (Waters 2003, 310)
Table 4. Comparison of domestic transportation mode (Bowersox & Closs & Cooper 2010, 203).

<table>
<thead>
<tr>
<th></th>
<th>Motor</th>
<th>Rail</th>
<th>Air</th>
<th>Water</th>
<th>Pipeline</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Cost</strong></td>
<td>Moderate</td>
<td>Low</td>
<td>High</td>
<td>Low</td>
<td>Low</td>
</tr>
<tr>
<td><strong>Market coverage</strong></td>
<td>Point-to-point</td>
<td>Terminal-to-terminal</td>
<td>Terminal-to-terminal</td>
<td>Terminal-to-terminal</td>
<td>Terminal-to-terminal</td>
</tr>
<tr>
<td><strong>Degree of competition</strong></td>
<td>Many</td>
<td>Moderate</td>
<td>Moderate</td>
<td>Few</td>
<td>Few</td>
</tr>
<tr>
<td><strong>Predominant traffic</strong></td>
<td>All types</td>
<td>Low-moderate value, moderate-high density</td>
<td>High value, low-moderate density</td>
<td>Low value, high density</td>
<td>Low value, high density</td>
</tr>
<tr>
<td><strong>Average length of haul</strong></td>
<td>515 miles</td>
<td>617 miles</td>
<td>885 miles</td>
<td>376-1,367 miles</td>
<td>276-343 miles</td>
</tr>
<tr>
<td><strong>Equipment capacity</strong></td>
<td>10-25</td>
<td>50-12,000</td>
<td>5-125</td>
<td>1,000-60,000</td>
<td>30,000-2,500,000</td>
</tr>
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</table>

Table 4 shows the economic characteristics of the five basic modes of transport. Besides, there are available modal combinations, like rail-motor, motor-water, motor-air and rail-water. Economic regulation and safety regulation are two major areas of transportation regulation. The economic one will affect business decisions and the safety one will cope with labor standards, working conditions for transportation employees, insurance and other aspects related to public safety. On the basis of modes above, there are some legal forms of transportation. They are common carriers, contract carriers, exempt carriers and private carriers. (Stock & Lambert 1993, 166)
Figure 11. Legal forms of transportation (Stock & Lambert 1993, 189).

The figure above shows that in the five modes of transportation, they have different legal forms. The first three forms are for-hire carriers and the last one is owned by the shipper. (Stock & Lambert 1993, 188)

7.1 Decision strategies in transportation

Transportation decisions can be characterized as strategic or tactical. The basic requirements of transportation are on time, accurate, economic and safe. How to make a strategy to choose a suitable and reasonable transportation method depends on five important aspects for considering. They are transporting distance, segments, tools, time and fees. Besides, there are other factors that can affect the choice like categories of goods, time limits, quantities etc. (Bowersox & Closs & Cooper 2010, 353)
Types of transporting routes should be based on place of departure and destination. The shortest, the most convenient and the most economic benefit route should be considered and designed through geometry, such as simple annular, compound annular, pattern of crossing lines etc. Especially, the start place can be the same one as the final destination. Only in this way, can the goods be delivered and carried in double ways. The targets of choosing routes are high effectiveness, low costs, best distribution service level, the shortest mileage and the smallest volume of the circular flow. (Bowersox & Closs & Cooper 2010, 355)

Categories of making a transporting plan have a short-term, long-term and daily one. A program composition has four steps. Firstly, collect program materials. Then make a program map. Next balance capacity and volume. Finally work out running plans of vehicle. With development of technology, Global Positioning System (GPS) can help people make a most suitable route for transferring goods and after vehicle begin transporting, according to true facts, now and then adjust to the route. At last, GPS will offer best advice for a satisfactory route. Until arriving at one destination, the company can arrange another route in order to reduce free time of vehicle to the lowest. (Waters 2003, 325)

7.2 Transportation activities and risks during the development

In logistics activities, transportation stands at one of the most important positions. Transportation takes the responsibilities and tasks of transferring goods from one place to another or more in different spaces. It solves the problems of separation between suppliers and customers and it is a main functional element that logistics creates space effect. Meanwhile, transportation acts a role as a bridge to connect
the relationships among different cities, countries, regions and international logistics development. (Wiley & Sons 1985, 120)

Transportation has an advantage of relation resource. Most of logistics companies have rich customer resources. They have set up a steadily cooperative partnership with both old and new customers. In many years’ operation, more or less to a certain degree, the companies can build a business collaborative relationship with local government and other competitors. This is a process of integrating resources. (Wiley & Sons 1985, 120)

An unreasonable transportation has many aspects. For example, a roundabout and repeating route, wrong choices of consignment methods and long distance transporting may happen during the process due to artificial operational mistakes, weather conditions, lack of technology or other risks and accidents. If facilities are under poor conditions and ratios of professional transportation stands too low. (Wiley & Sons 1985, 124)

Poor conditions include technological skills, few professional teams, backward managerial ideas, rules or systems, low quantities of people with special skills and so on. Especially in China, modern situation illustrates that because of the influence of long-term planned economy system, there are a lot of problems in transportation management, such as departmental separation, repeated construction, waste of resources etc. (Wiley & Sons 1985, 124)
With the development of modern traffic transportation tools and new advanced technological application, demands and potentials in modern logistics market become bigger and bigger. Meanwhile customer service is needed in a very high level in the process of transportation. It can accelerate modern logistics service quality, effectiveness and security improvement. Bar code technique and application, intelligent tags, Electronic Data Interchange (EDI), GPS and other informational technologies are widely used. In China, China Mobile, China Unicom and other network operators participate in logistics informational operation. (Waters 2003, 320)

In the period of transporting goods, traffic accidents will lead to damages and loss. Besides, bad management, control, theft or destroying goods on purpose by workers can affect the effectiveness of transporting activities. There are also many risks including weather conditions, defect of goods, mistakes of wrong direction guide and information etc. In a customer's perspective, transportation may sometimes lead to a delay and delivering goods later. That will cause some fees, except more transportation fees, like charges of delay, rent, distribution fees etc. (Bowersox & Closs & Cooper 2010, 244)
8 THE RESEARCH METHOD AND DATA ANALYSIS

The research part was carried out by two types of interviews and a questionnaire. The objective of the research was to analyze the strengths, weaknesses, opportunities and threats during logistics process in Shun Yue Cement Company Limited. The primary data is supported by the company. Two types of interviews include a personal interview with Mr. Bi Yu lin, the supervisor of the logistics department in charge of logistics management and a theme interview about customer service through 15 telephone interviews with customers of the company. A questionnaire survey is referred to inner management during logistics process for the employees in SYCCL. From these research methods, the data analysis will be presented afterwards.

8.1 Primary data collection

Primary data is the specific information collected by the person who is doing the research, specifically for a research project and it is important for all areas of research. When secondary data is unavailable and inappropriate, primary data can be collected to suit the purpose. There are a number of popular ways to collect primary data. It consists of surveys, interviews and focus groups, which show a direct relationship between potential customers and companies. (Primary home school 03/11/2010)
In the research process, primary data was collected through personal interview with Mr. Bi Yu lin, the supervisor of the logistics department in charge of logistics management. The data in recent years shows the situation of the cement logistics process in SYCC, including the production, transport vehicles, sales, revenue and profit tax, financial condition, income of employees etc.

8.2 Interviews

Interview as a method for a qualitative research involves a face-to-face meeting between interviewer and interviewee to ask a series of questions. The qualitative research interview is to describe and the meanings of central themes in the life world of the subjects. The main task in interviewing is to understand the meaning of what the interviewees say. There are seven stages of an interview investigation. They are designing, interviewing, transcribing, analyzing, verifying and reporting. (Kvale 1996, 88)

Besides, cover both a factual and a meaning level, though it is usually more difficult to interview on a meaning level. The interviewer can pursue in depth-information behind the topic. For an interviewer, there are some important tasks that should follow: (Research methods knowledge base 20/10/2006)

- Locate and enlist cooperation of respondents;
- Motivate respondents to do good job;
- Clarify any concerns;
- Observe quality of responses;
- Conduct a good interview.
There are some specific types of interviews, such as face-to-face interviews, panel interviews, telephone interviews, group interviews and sequential interviews. (Prospects 04/2009) In this research part, the interviews include a face-to-face interview of SYCC and a telephone interview on customer service. The personal depth interview was conducted with Mr. Bi Yu lin, who is the supervisor in the logistics department of SYCC. In the meantime, telephone interviews with customers about customer service were used to gather feedback and explore the need, complaints, evaluation, suggestions for improving the condition of company’s logistics process and finding more opportunities to keep a long-term relationship with customers.

8.3 Questionnaire for employees

Questionnaire, with a list of research or survey questions, is one of a range of ways for getting information from people and collecting appropriate data when doing a social investigation. Researchers work out questions or tables to ask respondents for opinions, suggestions, demands, feedback, complaints etc. according to the research topic and objectives. (Gillham 2000, 16)

In this study, the questionnaire was for employees about inner management during logistics process in SYCC. The questions were designed to find out problems during the logistics process, how to become cost effective, desire and suggestions for improving working efficiency. The data collected is calculated in Excel. Successfully, not only the respondents reflect their opinions, satisfaction,
complaints during their departmental daily work in logistics process, but also present some practical and useful recommendations for the company to improve inner management and better the business environment in SYCCL.

8.4 Data analysis

Data analysis is a process of collecting, analyzing data and turning data into information in an organizational way. It is conducted through a series of appropriate statistical tools to analyze the data collected. The objectives are to maximize the development of the data function and to find out the information for helping people make a judgment and get an accurate conclusion. With the development of technology, computer science is widely applied to offer numbers of useful tools to analyze data analysis. Excel and SPSS are two popular statistical tools for data analysis. (Fielding & Lee 1991, 16)

![Figure 12. The data analysis process (Office of prevention programs 2007).](image12)

Figure 12 is a continuous flow chart and represents the data analysis process. The process consists of four parts: revising, implementation, survey and collecting data and evaluation before the data analysis. (Office of prevention programs 2007)
9 ANALYSIS OF THE RESEARCH RESULTS

In order to seek the strengths, weaknesses, opportunities and threats during logistics process in SYCCL, two types of interviews and a questionnaire were conducted in the thesis research part. All the results and findings were analyzed and illustrated with the help of software tool Excel.

9.1 Findings from the interviews

The first face-to-face interview was with Mr. Bi Yu lin. He is the supervisor in logistics department of SYCCL. The research topic is SWOT analysis of cement logistics process in SYCCL and he pointed out how the company runs the daily business, what the strengths and weaknesses the company is faced with and opportunities for the future and threats or risks that should be avoided or prevented in advance. The interview took place on May 27\textsuperscript{th}, 2011.

The second theme interview was about customer service and made in June, 2011. There were 20 customers to be interviewed in plans but only 15 of them showed the interest and desire to accept the interviews. Finally they all provided suggestions to improve the company’s customer service and the logistics process.
Interview with Mr. Bi Yu lin, Supervisor of Logistics Department in SYCCL

In this interview, first of all, Mr. Bi presented a brief introduction of the logistics department in SYCCL. The logistics department in SYCCL was founded 1998. Their target groups are various, such as construction corporate, individuals, building material industry, related governmental department etc. especially construction projects in Northwestern area of Anhui Province. The trays, stations, means of transportation and handling equipment in SYCCL have adopted national and industrial standards. Taken as a whole, transportation, warehousing and delivery tasks have been regulated and standardized in present rules of the company. However, some other aspects are in need of making standards to regulate the management such as information system, ordering, customer service etc. (Supervisor, Bi Yu lin, Logistics department of SYCCL, interview 27th of May, 2011)

Besides, Mr. Bi briefly introduced how their customer service system works in daily business operation, especially collecting feedback from customers. When their orders are successfully made, they will receive a piece of paper that offers several questions for evaluating and making comments during every step from ordering to transporting. After the business is done, they can send the paper as feed-back tool to customer service of SYCCL for the staff to collect feedback. Almost every season, the company will have a seasonal meeting. The representative of customer service department will present a SWOT analysis and future plan to the company and also let the other departments get to know their weaknesses for improvement. (Supervisor, Bi Yu lin, Logistics department of SYCCL, interview 27th of May, 2011)
SYCCL has its own official website for publishing news, information, introducing the products, displaying different kinds of colorful activities, informing modern related new technologies of cement logistics and keeping in touch with target groups. With the rapid development of modern high technology, which accords with national standards, such as GPS, GIS, it is easier for the company to follow the track of goods. (Supervisor, Bi Yu lin, Logistics department of SYCCL, interview 27th of May, 2011)

In the interview, Mr. Bi mentioned that there still have been some big risks and threats that can be seen during logistics process. For instance, as it is an industry and their main product is cement, environmental pollution could exist somehow every day. There are three wastes in the factory, including air, water and dust wastes when producing and transporting cement. Energy consumption and cross infection are two serious problems that are difficult to be solved. High costs and investment are put into the facilities, transportation fees, warehousing, compensation etc. even though the destination for transporting is not far from the company. This is not an effective way for future development. (Supervisor, Bi Yu lin, Logistics department of SYCCL, interview 27th of May, 2011)

Finally, Mr. Bi suggested when the department evaluates the performance of the logistics process in the future, SYCCL should deepen the research concerning several strong points. The evaluating system include service quality control, punctual delivery ratio, dispatching error rate, ordering accuracy, warehousing and transporting management, customer satisfaction and environmental improvement. (Supervisor, Bi Yu lin, Logistics department of SYCCL, interview 27th of May, 2011)
Interview with customers about customer service

There were 15 customers that accepted the telephone interviews. The reason to contact them is to cooperate with customers to accomplish periodical assessment, investigate their demand, complaints and collect the feedback for the company. When asking the source of getting to know SYCCL at the beginning, they shared two choices. One is from the advertisement of the company and the other one is from the recommendation of other customers. They are from several construction companies. Cement is one of the essential materials for building houses. All of them have a long-term relationship with SYCCL.

They showed that the strengths which attracted them to make a decision to choose SYCCL should be good quality of cement and reasonable price standard among the cement industry. The company is located in the middle of Anhui Province. It is near Henan, Jiangsu, Jiangxi, and Zhejiang Province. The road transportation is quite convenient through logistics from several express ways. Besides, the company has its own three railway lines: the Fu yang line, Huai nan line and South to North line are connected all through Anhui Province.

Most of the interviewees have sent the inquiries to the company before the business started. Two thirds of them preferred using telephone as a method for contacting and other choices were through the e-mail, the official website and individual visit. They reflected the fastest and most effective way to send the
complaints to customer service is still to pay a visit to their office. Other ways, like letters, e-mails, faxes etc. are very slow, not clear to read or couldn’t be replied in time however.

During the period of solving problems, 50 % customers showed the satisfaction about the attitude of the staff when they were served. All mentioned that it is a good manner to serve every coming’s customer a bottle of water in hot summer. Other 7 interviewees said they didn’t care about their attitude and paid more attention on the staff’s working effectiveness of solving their problems. For the improvement, they hoped the equipment and package should be improved. Especially when the rainy seasons come, cement can’t be wet in water. So it is in need of taking more measures to prevent water.

9.2 Findings from the questionnaire

The questionnaire was designed for employees in logistics department of SYCCL about inner corporate management during logistics process. 300 copies of the questionnaire were sent and 284 copies valid answers were received with the participation of employees in different fields of logistics department in three weeks. Some copies were not returned so they were invalid.

The research starts from asking for individual information of the employees in SYCCL, like gender, age, educational level and department in the company. The objective is that, from this information, we can get a general view of the employees. No matter how old they are, what the educational level is, who they are and where they work, all of them are part of the company. To get to know their demands,
complaint, expectation, goals or recommendation, these are basic requirements although the information mentioned will definitely not affect the answers of the survey a lot.
Results from the questionnaire

Figure 13. Respondents’ genders and ages in logistics department of SYCCL, n=284.

In research results, there are in total 284 respondents in the logistics department of SYCCL participating in this questionnaire. Figure 13 shows the gender and age proportion of the sample. 186 respondents are male and 98 are female. The ratio of the respondents in the age group under 20 years old is 4 %, 29 % in age group 21-30, 46 % is in age group 31-40 and 22 % is in age group over 41.
From the Figure 14, we can see that 140 employees (46 %) of the respondents are in college and university educational level and 120 people (45 %) graduated from middle school or high school. Other 24 people (9 %) are in primary school level. They are working in different fields of logistics department.
The diagram in Figure 15 shows different fields during logistics process in SYCCL. The 284 respondents belong to and are responsible for sales, warehousing, transportation and other work. Overall, 34% of the respondents are engaged in sales department. Their tasks are to purchasing materials, procurement, contacting potential and target customers, selling cement, seeking challenges with price competition. 21% people are working in warehousing and 24% are working in transporting cement like truck drivers. The respondents in other fields are 26%.

*Figure 15. Respondents’ responsibility field in SYCCL, n=284.*
Figure 16. Most attractive issue and shortage during the work, n=284.

The diagram above displays two different situations that often happen during the respondents’ working time. When thinking about the most attractive issue for the employees to join the company and show the loyalty to work for it at the beginning, there are some factors that can affect them. In the opinions, there are 79 respondents (28 %) agreeing with challenge as most attractive issue. Diversity, social position and stability also take a big proportion. The figures are 16 %, 12 % and 7 %. Figure 16 also indicates the choices of 284 respondents of the shortages they are lacking from the work. There are 27 % of them considering entertainment as the lack of working hours. 44 respondents (15 %) are focusing on high income and 31 respondents (11 %) are worrying about the lack of diversity and activities in a company. Interest and stability are what the minority of people lack.
Figure 17. SWOT analysis in SYCCL during the logistics process, n=284.
From several aspects, the respondents show their point of views towards the strengths, weaknesses, opportunities and threats during the logistics process. Firstly, as we can see 28 % of the respondents give their opinions of technology as the strength, 15 % consider supply chain is a great strength and only 2 % think of the cement package.

When mentioning the company’s weakness, most respondents prefer to choose delivery and marketing in need of improving. 25 % people are willing to pay more attention to information system and meanwhile, supply chain, delivery and other aspects are considered by the same proportion 3 %. Risks and threats usually lead to failure and loss. 23 % selected marketing as a threat for the company and 19 % are concentrating on customer service. The following figures will present the detailed information of the respondents’ opinions on the SWOT analysis results.
From several aspects, the respondents show their point of views towards the strengths, weaknesses, opportunities and threats in the logistics process. Firstly, as we can see in Figure 18, 28% of the respondents give their opinions of technology as the strength, 15% consider supply chain is a great strength and only 2% think of the cement package and transport are strengths for the company. Customer service also takes a big proportion as 11%. Marketing and warehousing almost have the same proportion to be the strengths of SYCCL.
Figure 19. Weaknesses in the logistics process of SYCCL, n=284.

Figure 19 shows when mentioning the company's weakness, most of the respondents chooses delivery 19 % as the biggest weakness. People who decide marketing and other aspects as weaknesses of the company have almost the same proportion 18 %. Sales can be obviously seen also with a big weakness. 14 % of the respondents think so. Cement package and warehousing are regarded by 1% and 3 % of the respondents as weaknesses. Therefore, the company should improve delivery and marketing process.
Figure 20 indicates in their opinions, two big opportunities will be information system 25 % and technology 19 % in modern logistics development. Sales and marketing also take two big proportions 12 % and 9 %. Other aspects, like delivery, supply chain, warehousing, customer service and other aspects are all regarded as opportunities to better develop by the respondents at almost the same proportion between 3 % and 4 %.
Figure 21. Threats in the logistics process of SYCCL, n=284.

In Figure 21, 23% of people pay more attention to marketing as a threat for the company and meanwhile, customer service, warehousing and supply chain are considered by several large proportions like 19%, 15% and 12%. Risks and threats usually lead to failure and loss. 8% selected cement package as a threat for the company and only 1% of the respondents think of ordering and delivery. From 3% to 7% of them are concentrating on transport, sales and other aspects to be considering threats.
Figure 22. Satisfaction with the departmental management, n=675.

This question is with a multiple choice and can be selected with 3 answers to show the satisfaction of employees with the departmental management. The result can help the company get feedback and improve human resource management. As Figure 22 shows, we can get useful message from a range of options and answers. Through Excel analysis, about 18% of the respondents feel social activities and 16% feel company welfare as their satisfactory aspects. Almost the same percentage 13% of the respondents are satisfied with holidays and working atmosphere full of support. What’s more, meanwhile about 9% agree with working hours and salary and feel respected by others. The minority of people show their satisfaction with democratic rights and good leadership however.
9.3 SWOT analysis of the logistics process of SYCCL

According to the analysis of the results above, it is easier to get to know the main strengths, bad weaknesses, future opportunities and dangerous threats of the logistics process of SYCCL.

<table>
<thead>
<tr>
<th>Strengths</th>
<th>Weaknesses</th>
</tr>
</thead>
<tbody>
<tr>
<td>A high standard of cement quality</td>
<td>Cement supplies and volume remain tight</td>
</tr>
<tr>
<td>A suitable geography location in Anhui Province</td>
<td>Logistics department fails in controlling risks and lack of experience in system integration</td>
</tr>
<tr>
<td>Satisfactory customer service in SYCCL</td>
<td>Old facilities and existing workload too great</td>
</tr>
<tr>
<td>Being innovative and flexible in market changes</td>
<td>Limited security control in warehousing and transportation in the logistics department</td>
</tr>
<tr>
<td>Availability of skilled manpower</td>
<td>Low investments in supply chain</td>
</tr>
<tr>
<td>Manufacturing capabilities with national high quality standards in construction field</td>
<td>Environmental problems in logistics process</td>
</tr>
<tr>
<td>Higher operational efficiency of employees</td>
<td></td>
</tr>
</tbody>
</table>

**Enterprise Analysis**

**Environment Analysis**

<table>
<thead>
<tr>
<th>Opportunities</th>
<th>Threats</th>
</tr>
</thead>
<tbody>
<tr>
<td>Cooperate with China Construction Group</td>
<td>Challenging regional market competition and price inflation stands out outside</td>
</tr>
<tr>
<td>Supported by government and other plans for improvement for future years</td>
<td>Rapid development of smaller industries</td>
</tr>
<tr>
<td>A new urban channel is building in Huainan</td>
<td>Energy crisis in China e.g. coal, water, stones</td>
</tr>
<tr>
<td>Need to increase market share in China</td>
<td>Larger competitors traditionally get majority market share and international exports</td>
</tr>
<tr>
<td>Introduction of modern logistics modes</td>
<td>Anhui Conch Cement Co. Ltd is the biggest competitor of SYCCL in construction field</td>
</tr>
<tr>
<td>Global expansion as a future goal for SYCCL</td>
<td>Complicated traffic and changing routes</td>
</tr>
<tr>
<td>Awareness of high and rising energy costs</td>
<td></td>
</tr>
<tr>
<td>Application of modern technology e.g. GPS</td>
<td></td>
</tr>
</tbody>
</table>

Figure 23. **SWOT analysis of the logistics process of SYCCL in general.**

Through Figure 23, in Shun Yue Cement Company Limited, we can see in order to better development of the logistics process the company should pay attention to all parts' cooperation, like warehousing, marketing, customer service, transportation, information system etc.
10 CONCLUSIONS

The purposes of writing this thesis have two points. One is to research the strengths, weaknesses, opportunities and threats during the logistics process for Shun Yue Cement Company Limited. The other one is to get to know better about inner management of the company. The thesis is separated into two parts: theoretical part and practical part. The theoretical part mentions information about logistics process in details. Logistics is part of supply chain. Here according to the case company and the real working process, mainly introduced purchasing and ordering, customer service, warehousing and transportation.

The short-term objective is to improve the conditions of working process, service for customers and get feedback from employees of SYCCL about their complaints, satisfaction and demand of the company’s and departmental inner management. The long-term purpose would be to expand the cement product to a bigger market through the modern logistics mode and to satisfy more customers with both good quality of cement and better customer service. Meanwhile, employees can show their loyalty and sense of belonging to the company.

The second part is research part. In this part, both qualitative and quantitative research methods have been used. In the qualitative research, through two different types of interview – personal interview and telephone interview, and a questionnaire, it is better to understand logistics process is a key to execution and achieving results for a company, customer service survey has reflected the
affection on customers’ feelings, evaluations, opinions and comments towards products and related services and a good inner management leads to a good future for development and improvement.

Thanks for the help and support by the supervisor of the logistics department, Mr. Bi Yu lin, the employees of the logistics department and the customers in the company. In a word, based on the theory and research, it is easy to find strengths, weaknesses, threats and opportunities for them to consider.

- Strengths

SYCCL was founded in a suitable location to develop cement production and logistics in Huainan City. It is an old energy city and famous for coal mining near Huai He River. Western and northern sides are surrounded by stone mountains. So the company is abundant in water resource and raw materials like limestone, sands, coal and clay. The transportation is also very convenient as the company has its own three railway lines that connect all directions of Anhui Province.

The company's products have a high standard of quality. It has been widely applied in construction projects, building roads, bridges and under mines. In continuous years the cement of SYCCL has been designated as exempt products and has passed ISO9001: 2000 quality management system certification. The company transports cement by their own transportation logistics modes to reduce operating costs.
For more than 50 years, many customers are satisfied with the logistics system and customer service. The development of modern logistics industry keeps the company innovative, creative, flexible and informed on market changes and challenges. Besides, the company has availability of skilled manpower, manufacturing capabilities with national high quality standards in construction field and higher operational efficiency of employees.

- Weaknesses

Every coin has two sides so there are also weaknesses in SYCCL. Cement industry is high-energy. High operation costs, low investment in supply chain and backward production capacity often lead to cement supplies and volume to remain tight. In the logistics process, cement sales, ordering and purchasing are affected a lot by the radius of transportation. It expands the market barriers for SYCCL. So the nonlocal competition will be necessary to be faced with.

In the internal management of SYCCL, logistics department often have problems and failure in controlling costs, risks and lack of experience in system integration. For instance, labor costs for workers of duties in warehousing, transporting and producing management are under an increasing level. How to deal with solving the managerial contradiction in current complex economic situation is under great pressure.

The information system in the SYCCL is not advanced due to most of old facilities. The company needs to keep update the equipment, market and competitor
information. Furthermore, there is great existing workload and limited security control in warehousing and transportation in the logistics department. In the logistics process, there are a series of environmental problems for SYCCL to solve and keep sustainable development.

- Opportunities

Now SYCCL has a cooperative relationship with China Construction Group to realize the harmony of regional logistics market and avoid disorder competitions. So the support and acceleration of government is quite appreciated. This also contributes to increasing market share in China. Meanwhile, the urban second channel is designed and building to pass through the company in Huainan. The new channel will provide a smooth transporting road to do logistics activities.

In the company, monthly seminar is held in the logistics department to collecting experience, ideas and seeking challenges for future development. The attitude of the company turns more positive in recent years and it has more awareness of high and rising energy costs. During every busy season of cement sale, there are many practical measures to be taken to develop cement logistics. So far 2 five-year plans have been experienced and more plans for future years have been made.

The effects on making full use of warehousing volume, serving customers actively, keeping sustainable development, repairing and renewing 181 devices are very obvious. Faced with new situation and introduction of modern logistics modes, the general idea and working goals in 2011 are focusing on reducing costs to seek
development, seizing opportunities to increase corporate overall strengths, tamping foundation of the inner management and expanding global market as a future goal with the application of new technology, like GPS.

- Threats

The competition of regional market has intensified. As transportation and harbor costs have increased, they have resulted in inflation of cement prices. Affected by large interests, many smaller cement industries in rapid development are also under construction of their own logistics system to save operation costs. Regional cement energy capacity increases. For areas outside Anhui Province, price competitions stand out for a customer to make decisions. Challenging regional market competition and price inflation stands out outside.

The company also has energy crisis in China e.g. coal, water, stones even though it is a common phenomenon at the present. Larger competitors traditionally get majority market share and international exports, such as Anhui Conch Cement Company Limited, which is the biggest competitor of SYCCL. Finally, there are more and more complicated traffic and changing routes for truck drivers with a clear mind when transporting cement.
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APPENDIX 1

INTERVIEW QUESTIONS FOR THE SUPERVISOR MR. BI YU LIN FOR RESEARCHING ON THE LOGISTICS PROCESS OF SHUN YUE CEMENT COMPANY.

1. When was the logistics department in Shun Yue Cement Company (SYCC) founded? Whom do you regard as your target group?
2. Can you present a brief introduction of the working process in cement logistics department of SYCC?
3. What kinds of equipments and services in those functions have adopted national and industrial standards?
4. In which aspects has the company put into practice regulations and standards in present rules?
5. Where else the company is in need of making standards to regulate the management?
6. How do you collect feedback from your target groups/customers?
7. What do you think of the effects of modern related new technologies on cement logistics?
8. As new logistics models are coming up, what kind of new technologies will be applied to your company in the near future?
9. What are the biggest risks and threats and how do you deal with them in daily business life?
10. What will be the most important strengths and strong points in your logistics process in the future?
APPENDIX 2

THEME INTERVIEW QUESTIONS FOR CUSTOMERS OF SHUN YUE CEMET COMPANY FOR RESEARCHING ON CUSTOMER SERVICE AND FEEDBACK DURING LOGISTICS PROCESS TO SHOW THEIR SATISFACTION, DEMAND, ADVICE, COMPLAINTS ETC.

1. In what way did you get to know Shun Yue Cement Company?
2. What attracted you to make a decision to choose it?
3. Can you make a comment on the company image?
4. When you have an inquiry or need to present more demand, can the customer service office solve the complaints in time or give a quick response?
5. How about their attitude of the staff when they are serving customers?
6. What do you think the speed of transporting the products? Is it fast or slow?
7. According to the current situation of SYCC and modern logistics development, what aspects do you think are their most important strengths and weaknesses?
8. According to the current situation of SYCC and modern logistics development, what would be the biggest opportunities and threats in their marketing environment?
9. What suggestions would you like to tell the company to make improvement for the customer service?
APPENDIX 3

QUESTIONNAIRE FOR EMPLOYEES ABOUT INNER MANAGEMENT DURING LOGISTICS PROCESS OF SHUN YUE CEMENT COMPANY

This questionnaire is designed for employees in logistics department for Shun Yue Cement Company (SYCC). The purpose of making this questionnaire survey is to get to know about information of present cement logistics management and the final objectives are to help to improve working efficiency and to lower management costs for SYCC. Moreover, according to the data collected, suggestions, recommendations and all feedback situations will be reported to the head office for analysis and improvement.

Dear respondent, please either tick the appropriate choices or fill in other answers on the given lines. Only Question 18 is multiple-choice. It’s not necessary to inform your names on the paper. Thank you for your participation!

1. Your gender
   □ Female  □ Male

2. Your age
   □ 20 or under  □ 21-30  □ 31-40  □ 41 or over
3. Your educational level
   □ Primary School    □ Middle or High School
   □ College or University

4. Your responsible field in SYCC
   □ Sales    □ Warehousing    □ Transportation    □ Other

5. According to your present work, what is your most attractive issue?
   □ Stability    □ High income    □ Social position    □ Entertainment
   □ Bright future for your career    □ Your interest    □ Diversity    □ Challenge
   □ Other, what?

6. What is lacking from your work?
   □ Stability    □ High income    □ Social position    □ Entertainment
   □ Bright future for your career    □ Your interest    □ Diversity    □ Challenge
   □ Other, what?

7. In the following aspects, what is the strength in the company during the logistics process?
   □ Technology    □ Marketing    □ Customer service    □ Informational system
   □ Ordering    □ Sales    □ Supply chain    □ Warehousing    □ Transport
   □ Delivery    □ Cement package    □ Other, what?

8. What is the weakness in the company during the logistics process?
   □ Technology    □ Marketing    □ Customer service    □ Informational system
9. What is the opportunity in the company during the logistics process?
   □ Technology □ Marketing □ Customer service □ Informational system
   □ Ordering □ Sales □ Supply chain □ Warehousing □ Transport
   □ Delivery □ Cement package □ Other, what?

10. What is the threat in the company during the logistics process?
    □ Technology □ Marketing □ Customer service □ Informational system
    □ Ordering □ Sales □ Supply chain □ Warehousing □ Transport
    □ Delivery □ Cement package □ Other, what?

11. What aspects are you satisfied with the departmental management? (Choose three)
    □ Feel respected by others
    □ Working atmosphere full of support
    □ Social activities
    □ Working hours and salary
    □ Holidays
    □ Company welfare
    □ Good leadership
    □ Democratic rights
    □ Other, what? ________________________________

Thank you for your cooperation!