CHAPTER 2

Theoretical Foundation

This section is already entering the main point of this thesis that explains about a method to solve the payment transactions which will also affect the shipping goods process. In order to get the idea to solve the problems, certainly a lot of important data that related to the problems are strongly needed. In this thesis, there are two ways to collect and research the data which are the sampling and survey method. The sampling method will be divided into two categories of research that is going to search to local and overseas respondents, while the survey method will be going to the eBay seller survey analysis that could support more information and data for the research.

The research of this thesis can help to make a decision and support the answer, such as to determine the result, solve the weakness, the idea that works effectively and efficiently, easy settlements and so on. In order to achieve high expectation result, it will not be enough for having a research just going through by local sampling. Conducting a research like this international scale company will definitely need overseas sampling to get more accurate data. Otherwise it will not be enough data to be accumulated to get further evaluation and expected result.

By gathering those essential data, it could get an overview of how to assess and evaluate the data. From this example, the best way to find out and make it straight the problems is through sampling and survey method. From that sampling method, the research actually will collect the data to 50 users of each local and overseas respondents by random and for the survey method will look over the quality of eBay seller. The eBay seller survey will decide whether the seller or store on eBay is qualified or not. The survey will present the seller reputation by showing two examples of excellent seller as a good survey and awful seller as a bad survey. From the sampling method, it is a good thing to know the buyer's impression towards eBay while the survey is to identify what kind of seller or store that buyers confront. These are two ways to analyze both sides as buyer and seller.

2.1 The Sampling Method

Sampling can be (roughly) defined as the capture of a continuously varying quantity at a precisely defined instant in time [10]. Most usually, signals are sampled at a set of sample points spaced regularly in time. Note that sampling in itself implies nothing about the representation of sample magnitude by a number. That process is called quantization. [10]

Sampling basically means selecting people/objects from a "population" in order to test the population for something. For example, we might want to find out how people are going to vote at the next election [11]. Obviously we cannot ask everyone in the country, so we ask a sample. When considering a particular population, there are some sampling methods which can be chosen in such a way that everyone is represented. It requires careful thought about sample size and composition. Questionnaires are devised to identify the required information [11].

The benefits of using sampling methods are to predict the result based on the respondent answers and comments. There are many ways to conduct this method, but the sampling method that is going to be used for this thesis will be a questionnaire that contained a reliable and necessary questions to the respondents which are selected by random.

To explore and dig more some crucial information for this thesis, sampling method is a necessary way to identify how the result of respondent on eBay going to be like. By using a sample of few respondents (50 respondents of each category), it can generally show and prove many results from different respondents that will eventually anticipate and show the statistical way to see how the progress of current situation on eBay. The way to conduct the sampling is by distributing papers to 50 random local respondents and use online service called http://www.freeonlinesurveys.com to develop the questionnaire by random to overseas respondents [15]. This is a simple and practical way to get sample from users, because the essential of getting the required data is sufficient enough and does not take a long time to explore the result. For the overseas respondent will take longer time due to the distance and willingness of the user, user will be afraid the data contained spam that is why it takes time to approach the overseas users.

There are 3 important reasons why it took only 100 respondents by dividing 50 to local and the other 50 to overseas respondents for this sampling are:

- There is a limitation of time to survey within 3 months, to make a complete survey it will need more time to conduct the survey
- It is difficult to communicate with overseas respondents, because of the distant and the only communication used only by email.
- The survey tool is not really helpful yet advanced, this sampling and survey based on observation and used only a simple tool and in the result cannot provide better sampling and survey

2.1.1 Local Sampling

The research based on local sampling method will accumulate the data by random. The sampling method will choose 50 local respondent users by giving a piece of questionnaire paper to check the eBay local user profile. This will help and support to determine if eBay has a big potential of criminal acts or not and the user background. The sampling will contain 16 necessary questions and the local user is free to fill out the questionnaire by paper or through online. The answer will be accumulated normally within a week or maybe less than that. The way to send the questionnaire is through a personal eBay account or by email. It is quite practical to gather data even from close or remote places.

2.1.2 Overseas Sampling

The research based on overseas sampling method will accumulate the data by random as well. The sampling method will choose 50 overseas respondent users by sending a piece of questionnaire paper to check the eBay overseas user profile. This will help and support to determine if eBay has a big potential of criminal acts or not and the user background. The sampling will contain 15 necessary questions and the overseas user has to fill out the questionnaire through online. The answer will be accumulated normally within a week or maybe less than that. The way to send the questionnaire is through a personal eBay account or by email. It is quite practical to gather data even from remote place.

2.2 The Survey Method

The word "survey" comes from the Latin *sur* (over) and *videre* (to see), and it eventually came to mean a general or comprehensive view of anything. Studies that involve the systematic collection of data about populations are usually called surveys [12]. This is especially true when they are concerned with large or widely dispersed groups of people. When they deal with only a fraction of a total population—a fraction representative of the total—they are called sample surveys. The term "sample survey" should ideally be used only if the part of the population studied is selected by accepted statistical methods [12].

Surveys can be classified broadly into two types—descriptive survey and analytical survey [13]. In a descriptive survey, the objective is simply to obtain certain information about large groups. In an analytical survey, comparisons are made between different subgroups of the population in order to discover whether differences exist among them that may enable researchers to form or verify hypotheses about the forces at work in the population [13].

Surveys differ in terms of purpose, subject matter, coverage, and source of information. In the field of epidemiology, surveys have been used to study the history of the health of populations, diagnose community health, study the working of health services, complete the clinical history of chronic diseases, search for the cause of health and disease, contribute to the formation of health care policy, and to evaluate the effects of different approaches to the organization of health services. More recently, health-survey data have been identified as a key resource for the development of health indicators, such as alcohol consumption and the prevalence of smoking, in the twenty-first century [13]. The Health for All initiative of the World Health Organization is a policy that can be translated into three operational goals: increase in life expectancy and sustainable life; improved equity in health between and within countries; and access for all sustainable health systems [13]. Efforts have been made to promote standards for international comparability of such health indicators [13].

Survey research is a commonly-used research method in the social sciences. It involves gathering quantitative and/or qualitative data from participants typically using a questionnaire (or survey) or interview [14]. A questionnaire might be delivered via mail, face-to-face, or online. Interviews may be conducted via phone, face-to-face, or live the internet. By using carefully controlled sampling procedures and research designs, it is assumed that a sample's responses to the survey will be representative of the target population's likely responses [14]. It is important to appreciate the pros and cons of survey research designs: e.g., Plus and minus of survey methods [14].

A "**Survey Methodology**" refers to the set of practices and principles which help set survey research apart from unscientific questioning. The goal of good methodology is to get as much data as is needed, and to ensure that the results are true, accurate, and helpful to the survey maker [14].

The benefit of using survey method is more like the same like the sampling method on above, but the difference is the content of research is in more detail and the area of exploration is different with the sampling based research[14]. With survey method, the source or data which has been gathered will be focusing more to seller side. The process of survey method will be accomplished only through eBay site based on the seller capability and reputation. It is quite simple to make a research, because all the content already in the site itself that acts like a database user.

After doing sampling method which shows the result about regular explanation and common idea of 50 different respondents for both local and overseas categories, the next step is conducting a survey that actually will explain and illustrate about the seller reputation on eBay. The usage of sampling method is to observe from the respondents point of view about the impression toward the system of eBay which is working effectively or not, such as the eBay's problem, security, system quality, contact service, advantage and disadvantage of eBay, while the other usage of survey method is to observe the respond and opinion especially from the eBay buyer opinions towards the seller capability who offers and serve the quality and service of their product to the buyer. The way to conduct this survey can be various ways by observing toward the offered services, impressions, appropriate price, shipping service, shipping duration, worldwide shipping, insurance goods, seller's credibility, product quality and other influences.

2.2.1 eBay Seller Survey

The second method which is going to be used in this thesis for further research is called "eBay Seller Survey" where the scope area will look out for the seller on eBay. The scope area is as wide as the sampling method but in different respondent especially for the sellers. From the survey method, it will search from the store on eBay site or the user can try to find out the seller by finding out one by one through bidding or buy-it-now process. Actually there is another way to find the seller, by forum, blog or friend (from mouth to mouth) recommendations that able to find a good seller that provides good product and service.

There are 2 type of sellers on eBay only, good sellers and bad sellers. There are big gap differences to distinct between good and bad seller on eBay. By selecting and presenting example of good and bad seller (in random), this survey will explore more and let the user or newbie even novice knows how to deal and able to decide between good and bad sellers. The purpose is clearly to find out about the seller background that provides good products and services, the user can be more aware of the situation like selecting goods or items and fraud avoidance.

Both of the methods (sampling and survey) actually are integrated one to another, it cannot be compared which method is better to collect the data. In order to make a better result, both methods are really needed and necessary to support the concept and idea, because it will be an incomplete and partial research if there is one of the methods cannot be implemented well. It is also can improve the quality of outcome that will affect not only this section, but whole part of thesis will be involved and support one to another.

The other reasons why using these methods actually to prove and try to experiment whether it is effective or not. By using these 2 methods, it expects an expected outcome and answer of this thesis or else the project is failed for miscalculating both strategy plan and research method. The research based on survey method has few weaknesses as well, such as it takes a time to accumulate the data, because to get more accurate data, it cannot be done only by 1 or 2 respondents especially looking out reliable respondents. The data accuracy will be less than expected and may affect the result.

2.3 – Prepaid Payment Method

The last segment of theoretical foundation is about security which will explain about the way to overcome the payment transaction and shipping goods order problems. Based on the results above for both sampling and survey research, it has finally discovered a safe way to deal this payment transaction problem and shipping order process where these two cases are the most troublesome incidents and almost every user on eBay has experienced those problems. The offered method will need to modify several parts on eBay system, because the current system on eBay seems risky and vulnerable for technical and non-technical reasons which able to endanger the customer confidentiality. In this segment, it will be divided into 3 categories:

- 2.3.1 **The Concept of Method**
- 2.3.2 **International Membership Card**
- 2.3.3 **International Shipping Delivery Good and Service**

2.3.1 **The Concept of Method**:
It explains about the ideal concept of analysis on eBay to create a new eBay system that able to reduce any risks that could happen and keep the client or user confidentiality. The concept will give a detail of method explanation and also the purpose and effect of that analysis. The new concept will involve 2 new departments which is eBay central bank that has a function as a place for cash flow and security payment, while the other one is eBay shipping delivery good and service that will be as a branch company under eBay Inc. that has a function as goods transportation. Each department has its personal job and role, in order to make the system well integrated it is important for both department to cooperate to each other and work accordingly. The eBay bank will issue an international membership card that will have a purpose to enhance the security payment for all eBay users, the membership card will be the only tool of payment to get access on eBay and the shipping delivery good and service is the international shipping order transportation to deliver the items to reach the user destination. The system is a bit unique because it is a combination of 2 separate departments that supposedly move in different area, but in this case if one of the departments is missing, the system cannot work accordingly based on the predetermined theory above.

2.3.2 **International Membership Card**:

It is about a secured payment method which is a membership card with dual layered security access system and this card will be the only tool facility to get access about payment on eBay. The membership card has a prepaid payment function as a background of security method. It means the payment will need twice payment actions to finish one item per transaction. Due to prepaid payment system, the payment is in installment or DP process (Down Payment). User will have to pay 30% of the goods first for security purpose, while the good has been shipped and arrive to the user destination, user will need to pay the rest of the bill and otherwise the item will be kept in that branch office until the full payment is paid. To enhance the security access, the payment will need two different passwords to pay the goods through net banking or ATM machine, the first pin or password will be the series number of user membership card and after inputting the first password, the second password will be the series number of bank customer account.

2.3.3 **International Shipping Delivery Good and Service**:

It is about the shipping order process to deliver the goods. The process of shipping will be affected based on the payment through international membership card. The international membership card and international shipping order will be working together, because the system will influence both processes which will guarantee the confidentiality of every client or user on eBay. Based on the membership card, the shipping will be working after the payment has been paid. The first down payment will ship the goods to the destination country of user and wait until the next order which is fully payment. The goods will be delivered to the user address afterwards and fulfill the necessary documents like checking the card eligibility and leave a signature as a proof of the good recipients.