

Chapter 1. Introduction

This study was intended to provide analysis and suggestion for the related stakeholders of the importance of utilizing online marketplace for the companies' purchasing activity. The emergence of online marketplace makes it easier for market to do transaction by eliminating need for physical meeting. It is with the advent of Internet-based e-procurement systems and business-to-business (B2B) electronic markets that the real opportunities for online transactions have opened up across space and over time (Kauffman, 2001). Online B2B marketplace allows purchasing activities of companies to be done without regarding time and space constraints. There are major issues such as trust and complexity which are still of great concerns, but it is generally accepted that online purchasing has a range of potential applications. Previous researches have focused mainly on online B2B marketplace. There is little to no research available regarding the financial effect of utilizing online B2B purchasing system.

Business activities in Life Science Industry are similar to other industries. There are several Life Science business activities which can be improved through digitization. One of the major differences lies in how Life Science Industry is more heavily regulated. There is no research about Life Science Industry B2B online purchasing system yet. Most researches focus on different industries such as construction material, chemical, etc. This study was intended to provide reference for managers in Life Science Industry regarding adoption of B2B online purchasing technology.

As one example of Life Science Manufacturing companies, PT. Total Solusi Bersama serves as a suitable case for this study. This study will analyze the benefits PT. Total Solusi Bersama will get from online marketplace. As a manufacturing company, increasing productivity and profitability should be its main goals. Utilizing the online purchasing/marketplace technology to increase its profitability and productivity can be a way for them to edge out competitors. PT. Total Solusi Bersama will be referred as PT. TSB in short for this study.

1.1. Background of the Study

This study will provide reference regarding online purchasing effect towards a Life Science company's profitability and productivity. Previous studies (Gunasekaran, 2012; Turban, 2010) are available, but none are specific to the life science industry. Online purchasing system have been spreading across industries as explained by the theory of technological diffusion. Diffusion theory explains "the flow of information, ideas, practices, products, and services within and across cultures and subcultures, or markets and market segments" (Gatignion and Robertson, 1985). The new technology has been integrated by many industry and it has been proven as beneficial in other industry. Using online purchasing system will allow companies to gain improved profitability and productivity (Deeter-Schmelz et al., 2001). However, online purchasing system in Life Science industry has not yet been studied specifically. Life Science industry have specific rules and regulation. Therefore, the adoption of online purchasing system in Life Science industry may produce different outcome compared to the previous industries.

The study will be case specific but still it should be able to be used as a reference for similar companies in the future. The result of this study should be able to provide the related company with a tool to improve its way of doing business. In a bigger scope, this study will provide decision making tools in relation to the usage of online purchasing method for B2B market in general. This research will analyze the impact of online purchasing method in PT. TSB, especially to the company's productivity and profitability.

This study will take form in a study case of PT. TSB. The company, established in 2012 by Mr. Yoskar Lim, is a traditional herbal medicine manufacturing company based in Karawang, currently it produces only one product which is branded as BioHSA. The company manufactures 100,000+ bottles of BioHSA each year. The products will then be sold nationwide by CV. Global Nusantara as its exclusive distributor. PT. TSB used traditional method of purchasing. It bought ingredients and supplies by physically visiting the vendors and then made purchases. The selection of vendors had no special

method, the vendors which are familiar to the company will be selected every year. Starting from mid-2017, the company started shifting to purchasing its ingredients and supplies online.

1.2. Research Problem:

The main problem of this study is how a Life Science company can utilize online purchasing system to improve its productivity and profitability. Using online purchasing system will allow companies to gain improved profitability and productivity (Deeter-Schmelz et al., 2001). A company with limited resource needs to utilize every tool it has to deliver as much profit as possible, utilizing the online purchasing system may help PT. TSB to do just that. The traditional method of purchasing requires the person in charge to spend time searching and choosing vendors, and other processes which are time consuming. Online B2B marketplace allows companies to use online B2B purchasing system which transcend the boundaries of time and space. Analyzing the effect of utilizing this new technology to the productivity and profitability of PT. TSB will be the main goal of this study. Research questions which come from the research problem above are:

1. What is the effect of B2B Online Purchasing System integration on PT. TSB's productivity?
2. What is the effect of B2B Online Purchasing System integration on PT. TSB's profitability?

1.3. Objectives

1. Analyse the effect of online B2B purchasing system towards the productivity of PT. TSB.
2. Analyse the effect of online B2B purchasing system towards the profitability of PT. TSB.

1.4. Scope of the Study:

1. Describe the purchasing process of PT. TSB
2. Gather data related to PT. TSB's profitability and productivity

3. Qualitative analysis of the new technology effect on profitability and productivity
4. Quantitative analysis of the new technology effect on profitability and productivity