Master's degree thesis

LOG950 Logistics

Dependency in buyer-supplier relationships: A case study in Ganapati Products Private Limited

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Preface

This thesis has been prepared at Molde University College-Specialized University in Logistics, Norway, as part of a Master degree in Logistics for the two year program. During this thesis period, I have been under the supervision of Professor Arnt Buvik. This study focuses on the inter-firm dependency in buyer-supplier relationships with special reference to Ganapati Products Private Limited (GPPL), a Nepali company.

This study presents the dependency problems in the dependency situation of Ganapati Products Private Limited on its supplier Asia Chemicals Private Limited (ACPL) who supplies plastic wrappers to GPPL for packaging the smokeless tobaccos. Furthermore, it presents the probable strategies to minimize or balance the dependency situation of GPPL on ACPL. In addition, this study also evaluates other suppliers in the Eastern region of Nepal so as to suggest some strategies for sourcing to help in order to reduce the dependency. Furthermore, Economic Order Quantity is calculated to identify and suggest the optimal order quantity for GPPL in order to minimize the costs associated with ordering and holding inventory. It has been seen that there is a wide variation between the order quantity they place at present and the quantity to be ordered according to EOQ.

This paper typically includes six sections: Introduction; overview of the product and the company; theoretical framework; research methodology; discussion and analysis; conclusions, recommendations, managerial implications, limitations and future work.

Chapter one presents a general introduction of the study subject and the problems which encourages the researcher to conduct the research on this topic. It includes; background of the study, purpose, research problem, scope, ethical considerations and organization of the study.

Chapter two presents an overview of the product and the company. It introduces smokeless tobaccos as a product and its increasing demand in the Nepalese market. Furthermore this chapter briefly introduces GPPL and its activities. Moreover, it briefly explains the importance of plastic wrappers, the importance of ACPL to GPPL and availability of potential suppliers.

Chapter three presents the theoretical framework of the study, which includes a theoretical overview of resource dependence theory, purchasing portfolio, supplier evaluation, sourcing strategy, and economic order quantity. These theories are reviewed as they found to be relevant for the study in order to reduce dependency and to be cost effective.

Chapter four presents research methodology applied in this study. It includes research design applied, sampling of the research, data collection sources, questionnaire development and analysis procedure.

Chapter five presents the discussion and analysis of the study. Each section is analyzed in order to answer the research questions.

Chapter six presents conclusion, recommendation according to the analysis made in chapter five. Further, it presents managerial implications and limitation and hence suggest some future work.

The last section includes references of the present study and further it also includes appendix as a supplement material.

This study is undertaken for the purpose of the master thesis and further hope that the result of the thesis may help the organization in reducing or curbing its dependency on its supplier, ACPL.

Acknowledgement

I am so grateful to the Gracious God for giving me courage throughout my studies and strength to manage through the tough time during the massive earthquake in Nepal. My sincere thanks and gratitude also goes to my supervisor Professor Arnt Buvik whose supervision, advice and support has made it possible for me to complete this work. He has been a very kind and supportive supervisor. All I can say to him is ‘ thank you very much’.

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I wish to especially thank all the respondents for their cooperation during the data collection process. Thank you so much for the opportunity to grant me interviews despite of your busy schedules.

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My sincerest thanks go to my soul-mate, lovely and caring husband: Nitin Chandra Gajurel. Your love, patience, dedication, encouragement, prayer and support are worth mentioning. You have always been there to support me in this academic journey of my life. You are the source of motivation for me. Thank you dear for all your support and love. Moreover, I appreciate my cute and adorable son, Shaurya for his love, patience and tolerance. He has managed to stay away from his mom at a very tender stage. You are the best gift in my life baby. Mom loves you a lot, God bless you so much.

This acknowledgement cannot be complete without the mention of Ahilya Gajurel, my mother-in-law. Thank you so much for being there for me and taking care of my son. I have no words to express my feelings, just know that I am grateful for your love and support. Moreover, I wish to express my thanks to all my relatives, in-laws and friends for their encouragement and support. God bless you all.

Sonila Shakya,
Molde, Norway
June, 2015.

Table of Contents

List of Tables

List of figures

List of Picture

Appendices

List of Abbreviations

SLT	Smokeless Tobacco
GPPL	Ganapati Products Private Limited
ACPL	Asia Chemicals Private Limited
SPP	Shreya Printing Pack
PPI	Poly Pack Industry
AMP	Ananda Madan Printing
CBS	Central Bureau of Statistics
WHO	World Health Organization
SKU	Stock Keeping Unit
MADM	Multiple Attribute Decision Making
EOQ	Economic Order Quantity
Rs.	Nepali Rupees
Kg.	Kilogram

Abstract

Purpose: The purpose of this study is to understand the inter-firm dependency between buyer and supplier. The paper studies the dependency of Ganapati Products Private Limited on its supplier Asia Chemicals Private Limited for the supply of plastic wrappers, which is a very essential material for GPPL in packaging the smokeless tobaccos. The study reports on the factors that dependency on a sole supplier has created problems to GPPL which is affecting the organization's cost and profit. Hence, this paper aims to identify the appropriate strategies to reduce the dependency of Ganapati Products Private Limited (GPPL) on its supplier Asia Chemicals Private Limited (ACPL).

Design/method/approach: This thesis is exploratory in nature and it adapted case study as a research design and hence used qualitative empirical data for the analysis. Literature on resource dependence theory, Kraljic purchasing portfolio model, supplier evaluation, are reviewed. These theories help in the analysis and to develop some probable strategies to curb the dependency. Furthermore, EOQ is calculated to suggest the organization's optimization of the order quantity while sourcing in order to minimize the inventory holding costs and ordering costs.

Findings and conclusions: The study shows that GPPL is dependent on ACPL but the dependency is not that high as it were in the initial period of GPPL's relationship with ACPL. GPPL incurs transaction costs if it wants to terminate the relationship as it has to clear all the dues at once to ACPL and hence increases the investment burden. The present study concludes that in order to overcome this situation of dependency, GPPL can establish relationships with new suppliers along with the present supplier ACPL. This helps an organization to reduce the supply vulnerability and assure better quality, price and service by ensuring competition between two suppliers. Furthermore, GPPL can calculate the optimal order quantity to minimize the costs associated with ordering and inventory holding. However, splitting order volume into two suppliers reduces the scale economies, thus GPPL can place higher volume of orders to a new supplier (Poly Pack Industry) which will result in scale economies and limited volume of order to current supplier, ACPL in order to balance or minimize the dependency.

Limitations of the study: A major limitation of this study is that this study focuses only on the buyer side, hence findings cannot be generalized. However, for the triangulation of data the information from other suppliers and the buyers in the market are also collected.

Managerial implications: This study can be beneficial to the managers of the company to understand the dependency situation, and nature of the product to identify the suitable strategy for reducing the dependency on its supplier. Furthermore, the organization needs to recognize the right number and right kind of suppliers. In addition, they need to recognize the optimal quantity of order to minimize the cost.

CHAPTER ONE

INTRODUCTION

1.1 Introduction of the study

Organizations as an open system depend on the external environment for resources to achieve their goals. They are resource-inefficient and depend on the other parties who control resources, due to which dependency is created in buyer-supplier relationships (Emerson,1962; Pfeffer and Salancik, 1978; 2003). The heavier the dependence of the buyer on the resources, the more powerful will be the supplier (Caniels and Gelderman,2007; Pfeffer and Salancik, 2003).

This study is about dependency structure in a buyer-supplier relationships with respect to the case of Ganapti Products Private Limited (GPPL). Ganapati Products Private Limited (GPPL) is one of the smokeless tobacco manufacturing company in Nepal. The study focuses on the dependency of GPPL in its inter-firm relationship with Asia Chemicals Private Limited (ACPL), who is the sole supplier of plastic wrappers used to package the smokeless tobaccos. Since there involves the interaction between the two parties, it is a typical unit of analysis in a buyer-supplier perspective. However, there seems to be growing dissatisfaction and problems in the relationship between GPPL and ACPL regarding the supply of the materials.

According to Gelderman and Van Weele (2004), the growing dependency of one party to another give rise to several problems in buyer-supplier relationships and increases the organization's vulnerability. The dependent partner loses control over resources and is vulnerable to constraints in the freedom of choices of actions (Gelderman and Van Weele, 2004) .

Some studies on inter-organizational exchange state on total interdependence and interdependence asymmetry. Total interdependence is the situation where both parties in exchange are dependent to each other (Berger et al., 1995) and have a positive effect on commitment (Kumar et al., 1995). Whereas, interdependence asymmetry is the difference in dependence on a buyer-supplier relationship (Berger et al., 1995). Asymmetric

interdependence in a business relationship increases conflicts and decreases commitment (Kumar et al., 1995).

Dependence often is connected to the cost associated with terminating and changing to a new supplier (Joshi and Arnold, 1997) . Asymmetric interdependence in a buyer-supplier relationship can lead to unproductive partnerships (McDonald, 1999)**.** Independent partners experience high power and have the potential to exploit dependent partners (Anderson and Weitz, 1989). Thus, a governance mechanism is required in order to coordinate the buyer supplier relationship (Heide, 1994).

According to Metcalf et al. (1992), factors like information exchange and interpersonal contacts help to create a conducive environment between a buyer and a seller. Effective coordination between buyers and suppliers helps to gain competitive advantage. Firms that have productive relationships with their suppliers gain many advantages like lower risk, access to technology, more co-operation, increased knowledge, and information sharing (Ellram, 1995).

Thus, the aim of the study is to explore the inter- firm dependency between GPPL and ACPL and identify the problems faced by GPPL from ACPL. Furthermore, this paper tries to suggest some possible strategies to balance or reduce the dependency of GPPL on its supplier ACPL.

1.2 Background of the study

Nepal is a mountainous country, known as land of Mt. Everest and the birth place of Lord Buddha. It is an independent, relatively small and a landlocked republic, which is in South Asia, with China to the North and India to the East, West and South. The area of Nepal is 147,181 square kilometers and its population is 26,494,504 (CBS, 2011). The country is divided into 5 development regions which are further divided into 14 zones and then 75 districts.

Kathmandu is the capital city and the largest metropolitan of Nepal located in the Bagmati zone of the central development region. Whereas, Biratnagar is a sub-metropolitan city and located in Morang district in the Koshi zone of the Eastern development region of Nepal. Most of the industries in the country are located in Biratnagar city.This study is undertaken

in Biratnagar since the organization, Ganapati Products Private Limited (GPPL) is located in this city. The country map is presented below in Figure 1.

Figure 1: Map of Nepal

Source: France Today (2015) ***http://www.francepress.com-or.net/news/Nepal-Map***

The tobacco industry, including smokeless tobacco, is one of the fastest growing industries with very high profit margins. There are many big and small smokeless tobacco manufacturers in the market and market competition is very intense. In Nepal, smokeless tobacco products are packed in plastic wrappers/pouches and then sent it to the market. Plastic wrappers are very essential materials for any smokeless tobacco products (SLT) because of their perishable nature.

Asia Chemicals Pvt. Ltd (ACPL) is the sole supplier of plastic wrappers to GPPL. From the very beginning, Asia Chemicals Pvt. Ltd (ACPL), is supplying plastic wrappers to GPPL. However, GPPL is facing some problems in its buyer-supplier relationship with ACPL. They are dissatisfied with their current supplier, ACPL. ACPL charges premium prices compared to other suppliers in the market and never informs in advance of price increments to its buyers. These are some of the problems that GPPL faces from ACPL. GPPL revealed that ACPL is the sole supplier of its plastic wrappers needs. Furthermore, the number of buyers of plastic package materials is increasing and therefore GPPL (buyer) feels that

ACPL(supplier) is taking advantage of the situation because it caters for a wide range of buyers.

The situation faced by GPPL has given the reflection of a dependency problem in its inter-firm relationship with ACPL and hence encouraged the researcher to do the work in this field in order to explore the dependency situation of GPPL on ACPL and to suggest possible strategies to curb it.

1.3 Purpose of the Study

The purpose of this qualitative study is to understand the dependency situation of the buyer on its supplier. This study seek to identify the reasons for growing dissatisfaction between the two parties. Furthermore, this study aims to understand the present situation of dependency on ACPL and hence tries to identify the appropriate ways to reduce or balance the dependency of GPPL on its supplier ACPL.

Since the buyer is facing problems with the supplier and wants to find out the way to tackle the situation, it is therefore interesting to research in this field and the findings of this study may be helpful for the organization to manage its buyer-supplier relationship.

1.4 Research problem

Lack of self-sufficiency regarding resources creates dependencies and imposes several problems to decision makers (Pfeffer and Salancik, 1978). Increased dependency reduces the autonomy of the organization and transfer benefits and profits from the dependent organization on the dominant organization (Bourantas, 1989). GPPL is facing problems in its relationship with ACPL. They are not satisfied with their present supplier, ACPL.

Moreover, GPPL perceives that the supplier is taking advantage of them as their sole supplier and further perceives that in the future there may be more problems from the side of supplier as the number of buyers from ACPL are constantly increasing. The appropriate strategy is thus required to be undertaken to reduce the dependency of GPPL on ACPL. Furthermore, it is evident that single sourcing creates a great dependency between a buyer and a supplier (Costantino and Pellegrino, 2010). Therefore, appropriate choice of suppliers can be one of the important decisions in management of purchasing risk in a buyer-supplier relationship (Costantino and Pellegrino, 2010).

Thus in the view of these given issues, this study is undertaken to seek answers to the following research questions.

1.4.1 Research questions

The research questions of this study are as follows:

- **What problems does GPPL face in the relationship with ACPL?**

The first research question is more general, aiming to identify the issues that GPPL faces with its current supplier, ACPL. The objective is to identify the problems that GPPL face from its current supplier and its impact to GPPL.

- **How is GPPL dependent on its supplier ACPL?**

The second research question aims to explore the dependency situation of GPPL on ACPL. It tries to see how the dependency exists between them. The objective of this question is to identify why there is power imbalance (if it exists) between the two parties.

- **How can the inter-firm relationship between GPPL and ACPL be improved?**

The third research question aims to identify the strategies based on the types of items GPPL is buying, in order to reduce the dependency of GPPL on ACPL. It aims to analyze the purchasing product portfolio and to find the appropriate strategies to improve GPPL's dependence position.

- **How should GPPL evaluate suppliers for better sourcing in order to reduce dependency?**

The aim of the fourth research question is to evaluate different suppliers on the basis of suppliers' attributes. The objective is to identify the potential suppliers of plastic wrappers and suggest possible strategies while selecting the most appropriate suppliers

To answer the above research questions, this paper used Resource Dependence theory (RDT); Kraljic purchasing portfolio model; supplier selection criteria and methods; and Economic Order Quantity and sourcing strategy as the theoretical frameworks of the study.

RDT has been used in order to explore the dependency situation of GPPL on its supplier. To identify the dependency situation, certain information for instance, how important the

supplier is; the availability of alternative suppliers and the availability of substitute wrapping materials will be collected to explore the dependency situation of this buyer-supplier dyad. Identification of the dependency level is important because organizations facing dependency will structure their relations with exchange partners in more favorable manners (Buvik, 2001).

GPPL is facing problems with its supplier, affecting the organization's total product cost and its profits. It is perceived by GPPL that this problem will further grow in the future, so in order to explore this situation this paper has deployed the Kraljic model to identify the supply risk at hand and the buying power which will help in developing purchasing and supply strategies (Kraljic,1983; Van Weele, 2010).

In view of this model, information such as percentage of raw materials in total cost, impact on business profit, product availability, alternative source of supply or technology and barriers of entry are collected to see supply risk and financial impact on the buyer (Van Weele, 2010). Moreover, to evaluate ACPL with other potential suppliers and identify the appropriate suppliers for GPPL, this paper further use linear averaging method to evaluate suppliers. Based on the organization's viewpoint, appropriate attributes were selected and on the basis of that, each potential suppliers are evaluated to find the best of them. Furthermore, economic order quantity has been calculated to optimize the order quantity to minimize the costs associated with ordering and holding inventory.

1.5 Scope of the study

This study focuses on the dependency situation of GPPL on its supplier, ACPL, who supplies it with plastic wrappers for packaging its products . At present, GPPL is facing problems with its sole supplier ACPL and wants to find the way to tackle the situation. Thus this study especially focuses on the dependency situation between them. Since this study is undertaken from the side of the buyer, only the buyer's views about its particular supplier are collected. Hence, this is a one-sided study of the buyer-supplier dyad. However, for the validity purpose and triangulation of data, information is also collected from other buyers and suppliers in the market to get more pertinent perspective about the situation and their experience with ACPL to avoid biasness.

1.6 Ethical considerations

For the purpose of ethical considerations, the researcher designed an introduction letter and gave it to respondents. This introduction letter explained the purpose of the research, and requested participants to respond willingly in this voluntary research. Furthermore information and data was collected from the organization at their consent. For the confidentiality purpose, there has been a consensus reached on not to publish the study in 4 years time and furthermore, the name of respondents have not been disclosed to ensure confidentiality of participants.

1.7 Organization of the study

This study is organized into six chapters. The introductory chapter gives a brief introduction and includes background of the study, the purpose of the study, the research problem, the scope of the study, ethical considerations and organization of the study. Chapter two gives gives an overview of the product and the company. Chapter three gives the theoretical background for the study. In chapter four, research methodology employed in the study is explained. Chapter five deals with the discussion and analysis. And chapter six which is the concluding part of the study, includes: conclusions, implications, limitations of the study and further research.

1.8 Chapter summary

In this chapter, the introduction and background of the study is provided. This is followed by the research problem, the purpose of the study, the scope of the study, ethical considerations and organization of the study. In the following chapter, it gives an overview of the smokeless tobacco product and an overview of the company, Ganapti Products Private Limited.

CHAPTER TWO

AN OVERVIEW OF THE PRODUCT AND THE COMPANY

*2.*1 Introduction

This chapter gives an overview of smokeless tobacco as a product in Nepal and its growing demand.Furthermore, it gives an introduction of GPPL and explains the importance of plastic wrappers to GPPL, importance of ACPL and potential suppliers of GPPL in the Eastern region of Nepal.

2.2 Smokeless tobacco as a product

Smokeless tobacco product is consumed by people without burning it. These can be used orally and nasally as snuff. Oral smokeless products are kept in the mouth, cheek or lip and sucked (dipped) or chewed (WHO, 2007) . Similarly, tobacco pastes or powders are used and applied to the gums or teeth. Whereas, fine tobacco mixtures are either inhaled or absorbed in the nasal passages (WHO, 2007). The classification of smokeless products by use is presented in Table 1 below.

Table 1: Classification of smokeless tobacco products by mode of use

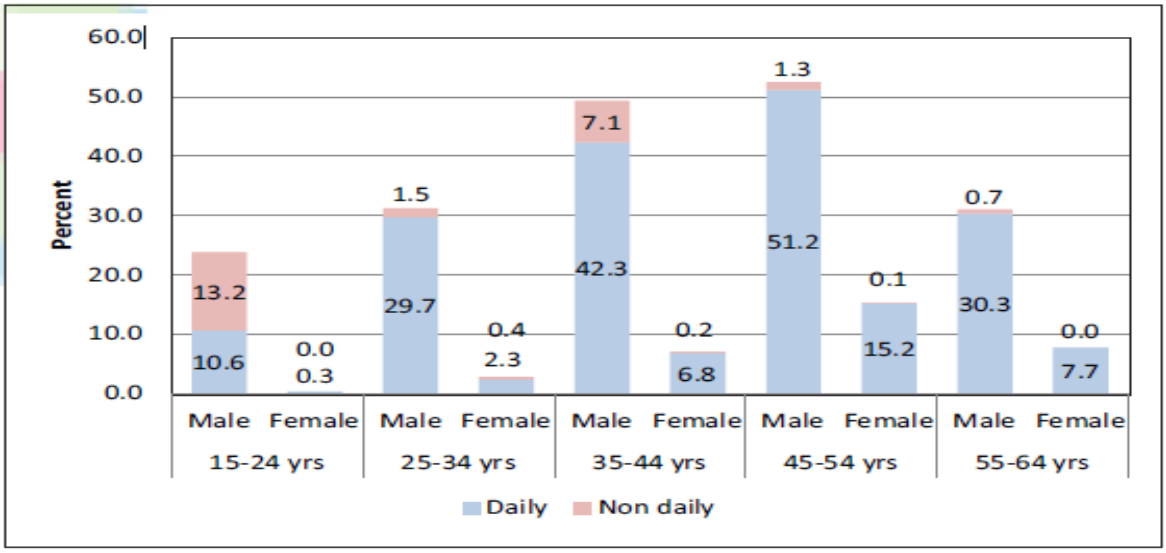
Oral Use			**Nasal Use (sniffing)**
Sucking	**Chewing**	**Other oral uses**	
Chimo’	Betel quid	Creamy stuff	Dry snuff
Dry snuff	Gutka	Gudhaku	Liquid snuff
Gutka	Iq’mik	Gul	
Khaini	Khaini	Mishri	
Loose-leaf	Khiwam	Red tooth powder	
Maras	Loose-leaf	Tuibur	
Mishri	Mawa		
Moist snuff	Plug		
Naswar	Tobacco chewing		
Plug	Gum		
Shammah	Twist or roll		
Snus	Zarda		
Tobacco tablets			
Toombak			

Source: WHO (2007)

People around the world use smokeless tobacco (WHO, 2007) and it is consumed by different age groups (Subba, et al., 2011). As the price of cigarettes is increasing and even in some countries banned to smoke in public places thus the use of smokeless tobacco (chewing tobacco), especially by young generation has flourished (Subba, et al., 2011).

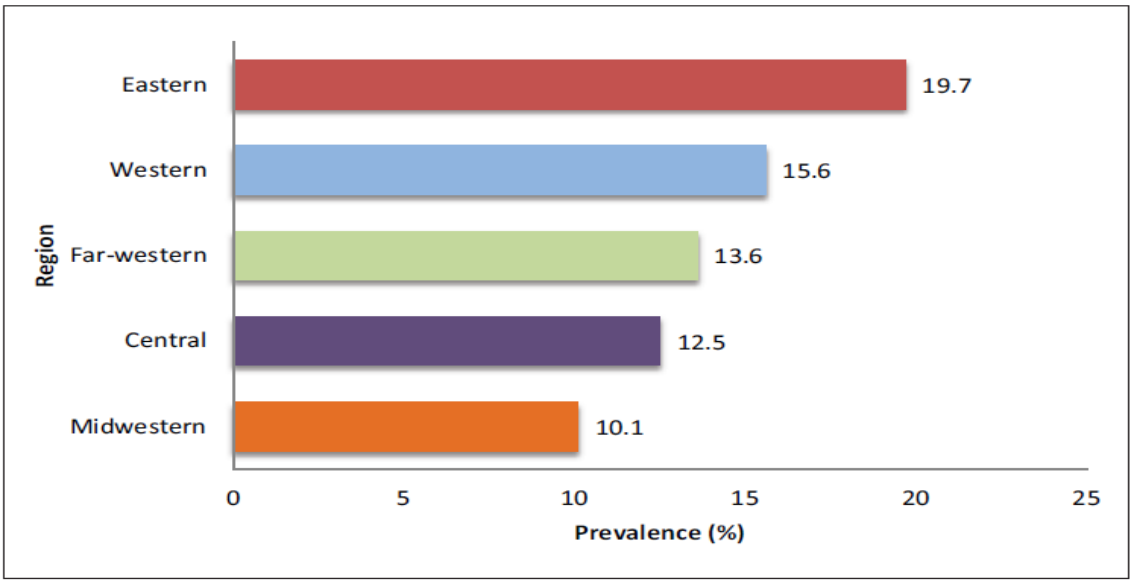
In Nepal, the use of SLT products is high and are readily available. A non-communicable disease risk factor survey conducted in 2008 at national level with 4072 respondents showed that the use of SLT by the age group of 15-64 years was 18.6 % among adults, 31.2 % among males and 4.6% among females. The non-daily users of SLT products were higher in the young age groups than in the older age groups (figure 2). In general, the frequency of chewing tobacco was seven times per day (Ministry of Health and Population Nepal, 2008). However, this frequency varies according to different SLT products. For example, betel quid with tobacco and gul were used three times per day, whereas gutka was used four times per day (Ministry of Health and Population Nepal, 2006). Furthermore, a survey conducted by Government of Nepal, Ministry of Health and Population (2010) revealed that tobacco chewing also varied from region to region. It is stated that the chewing tobacco varied from 10.1% in the mid-Western region to 19.7% in the Eastern region (figure 3), which shows that the use of tobacco chewing is more in Eastern region.

Figure 2: Percentage of current users of smokeless tobacco by gender, age groups and their consumption pattern



Source: Ministry of Health and Population, Nepal (2008)

Figure 3: Tobacco chewing by region, Nepal



Source: Ministry of Health and Population (2006)

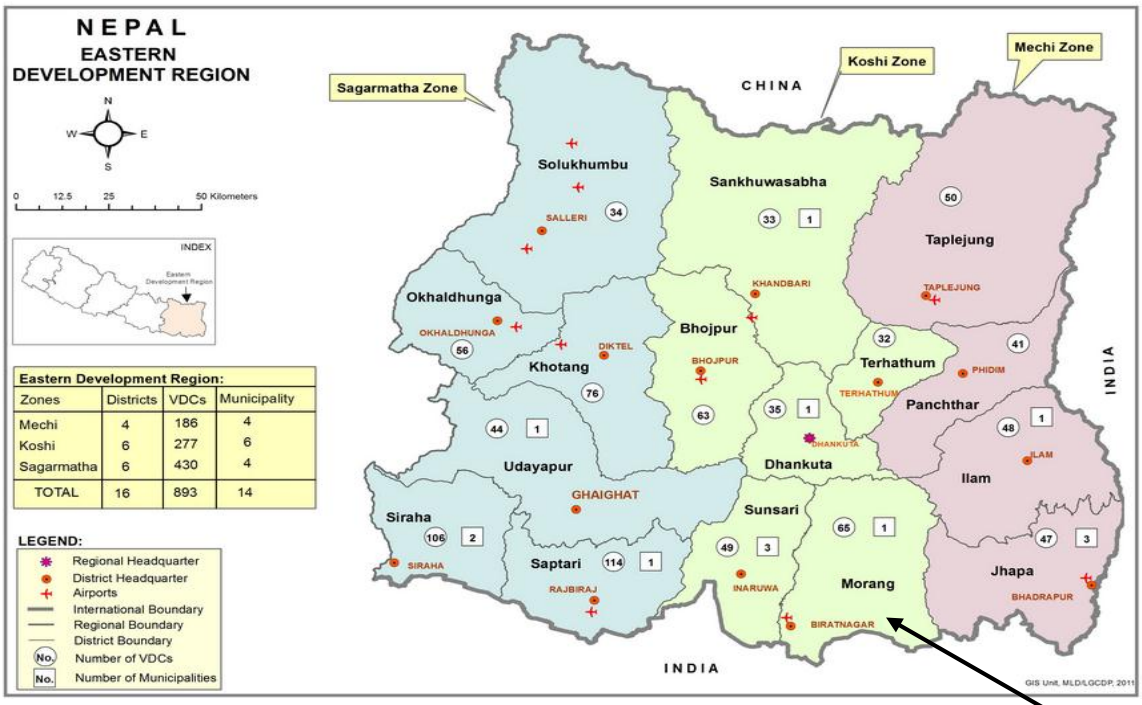
2.3 Ganapati Products Private Limited: An introduction

Ganapati Products Pvt. Ltd. was established on 30th August 2010 and started its operations from 2012 and is registered according to The Industrial Enterprises Act, 2049 (1992 A.D) under the Government of Nepal.

GPPL was established by a capital investment of Rupees 9,500,000 (Ninety five lakhs). Its objective is to produce smokeless chewing tobacco products. GPPL is a small scale business according to Industrial Enterprises Act, 2049 (1992 A.D). As per The Industrial Enterprises Act 2049, industries with a fixed asset of up to an amount of 30 million rupees shall be named as small industries.

GPPL is located at Morang District, Malaya Road, Biratnagar-11, which is the sub metropolitan city of Nepal. Biratnagar lies in the Eastern development region of Nepal. It is renowned as the industrial city in the country since major industries are situated in its lap. The map of Eastern development region of Nepal is presented below in figure 4.

Figure 4: Map of Eastern Development Region of Nepal



Source: Local Governance & Community Development Programme, Phase II (2011).

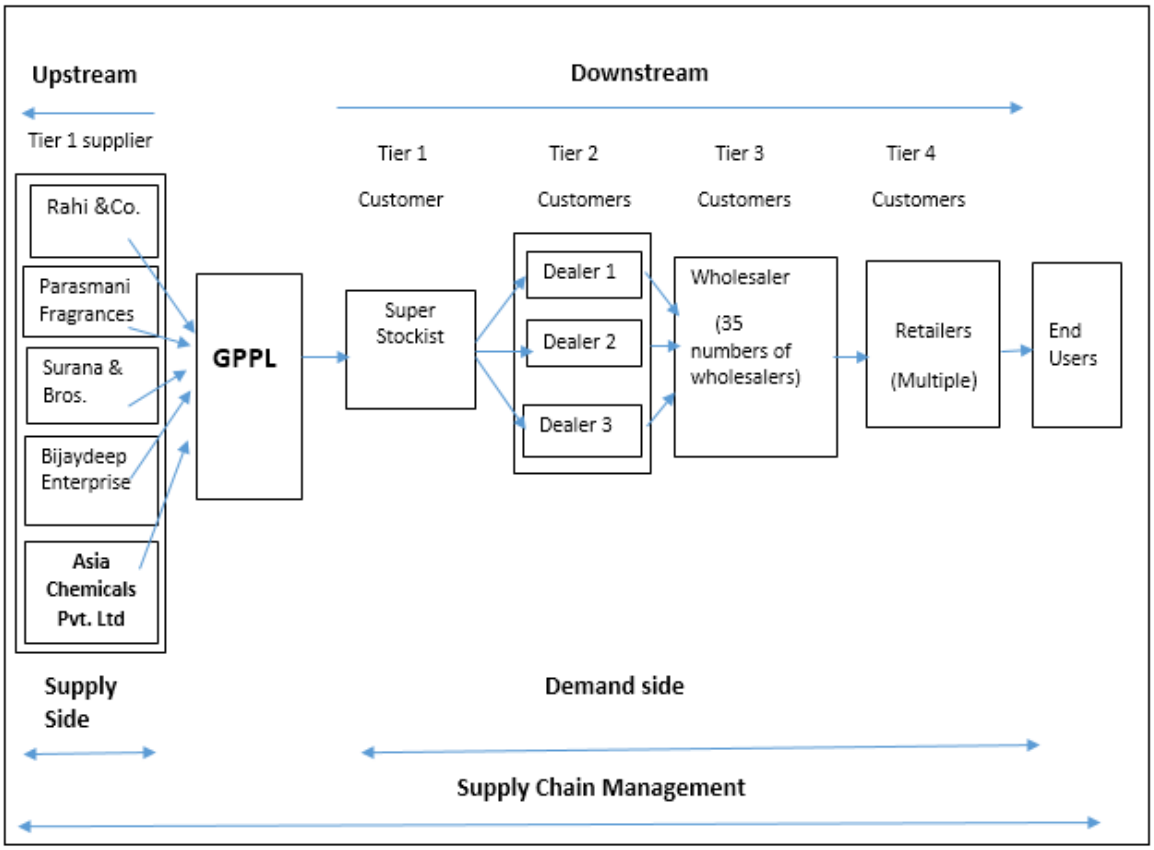
GPPL

GPPL produces different varieties of smokeless tobacco products. The products produced by GPPL are: gutkha/gutka, chewable tobacco (surti), panmasala, mouth freshener, and sweet supari. These are the chewable tobacco products, with its main ingredient being areca nut.

Picture 1: Picture of the final product

The prices of these products are mainly of Rs.2 and Rs. 6. Out of these two, the product sold at Rs. 2 is more on demand as its target customers are the lower and medium level income earners. The target market of GPPL is the Eastern region of Nepal. It is widely available in any retail shop of Eastern region of Nepal.

Figure 5: Supply chain of GPPL



Source: GPPL (2015)

The supply chain of GPPL involves several tiers which include supply side and demand side of the organization. Materials flow from left upstream to right downstream where as, customer demand information flows from right to left. The supply side, tier 1 comprises suppliers of raw materials who supplies directly to GPPL. On the demand side, GPPL supplies to super stockist as tier 1 customer, who in turn supply to dealers as tier 2, and from dealer to wholesalers as tier 3 and so on.

However, this study focuses only on the inter-firm dependency between Ganapati Product Private Limited (GPPL) and Asia Chemicals Private Limited (ACPL) who is the supplier of plastic wrappers to GPPL.

2.3.2 ACPL and its importance to GPPL

GPPL has been purchasing plastic wrappers from ACPL from the date of its establishment. It is one of the biggest plastic suppliers and also one of the nearest suppliers to GPPL. The distance between GPPL and ACPL is only eight minutes (driving distance). ACPL accepts low to high quantities of orders. It takes the lowest amount of orders up to 50-60 kg. whereas, others suppliers do not take orders below 500 kg.

In the commencement of GPPL's business, their production quantity was not high and could not place orders beyond 500kg. Since ACPL accepts low quantity orders, that paved way for GPPL to work with ACPL from the beginning. Moreover, the quality of wrappers supplied by ACPL is also good. However, at present GPPL is facing price and non- price related problems with ACPL. Furthermore, GPPL expects to face similar kinds of problems from ACPL in near future.

2.3.3 Potential suppliers of plastic wrappers

There are three potential suppliers to GPPL, including Poly Pack Industry (PPI), Shreya Printing Pack (SPP) and Ananda Madan Printing (AMP). Besides these three there are also other alternative suppliers in the market but these three are the potential suppliers with regard to distance.

Poly Pack Industry (PPI) is located in Tintolia, Biratnagar which is in 15 minutes drive from GPPL and Shreya Printing Pack (SPP) lies in Hathkhola, Biratnagar that is in 25 minutes drive from GPPL. Whereas, Ananda Madan Printing (AMP) is in Bhairawa which would take approximately 11 hours for the wrappers to reach GPPL's premises.

Poly Pack Industry (PPI) is also one of the biggest suppliers of plastic wrappers and on the same scale like ACPL and is the strongest competitor of ACPL. There are no variations in products supplied by ACPL and other suppliers. The advantage and disadvantage of each potential suppliers along with ACPL is presented in the table 2.

Table 2: Advantage and disadvantage of ACPL and potential wrapper suppliers in Eastern Region of Nepal

ACPL	PPI	AMP	SPP
Advantage	**Advantage**	**Advantage**	**Advantage**
• Takes low order up to 50-60kg • Nearest to GPPL (driving distance 8 minutes)	• Price is lower than ACPL • Not far from GPPL (driving distance 15 minutes) • Provides long credit period	• Price is lower than ACPL,PPI, and Shreya • Provides long credit period	• Price is lower than ACPL • Provides long credit period. • Not far from GPPL (driving distance 25 minutes)
Disadvantage	**Disadvantage**	**Disadvantage**	**Disadvantage**
• Charges higher price than others • Short credit period • Poor delivery service.	• Does not take orders below 500kg	• Does not take orders below 500kg • Far from GPPL (driving distance 11 hours) • Increases transportation cost • More risks due to external environmental uncertainties like strikes.	• Does not take orders below 500kg • Not big supplier as ACPL, PPI and AM i.e. investment capacity is not big.

Source: Own formulation from field data (2015)

2.4 Chapter summary

GPPL is a small scale industry, located in Biratnagar, which is in the Eastern region of Nepal and buys plastic wrappers solely from ACPL for the final packaging of its smokeless tobacco products. Though ACPL is important, GPPL is currently facing some problems in doing business with them and expect to face similar kind of problems in future too. The situation faced by GPPL hence needs to be addressed for the smooth functioning of the organization and thus the need of a research to be conducted. The relevant literature and framework on resource dependency theory, Kraljic model, supplier evaluation and method , sourcing strategies and Economic order quantity (EOQ) are reviewed in the coming chapter three.

CHAPTER THREE

THEORETICAL FRAMEWORK

3.1 Introduction

This chapter presents the relevant theoretical review related to the study. The theories reviewed are: resource dependency theory, Kraljic portfolio model, supplier evaluation, sourcing strategy and economic order quantity model. Theories reviewed in this chapter will later be used in the analysis of the case.

3.2 Resource dependency theory

In order to explore the dependency situation of GPPL on ACPL, resource dependency theory has been used in this paper because it explains the dependency of an organization on the basis of the importance of a specific resource, control over the resources, and availability of alternatives.

Organizations are an open system that depend on input and output to achieve certain goals of it (Buvik and Grønhaug, 2000). Input are the resources which are very essential for the survival of the organization. These input or resources can be financial or non-financial (physical resources) as well as information. The ability to acquire and maintain these resources is the key to organizational survival. The degree of dependency depends upon the importance of these resources. Since no organization is self-sufficient therefore, the problem of insufficiency creates dependency in organization (Pfeffer and Salancik, 1978). Organization depend on other organizations for the other resources which they require for survival (Pfeffer and Salancik, 1978).

Resource dependency theory states that the way the organization acts depends upon the dependency upon certain resources (Pfeffer and Salancik, 1978).Those organization which have control over resources gets power and influence the one who lack those resources (Pfeffer and Salancik, 1978). Heide (1994) defined supplier dependency as a cost increased to supplier while replacing the particular buyer and buyer dependency defined as cost increased to buyer when replacing particular supplier.

Furthermore, Pfeffer and Salancik (1978), stated that, there are three elements, which constitute the dependence level of an organization; the importance of the specific resources, the degree to which one of the partner has control over other resources and the third one is the degree of availability of substitutes or alternatives to those resources.

Emerson (1962) in early work on social exchange theory suggest that party enjoys power based on the degree of dependence experienced by other. Two variable dependence and power jointly function while fixing the dependency of one upon another. Emerson (1962) states that dependence of one actor upon other actor is directly proportional to prior actor's motivational investments in goals controlled by other and inversely proportional to the availability of these goals outside their relationship. Whereas, power possessed by on actor is the potential power or influence to overcome resistance on the other part and is directly related to the dependence of the other actor (Emerson, 1962).

RDT describes that if firm stuck in such demanding environmental conditions than it need to develop possible solutions by creating negotiated environments and by establishing inter-organizational arrangements (Buvik and Grønhaug, 2000). When there increases resource dependency, organization try to set inter organizational arrangement as a response to uncertainty and dependency (Stern and Reve, 1980) by increasing the coordination with exchange partners (Paulraj and Chen, 2007).

The research conducted by Levy (1985), John G and Weitz (1988) and Masten (1984), found that there is positive association between environmental uncertainty and vertical integration and internal production whereas, Anderson and Schmittlein (1984) and Maltz (1994) found no significant association between them (cited in Buvik and Grønhaug, 2000).

Barrringer and Harrison (2000), suggest that organization must obtain access to critical resources in order to decrease the dependency and increase their power to other oganization. Pfeffer and Salancik (1978) suggested following possible strategies as a response to such demanding conditions.

- Adaptation or avoidance of compliance (by finding substitutes or reducing dependency on single market or resources)
- Altering dependencies by merger (vertical/ horizontal) and diversification.

- Negotiating with the environment by joint ventures, interlocking directorates, professional and trade associations
- Using regulation and government granted social legitimacy to favorably influence their environment.

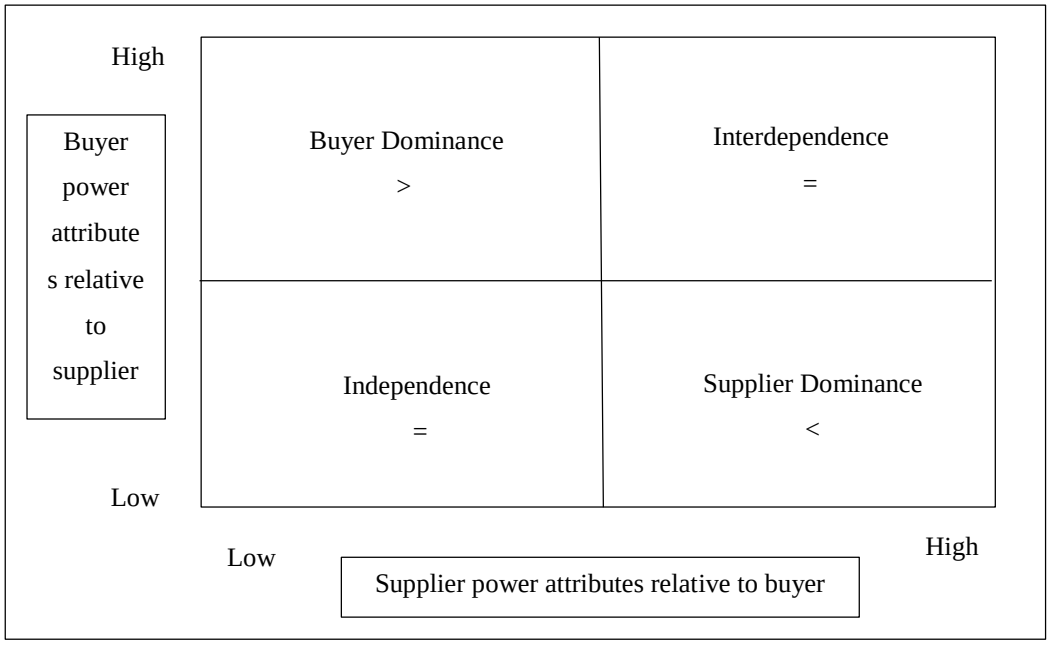
Emerson (1962) mentioned cost reduction and balancing operation as a strategy for changing power dependence structure. According to Emerson (1962), cost is the degree of resistance to overcome the power. To overcome the imbalance he suggested to reduce the costs or pains associated to the compliance to the powerful actor's demand. Addition to this, Emerson (1962) further suggested four generic types of balancing operation. They are:

- If B reduces the interest in the resources possessed by A
- If B increases the alternative sources
- If A increases the motivational investment in the resources possessed by B
- If A is denied alternative sources for goal achievement.

In line with Emerson (1962), Gelderman and Van weele (2004) stated that, dependence is the function of the importance of the resource and the substitutability of the source.

Following the idea of power and resource dependence by Emerson (1962) and Pfeffer and Salancik (1978) a matrix has been constructed by Cox, et al. (2000), with four basic types of power structure i.e. buyer dominance, supplier dominance, buyer- supplier independence (low mutual dependence), and buyer supplier interdependence (high mutual dependence). According to Cox, et al. (2000), the idea of constructed matrix is that " All buyer and supplier relationships are predicted on the relative utility and the relative scarcity of the resources that are exchanged between the two parties" (cited in Cox, 2001, p.13).

Figure 6: Power Matrix



Source: Cox, et al., (2000)

RDT follows an effectiveness path where each party in relationship tries to stabilize and control the uncertainties of trade through formal or semiformal links with their trade partner for the achievement of their own goal (Buvik and Grønhaug, 2000).

The notion of the RDT is that the organization is interdependent with other organization for the resources they need for survival. As organization are constraint by resources thus need to interact dynamically and strategically to manage the dependency on the other firm (Pfeffer and Salancik, 1978). Thus, dependent organization need to balance their dependency situation in order to balance the operation.

3.2.1 Determinants of dependence

Gelderman and Van weele (2004), in the paper "Determinants of dependence in dyadic buyer-supplier relationship" mentioned the determinants of dependnce which includes: Logistical indispensability; need for the supplier's technological expertise; availabilty alternative suppliers; and switching costs for buyer's dependence; and financial magnitude; need for the buyer.s technological expertise, availability of alternative buyers and switching costs for supplier's dependence.

- **Logistical indispensability**

This issue is more important to the buyer then supplier. It is the way the buyer receive goods in a way that is logistically compatible with the buyer's production system (Caniels and Gelderman, 2007). The correct delivery is the main concern of buyer. Whereas, the supplier concern is of financial nature (Caniels and Gelderman, 2007).

- **Financial magnitude**

It refers to a finacial magnitude of the transactions, which is measured by assessing the proportion of total input or the proportion of total outputs. A relative important buyer in a financial magnitude will have powerful position and hence, supplier become dependent (Gelderman and Van weele, 2004).

- **Technological expertise**

Both buyer and supplier needs technological expertise. Companies are attracted to those organizations who are technolgically expertise. Simlarly, supplier also need the critical expertise and specialized knowledge of their customers (Caniels and Gelderman, 2007).

- **Availability of alternatives**

Availabiltiy of resource is important in organization's dependence. Dependency will increase when there is lack of alternative of sources to acquire resources from others (Gelderman and Van weele, 2004).

- **Switching costs**

Switching costs refers to the costs connected with changing the current partner (Gelderman and Van weele, 2004). According to Benito, et al., (1999), switching costs are of two types: break-off costs and set-up costs. Break off costs are the costs that form a barrier to terminate old relationships whereas, set-up cost are the costs that create a barrier to engage in business new relationship (Benito, et al., 1999). Teminating an existing supplier with a new supplier can incur huge expenses (Gelderman and Van weele, 2004).

3.3 Purchasing portfolio model

Kraljic purchasing model is influenced by power and dependence of buyer and supplier which is therefore useful in identifying the choice of purchasing strategy for GPPL to reduce the dependency on ACPL. Hence, this model is reviewed in this section.

In professional purchasing, purchasing portfolio models have received much attention (Caniels and Gelderman, 2007) . One of the famous model in purchasing portfolio model was introduced by Kraljic (1983) and influenced many other academic writer to undertake research into this purchasing portfolio models (Caniels and Gelderman, 2007).

Portfolio approach introduced by Kraljic (1983), help to develop purchase and supply strategies to balance the power between buyer and supplier (Van Wheele, 2010). According to Kraljic (1983), supply management becomes more critical when there is more uncertainty of supplier relationships, technological development and physical availability of those products/ items.

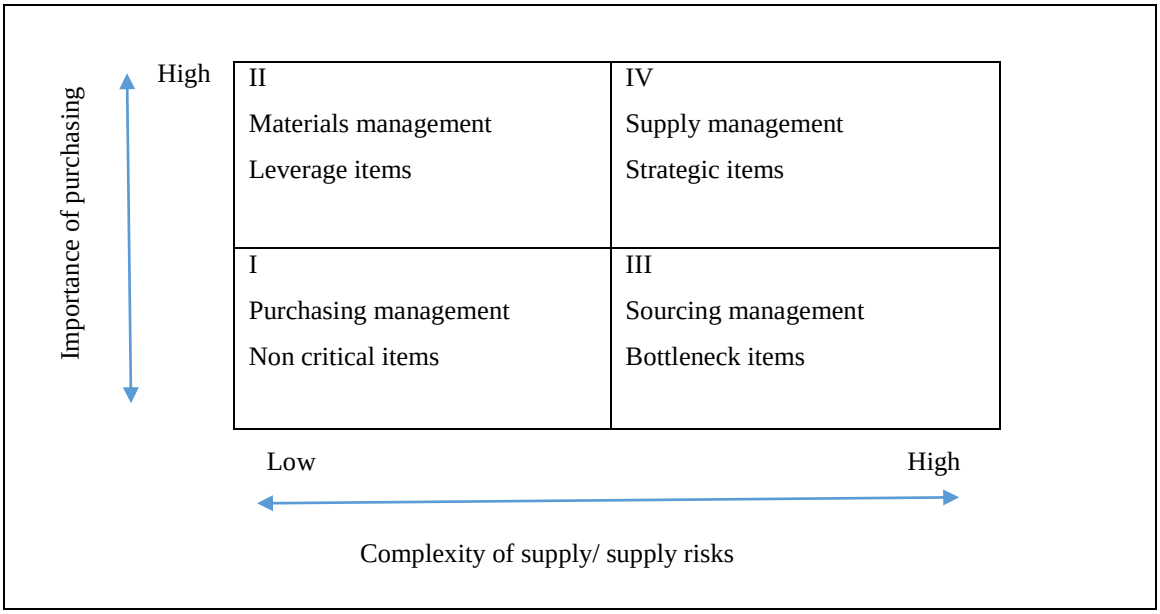
In the article of Kraljic (1983), "Purchasing must become supply management", Kraljic (1983) presented a figure in the form of matrix which shows the stages of purchasing sophistication, which identifies four stages: purchasing management, materials management, sourcing management, and supply management (Kraljic, 1983).

Furthermore, Kraljic (1983) proposes a framework for developing a supply strategy to minimize the supply risk and increase the buying power. This model classifies all its purchased materials or components in terms of two factors or dimensions. They are: first, strategic importance of purchasing (which is measured in terms of criteria like value added by product line, percentage of raw materials in total cost, impact on business profit growth etc.). Second is the complexity of the supply market (which is measured in terms of product availability, alternative source of supply, or technology, entry barriers, market conditions etc.).

The understanding of these two dimensions leads to develop appropriate supply strategies. These two dimensions further result in 2x2 matrix and classified into four categories: Strategic items, leverage items, non-critical items, and bottleneck items. Each of these categories requires different approach to manage the supplier. Then it analyze the market by weighing the bargaining power of its suppliers against its own strength. Subsequently, then

company positions the materials identified in the first phase as strategic in a portfolio matrix. Then, finally it develops action plans for these strategic products and three strategies were recommended: exploit, balance, and diversify (Kraljic,1983).

Figure 7: Purchasing portfolio model



Source: Kraljic (1983)

The product categories, in Kraljic portfolio model, are explained below:

- **Strategic products**

Strategic products are the high technology based and high volume product, which are supplied at customer's specification. In this type of product, only one supplier is available and thus requires global sourcing (Kraljic, 1983) and more collaborative strategy between buyer and supplier (Van Wheele, 2010).

- **Leverage products**

Leverage products can be obtained from various suppliers. They are bought at large volumes and represents large share of the product's cost price. It require focusing on multiple sourcing and competitive bidding (Van Wheele, 2010).

- **Bottleneck products**

Bottleneck products are obtained from only one supplier. They have low impact on financial results. It is supplier dominated thus, requires obtaining continuity supply of the product, look for other potential suppliers, or develop alternative products (Van Wheele, 2010).

- **Non-critical products**

Non-critical products have small value per item and many supplier provides them. The handling cost are higher than its product value. It requires to organize the purchase of these products efficiently (Van Wheele, 2010).

The purchasing portfolio model given by Kraljic (1983) is very useful in purchasing. Lamming and Harrison (2001); Gelderman (2003) specified that this matrix has become a standard in purchasing portfolio. Nellore and Soderquist (2000) argued that buyers can manage and optimize the use of capabilities of different suppliers by portfolio martrix. "The aim of Kraljic matrix is to minimize the supply risk and make the most of buying power" (Gelderman and Van Weele, 2005).

However, Kraljic (1983) focuses mainly on strategic items than to other categories and many different Scholars like (Van Weele, 2000; Syson, 1992; Elliott-Shircore and Steele, 1985) filled the gap and refined the matrix and recommended strategy for each quadrant (Caniels & Gelderman, 2007). The refined matrix with its recommended strategy is given in table 3 below.

Table 3: The Kraljic purchasing portfolio model (modified from Kraljic, 1983)

Profit Impact	**Supply Risk**	
	Low	High
High	***Leverage items*** Exploit purchasing power	***Strategic items*** Form partnerships
Low	***Non-critical items*** Ensure efficient processing	***Bottleneck Items*** Assure supply

Source: Caniels and Gelderman (2007)

Further, on the basis of three in depth case studies, Gelderman and Van Weele (2003) identified several purchasing strategies for each product category (Caniels and Gelderman, 2007). They suggested three strategy for strategic product: terminate partnership, find new supplier; accept locked-in partnership; maintain strategic partnership. In the same way, for leverage product, two strategies were suggested: exploit buying power; develop a strategic partnership. For non-critical product: individual ordering, pursue efficient processing; pooling of requirements were suggested. Similarly for the bottleneck product: reduce dependence and risk, find other solutions; accept dependence, reduce negative consequences were suggested. Caniels and Gelderman, (2007), stated that, **i**n Kraljic approach, power and dependence seems to play an important role. Therefore the power and dependence of buyer and supplier are thought to be important aspect in explaining the condition that influence the choice of purchasing strategy in each quadrant (Caniels and Gelderman, 2007).

3.4 Supplier evaluation

Supplier evaluation is one of the important task of purchasing. There are several alternative suppliers in the market for GPPL at present situation. Hence in ordeer to explore which supplier can be the best alternative for GPPL in terms of selected criteria, supplier evaluation is must because evaluating and selecting the right supplier is a key element in the purchasing process to reduce cost in a supply chain (Pal et al., 2013). Purchasing as a whole plays an immense role in the success of organization through appropriate supplier selection (Ellram and Cayy, 1994). Further selecting the right method for supplier selection leads to decrease in purchase risk, increase the number of JIT suppliers and TQM production (Ellram and Cayy, 1994). According to Wills, et al., (1993) and Dobler, et al., (1990), selection of right supplier reduces the cost of material purchasing and improves organization competitiveness and many experts believe supplier selection as an important task of purchasing department.

3.4.1 Method of supplier evaluation

There are various supplier selection methods which can be found in the literature. Different techniques and models like MADM techniques (multiple attribute decision making), methods for prequalification of suppliers, mathematical programming models, artificial intelligence methods, fuzzy approach, and combined approaches are used for supplier selection (Pal et al., 2013). The general types of supplier evaluation system includes:

categorical method, cost ratio method, and the linear averaging method. This paper uses linear averaging method to evaluate the suppliers for GPPL in the discussion and analysis chapter, therefore, a linear averaging method is only reviewed in this section.

Linear averaging method is one of the frequently used method for evaluation of supplier (Wills and Huston, 1990). This is also known as weighted point method (Humphreys et al., 1998). In this method, firstly, the evaluation criteria are selected and assigned appropriate weights to each criteria in such a way that the summation of all weightage becomes 100. After that, suppliers are evaluated on each criteria according to a numerical scale. Then finally each performance criteria is multiplied by its respective weight and rating is created for each supplier. Thus the supplier who gets highest score will be selected. In this method assigned weight is subjective and varied according to decision maker (Ordoobadi, 2009).

3.5 Sourcing strategy

Sourcing is gaining increasing attention in supply management and in academic research (Tomi, 2006). Organizations must decide about the sourcing strategy while buying the equipment (Tullous and Utecht, 1992). Each sourcing strategy has its own advantage and disadvantage. Implementation of appropriate sourcing helps organizations to reduce its dependency thus in order to analyze and suggest some possible sourcing strategy to GPPL in chapter five, a brief review on different sourcing strategies are described in this section. The different ways of sourcing are sole sourcing, single sourcing, dual sourcing and multiple sourcing and parallel sourcing.

- **Sole sourcing**

When only one supplier is available to the buyer, then it is called as sole sourcing (Tomi, 2006). Buyer in sole sourcing are forced to buy from one supplier due to the factors such as, location, exclusive design rights, a particular customer specification and possible buyer inertia (Quayle, 1998). Sole sourcing contrasts with single sourcing and are dependent for the specific product (Mathyssens and Faes, 1996).

- **Single sourcing**

In a single sourcing, buyer purchases an item from only one supplier and places all orders with it (Mishra and Tadikamalla, 2006). Furthermore, Newman (1988) defines that in single souring there are number of alternative suppliers available even though they source from

only one supplier. The idea of single sourcing is the reduction of supplier base that reduces the total cost (Osmond, 1999). According to Zeng (2000), the benefits of single sourcing are cost reduction, improve communication and stability. Cousins et al. (2008) states that in single sourcing relationships are much more long-termed and focuses on the development of the relationship. Furthermore, quantity discounts from order consolidation, reduce order lead times, and logistical cost reductions are also documented as benefits of single sourcing (Bozarth et al., 1998) .

However there are also some disadvantages related to single sourcing. Due to only one source of supply buyer become totally dependent on the supplier (Bozarth, et al., 1998; Cousins, et al., 2008). Moreover, investment in single sourcing creates switching costs (Richardson and Roumasset, 1995).

- **Dual/ Multiple sourcing**

When orders for an item are placed with two suppliers, it is referred as dual sourcing (Mishra and Tadikamalla, 2006). Addition to this, when orders for an item are placed with two or more suppliers it is called as multiple sourcing (Mishra and Tadikamalla, 2006).

Multiple sourcing help to limit the cost through competition (Tullous and Utecht, 1992; Amilhud, 1976; Porter, 1985; Rubin, 1990; Tomi, 2006). Due to competition between suppliers, buyer gets control over price levels (Gadde and Håkansson, 1994) . Increase number of sources will reduce the risk of supply disruptions and ensures timely delivery and continuity of supply (Sheridan, 1988; Trevelen and Sweikhart, 1988; Tullous and Utecht, 1992; Bozarth, et al., 1998). Moreover, due to the diversification of the firm's total requirement, it gives greater upside volume flexibility (Ramasesh et al., 1991). Furthermore, it hedges the risk of dependency on single supplier (Tomi, 2006; Trevelen and Sweikhart, 1988; Newman, 1988; 1989).

Kelle and Silver (1990) find that order splitting among multiple sources reduces the organization's safety stock without increasing stock out probability. However, managing multiple source is less flexible than managing single source (Kirytopoulos et al., 2010). In addition to this, multiple sourcing incur high administrative cost (Sheridan, 1988; Brierly, 2002) and reduce scale benefits (Ellram and Billington, 2001; Briely, 2002).

Choosing between single supplier and multiple sourcing depends on the power of buyer. A powerful buyers might buy from single source but weaker buyers will buy from multiple sources by splitting the volume between two suppliers in order to maintain alternative source (Heese, 2015). Furthermore, decisions on sourcing depends on the anticipation of number of suppliers in the market (Greenstein, 1995).

- **Parallel sourcing**

According to Cousins et al. (2008), the concept of parallel sourcing is developed by Richardson (1993). Richardson, 1993:342 defines parallel sourcing as:

> "(…) *two or more suppliers with similar capabilities are concurrently sole source suppliers for very similar components. While using a sole source for a component, the assembler established parallel sources to provide performance comparisons and competitive bidder for the next model cycle*".

Richardson (1993), states that parallel sourcing provides the advantage of single and multiple sourcing. Due to the certain drawbacks in single sourcing like over-dependency on one source, less competitive pressure on the supplier, and less competitive price structures, many large companies balance these threats by choosing a single sourcing for one component and at the same time introducing competition on the level of a family of related components (Richardson J. , 1993). For instance, an automotive company that producing two different car models A and B, and buying a similar but somewhat different braking system for both of them. The braking system for model A will be bought from supplier A as a single source and for Model B, from supplier B. Hence by doing so company will buy each different product from a source but keeps two parallel sources as a family (Mathyssens and Faes, 1996).

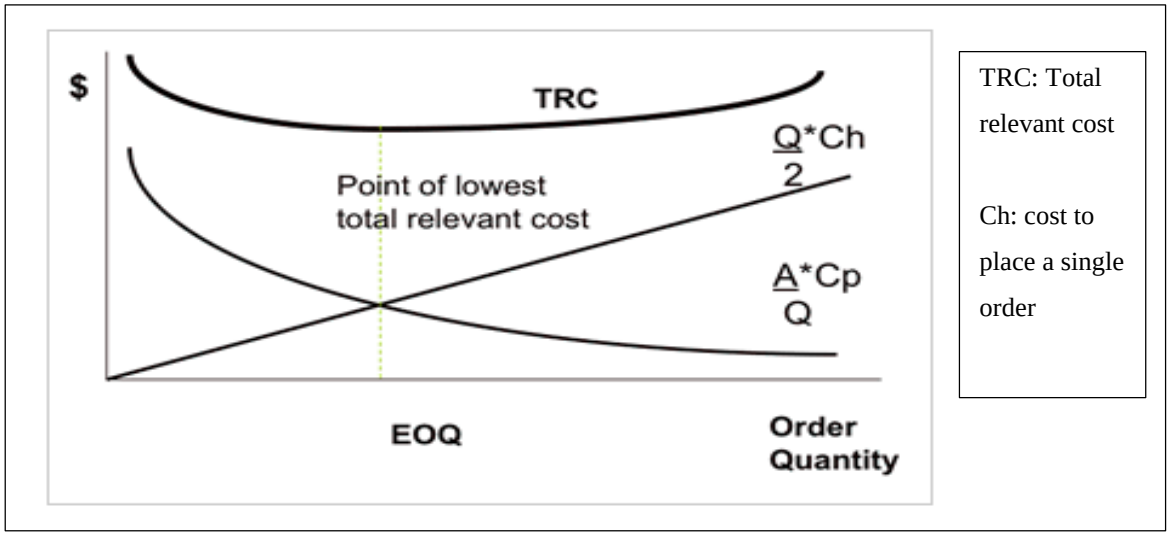
Hence, different sourcing strategies has its own importance. Choosing to apply either of the sourcing strategy depends on the needs and wants of the buying organization, desired type of relationship, the acceptable level of dependency between the parties and further the nature of competition (Cousins et al., 2008).

3.6 Economic order quantity model

Economic order quantity (EOQ) has been reviewed in this section because in the analysis chapter EOQ is calculated in order to identify and suggest the optimal order quantity to GPPL to minimize the costs associated with inventory handling and ordering.

Economic order quantity (EOQ) is also known as Wilson EOQ model. This model was first presented originally by Ford Whitman Harris in 1913 in *Factory, The Magazine of Management* (Erlenkotter, 1990). EOQ model minimizes the total inventory holding cost and ordering cost (Schwarz, 2008) It is the point where the sum of inventory cost and ordering cost per unit is lowest (Van Weele, 2010).

Figure 8: Economic Order Quantity



Source: Bozarth (2011)

A larger order quantity spread out the cost to large number of orders and hence reduces the order cost per unit but increases the inventory carrying costs per product (Van Weele, 2010). In the same way, a small order quantity reduces the inventory carrying cost but increases the ordering frequencies and ordering cost (Schwarz, 2008). Thus EOQ selects the order quantity that minimizes the average inventory management cost/ time for a product whose demand rate never changes (Schwarz, 2008).

To minimize the total annual cost, EOQ can be calculated mathematically. These includes: the cost of carrying cost of placing the cost of inventory carrying, the transportation and

clerical cost of placing the order, and the purchase price of the items. More specifically carrying cost can be broken into cost of physical storage, opportunity cost of the working capital tied up in purchased goods, taxes and insurance paid on inventory items and inventory spoilage and obsolescence (Gaither, 1996).

EOQ will be significance on the assumptions that, consumption of component at hand is fairly stable; consumption is evenly spread over the course of time; delivery time is fixed; ordering costs per order are fixed; and the inventory carrying cost do not depend on the ordered quantity, etc. (Van Weele, 2010).
Following the assumptions, the economic order quantity can be calculated by following formula;

$$Q_0 = \sqrt{\frac{2 \times A \times Cp}{Ch}}$$

Where, A = Demand for the year

Cp = Cost per order

Ch = holding cost for one unit inventory

*3.*7 Chapter summary

In this chapter, an overview of Resource dependence theory, purchasing portfolio model, supplier evaluation, sourcing strategy and economic order quantity has been discussed as the main theory guiding this study. The research methodology applied to this study is delineated in the coming chapter four.

CHAPTER FOUR

RESEARCH METHODOLOGY

4.1 Introduction

This chapter will give an overview of the research methodology and methods that will be applied in this study. This describes the kind of research design and research strategy used, sampling and validity of the research and further specifies the procedures for obtaining the information, data sources needed in order to answer the research questions.

4.2 Research design

A research design is a plan that guides in collecting and analyzing the data (Churchill and Brown, 2004). It can also be defined as a plan and the procedures for research that widened the decision from broad assumptions to detailed data collection methods and analysis (Creswell, 2011). It is therefore a framework of research work which specifies the method for collecting and analyzing the data.

4.3 Types of research design

Several classifications have been suggested by different researchers. Churchill and Brown (2004) suggested three different types of research design: exploratory, descriptive, causal and effect design. Exploratory research gives emphasis to the discovery of new insights or ideas; descriptive on the other hand, focuses on determining the frequency of something that occurs; and finally causal design determines cause and effect relationships. Creswell (2003), on the other hand classified research design into three methods: quantitative, qualitative and mixed methods. According to Ellram (1996), the appropriate research method depends upon the researcher's goal and the nature of research questions.

The purpose of this study is to gain an understanding of the dependency situation between GPPL and ACPL and how the dependency situation can be balanced. This study thus has an exploratory nature as it wants to explore the situation of dependency and further aims to address the strategy to manage the dependency of the buyer on the supplier. The purpose of undertaking the exploratory research is to diagnose the situations, to ask questions and discover new ideas (Pant, 2012).

This study is qualitative research based on empirical data. Qualitative research method is the one where researcher uses constructivist perspective or advocacy or participatory perspectives or both for making a knowledge claim. Qualitative research explores and interpret the perceptions, opinions, aspirations, behaviors, concerns, motivation, culture or lifestyles of small samples (Pant, 2012). It is all about exploring and understanding the phenomenon and answering questions (Pant, 2012). Hence, in order to conduct qualitative research, empirical data are used in this thesis to collect the real field situation (Ellram, 1996). Furthermore, to collect the information open ended questions were developed and interview was conducted with managers of the organization. Moreover, direct field visit was done.

4.4 Case Study as a resesearch strategy

As this study is delimited to one organization and seek to explore the dependency situation between GPPL and ACPL, therefore, the case study method has been used as the appropriate methodology for this research work.

"Case study is an empirical inquiry that investigates a contemporary phenomenon within its real life context, especially when the boundaries between phenomenon and context are not clearly evident" (Yin, 2003, p.13). Creswell (2003) states that in a case method researcher in depth explores about a program, an event, an activity, a process, or one or more individuals. Researchers collect detailed information by using different data collection procedures over a different period of time (Stake, 1995).

Under this method researcher collects data about the present state, past experiences, and environmental conditions that influence the individual and its behavior. A lot of detail information can be collected through this method. After analyzing these, the researcher conducts an inclusive study of unit or entity (Pant, 2012).

Case study research can be single or multiple case studies (Yin, 2003). However, it is to be noted that "Each case study is in and of itself a self-contained experiment, with unique context that is part of the experiment" (Ellram, 1996, p.100). Case study method can be undertaken in the condition when a researcher wants to know how the context of interest affects the outcome (Yin, 1981).

Hence, case study will help to explore a problem and helps in doing an in-depth investigation of it. It helps to provide in-depth understanding of a case. They are intensive in nature and thus provides light to important variables, processes and interactions, which requires more attention (Pant, 2012).

4.5 Sampling of the research

Sampling is an important part of any research. It is a collection of items from a population or universe which represents the only portion or subset of the universe (Pant, 2012). Sample can be probability and non-probability sample. Probability sampling is where each item or element in the universe has equal probability of being selected, whereas, non-probability sampling is that in which all items in the universe do not have equal chances of being selected (Pant, 2012).

This paper uses non-probability sampling for the study. Non probability samples are those which are determined by the researcher on the basis of personal convenience or judgment. Furthermore, non-probability sampling is done for the case studies, qualitative research and pilot studies (Pant, 2012). Moreover, this study uses a judgmental sampling method under non-probability sampling. Judgmental sample is the one that is selected on the basis of researcher's judgment. It involves targeting a particular group in which researcher interested in (Pant,2012).

Since this research is based on a case study of GPPL (Buyer), therefore this study focus on particular target group/persons of an organization like director and purchasing manager of GPPL. The key assumption to judgmental sampling is that the elements which are selected are believed to be representative of the population in such a way that errors of judgment in the selection will cancel each other out (Pant, 2012). The researcher under this study also contacted other supplying and purchasing organization professionals for more information and data triangulation.

4.6 Validity and reliability

Validity and reliability are important to any research process. According to Ellram (1996), any research whether it is qualitative or quantitative, a good research design requires: construct validity, external validity, reliability, and internal validity.

Construct validity addresses the establishment of right operational measures for the concept being studied (Yin, 1981). External validity is the one that shows how accurate the results represent the studied phenomenon by establishing generalizability of the study (Yin, 1981). Reliability demonstrate data collection procedure which addresses the repeatability of the experiment, with same result (Yin, 1981). Internal validity is the one which establishes a causal relationship and is concerned for explanatory or causal studies only. This is not for descriptive or exploratory studies (Yin, 1981; Yin 2003). For the purpose of the study, this paper addresses construct validity and reliability.

4.6.1 Construct validity

In a case study, there are three tactics to increase construct validity: use multiple source of evidence, establish chain of evidence and have key informants review draft (Yin, 2003). The use of multiple source in case studies helps the researcher to address a broader range of historical, attitudinal and behavioral issues (Yin, 2003).

To understand the real situation, along with GPPL other organizations who buys or use to buy from ACPL were also interviewed. The views of other buyers will give more information and help in analysing the case. Therefore to generate more information four different buyers were interviewed for the purpose of the study. They are: Tiffin Bujiya and Snax Gharelu Udhyog, Subharmabha foods Pvt. Ltd, Janaki Products, and Madhu Chemicals Udhyog.

In addition three different suppliers who supply plastic wrappers to the market were also interviewed in this research. They are Poly Pack Industry, Shreya Printing, and AM Printing. Furthermore, questions were asked as per the designed interview guide and cited specific interviews in this study in order to satisfy the chain of evidence. Addition to this, the researcher prepared a draft after taking an interview and given back to respondents for further review and comments which is another tactic to increase construct validity in the case study method (Yin, 2003).

4.6.2 Reliability

Reliability in a research is to minimize the errors and biases in a study (Yin,2003). The objective of reliability is to be sure if the reader or later investigator conduct the same research following the procedure, which is mentioned by earlier investigator, then later investigator should come with same findings and conclusions (Yin, 2003). Thus, in order to minimize the errors and biases, throughout this research, references are made to the literature, and documents. Furthermore, the copies of interview guide and interview drafts can be found in the Appendix .

4.7 Data collection

To find the specified information various data sources should be considered. According to Yin (2010), primary and secondary are two types of data sources. Both primary and secondary data sources are used in this study. Pant (2012) stated that secondary data are gathered by others for other purposes. It can be collected internally and externally. Internal secondary data is found within the company such as, sales information, accounting data, internal research report. Whereas, external secondary data are collected from outside the organization such as, books, periodicals, published reports, data services, computer data banks (Pant, 2012). Primary data are collected by researcher to meet specific objective through various primary sources like interview, observations, and experiments (Pant, 2012).

For the purpose of this study, secondary data are sourced from internally and externally. The information related to the price of the final product, cost of material, purchase volume are collected from organization's internal source. Where as, the external secondary data are sourced from books, journal articles on related subject, reports, online sources e.g. Science direct and ProQuest.

Addition to this, primary data are collected in this study by questioning the respondents to have research specific information. Under primary source, information about the organizational situation are directly collected from direct interviews with structured questionnaire and face-to-face interview. In order to have direct information, interview was undertaken with the director and purchasing manager of GPPL and furthermore external primary data are collected by interviewing other buying and supplying organization professionals.

In addition to this, direct observation to field was also done. Structured interview was undertaken to ensure research reliability. The sources of primary and secondary data used in this study are shown in Table 4.

Table 4: Data collection sources

Data Collection	**Sources of data**	
	Internal	**External**
Primary	• Interviews within Executive and purchasing manager of GPPL • .Direct observation	• Interview with other buyers in the market. • Interview with other suppliers except ACPL
Secondary	• Purchase volume • Cost price of the raw materials	• Research reports • Journal articles • Books • WWW. Information

Source: Own formulation (2015)

This study used purchasing manager and director of the organization of GPPL as key informants. The key informants are chosen because they are supposedly knowledgeable about the issues that is being researched and are able and willing to communicate (Kumar, Stern, and Anderson, 1993). In the same way, for other supplying and buying organization executive head were taken as key informants.

4.8 Questionnaire development and analysis procedure

During summer holiday, a trip to Nepal was managed, where after talking to few organizations, finally researcher found one organization (i.e. GPPL) who showed interest towards conducting research in their organization about the problem they are facing in supply chain management. After having a general conversation with them, dependency in the relationship was found as the main issues to the problem. Hence, based on the initial information provided by GPPL a set of interview questionnaire (guide) was developed and reviewed with the respected supervisor. Different interview guide were developed to generate information from purchasing manager and director/executives of the organization. The point of making different interview guide for the same organization was to get more

information and a clearer overview of the entire situation from two different hierarchal levels of an organization. Interview guide can be found in the Appendix 2.
Addition to this, a set of interview questionnaire (interview guide) was also designed for other buying and supplying organization. The interview guide for this can be found in the Appendix 2. Here, other suppliers means those who supplies similar plastic wrapper in the market (it is to be noted that the interview was not conducted with ACPL). Whereas, other buyer means those who buys or use to buy plastic wrappers from ACPL.

As English is not the national language of Nepal, so for the convenience of respondents/ participants, the questionnaire was translated to "Nepali" which is the national language of Nepal.

Once data are collected, from the interview and observation within a particular context and then responses were used as a guide to conform to that particular context. After this, codes were derived and related theories for things happenings and the linkage of these happenings are searched and described in the research report.

4.9 Chapter summary

In this chapter the research methodology applied in the study was discussed. The research design used in this study was discussed and the data collection methods applied in this study were also presented. Furthermore, the validity and reliability of the research along with questionnaire development and analysis procedure were discussed in this chapter.

CHAPTER FIVE

DISCUSSION AND ANALYSIS

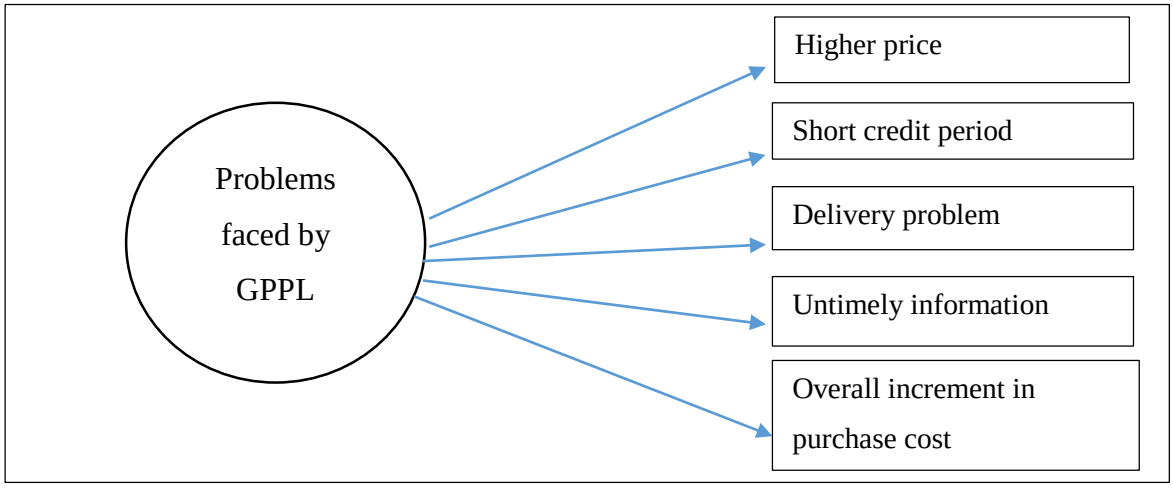
5.1 Introduction

This chapter presents the discussion and analysis of the four addressed research questions. The first section addresses first research question which is more general and explores the problems faces by GPPL in the relationship with ACPL. The other two sections deals with second and third research questions which are more specific and identify the dependency situation and try to find some probable strategies to overcome the problems and balance or eradicate the dependency situation. Finally the last section deals with forth research question about supplier evaluation to identify the appropriate suppliers, according to evaluation criteria and to suggest some possible strategies in sourcing, to reduce GPPL's dependency on ACPL. To make the sourcing cost effective, furthermore, EOQ is calculated to understand whether the current purchase order made by GPPL is reasonable or not.

5.2 Problems faced by GPPL in the relationship with ACPL

This research question aims to identify the problem faced by GPPL due to the dependency on its sole supplier, ACPL. To identify the problem this paper tries to list problems and their impact on GPPL. The issues like high price, low credit period, product delivery, untimely information on the supplier side, and increase in overall product cost are some of the problems GPPL faces in the relationship with ACPL.

Figure 9: Problems faced by GPPL from ACPL



Source: Own formulation from field data (2015)

5.2.1 Higher price

ACPL charges higher price than any other suppliers in the market. There are also other plastic wrapper suppliers in the market who supply the same plastic material with no significant difference in quality but charge less price than ACPL. Furthermore, no specific adaptation or investments have been tailored by ACPL for GPPL. Table 5 presents the price of different suppliers during different periods.

Table 5: Price of different suppliers during different periods

Year	ACPL(present supplier of GPPL) Price/ kg (Rs.)	PPI Price /kg (Rs.)	Shreya Price /kg (Rs.)	AM Price / kg (Rs.)
2012	300	295	290	285
2013	320	300	300	285
2014	350	330	328	305
2015	395	380	380	370

Source: Own formulation from field data (2015)

During the interview with Tiffin Bujiya and Snax Manufacturer, one of ACPL's buyer, mentioned that ACPL is always concerned on charging premium prices to its customers, although there is no difference in quality and service provided to its customers in relation to other suppliers. The only competitive advantage ACPL has in relation to the small buyers is that it takes small orders of up to 50-60kg which is very important for small business manufacturer on inventory holding costs and capital bases.

Similarly with regard to Janaki Products (former buyer of ACPL), the manufacturer of pan masala and gutka revealed that product like gutka and pan masala are sold at 2 rupees (Rs) per unit to the final consumer. Hence small fluctuations in price leads towards the fall in organization's revenue.

5.2.2 Short credit period

According to Zainudin (2011), credit period is the length of time during which supplying organization grants credit to its customer. The length of the credit period varies from organization to organization. At the end of the credit period, the customer is expected to pay for the goods that are purchased from the supplier.

ACPL provides 15 days credit period which is a very short credit period compared to other competitors. Other suppliers in the market provides 45-60 days credit period. GPPL in the interview revealed that it buys plastic wrappers from ACPL with 15 days credit period, but has to provide 45-60 days credit period to the buyers (super stockist,wholesalers and retailers) of the product in the market. The products that are sold in the market will give return only after 45-60 days creating setbacks in paying its credits to ACPL after 15 days. Therefore, GPPL has to take loans from the market which come with high interest rates at the cost of the organization. If ACPL provided longer credit periods, GPPL would not need to take loans to service their debts, and also could have the ease in their capital rotation.

5.2.3 Product delivery

Product delivery from ACPL has become another problem to GPPL. According to the agreement between GPPL and ACPL, on-time delivery of the plastic wrappers to the buyer's place is the responsibility of the supplier. But ACPL seems to be less committed towards their agreement. ACPL now has left the delivery process of the packages from the factory at the fate of GPPL's hands hence increasing additional transport cost to GPPL.

This issue has also been addressed by another buyer. Madhu Chemicals Udyog, a manufacturer of smokeless tobacco stated that, at the initial stage ACPL used to deliver the orders by its own delivery vans but over the time period it began to ask buyer's to manage their own delivery vans.

Further Janaki Products, another manufacturer of smokeless tobacco mentioned that at the initial stage of a new entrant (buyer in this case) in the market, ACPL as a supplier shows hard core support to its customers but over time the buyers were left devastated due to the little support given.

The information from Madhu Chemicals and Janaki Products reflect that GPPL is not only the organization suffering from delivery problems caused by ACPL. Thus, it is revealed that ACPL has been taking advantage and creating problems with regards to its commitment and the service towards its customers.

5.2.4 Untimely information

ACPL never gives prior information about the price increases. They spontaneously increase prices and force buyers need to pay that. Moreover, they even charge new prices to orders yet to be delivered that were previously billed on old prices. Due to the increment in the price of plastic materials, GPPL's production cost has increased but the firm is reluctant to escalate the prices of the final products because of their high elasticity in nature. A sudden increase in price of the final products will have a negative knock-on effect on GPPL's market share as customers prefer the cheapest option in the smokeless tobacco market. Therefore, GPPL has to offer its final product in the same market price even though the cost of the product increases. Due to this GPPL's profit decreases substantially.

In regard to the untimely information setback when interviewed, the other buyers considered this issue in the following manner:

Janaki Products mentioned that normal increments in price is acceptable but withholding the information about the price increase rather than passing the information in advance is a violation of fair trade practice. "They suddenly announce the increment even if other suppliers in the market have no price increment. Moreover, the orders placed at old prices and awaiting delivery are also delivered at the increased rate" says Janaki products spokesman.

Similarly Madhu Chemicals Udhyog and Tiffin Bhujiya and Snax Gharelu Udhyog also have similar view about ACPL. Madhu Chemicals Udhyog stated that, ACPL is always in a look to exploit the customers by charging high prices. They never give prior information about price increment and even charge new rates to those orders which had been ordered before the increment.

5.2.5 Overall increment in the purchase cost

The above mentioned factors like abrupt increment in prices, problems with delivery and service, and untimely information all lead to increase in the cost of final product. The manufacturer of Janaki Products stated that small fluctuations in prices lead to excess costs towards the organization hence a fall in revenues.

For instance, table 6 given below compares the total purchasing cost between four different suppliers in the Eastern region of Nepal. AM Printing is taken as the base for comparison because AM printing charges lower price than other suppliers.

Table 6: Cost comparison of different suppliers in the year 2014

Suppliers	**Cost of material (cost price x purchase volume in kilogram)**	**Percentage of cost difference (Taking AM printing as the base for comparison)**
ACPL	Rs. 350 x 27000kg = Rs. 9450000	14.75%
PPI	Rs. 330 x 27000kg = Rs. 8910000	8.91 %
Shreya	Rs. 328 x 27000Kg= Rs. 8856000	7.5%
AM Printing	Rs. 305 x 27000Kg= Rs. 8235000	-

**note: Nepali currency is denoted as Rupees, which is expressed as Rs.*

Source: Own formulation from field data (2015)

The above table 9 depicts that GPPL in 2014 ordered 27,000 kg of plastic wrappers from ACPL at the rate of Rs. 350 which cost them Rs.9, 450,000. For the purpose of the study cost price comparison has been done and found that if GPPL bought the same quantity of plastic wrappers from PPI, Shreya and AM then that could cost them less than what they had paid to ACPL.

Furthermore, when the cost price of AM printing is taken as a base for comparison, it found that the difference between the price of ACPL and AM printing is 14.75% which represents Rs. 1,215,000. That is, GPPL could save 14.75% from what they had paid to ACPL. As GPPL is paying a high price to ACPL which increases their purchasing cost and decreases their final profits. However, the motive of price comparison in this paper is not to suggest to select the low cost supplier. It is to provide the general idea of the price difference because the small difference leads to a saving of large sums of money.

The manufacturer of Janaki products **(**a former buyer of ACPL**)** revealed that even small savings are very important for the organization, especially when there is no such difference in the product supplied by existing supplier and other suppliers in the market.

However, Considering the fact that price is not always the criteria for supplier evaluation, these suppliers are further evaluated in terms of multiple criteria in the supplier evaluation section.

GPPL faces above mentioned problems due to the high dependency on ACPL as its single supplier. The issues like delivery problem, charging a higher rate to the product which was already ordered, not giving timely information about price increment by ACPL to GPPL, give a reflection of opportunism from the supplier side due to the dependency on single supplier.

Opportunism is defined as "self-seeking with guile" that includes withholding or distorting information, lies, stealing, cheating, calculated efforts to mislead, disguise, failing to fulfill promises or obligations (John, 1984; Williamson 1985**).** Further, GPPL is paying a high price to ACPL which has increased their purchasing costs as well as it had an impact on organization's saving, which is depicted in the above table 6. Since GPPL faces a problem in relationship with ACPL thus, in the next section the dependency of GPPL on ACPL are discussed and analyzed.

5.3 GPPL's dependence on ACPL

This section explores GPPL's dependency situation on ACPL, its supplier of plastic wrapper. GPPL's dependency has been discussed and analyzed according to past and present situations in the study. Thus, this paper firstly discusses both the initial and the current situation of dependency. The motive behind this is to understand the situation of dependency that exist in GPPL and to identify the probable strategies to curb the dependency.

To analyze the situation of inter-firm dependency, this section tries to explain different aspects like financial magnitude; technological expertise; logistical indispensability; alternative buyer and supplier; and switching costs; that compose buyer's dependence and supplier dependence as suggested by Caniëls and Gelderman (2007). A buyer is mainly concerned to the delivery of goods and a supplier concerned to financial magnitude (Caniëls and Gelderman 2007). In the construct of supplier's dependence, it includes both the financial magnitude and buyer's technological expertise and in the construct of buyer's

dependence, it includes the logistical indispensability and of the supplier and supplier's technological expertise.

5.3.1 The Dependency situation of GPPL on ACPL during the initial period

In order to illustrate GPPL's dependency on ACPL, this subsection explores the various aspects preceding the inter-firm dependency between GPPL- ACPL dyad during the initial period.

- **The Financial magnitude of transactions**

The financial magnitude in business transactions is an important element that can create supplier's dependency. If a lot of money is involved, then the buyer is powerful in negotiations and that leads to supplier's dependency on the buyer (Gelderman and Van Weele, 2004; Caniëls and Gelderman, 2007).

GPPL purchases all the wrapping materials from their sole supplier, ACPL. It is to note that ACPL was the sole supplier in the initial period of GPPL as there were no other alternative suppliers in the market who could accommodate small order quantities. Although 100% purchasing was done from ACPL, the percentage contributions to the supplier's total sales is unknown in this paper because this study is conducted only from the buyer's side. However, GPPL revealed that ACPL's customers are not only the smokeless tobacco manufacturers, but also manufacturers who produce goods like biscuits, noodles, bhujia and snacks, scented or perfumed stick (used in temples for worshipping purposes), chocolates and many other products which need plastic wrappers to wrap their final products. Furthermore the interview with GPPL revealed that there are many buyers of plastic wrapper than the available suppliers. This depicts that ACPL was not that much dependent on GPPL with regard to the financial magnitude aspect.

- **Technological Expertise**

Technological expertise is another important element that influences dependence in a buyer-supplier dyad (Caniëls and Gelderman, 2007; Jong and Nooteboom, 2001). Both the buyer and the supplier might be interested in the technological expertise held by the other party (Caniëls and Gelderman, 2007).

From the supplier side, GPPL's technological expertise was negligible by ACPL because their work was basically supplying the materials required by GPPL like the way they do supply to other buyers in the market. From the buyer's side, the technical expertise of ACPL does not have a significant difference in the quality of products produced compared to the other suppliers in the market. Therefore GPPL was not dependent on ACPL for technological expertise.

- **Logistical indispensability**

According to Caniels and Gelderman (2007), logistical indispensability is about the delivery of goods from supplier and mainly concerns the buyer. With regard to logistic-based dependence in the initial stages of GPPL's relationship with ACPL, the buyer was highly dependent on the supplier for the final delivery of the plastic wrappers to its premises. ACPL used to deliver the final products to GPPL by using their own delivery vans.

- **Alternative buyers and suppliers**

The availability of alternative sources is another factor that defines the dependence position of buyers and suppliers (Gelderman and Van Weele, 2004; Caniels and Gelderman, 2007). The presence of alternative buyer and supplier can decrease or increase the power of supplier (Noorderhaven, Nooteboom, & Berger, 1998). In terms of alternative buyers, there are many buyers, purchasing plastic wrappers from ACPL. Furthermore, smokeless tobacco manufacturers are not the only buyers of ACPL's products but also all the rest of manufacturers using plastic wrappers to pack the products. Similarly, in GPPL's perspective, there were no alternative suppliers in the market for GPPL during the initial period. As the production volume of GPPL was quite low in the early stages of its establishment, they started procuring materials from ACPL who could accommodate their special small order quantities. Since the buyer only deals with ACPL for this plastic wrapper, this has made the buyer totally dependent on its supplier.

- **Switching cost**

Switching cost is incurred when there are difficulties or costs connected with changing the organization's current supplier (Klemperer, 1995; Gelderman and Van Weele, 2004; Kim, et al., 2004).

Due to the low order volume, GPPL has been left totally dependent on one specific supplier i.e. ACPL. In 2012 and 2013, the yearly purchase volume of GPPL of plastic wrapper was only 5000 kilogram and 12000 kilogram respectively. The weekly average purchase volume of GPPL was below 500kg. Therefore, there was no other possibility for GPPL to switch to other alternative suppliers because they do not accept orders below 500kg. ACPL is the only supplier in the market who accept orders up to 50-60 kg. If GPPL switch to other suppliers then they have to increase their order volume, which incurs the inventory and the investment costs. Therefore switching cost was quite higher for GPPL in the initial period.

Thus, during the initial period, GPPL was highly dependent on its supplier ACPL because of logistical indispensability, unavailability of alternative suppliers, and high switching cost. As the buyer had no alternative choice rather than comply with the supplier's terms of trade, it led to the overall high dependency of GPPL on ACPL as a sole supplier. Provan and Steven (1989) and Williamson **(**1985**)** on this regard state that a dependent buyer will comply with his supplier as they want to continue the relationship and have no other alternatives of other suppliers. The dependency situation of GPPL and ACPL during initial period is further presented in the table 7.

Table 7: Dependence situation of GPPL (Buyer) and ACPL (Supplier) before

Buyer dependence	**Dependence**		**Supplier dependence**	**Dependence**	
	Yes	**No**		**Yes**	**No**
Logistical indispensability	✓		Financial Magnitude		✓
Need for supplier's technological expertise		✓	Need for buyer's technological expertise		✓
Alternative suppliers	✓		Alternative buyers		✓
Switching costs	✓		Switching costs		✓
Overall dependence	✓		Overall dependence		✓

Source: Modified from Caniëls and Gelderman (2007)

5.3.2 The Dependency situation of GPPL on ACPL at the current period

The present dependence situation of GPPL on ACPL is explained in this section, with three important factors from GPPL's side; logistical indispensability, alternative suppliers and switching costs. These three factors are explained as they have changed the dependency

situation of GPPL in the current context. On ACPL side, the situation is same as before. ACPL seems to be not dependent on GPPL as in the initial period, so therefore the supplier side has not been explained here.

- **Logistical indispensability**

With regard to logistic-based dependence in the current stage of GPPL's relationship with ACPL, the buyer is not dependent on the supplier for the delivery of the plastic wrappers to GPPL's premises. ACPL often ask GPPL to collect the plastic wrapper from its premises. GPPL uses its own delivery vans to collect the plastic wrappers from ACPL premises.

- **Alternative suppliers**

There are many suppliers of plastic wrappers in the country, but in terms of potential suppliers, there are only three in the Eastern region of Nepal: PPI, Shreya, and AM plastic industry.

GPPL revealed that currently the order quantity of plastic wrappers is 850kg on a weekly basis. Thus the purchase order of GPPL is now greater than 500 kg, which means that they can buy from other suppliers in the market as they are able to meet other suppliers' requirements of order quantities above 500kg which was the major constraint in the initial period of the organization.

Further, out of the three potential supplier's, two of them are not that far from GPPL. The driving distance between GPPL and PPI is only 15minutes whereas driving distance between GPPL and Shreya printing is 25 minutes.

Hence, the increased production capacity and the increased volume of purchase has opened the door to GPPL to work with other suppliers in the market. Supply risk usually becomes less when same product can be purchased from more than one supplier (Van Weele, 2010) and enjoy the best price advantage (Yu et al., 2009).

- **Switching Costs**

Switching to a new supplier means more transaction costs, learning costs and artificial or contractual costs (Klemperer, 1987; Kim, et al., 2004). At present, the switching cost is not that high as before but however, GPPL will incur costs if it decided to change the supplier. GPPL mentioned that they have the potential to work with other suppliers other than ACPL

but would not be done overnight because of the costs involved to the organization. GPPL would have to pay all their dues at first hand, tying up their capital, hence they would need to take loan from the financial institution that increases the interest rates. Moreover, dealing with new suppliers arises the need for further investment such as advance payments to the new suppliers of GPPL.

Therefore, changing to new suppliers at once increases transaction costs to GPPL. For instance, two banks may offer completely identical checking account, but it involves a high transaction cost in closing an account with existing bank and opening an account in another competitor bank (Klemperer, 1995). Hence, the costs and difficulties associated with the replacement of a specific supplier by the buyer depicts buyer dependence on supplier (Heide, 1994). The table 8 depicts the present dependence situation of GPPL on ACPL.

Table 8: Present condition of Dependence situation of GPPL and ACPL

Buyer's dependence	**Dependence**		**Supplier dependence**	**Dependence**	
	Yes	**No**		**Yes**	**No**
Logistical indispensability		✓	Financial magnitude		✓
Need for buyer's technological expertise		✓	Need for buyers technological expertise		✓
Alternative suppliers		✓	Alternative buyers		✓
Switching costs	✓		Switching costs		✓
Overall dependence	✓		Overall dependence		✓

Source: Modified from Caniëls and Gelderman (2007)

From the above discussion and the presentation of the table regarding the current situation of dependency, it shows that switching costs have created a dependency on the supplier, otherwise the buyer does not seem to be that dependent to the supplier regarding other factors because there are many more potential suppliers in the market who could supply same plastic materials to GPPL. Furthermore, the company is currently in a position to meet the order requirement of other potential suppliers in the market. However, switching costs seem to be the major obstacle for GPPL to change to alternative suppliers.

5.3.3 Probable Strategies

To identify and analyze the probable strategies with regard to the organization's condition, this paper has used buyer's dependence reduction action as suggested by Emerson (1962). Questions were asked to GPPL during interview about various strategies given by Emerson (1962) to identify the best possible options. Hence, the feasibility and the infeasibility of different strategies were explained further in detail.

5.3.3.1 Reduce GPPL's interests in the resources possessed by ACPL

This strategy can be implemented in three different ways: change of technology, substitution of material and modification/ development of a new product (Emerson, 1962). In the interview, GPPL mentioned that developing or modifying new products and changing technology is quite infeasible because there is no room for modification or expansion.

However GPPL stated that substitution of the packaging material is possible through paper pouch packing and can packing. Normal paper pouch packing, however comes with a price because it makes the product highly vulnerable to moisture, tear and wear hence exposes products to new risks like reducing the products' lifespan. Since it affects the quality of the products, paper pouch packing is not a feasible solution.

On the other hand, can packing is very safe but it needs additional installation of machines that costs very high to the company. The market for the smokeless tobacco products in Nepal targets low-price customers, therefore the product is available in SKUs (stock keeping units) of Rupees 2 per pouch. Therefore, substituting the plastic wrappers with can packaging incurs heavy investment and increases the total cost of the product that will have a knock-on effect on the final price of the product if the organization is to make profits. This will put GPPL's market share in jeopardy because of the high price elasticity associated with the targeted customers, who are more likely to substitute GPPL's products for other smokeless tobaccos. Therefore can packaging is also infeasible for the company.

5.3.3.2 Increase GPPL's availability of alternative sources

Emerson (1962) suggested three different ways of increasing a buyer's availability of alternative sources; multiple sourcing, internal production and supplier development. Among these three, GPPL stated in the interview that internal production and supplier development are not feasible to them because firstly GPPL does not want to go for an in-

house production as these two are quite different businesses. Further, it needs very high investment to produce such materials so it does not want to invest in a new business.

Supplier development which is defined as a long term effort of a buying firm with its suppliers to increase suppliers' technical, quality, delivery and cost capabilities to promote ongoing improvements (Watts and Hahn, 1993; Krause and Ellram, 1997). With regard to supplier development, GPPL stated that development of supplier by the buying firm requires long-term investment, effort and time which is not possible to materialize the supplier development process. Furthermore, GPPL mentioned that multiple sourcing can be one alternative solution to the situation due to availability of potential suppliers in the market who supply similar plastic wrappers, hence making it a feasible solution.

5.3.3.3 Increase ACPL's interest in the resources possessed by GPPL

In terms of the third alternative, Emerson (1962) suggested four ways to increase a supplier's interest in the resources possessed by a buyer. These are long-term contract, joint venture, extended relationships with the new process, development of leverage strategy and establishment of buying consortia. Among these four developing leverage strategy seems feasible as there are other potential suppliers in the market supplying the same quality of raw materials and hence by bringing competition between the suppliers, GPPL can gain price advantage. Moreover, in the interview, GPPL mentioned about doing business with other suppliers in the market as a possible solution.

But regarding long-term contracting, GPPL states that it is not possible because of ever-changing government regulations regarding packaging of tobacco products (Tobacco control policy fact sheet, Article 13). Due to this it is very difficult to sign long term contract with the supplier. And also due to the constant evolution of technology, long-term contracting will be a disadvantage if other suppliers develop alternative packaging materials at very low costs making long-term contract a constraint in cost-saving. GPPL stated that extending relationships with new processes is infeasible for GPPL since it requires long term investment, effort and time and hence GPPL does not want to do investment in new processes. Addition to this, investment in new processes increases the cost of the total product and further increases the product price which will affect the organization's profit.

With regard to buying consortia, GPPL mentioned that it is difficult to form a consortium between buyers because there are different buyers (big and small) with different business strategies and few suppliers in the market, and further makes it impossible to convince and group them under a single umbrella because of intense competition (GPPL).

5.3.3.4 Decrease ACPL's availability of alternative sources

Emerson (1962) suggested two ways of decreasing supplier's availability of alternative sources: develop long-term relationships and increase control over supplier's customers. It is quite difficult for GPPL to control supplier's customers because there are many big and small buyers comparing to suppliers. With regard to developing long-term relationship GPPL mentioned that it is infeasible because the government regulations with regard to packaging of SLT products changes frequently. Long term relationship is based on dependence and trust (Ganesan, 1994). As GPPL is not satisfied with the performance of ACPL and facing several problems, thus, long term relationships based on trust may not be possible.

Hence, while analyzing probable strategies of GPPL by using dependence reduction action as suggested by Emerson (1962), multiple sourcing and developing leverage strategy found as a feasible strategy for GPPL.

Since there are other suppliers supplying the same materials with no difference in quality so therefore it is beneficial for an organization to source from different suppliers and adapt leverage strategy to become cost effective and to ensure continuity of supply of materials. According to Gadde and Håkansson (1994), in multiple sourcing buyers are expected to have better control of price levels and have more reliable supply due to the diversification of risk. Furthermore, multiple sourcing can help to avoid the risk of becoming dependent on a single supplier (Svahn and Westerlund, 2009).

In order to balance the dependency of GPPL on its supplier ACPL, purchasing and supply strategies are developed though the purchasing portfolio, which are discussed and analyzed in the next section.

5.4 Purchasing portfolio model

The objective of this section is to identify a proper purchasing strategy according to its Kraljic purchasing portfolio model. In Kraljic purchasing portfolio model power and dependence plays an important role in influencing the choice of purchasing strategy so therefore this model is applied in this study to reduce GPPL's dependency on ACPL.

The Kraljic's purchasing portfolio matrix helps professional purchasers to optimize the use of capabilities of different suppliers and hence help to manage suppliers effectively (Caniels and Gelderman, 2007). Kraljic (1983), mentioned that buyers should classify all the components or materials in terms of profit impact and supply risk in order to develop strategy towards suppliers. Hence this section first tries to explore the purchasing impact and the supply risk of plastic wrappers for positioning the product in the purchasing portfolio matrix. And further try to find some probable strategies to reduce the dependency of GPPL on ACPL.

5.4.1 Purchasing Impact

On the purchasing impact, the factors like volume purchase by GPPL, percentage of the total purchase cost, and impact on product quality were analyzed (Van Weele,2010) .

- **Purchase Volume**

The purchase volume of the products was very low in the initial period of GPPL's relationship with ACPL. However, recently the purchase volume of the plastic wrappers from ACPL is high and it seems there will be a tremendous growth in the volume in the near future as the demand for GPPL's final product is increasing. Therefore, high purchase volume has high purchasing's impact on financial results (Van Weele, 2010).

- **Impact on Product Quality**

Plastic wrappers are of greater importance to GPPL's growth and product quality. This is a very essential raw material for the company. The final products produced by GPPL are highly perishable and cannot be sent in the market without packing it. They become tasteless and harmful if they come into contact with air. Thus the purchased plastic wrappers have high impact on product quality. Based on this, the impact on product quality has a high purchasing impact

- **Percentage of total cost**

The percentage of purchase plastic wrappers are 12% of the total cost. (See appendix). Extant literature does not mention about how much of the percentage on total cost can be placed as a low impact on purchase risk. 12% is not a small percentage volume and furthermore plastic wrappers alone account for 12 % out of the total cost of the product, which include: betel nut, tobacco1, tobacco2, tobacco 3 (note: the final product contains the mixture of tobacco 1, 2 and 3), sandal, paraffin, menthol, cardamoms, edible scent, lime, catechu, diesel, and cost of labor including supervisors, accountant, storekeepers, cooks, packaging labor, sales people and drivers. Therefore, the plastic wrappers are placed as materials of relatively high importance in the purchasing process.

5.4.2 Supply Risk

When it comes to supply risk, factors like the availability of the product; the number of potential suppliers; the cost of changing suppliers; supply of market structure; geographic distance; storage risks and substitution possibilities of the raw material were looked after (Van Weele, 2010). Hence, these factors are discussed below.

- **Product availability**

Due to the low purchasing volume in the initial period, GPPL was bound to buy from ACPL as it could accommodate small order quantities of up to 50 to 60kg. Today the purchase volume of GPPL has increased and can fulfil the minimum order requirement of other suppliers in the market Moreover other suppliers in the market supply same materials of the same product quality and thus there seems no supply scarcity for plastic wrappers and furthermore, no risk regarding the future availability of the product.

- **Number of potential suppliers**

Although there are many suppliers who supply plastic materials, there also are three potential suppliers for GPPL in Eastern Region of Nepal in terms of cost, price, service and distance. They are PPI, Shreya Printing and AM Printing.

- **Market structure**

Market structure is the way markets are organized within an industry (Bello et al., 2009). Market structure influenced by the number of competing firms, number of buyers, levels of product differentiation, and entry/ exit condition in the prevailing market (Bello et al., 2009). There are few firms in the plastic wrapping industry supplying plastic wrappers to a large number of customers/buyers. All the producers who need plastic material to wrap the final products are the customer of the plastic wrapping industry. The products are homogeneous in nature. There is competition between the firm and have more non price competition like: product quality, service, credit period, distribution service. There is a barrier to entry due to the requirement of high investment and economies of scale.

Hence, if the market structure of buying industry and supplying industry is analyzed, in the present case, then the typology of market structure is a supply side oligopoly, where there are few suppliers and many buyers of plastic wrappers, thus it is very essential to have a proper strategy to arrange the supplier to assure long term supply of the raw material in a desired way.

- **Distance**

Distance from GPPL to its potential suppliers is not a constraint because they are all situated in GPPL's proximity. Among the three potential suppliers, two are PPI and Shreya which can be reached by 15 minutes and 25 minutes respectively. So there is no distance-related risk.

- **Storage risk**

There is no risk related to storing of the plastic materials. Firstly, plastic materials are non-perishable in nature, therefore GPPL does not face the risk of expiration of the plastic wrappers. Furthermore, the materials do not require special storage facilities in their favor, meaning low storage costs. Moreover, the purchase volume is in small quantities, on a once-per week basis which is an advantage to GPPL because it does not incur significant inventory holding costs.

- **Material substitution**

According to the obtained information from GPPL, smokeless tobacco product can also be packed either by paper or by can. However, according to GPPL, paper packaging is vulnerable and can packaging is very expensive. Since the final product needs to be sold at rupees 2 per sachet in the market so it will not be feasible to substitute the packaging materials to can packaging because it will increase the unit cost of the product. However, as there are already other suppliers of plastic wrappers in the market and there is no supply risk of plastic wrappers in the future so it seems that there is no need of material substitution.

- **Cost of changing supplier**

In the interview, GPPL revealed that it will be costlier for it to change the supplier because it will increase additional costs as they have to clear all the dues beforehand. Furthermore, moving to new suppliers also increases other costs as they have to give them a down payment in advance. Hence, the cost of changing suppliers will be costlier for GPPL thus it can have a medium impact on risk. The reason for placing it as a medium risk is that there is no specific investment assigned by the buyer on the supplier. According to Caniels and Gelderman (2007), when buyers and suppliers develop specific investment, this will result in high switching cost (Caniels and Gelderman, 2007). As there is no specific investment done by the buyer but there is some cost incurred thus risk of supply is placed in medium. These characteristics of product are further depicted in the table 9 given below.

Table 9: Purchasing impct and supply risk

Purchasing impact	**Impact on Purchasing**			**Supply risk**	**Impact on supply risk**		
	Low	**Medium**	**High**		**Low**	**Medium**	**High**
High Volume purchased			✓	Product availability (short and long term)	✓		
Impact on product quality			✓	Potential suppliers available	✓		
Percentage of total purchase cost		✓		Market structure	✓		
				Geographic distance	✓		
				Storage risk	✓		
				Cost of changing supplier		✓	

Source: Own formulation (2015)

Thus, from the above discussion and analysis, it has been illustrated that the impact on purchasing is high with regard to high volume, product quality but the percentage of total purchase cost has medium impact on purchasing. On the other side, the impact on supply risk is low in terms of: product availability, supplier's availability, market structure, geographic distance and storage risk. But impact on supply risk in terms of cost of changing suppliers is placed in the medium because if GPPL wishes to change the present supplier, then it has to clear all the dues at once to ACPL which increases the additional investment cost for them. Hence, based on this discussion and analysis, positioning of the product is explained in the following section.

5.4.3 Positioning the product (Plastic wrappers)

In order to balance the dependency GPPL on ACPL, it is important to locate in which quadrant these plastic wrappers falls into. However, it is difficult to exactly identify in which quadrant plastic wrappers fall.

In the initial period of GPPL-ACPL relationship influenced by order volume constraint, GPPL totally depended on its sole supplier who could supply plastic wrappers according to GPPL's requirement. As plastic wrappers are very essential for GPPL and they only source from a sole supplier, it implies that the plastic wrappers have the characteristics of strategic product in this perspective. However, at the initial period, GPPL's volume of orders was so low so this tells that the product also had the characteristics of bottleneck product. Therefore, by looking to the overall nature of the plastic wrappers, it can be concluded that it was in between strategic and bottleneck products in the initial period.

In the current situation, GPPL, purchases plastic materials from ACPL but it also has other potential suppliers in the market. Today the purchased volume of plastic wrappers has increased and due to this GPPL has an opportunity to work with other suppliers in the market. There are three potential suppliers who supply similar plastic wrappers with no significant difference in quality. Thus, there is the availability of alternative suppliers to GPPL for plastic wrappers in the market. Additionally, high purchase volume and getting the product at the same standard quality from other suppliers reveals that plastic wrappers have more characteristics of leverage product. Furthermore, the percentage of purchased plastic wrappers holds 12 percent of the total purchase cost which represents relatively high value to the end product cost. Therefore, the plastic wrappers can be more leverage products

rather than routine products. Routine products are of small value per item which includes cleaning materials, office supplies, maintenance supplies, and fasteners (Van Weele 2010).

However, it has been seen that costs will be incurred by GPPL while changing to new suppliers. But the switching cost is not that high to GPPL. Switching costs will be significant when a party in the transaction is involved in specific investment (Caniels and Gelderman, 2007). But in this case, neither GPPL nor ACPL is involved in specific investment to cater for this relationship. Thus, we can say that the plastic wrappers at present situation, are more of leverage products which moved from bottleneck and strategic quadrant.

5.4.4 Probable strategies

According to the above discussions and analysis of characteristics of the plastic wrapper, the product holds more features of Leverage product. On the basis of this, probable strategies for plastic wrappers as a leverage product can be competitive bidding (Van Weele, 2010; Gelderman and Laeven, 2005; Forker and Stannack, 2000) and multiple sourcing (Van Weele, 2010).

- **Competitive Bidding**

Generally leverage products can be sourced from many suppliers, thus competitive bidding (Van Weele, 2010; Gelderman and Laeven, 2005; Forker and Stannack, 2000) can be one of the probable strategy for GPPL. There is no need of long-term contracts as suppliers are interchangeable (Van Weele, 2010). According to Forker and Stannack (2000), when alternative sources are available buyer can easily compare and determine the fair price. Furthermore, small savings in leverage products represent a large sum of money (Van Weele, 2010) so GPPL can use competitive bidding and get fair price from the market. Competitive bidding might only be feasible when buying firm has not made specific investment and has alternative suppliers (Bensaou, 1999; Forker and Stannack, 2000). However, competitive bidding can be time consuming. Therefore GPPL can develop a list of potential suppliers and ask them to bid in order to save time.

- **Multiple Sourcing**

Furthermore, GPPL can adopt a multiple sourcing strategy. Van Weele (2010) states that buyers of leverage products in most of the cases adopt multiple sourcing. Moreover, due to multiple sourcing they can buy at minimum price, with standard quality due to positive competition among suppliers and ensure continuity of supply (Van Weele, 2010). Further, it provides greater assurance of on-time delivery, upside volume flexibility (Ramasesh et al., 1991) and increases buyer's negotiation power (Costantino and Pellegrino, 2010). Linthorst and Telegen (2006), mentioned that multiple sourcing helps to reduce the risk of supply disruption and further reduce the dependency on the supplier.

5.5 Supplier evaluation

For the purpose of evaluating the suppliers and alternative sourcing for GPPL, supplier evaluation is done in this section. Simply switching to a new supplier by terminating the existing one because another supplier is a few percentage points cheaper is not an appropriate solution always. Suppliers must be evaluated in term of multi-attributes according to their importance to the organization. Hence this section first identifies the criteria for selection of suppliers and its weightage and further evaluate each supplier on the basis of different attributes.

- **Identificatin of Criteria and its Weightage**

To evaluate and select the suppliers, weighted method (also called linear averaging method) has been used in this section. The researcher first asked the organization to list the important criteria for the selection of plastic wrapper suppliers. Organization view was taken for the selection of criteria, as the kind of item to be purchased has greater influence on the criteria when selecting a supplier (Dickson, 1966). Price, quality, delivery, service and distance were mentioned by GPPL as an important attributes for the selection of suppliers. Out of these five attributes (criteria), price, quality, delivery and distance were also identified by Dickson (1966) in his seminal paper as an important criteria for supplier evaluation.

Furthermore, GPPL were again asked to weight the criteria / attributes in total of 100%, according to its importance to organization. The attributes and its assigned weights are given in table 10.

Table 10: Supplier selection attributes and assigned weights

Attributes	Weight
Price	.35
Quality	.30
Delivery	.20
Service	.10
Distance	.05

Source: Own formulation from field data (2015)

Out of five attributes, price of the materials found to be the most important criteria considered by GPPL for evaluation of plastic wrapper suppliers. After price, second important criteria for GPPL is the quality of the product whereas, delivery is the third important criteria and so on.

- **Evaluation of Each Suppliers on the Basis of Attributes**

Once the weights were assigned to their attributes, rating scales were developed ranging from 1 to 4. Where 1 stands for poor, 2 stands for fair, 3 stands for good and 4 stands for excellent. In order to analyze the suppliers, the organization further ranked different potential suppliers in different scales according to the given attributes. And finally, the total score has been generated for each supplier.

The evaluation of each supplier is presented on the basis of different attributes are presented in the table 11.

Table 11: Supplier evaluation on the basis of attributes

Suppliers	Attributes						Ranking
	Price (0.35)	Quality (0.30)	Delivery (0.20)	Service (0.10)	Distance (0.05)	Weighted sum	
ACPL	1	4	2	1	4	2.25	IV
PPI	3	4	4	4	3	3.6	I
Shreya	3	4	3	2	2	3.15	II
AM Printing	4	3	2	3	1	3.05	III

Source: Own formulation from field data (2015)

According to the above table, Poly Pack Industry (PPI) had a higher score than other potential suppliers. The second best is Shreya printing (SP). Hence, one of the best supplier for GPPL can be PPI on the basis of price, quality, delivery, distance and service. Although AM Printing (AMP) stands best in terms of price but due to the distance and delivery related problems AM Printing score less value than PPI and Shreya Printing. It takes approximately 11 hours for the wrappers to reach GPPL's premises from AM Printing. Whereas, the other three suppliers are more nearer than AM Printing.

5.5.1 Probable Strategies

Hence, by comparing the weightage and the ranking of the four potential suppliers, the following probable strategies can be formed to choose suppliers.

Strategy 1: GPPL can terminate the relationship with ACPL and establish new inter-firm relationship with PPI.

GPPL can abandon its present supplier and select Poly Pack Industry (PPI) for the supply of the plastic materials as it stands good in overall and scored high in ranking. GPPL can switch to PPI for the supply of the wrappers as it is equally competitive with regards to quality and has an advantage over various factors. Furthermore, buying from single supplier helps GPPL to achieve economies of scale and cooperation between the firm (Costantino and Pellegrino, 2010).

However, depending on single supplier increases the supply vulnerability (Costantino and Pellegrino, 2010). For instance, Chopra and Sodhi (2004), stated that in the year 2000, when fire cause at a local plant owned by Royal Philips Electronics, N.V. one of the customer Nokia Corporation with its multiple sourcing started ordering its chips for mobile phone to other Philips plants and other proven Japanese and American suppliers. Whereas, the other customer Telefon AB L.M. Ericson, stopped its production with heavy losses about $400 million of sales due to single sourcing policy. Similarly, another example is about Toyota group. A fire cause at one of the main plant of Aisin Seiki's halted the operations of Toyota vehicles for weeks (Nishiguchi and Beaudet, 1998). Hence, in single sourcing, it creates high dependency on a single supplier and thus increases supply interruption (Burke et al., 2007). Furthermore, investment burden increases if GPPL immediately terminates the relationship with ACPL.

Strategy 2: GPL can establish a new relationship with PPI along with ACPL

GPPL can buy from one best supplier, PPI along with the present supplier, ACPL. The reason for this is at present, GPPL gives 850kg of orders on a weekly basis, therefore if it is divided to multiple suppliers then volume of order automatically shrinks. The order volume becomes small after splitting it to another supplier and may fail to meet the order requirement of new suppliers but still be in line with ACPL low volume purchases as ACPL accepts order up to 50-60 kilogram.

Furthermore, the reason for not abandoning ACPL completely is due to the fact that GPPL still has its working capital bounded as credit from ACPL and the termination of the relationship would mean that the company has to clear all the outstanding credits immediately, hence inflicting additional investment burden. Furthermore, it is beneficial for GPPL to keep ACPL as a reserve alternative supplier at hand in order to avoid dependency on specific supplier (Svahn and Westerlund, 2009) and to remain safe (Presutti, 1992).

5.6 Calculation of Economic Order Quantity (EOQ)

The study shows that the transactions between GPPL and ACPL is of very frequent one. GPPL place an order of 850 kilograms in every 6th day. The objective of raising this issue here is to know whether the current order is optimal or not. If no then GPPL are incurring the transaction costs. The frequency of transactions in inter-firm relationship reflects the inventory carrying costs and inter-firm coordination costs. As the frequency of orders increases, there will be reduction in average lot sizes and inventory carrying costs but increases the cost of acquisition, order scheduling and transportation planning (Buvik, 2002). In order to minimize inventory holding cost and ordering cost it is thus necessary to identify order frequency (Buvik, 2002).

Therefore to identify the optimal order quantity and suggest them to GPPL for improvements this paper further calculated the Economic order quantity (EOQ), times of order to be placed in a year and length of an order cycle. The calculation of EOQ is done in this paper according to the data collected from GPPL.

Annual Requirement (Demand) = 40800kilogram (kg) (Expected value by GPPL)
Holding cost = 3.95 (According to GPPL, I is 1%; so therefore, 1 % of Rs. 395= 3.95)
Ordering Cost= Rs. 100 (According to GPPL)

How much to order each time to minimize the total cost?

$$EOQ = \sqrt{\frac{2\,A\,O}{C}}$$

$$= \sqrt{\frac{2 \times 40800 \times 100}{3.95}}$$

$$=1437.297041$$

Thus, economic order quantity (EOQ) is 1437 kilograms.

How many times should company order?

$$\text{Optimal number of orders per year} = \frac{D}{EOQ}$$

$$= \frac{40800}{1437.297041}$$

$$= 28.38661657$$

Order should be placed 28 times in a year.

What is the length of an order cycle?

Days between order = $\frac{working\ days\ in\ a\ year}{optimal\ number\ of\ orders\ per\ year}$

$= \frac{300}{28.38661657}$

= 10.5683606

The length of an order is 10.5683606 so we take 11 days.

Calculations showed that the Economic Order Quantity is 1437kg and order can be placed 28 times in a year and length of an order is 11 days.

So therefore, 1437 kilograms is the optimal order quantity for GPPL to order the plastic wrappers. This is the level where inventory holding cost equals to ordering cost, which is shown by further calculations.

Cost of inventory management = optimal number of order per year x ordering cost

= 28.38661657x 100

= Rs.2838.66165

Holding cost based on average inventory = $\frac{EOQ}{2} \times holding\ cost$

$= \frac{1437.297041}{2} \times 3.80$

= Rs.2838.66165

According to Bozarth, (2011), EOQ gives good indication of current order quantities to know whether it is reasonable or not, even if all assumptions do not hold exactly. The current order quantity made by GPPL does not seem to be reasonable according to the above EOQ calculation, as there is a wide gap between the quantity ordered by GPPL at present and quantity supposed to be ordered according to EOQ. Furthermore, the length of order is 11 days according to the EOQ calculation instead of 6 days.

Thus, the above analysis shows that in order to minimise ordering and inventory holding costs GPPL can place an optimal order volume of 1437 kilograms in every 11 days. But if volume of order divided into two suppliers then economies of scale decreases. Economies of scale decreases in a sense that while sourcing from two suppliers, the unit transportation cost may increase as a result of ordering small volume from two different suppliers.

Thus to manage this situation GPPL can order large volume from new supplier Poly Pack Industry (PPI) because PPI stands best among all the suppliers and hence Ganapti Products Private Limited (GPPL) can benefit economies of scale by buying from them in a larger quantity. Furthermore, to curb the future dependency and to coordinate and maintain the reserve supplier GPPL need to gradually decrease the order placement on ACPL and can place small volume of order with Asia Chemicals Private Limited (ACPL) to keep the relationships going, as it accepts lower orders up to 50-60kg.

5.7 Chapter Summary

This chapter presents the discussion and analysis about the problem faced by GPPL and its dependency on ACPL. It discussed various alternatives and probable strategies to reduce the dependency by using resource dependence theory, kraljic model, and supplier evaluation method. Furthermore, to provide suggestions to GPPL this paper also calculated EOQ to identify the optimal order quantity. The next chapter presents the concluding part of this study. It integrates discussion and analysis done in the previous chapter by way of a summary, the managerial implications, the limitations of the study, and further research.

CHAPTER SIX

CONCLUSIONS, RECOMMENDATIONS, LIMITATIONS AND FURTHER RESEARCH

6.1 Conclusions and Recommendations

The rationale of the study is to understand the inter-firm dependency situation between Ganapati Products Private Limited (GPPL) and Asia Chemicals Private Limited (ACPL), and to identify the probable strategies to curb the dependency of GPPL on ACPL.

First, this paper identifies the problems faced by GPPL in relation with ACPL, giving the general overview of problems which help to answer the first research question of this study. The study shows that GPPL is facing different price and non-price related problems from ACPL, who is the sole supplier of GPPL for plastic wrappers. Untimely information or holding of information, poor credit facilities, improper delivery service, charging higher prices than other suppliers in the market are some of the problems GPPL is facing from its supplier ACPL.

Moreover, ACPL even charges new escalated prices to orders yet to be delivered that were previously billed on older prices. As a result, it has had an impact on organization's product costs, but GPPL is reluctant to increase the price of the products because of their high elasticity in nature considering the target market. Since the target consumers are low and medium income, a sudden change in price of smokeless tobacco will have negative impacts on market share, as customers prefer the cheapest option.

The problems addressed here give a reflection of dependency on a single supplier, thus needs special attention to reduce or balance the dependence position. Hence, as the answer to the second research question, the dependency situation of GPPL on ACPL is further analyzed in order to explore the dependency situation and to identify the probable strategies.

Based on the resource dependence theory, GPPL has been found to be highly dependent on ACPL during the initial relationship period. But at present GPPL is not that dependent on its supplier ACPL, as it was before. The analysis shows that GPPL's volume of purchase

has increased and there are alternative suppliers in the market who could supply same plastic wrappers to GPPL with no significant difference in quality. Furthermore, GPPL is currently in a position to meet the purchase order requirements of other potential suppliers in the market. In addition to this, GPPL is not logistically dependent on its current supplier as GPPL use their own delivery vans to bring plastic wrappers. However, the switching costs seem to be the factor that has created a dependency on its supplier. Although there is no specific investment done by the buyer but switching immediately to other alternative suppliers may increase additional investment burden to GPPL. Hence, GPPL seems to be dependent on ACPL but the dependency is not so high. Furthermore, multiple sourcing and leverage strategy have been found as probable strategies for GPPL by analyzing dependence reduction action. Hence it can be recommended to organization that as there are potential suppliers in the market so GPPL can source from more than one supplier instead of single sourcing to reduce the dependency on one specific supplier. A survey made by Presutti (1992), suggest that most of the organziations prefer to have two or three suppliers inorder to remain safe. Hence, it is recommended to source from two suppliers because maintaining a large supplier base results to excessive costs (Carbone, 1999; Brierly, 2002; Burke, et al., 2007).

Thirdly, analysis of the product portfolio found smokeless tobacco as a leverage product. According to Kraljic portfolio analysis, competitive bidding and multiple sourcing are found as probable strategies. It is important to note that resource dependency and portfolio model, both found multiple sourcing as a probable strategy. Thus, it can be recommended to GPPL that by bringing competition in the selection of supplier, GPPL can be efficient and can expect to have better control of price levels (Gadde and Håkansson, 1994; Costantino and Pellegrino, 2010) and more reliable supplies (Sheridan, 1988; Trevelen and Sweikhart, 1988; Costantino and Pellegrino, 2010).

Fourthly, as the analysis of this paper focuses towards the change of sourcing strategy to reduce the dependency thus this paper analyzes three potential suppliers along with ACPL in the Eastern region of Nepal. The study found Poly Pack Industry (PPI) as the best potential supplier on the basis of selected attributes. The other suppliers Shreya Printing Pack (SPP), Asia Chemicals Private Limited (ACPL) and Ananda Madan Printing (AMP) are ranked as second, third and fourth respectively. Two alternative strategies were formulated from the evaluation of suppliers: 1. GPPL can terminate the relationship with ACPL and establish

new inter-firm relationship with PPI. 2. GPPL can establish a new relationship with PPI along with ACPL.

The first strategy is terminating the ACPL exchange relationship and buying from PPI can again make GPPL dependent on the new supplier PPI due to single sourcing. The second strategy may help an organization to split purchase order volumes into two suppliers i.e. ACPL and PPI. This second strategy of sourcing helps the organization in two ways by overcoming the problems, i.e. GPPL can solve the problem of single sourcing by buying from PPI and ACPL , and can easily split the order volume of 850kg between these two suppliers since ACPL accepts orders up to 50- 60kg. The reason for not terminating the relationship with ACPL is due to the fact that the termination of the relationship would mean that company has to clear all the outstanding amount immediately which will increase additional investment burden to GPPL. Hence, GPPL can decrease the volume of orders to ACPL gradually, and substitute those order volumes to the new supplier. Furthermore, the other reason is, it is beneficial for GPPL to keep ACPL as an alternative or reserve supplier at hand in order to avoid dependency on one specific supplier and further remain safe.

Addition to this, PPI is the strongest competitor of ACPL and there are no variations in products supplied by ACPL and PPI. Thus, it can be recommended to GPPL to buy from PPI and ACPL in order to increase competition among the suppliers which will lead to better quality, price, delivery and further curb the dependency.

Finally, this paper calculates the economic order quantity (EOQ) and the result shows that the present volume of order is not optimal. GPPL can optimize its order volume by placing an order of 1437 kilograms in every 11 days instead of 6 days. This is the optimal quantity where ordering and holding costs gets equal.

Thus, it is recommended to GPPL that they can can source from PPI along with ACPL in order to balance its dependency position on ACPL and further to be cost effective GPPL can place an optimal order of 1437 kg in every 11 days which will minimize their total inventory holding and ordering costs. Furthermore, in order to overcome the problem of economies of scale while sourcing from two different suppliers, GPPL can place a large volume of orders with new supplier PPI and with ACPL ordering just enough to keep the relationship going.

6.2 Managerial Implications

Managers of company may benefit on this research findings in a sense that they can identify the dependency position of the organization, and further they can identify and understand the type, nature and characteristics of their products and hence implement the suitable strategies in balancing their inter-firm relationships. For the success of organization supplier's resources and quality of relationships play important roles. On this regard the main issue to consider is to optimize the size and number of suppliers and choosing the appropriate suppliers (Svahn and Westerlund, 2009). Managers of organization need to recognize the sourcing strategy as each strategy has its own advantage and disadvantage. Furthermore, they should understand that depending on a single source make the organization more vulnerable hence it is better to have an alternative (reserve) supplier. Furthermore, they should give emphasis on supplier selection to have competitive advantage. Moreover, GPPL needs to identify the optimal order quantity for the purchase order volume and the number of days in placing the order. As the frequency of purchase increases, lots of coordination efforts like acquisition costs, order scheduling and transportation planning costs also increase (Buvik, 2000). In this view, this paper may help GPPL in balancing their dependency in inter-firm relationships.

6.3 Limitations and further research

A major limitation of this study is that it involved the analysis of a single organization. The data was collected from only the buyer side of the buyer-supplier dyad. Therefore the findings of this study may not be generalized across other buyer-seller relations. The second limitation of the present study is the qualitative nature of the study due to which it analyzes the data based on theory and observational methods. Hence it may be more useful in conducting quantitative or mixed study to analyse data statistically.

Furthermore, based on qualitative research this paper suggested dual sourcing as a purchasing strategy to reduce the dependency. However, it also identified that buying from two or more suppliers involves higher costs than single sourcing due to the need for managing two suppliers at a time and the loss of economies of scale. Therefore, the selection of proper strategy requires proper justification of these additional costs against the benefits given by dual or single sourcing. Hence, future research regarding optimal number of suppliers and their quantity allocation requires further research by using mathematical models.

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APPENDICES

Appendix 1: Letter to Organizations

Dear Sir,

I am a Master's student, studying in Molde University College, Norway. I am conducting a research for my Master Thesis. I am doing a research on the buyer-supplier relationship so I humbly request for your help to learn and understand about a few issues. I am interested in learning about your organizational relationship with suppliers.

If you have any general or specific issues related to your organization with your supplying organization, then you could send me or inform me in advance, I would appreciate it greatly. That would help me be more prepared for my visit and also help me in questionnaire development. I appreciate your willingness to host my visit.

I assure you I will not take more time and will arrive at your facility according to your convenience. The information collected will be only for a study purpose. Please contact me if you are willing to support me.

Best Regards,

Sonila Shakya
Tintolia
Biratnagar-13
Cell no: 9842044384

Appendix 2: Interview Guide

Questions for purchasing manager of GPPL

1. When was GPPL established and how it functions?

2. What products are produced by GPPL?

3. What material is used to wrap the product? Why?

4. Why do organization purchase from ACPL?

5. How frequently do you purchase the plastic wrappers?

6. What is the volume of purchase?

7. What is the share of a supplier in the organization?

8. What type of problems do you face from your present supplier?

9. Who are the potential suppliers in the market?

10. What are the most important criteria that an organization prefers while choosing a supplier?

11. Is it possible to substitute the present supplier? If yes, how and if no why?

Questions to the head of the organization or director of the organization of GPPL

1. What do you say about market competition for SLT products?

2. Is there any entry barriers?

3. Why plastic wrappers are preferred to wrap the product?

4. Can organization substitute these materials or adapt new technology for packing these products?

5. Why organization prefer to purchase from ACPL?

6. How far the ACPL is from GPPL?

7. How many suppliers are there in the market?

8. How far they are located?

9. What are the criteria for choosing the supplier?

10. What types of problems do you face from your present supplier?

11. What difficulties can be expected in the near future from ACPL?

12. How does this influence the organization?

13. How about supplier development or having a long term contract/ with the supplier?

14. How about forming buyer's consortium?

15. Is there any possibilities to make-in those materials?

16. What is the most feasible way for an organization to solve the current problem?

Question to other buyers in the market:

1. What is the major business of your company?
2. Do you buy plastic wrappers?
3. Do you buy wrappers from ACPL?
4. What do you say about the price charge by ACPL?
5. How do you feel about ACPL regarding its performance?

Question to other suppliers in the market (except ACPL)

1. What is the market price of your product? Can you give me the data related to price in 4 different years?
2. What factor leads to increase the price?
3. Why do you think, ACPL is charging a higher price than yours or other suppliers in the market?

Appendix 3: Percentage of the wrappers cost associated in a production of a unit of 150gm.

Taking the price rate of **2014**

Cost of 1kilogram (1000 gm) of plastic wrapper= Rs. 350(Nepalese rupees denoted as Rs.)

Total weight of plastic wrapper in a final product = 34 gram

Price of 150gram= Rs.99

1gm= 350/1000= 0.35 per gram

34gm= 350/1000 x 34
=Rs. 11.9

% of cost = 11.9 / 99 x100
= 12%

12% of the wrapper costs associated in production of a unit of 150gram.

Appendix 4: An Interview Draft of GPPL

Ganapati Products Private Limited (GPPL)

GPPL is established on 30 august 2010 (2067.05.14 B.S) and registered according to the Industrial Business Act, 2049 under Government of Nepal. GPPL is a small scale business. It is established by the capital investment of Nepalese rupees ninety five lakhs (Rs. 9500000) to fulfil the main objective of producing smokeless (chewing) tobacco products. The product produce by GPPL are: Gutka, chewable tobacco (surti), pan masala, mouth freshener, sweet supari. Although it's a small scale business, competition is very high. There is no product differentiation. By concerning to public health, government has stopped issuing new license to enter in this business since last three years and there seems no chance to any change in government regulation regarding it. Due to government intervention, there is entry barrier to this business.

In order to wrap these products GPPL needs plastic wrapper/ pouch. These wrapper are essential packaging material because these smokeless tobacco products are so perishable that once they come to the contact of air they become tasteless and harmful. There are other alternative for packing these products like, normal paper pouch packing and can packing.

Normal paper pouch packing has high rate of vulnerability to keep the product safe for a long time. On the other hand, Can packing is very safe but it needs additional installation of machines that costs very high for the company. Since in Nepal, the market for these smokeless tobacco product is low price consumer market, the product is available in SKU (stock keeping unit) of Rupee 2, and Rs.6 per pouch. Out of these three categories 2per pouch is highly demanded. Therefore, to provide the product to final consumer at Rs.2, plastic wrapper is important because it cost less than other alternatives.

GPPL purchase plastic wrappers from ACPL from the date of its establishment. It is one of the big supplier and one of the nearest supplier to GPPL. The distance between GPPL and ACPL is only 8 minutes (driving distance). ACPL accepts low to high quantity of orders. It takes lowest amount of order up to 50-60 kg, whereas, others do not take order below 500 kg.

In the initial phase of GPPL the production quantity was not high and could not place order beyond 500kg. Since ACPL accepts low quantity orders so GPPL started working with ACPL from the beginning. Addition to this the quality of wrapper supplied by ACPL is also

good. At present ACPL is the only one supplier to GPPL for supplying plastic wrapper therefore the supply is 100% from ACPL.

The current requirement of plastic wrapper is 100 kg per day in an average. Currently GPPL is ordering average 850kg in a week. The order is place on weekly basis and one week safety stock of 850kg has been always carried forward.

GPPL is facing problems with ACPL regarding the issues like price, credit period, delivery, and information related. ACPL charges high price than other supplier in the market. Although there is no significant difference in the quality of product but they charge higher price than others. It provides very short credit period of 15 days while GPPL has to provide 45 to 60 days credit period to the market due to this interest expenditure increases for GPPL which directly affects its profit. While other suppliers in the market provides 45 to 60 days credit period.

In terms of delivery of product, ACPL ask GPPL to collect the product from ACPL factory instead of delivering them to GPPL. As delivery of a product is the responsibility of ACPL. Further, ACPL never gives information about price increment in advance. They even charge new price to the order which has already been order before the increment of price. Due to this it affect in the overall cost of the organization Since they are the 100% supplier of plastic wrapper to GPPL so they take advantage of the situation and GPPL has to accept it.

There is the possibility to substitute the present supplier ACPL but it cannot be done by tomorrow because if company wants to discontinue the current supplier, GPPL has to clear all the outstanding amount immediately that adds the additional investment burden. Further, in order to go with new supplier, GPPL have to place new order for which additional money is required. The alternative ways of packaging the smokeless tobacco products are can packaging and paper packaging. Paper packaging is vulnerable to moisture, tear and wear whereas, can packaging is safe but expensive that which increases the product costs. As the consumers of the smokeless tobacco products are low to middle income earners so increase in product price affects the organizations profit. Further GPPL doenot want to do investment in new technology or processes. With regard to modification of smokeless tobacco, there is no room for expansion or modifications.

Regarding long term contract, government regulation do change frequently so it is very difficult to sign long term contract with supplier. Development of supplier by buying firm is not so common in Nepalese context. Developing supplier needs long term investment and effort and time which is not feasible for us. Further ACPL is a big organization comparing to GPPL and there seems no reason for them to join hands with us. It will be difficult to

bring supplier in agreement. So it is not possible. GPPL does not want to go for in house production because first, these two are quite different business. Further, it needs very high investment to produce such materials. Controlling and convincing other buyers is quite difficult for GPPL because there are many small and big organization who is competing in this market so it is very difficult to convince them to form an association.

The requirement of plastic raw material is increasing so GPPL need to come up with proper solution because it will impact on profit. Doing business with other supplier or multiple sourcing is one way to cope this situation but changing the existing supplier at once is not easy as it increases the additional cost to GPPL

There are other suppliers in the market who supply similar products to the market. As per the geographical distance there are three potential supplier to GPPL, they are: Poly Pack Industry (PPI), Shreya Printing Pack (SPP) and Ananda Madan Printing (AMP). Poly Pack Industry (PPI) is located in Tintolia, Biratnagar which is in 15 minutes driving distance from GPPL and Shreya Printing Pack (SPP) lies in Hathkhola, Biratnagar that is in 25 minutes driving distance from GPPL. Whereas, AM printing is in Bhairawa which is 550 km far from GPPL that takes approximately 11 hours to reach there from GPPL. Poly Pack Industry (PPI) is also one of the big supplier of plastic wrapper like ACPL and is a strong competitor of ACPL. There is no such variation in product supplied by ACPL and other suppliers.

Criteria for choosing suppliers:

While choosing supplier, elements like cost price, quality, delivery, distance, service, all are important for us (GPPL). But for the product like these whose market is low consumer price market, cost price is the first and foremost important element because price has a significant impact on profit and sales. The second most important is quality because it affect the final product of GPPL. Then after quality the other important are delivery, service and distance.

In the initial period of our company (GPPL), price does not have that much impact due to very low volume of requirement of the raw material but now when company's requirement is increasing in course price has a great influence in company's profit.

Difficulties expected in near future and how it influence the organization:

- Number of buyers for plastic wrapper is increasing. Buyer for plastic wrapper may be any manufacturer who produces goods that needs plastic as a wrapping material. It can be biscuit manufacturer, noodles manufacturer, tobacco manufacturer etc. Increasing number of buyers may lead to significant variance between demand and supply because

buyers are increasing rapidly but no supplier is seemed to increase for another 4-5 years. Because the present market demand are being easily fulfilled by these existing suppliers and another reason may be it needs huge investment. If there is great variance between demand and supply, the supplier will not be able to deliver the material in time and when GPPL does not get the delivery en expected time then it will not be able to supply the final products regularly to the market. When there is scarcity of final product in the market repeatedly, GPPL gradually loses its consumer and finally, GPPL might lose its business.

- ACPL may provide very short credit period or no credit period. A very short credit period or no credit limit directs the buyer to increase interest expenditure. Buyer's investment increases in plastic wrappers as well as in the consumer market.
- Overloaded demand may lead the supplier to take advantage of the situation and show opportunistic behavior such as abnormal price increase, inconsistent quality.

Source: Ganapati Products Private Limited

Appendix 5: An interview draft of other buying firms in the market

Tiffin Bhujiya and Snax Gharelu Udhyog, Biratnagar (product: Bhujiya and Snax)

"ACPL is always concerning on charging high price to its customer, although it has no difference in quality and not any significant additional superior services to its customers. They even implement new price rate to those orders which has been ordered before the increment of the price.The only benefit working with ACPL for small business entrepreneurs like us is that it takes even the very low volume of orders of 50 to 60 kg. This is very important for us because we would not be in a position to invest very high amount, and within a very limited and short amount of capital we have to move our business ahead.".

Source: Tiffin Bhujiya and Snax Gharelu Udhyog

Shubharambha Foods Pvt. Ltd (product: Biscuit)

"We are quite satisfied with ACPL. We have been working with ACPL since last 5 years and not any significant difficulties faced till date. Yes it is right that the price of ACPL is higher in comparison to others and increase the price suddenly but however, since we believe in premiumness and mark the micro variances of the product we have found no complain on the wrappers produced by ACPL in this regard".

Source: Shubharambha Foods Private Limited

Janaki Products Private Limited , Dharan (Product: smokeless tobacco – pan masala and gutka)

"Janaki product is a pan masala –gutka manufacturing firm and in such an organization it has to serve complete product at rs.2 per unit to the final consumer. The target consumer of such products are lower level to lower middle level consumers, who are not quality conscious. In one rupee pack they want full satisfaction. A small unit of price fluctuation leads the organization towards fall in revenue. Small saving is considered to be important in the business especially in the case when there is no product difference. Considering all these facts Janaki products had already left the ACPL to work with. It had been working with ACPL for 4 yrs. but due to its opportunistic behavior Janaki products decided to leave ACPL. At the initial period of a new entrant ACPL shows hard core support to its customers but over the time period it get exposed. Normal increment over a time is acceptable but ACPL

even does not inform the customers priorly that price is going to increase. ACPL suddenly announces the increment even if others have no increment. The orders placed at the old price but not received yet is also delivered at the increased rate while they have been previously ordered before the notice to increment is published".

Source: Janaki Products Private Limited

Madhu Chemicals Udyog (product: smokeless tobacco)

"We have been working with ACPL since last 5 years. For the initial period of 2 years we dealt with the only one supplier "ACPL" but after that we started working with another one also because we had begun to feel one kind of inconvenience to work only with ACPL. Now we are working with two different suppliers along with ACPL. We purchase only 15% of total material from ACPL today. ACPL charged even the cost of cylinders to us while others do not. Cylinder is a kind of mould that is made of iron on which the final design of the wrapper including font size, font type, logo brand name colors, size of wrappers etc. is fixed and then sent to print and laminate. Other printing organizations pay the cost of cylinder themselves and give us minimum benchmark of printing quantity. That means the buyers have to place orders up to the minimum level of quantity to get the rebate from the cost of cylinders. Initially ACPL used to deliver the orders by its delivery van but over the time period it began to ask us to manage our own delivery which was not possible for us. Further, ACPL always in a look to exploit the customers by charging high price. They never give prior information about price increment. They charge new price to those orders which was ordered before the increment. And even evokes other suppliers about increase their price also by saying that ACPL is charging this much why not you people charge up to this level to your customers. It seems that ACPL intentionally wants to charge higher price and want to create price syndicate".

Source: Madhu Chemicals Udyog

Appendix 6: An interview draft of other suppliers in the market

Other Suppliers view (except ACPL)

Poly Pack Industry (PPI)

"For every manufacturer the general factor that affect price of the product are: government tax, cost of raw materials, dollar price labor and human resource cost, transportation cost, and electricity etc. Cost of labor has increased from Rs. 300 to Rs. 400. Cost of transportation increases due to rise in cost of fuel. Further, all Nepalese manufacturer is facing load shedding problem. Due to fluctuation in electricity manufacturer have to depend upon generator to continue their production, which ultimately consume more fuel. So load shedding has become very problematic for Nepalese manufacturer to carry out their business."

"Every organization do their business to earn profit. But business is not one time activity. Customer relation and satisfaction is must. Why ACPL has charged higher price is difficult to say but the general cost that ACPL bears we also bear the same thing and provide same quality product as ACPL does".

Source: Poly Pack Industy

Shreya Printing Pack:

"The factors like raw material cost, government tax, labor cost, transportation cost, interest rate are some elements that influence price. But addition to this another important issue in Nepal is Load shedding which increases the cost of every manufacturer. They cannot escape from this. We are using generator and that burn fuel. As the fuel price is high our production cost increases".

"It is true that ACPL charge higher price to their buyer and they even tell us to increase the price to our buyer. It is very difficult to answer why they charge higher price to buyer. As every organization has their own way of doing business so it is quite difficult to give this answer."

Source: Shreya Printing Pack

Ananda Madan Printing:

"Price increment depends upon various factors. In Nepal's context the factors like cost of raw materials, fluctuated rate of dollar price, increment in government taxes, increase in labor cost, increase in transportation, load shedding are the major factors".

"It cannot be exactly said why ACPL charge higher price but it can be due to low volume purchase of raw materials, focusing on local purchase, depending on more level of purchase channel".

For printing raw materials, we have to deal with international market like Thailand. Raw material comes to Nepal by passing through different boarders and channel member. There are different ways to bring raw material to Nepal from international market. First, Thailand to directly Nepal but it needs huge investment, second Thailand to India (Indian Agent) and directly to concerned organization (buying organization). Third way is, from Thailand market to India (Indian Agent), to Nepal Agent then to concerned organization. Then finally, the fourth way is from Thailand market to India (Indian agent) to Nepal agent to local Agent and finally to concerned buying organization. So increase number of channel member increases the cost of raw material. The another reason about ACPL having high price is may be its own tendency to charge high to the consumer because ACPL ask us and sometimes even send letter to us to increase the price by saying that ACPL is increasing the price so you also increase the price to customer. We have never sent any letter to other supplier to increase the price in the market but ACPL does that. This behavior somewhat reflects that ACPL may be intentionally want to increase the price".

Source: Ananda Madan Printing

Appendix 7: Some pictures of the final products

7 A: Smokeless tobaccos in a plastic pouch

7B: Smokeless tobaccos in a plastic bag (numbers of pouch inside the bag is 15 and total weight of bag is 150 gms)