1.0 INTRODUCTION

1.1 The Company Background

Doyen Medipharm Limited (DML) was founded in United Kingdom in 1991 as a specialist supplier of capital equipment (mainly packaging machines) to the medical and pharmaceutical industries. In early 1994, the United States arm, Doyen Medipharm Inc. (DMI) was formed to exploit the US market. Doyen started to move from being a supplier company into machines manufacturing with the acquisition of Bodolay Pratt, an established US company in supplies of medical and converting machines. This was followed by the 1997 acquisition of Doyen's original supplier in United Kingdom, Datum Appropriate Technology. In order to complete its product range, Doyen had also acquired the non-exclusive rights to a thermoformer design.

Doyen Medipharm is the world's only manufacturer of automated packaging machinery whose products are designed and engineered specifically to package medical devices. Compared to competitive equipment, which typically is derived from food packaging machinery, Doyen's products contain features that are uniquely geared to packaging medical devices and preserving the anti-microbial barriers that ensures sterility and product integrity. Doyen's machinery is considered the "Rolls-Royce" of the industry and no other medical device packaging machinery producer has as comprehensive a product line.

Doyen is a privately owned and financed company. The operations have been profitable and debt free. Sales turnover has also grown at a fast pace with revenue growing at a compound annual rate of 76% in the period 1992 to 2000 (34% since 1996) to almost USD10 million.

Doyen produces five core product lines covering the medical device packaging requirements:

- i. Four Side Seal Pouching Machines
- ii. Thermoform Packaging Machines

- iii. Glove Packaging Machines
- iv. Dressing Fabricating & Packaging Machines
- v. Transdermal Patch Fabricating & Packaging Machines

There are ten standard machines platforms within the five core product lines above. They are built in accordance to standard design but normally customised to satisfy customers' unique packaging requirements.

Refer to Appendix 1 for Product Details

Doyen machinery lines feature many technical and medical-grade achievements that have taken Doyen to be in the leading position in several market niches it serves. Currently there are over 400 installations of their machines in operations (including those of predecessor companies) at nearly 150 different medical device and pharmaceutical manufacturers located in more than 20 countries.

Currently Doyen has two manufacturing locations; one in Florida, USA and the other at Norfolk, United Kingdom, catering for both American and European markets. Separate sales offices are located near major customer concentrations, in New Jersey for the US market, England for the European markets and Malaysia covering the Asia market.

The latex gloves manufacturing industry is concentrated in the Asia countries with tropical climate especially Malaysia and Thailand due to the availability of the main natural resources, namely rubber latex. This provides great opportunities for the Doyen glove packaging machines line. Thus, the Malaysia office was formed in 1996 as a branch of DML, serving as the sales and service office for the Far East market. Located at Kulim, Kedah, the Malaysia office currently has a workforce of 4-5 person servicing the existing clients in the glove industry and to look for opportunities to increase their glove packaging machines

line installation base as we'll as to expand into the other medical devices industries with Doyen's other product lines.

Doyen gloves packaging machine is designed to pack gloves in a single pair packs, which is the requirement of most surgical gloves and for certain sterilised examination gloves. Currently, there are about 80 Doyen machines serving the gloves industries in Malaysia, Thailand and Sri Lanka. Majority of these machines were either inherited from the Bodolay Pratt acquisition or were sold by Doyen US and UK offices to the multinationals with their headquarters there.

Refer to Appendix 2 for Doyen Glove Packaging Machines Descriptions

1.2 The Issue

The machine manufacturing business is challenging, and Doyen has only succeeded by being amongst the best in the world. However, the skills, excellence and resources available to Doyen are not reflected in the Doyen's profitability, and Doyen is seeking to capitalise on it's inherent strengths with a second revenue stream that will both increase profitability and reinforce machine sales. Thus, Doyen has decided to expand into contract packaging business, which the pilot project was started in the US manufacturing plant recently.

With the local Malaysia gloves companies venturing and growing in the surgical gloves market, there are opportunities to market the glove line machines to them. Therefore it is the intention of Doyen to explore this market size and determine the feasibility of expanding their Malaysia operation into the contract packaging business in the surgical gloves industry, which plays an important in future machine sales. This new business however is preferably self sufficient or close to that in order to justify the investment.

This study is therefore initiated to act as an exploratory study to assist Doyen in their current marketing as well as the decision on the planned contract packaging business

1.3 Project/Study Objectives

The objectives of this study are:

- To provide the company with better understanding on Malaysia gloves market specifically the surgical gloves market with some information on the Thailand market as well.
- ii. To analyse the industry trend and growth potentials
- iii. To investigate the competition in the contract packaging business
- iv. To analyse the strength and weaknesses of the local Doyen arm in providing this new service and suggestions on strategies to capitalise on the strengths and to minimise or overcome the weaknesses
- To determine the feasibility of setting up the contract packaging business in Malaysia.
- vi. To provide a framework for the actual launch of this business

1.4 Significance of the Study

The study plays a significant role serving as among the important information provider for the Company in its decision making process on starting its Malaysia based contract packaging business. By providing the information on the surgical glove market in the region, the Company can have a better understanding on the local industrial trend and potentials, which no only help the Company in its intended contract packaging business but also its existing machine sales business

Although the regional medical glove market studies have been done before by Frost & Sullivan, the renowned research consultation company in the medical

industry, it was not readily available to the public and the latest study done was back in year 1999. There was also no direct study into the glove's packaging business, which is the critical information the Company requires in their business.

In addition to understand the surgical glove market, this study provides the analysis on the Company local operation, in terms of its strengths and weaknesses, and provides some suggestions to capitalise on its strengths and to minimise and overcome its weaknesses. This information might be able to help the Company in positioning its marketing strategy in targeting the local surgical glove producers for its existing machine sales business.

1.5 Scope of the Study

The interviews carried out in this study are on the Company existing clients, the potential machine purchasers, companies interested to venture into surgical gloves production and companies that currently outsource their surgical gloves packaging. Some quick discussions were also held with the officers of Malaysia Rubber Glove Manufacturers Association (MARGMA) and Malaysia Rubber Export Promotional Council (MREPC) to understand the general gloves market trend. Appointments were also made with Malaysia Industrial Development Authority to understand the incentives that Malaysia government is providing to new business set up.

Time and cost constraints have limited the geographical coverage of the personal interviews to limited parties in the Klang Valley, Ipoh and Penang areas, and over a period of 5 weeks only.

1.6 Limitations of the Study

As with most other studies, this study is subjected to certain limitations. Among the main limitation confronting this study is the inability to interview some of the potential machine prospects whom are currently negotiating or in the mist of deciding a machine purchase. This is to avoid heightening their expectation and perceiving the Company is offering such services as a marketing gimmick especially when there is no clear indication that this service will be available.

Some of the interviewees are unwilling to disclosure information about their operations as well as their working arrangement with their existing contract-packaging supplier. Organised survey forms are unable to be used as most interviewees decline to discuss further on their operations' need.

As there are many different packaging dimensions, materials types and qualities, the information on the economics feasibility was done based on the most common material used and the average cost available.

Despite the shortcomings, findings of this study have provided some insights on the current surgical market in Malaysia as well as the existing contract packagers operations.

1.7 Organisation of the Study

The study is organised into six chapters. The first chapter introduces the company and their Malaysia operation, and the issue that drives this study. This chapter also highlights the objectives, the significance, scope and the limitations of the study.

Chapter Two introduces the definition of contract packaging and provide more details behind the reasons for Doyen to enter the contract packaging business.

Malaysia gloves industry specifically the surgical gloves market is discussed in Chapter Three, which also provide some briefs on the Thailand gloves market. In Chapter Four, the research methodology and the findings. o 10 \circ 10 \circ

Chapter Five presents the analysis of the findings which include the external environment analysis and the internal environment analysis together with recommendations on the strategies to capitalise on the strengths and opportunities as well as to minimise or overcome the weaknesses and threats. The market segment is also presented here.

The last chapter forms the summary and conclusions of the study, addressing the feasibility of the business including the economics study and suggestions of some alternative courses of action. Recommendations for future research are also included.