

5.0 MARKET RESEARCH ANALYSIS

5.1 External Environment Analysis

An analysis of the external environment was carried out based on the market research done to identify the major trends in the industry. The competition analysis was also done. The opportunities and threats they posed are further discussed together with the internal environment analysis done with strategies to capitalise on some of the opportunities and to overcome or minimise the threats.

5.1.1 Industry Analysis

As the examination gloves market is rather mature and saturated, many Malaysia gloves manufacturers are interested to venture into surgical gloves production, which provides them with readily identified market as most of their clients are the same for both the medical examination gloves and surgical gloves. There are a number of local manufacturers who are venturing into the production of surgical gloves with commitments from their distributors. Increase production will increase exports, as surgical gloves market is not saturated.

Unlike the examination gloves, production of surgical gloves being labour intensive, due to the specific packaging required, and availability of labour is a major problem in Malaysia. Increasing labour cost and the recent sanction on Indonesian foreign workers by Malaysian government have added salt to the wound. Many manufacturers are not able to produce as many surgical as they would like to. This is also one of the major market restraints for the new or interested manufacturers. According to the survey done by Frost & Sullivan, labour shortage is ranked no. 2 in the order of market restraints impact for Malaysia disposable surgical gloves market. The labour shortage and rising labour cost are some of the main reasons for multinational companies such as Safeskin and Allegiance to move their production to Thailand. As it is quite impossible to match the low cost of labour in the neighbouring countries, many

Malaysia manufacturers are forced to differentiate their products in terms of quality rather than cost.

Automation is the solution to overcome the labour shortage and rising cost, however it is expansive and requires high capital investment. Automation cost is ranked 6 in the similar study done by Frost & Sullivan.

Unlike examination gloves' prices, which are almost reaching the stage of commodity, surgical gloves' prices are more related to the branding and quality it portrayed including the package or wrappers' aesthetics. With more local manufacturers shifting from OEMs to OBMs with their own brand names, packaging process becomes increasingly important as the price of the surgical gloves are greatly effected by the package quality and the process itself.

While almost all the surgical gloves are packed in single pair inner wallet of paper material, the poly material inner wallet is gaining popularity amongst the higher end products. Multinationals manufacturers have begun to test market these new packaging type. Modifications and improvements on the packaging machines are needed to suit these new poly materials.

Some companies such as Brightway has almost completely changed their inner wallet packaging style to poly material with a pocket for each glove. Currently the gloves packaging machines in the market is unable to automate this packaging style.

While the inner wallet packaging for the surgical gloves is almost mandatory, the subsequent packaging into the outer pouch is not, with some manufacturers selling their gloves to the other medical devices companies and packed together with other medical devices in a medical kit form.

The condition or cleanliness of the production area especially the finished products areas such as the testing area, the inspection area and the packaging area are greatly emphasised by the high-end clients especially those from the developed countries which are the major importers of these surgical gloves. These clients generally are willing to pay more for the gloves and places great emphasis on the product quality as well as on the process excellence. Almost all the multinational and the larger local surgical gloves manufacturers have clean room environment for their packaging room, ranging from clean room Class 100,000 to Class 10,000 (the number indicates the number of particles in a cubic volume).

International regulative bodies such as FDA are demanding higher standards on the medical gloves manufacturing procedures and protocols. Packaging process plays a very important role in ensuring the surgical gloves pouches' sealing integrity are of high quality as the gloves will be rejected if any broken seals or leaks are detected.

As surgical gloves are considered to be essential for the medical industry, many medical companies are demanding their supplier to guarantee no interruption of supply. This has prompted some of the medical multi national companies to look into alternative or emergency recovery options, ensuring no interruption of supplies should their production line or machines are downed. The recent global anthrax scare has also spurred some increase in surgical gloves demand.

Based on the report by Frost & Sullivan, the Malaysia surgical gloves market revenue would be more than doubled of the year 2000 forecast with yearly Compound Annual Growth Rate (CAGR) of 14 percent to year 2007. Although the figures in year 2000 and 2001 have not been very encouraging and not reaching the projected figures in that study, there are signs from the industry that the surgical gloves market is moving upwards especially during the last few

months. According to the industry players and MREPC, they expect the industry to be on the upward climb following the hiccups in the past 2 years.

5.1.2 Competitors Analysis

The competitors can be divided into two categories;

- i. The machine competitors
- ii. Contract packaging competitors

The main machine competitors to Doyen in this region for the gloves packaging machine are Maruani of France and Medkeff Nye of USA. Both offer a complete glove packaging line, which includes the glove inner wallet packaging machines and the outer pouch sealing machines. They are relatively lower cost machines with low performance. Some of the companies in this region also use Autowrappers of UK and Circle for their outer pouching packaging. All of these companies are not very active in sales here, prefer to let Doyen to do the initiative in convincing the potential users to move from manual packs to automation and then come in a much lower price to win the contract. Their after sales support in this region are almost none existence.

Without sufficient number of machines, these companies are unlikely to set up their dedicated service support facilities here and also unlikely to start offering contract packaging business similar to Doyen's intention.

Most of the surgical glove contract packing companies are located in Klang Valley. They are mostly proprietary owned or set up with few partners, most with prior working experience in the glove manufacturing. The few notable ones are Laconn Enterprise in Sg. Buloh, Glove Net in Kajang, Eastern Promise in Klang and QC Gloveas in Batang Kali. These companies are mainly poorly equipped and rely largely on manual labour, which most are foreigners. Besides packaging the surgical gloves, these existing contract packagers are also

providing manual packaging services for the examination gloves, therefore their relationship with their clients were started before the surgical gloves packaging contracts.

While almost all the major surgical glove factories pack their gloves in clean room of Class 10,000 or Class 100,000, these contract-packaging companies generally do not have clean room facilities and merely just having air condition rooms for their employees in the packaging room. Due to this quality control issue, the major surgical glove manufacturers do not outsource their packaging needs to these contract packaging companies to be done at their inadequate facility. However, as these contract packaging companies are mainly labour suppliers, and they are also able to provide on-site contract packaging services at the clients' premises depending on the client requirements. Some glove manufacturers prefer this for better quality control and the ability to pack in their clean room. The manufacturers with machines is unlikely to do engage this service as there is requirement to have pre-prepared packaging material which is impossible with short notice.

Most of the contracts between these contract packagers and their clients are based on order-to-order basis or batch-to-batch basis with no assurance of continuity of business. However due to their relationship and mutual benefits, these contracts are mostly on a continuation basis.

Majority of the payment terms are of a two weeks term. The contract packers are responsible for the offloading upon arrival of the clients' gloves at their premises until transporting the packed gloves back to the client or sending them directly to the designated port of export. The packaging materials are supplied by their clients and they are expected to cuff, pack the gloves into the pair inner wallet, followed by putting them into the outer pouches, seal the pouches and placed them into cartons. While doing these, the packers are expected to provide

additional quality checks on the gloves during the cuffing and inner wallet packing.

For their effort, these contract packaging companies charges between 5.5 cents to 6.0 cents (RM sen) per pair of gloves.

These contract packaging companies are basically doing a good job; providing quality packing, meeting the delivery schedule and are flexible in meeting last minute requirements. Most of them are with more than 5 years experience, employing experience employees who are able to pack fast. Their experience employees are also able to provide additional quality check on the gloves while cuffing and packing them.

Besides the existing contract packagers, there is also a local medical packaging material supplier who is now planning to set up their own contract packaging business with clean room facility to be located adjacent to their existing facility. This company Wazone Sdn. Bhd., produces the pre-cut and pre-printed inner wallet for the surgical gloves as well as the outer pouches with three sides pre-sealed. Originally planned for carrying out packaging for medical devices using simple thermoform machines, they are also interested to look into the surgical gloves packaging using manual labour. They are however looking for alternatives to automate this packaging as well including joint venture with machine suppliers.

5.2 Internal Environment Analysis

Based on the discussion held with the local Doyen personnel, the strengths and weaknesses of their operations in relations to the proposed contract packaging business are as follows.

In terms of strengths, Doyen possesses the machinery required for the surgical gloves packaging business as well as the technology know-how, which gives it the advantage over other competitors in the business. It is the leader by far in this surgical gloves packaging machines market with its reliable and superior technology, which is acknowledged by the users. Doyen also has a good reputation in the market for its service response and reliability. As being the sole medical packaging machine producer that has its own service team locally and with local service charges, this has been one of its key selling points to the local clients.

Although the Malaysia regional office has only been set up in end 1996, Doyen has the advantage of employing service personnel who had been working on its machine with a combined of more than 20 years of experience. This is due to the fact that it has a long history in these packaging machines in Malaysia dated from its predecessor, Bodolay Pratt and the availability of resources as their client (Allegiance) relocated some of their production to Thailand.

It will be a synergy with their existing machine sales and services business here, with the ability to provide in-house machine maintenance and operations capabilities. It will also be an avenue for Doyen to provide demonstration of their machines' capabilities and importance of validation, which brighten up their machine sales prospects.

Doyen also has some weaknesses that are limiting their existing business and could damper the proposed contract packaging business. With their glove packaging machine price almost double of their competitors, this has been the major stumbling block in competing with their machine competitors.

Generally, machine packed packages will be of larger size for both the inner wallet and the outer pouch. These increase the cost of packaging material, transportation and sterilisation costs. Therefore unless the glove manufacturers

can demand a higher price for its gloves or being a requirement by their clients, it is difficult to convince them to change from manual pack to automation.

The current local Doyen employees have no experience in contract packaging business. They also acknowledged that they lack the industry knowledge and have not foster good relationship with the surgical gloves manufacturers besides their existing clients.

5.3 Market Segment

Doyen's Malaysia contract packaging market can be segmented into 5 segments as follows:

- i. Their existing clients in the surgical gloves industry that they have deep level of contacts and history of working together. With a disaster recovery policy in place for these clients, they will be offered guaranteed access to a specified Doyen machine type at a specified, but short, notice. Premiums for continued access will be charged annually, but longer contracts should also be sought. In the event that the disaster recovery is invoked, a premium will be charged for the work conducted to ensure that there is a small cost penalty over the customers existing manufacturing costs for invoking the agreement.
- ii. Product start up and clinical trials. This service will be specifically targeted at existing customers with new products that are ultimately intended to be manufactured in house. Customers will normally be the existing Doyen machine users seeking new product introduction without disrupting their existing facilities. As the product matures and grows in volume, the customer can elect to purchase the entire machine and document package.

- iii. The companies that existing packaging their gloves using competitor machines. Similar to the disaster recovery policy that Doyen offer or the product start up options to their machine clients, with perhaps slightly higher premium, this is an opportunity to show and prove to these companies on Doyen machines' superiority. In line with Doyen's objective to sell machine, this can be a plus point in these companies future purchasing.
- iv. The companies intended to automated but without sufficient volume or strong future sales projection to justify machine purchase. This includes the existing surgical gloves manufacturers who package in-house or outsource it and the newcomers.
- v. Other medical devices companies. The four sides seal machine for the gloves outer pouch packaging, is a flexible machine that can be adjusted to suit other packaging requirements.

5.4 SWOT Analysis Summary and Strategies

The analysis done on the external and internal environments are summaries in the table below together with the strategies to capitalise on the opportunities and strengths as well as the strategies to overcome or minimise the threats and weaknesses.

<p>Opportunities</p> <ul style="list-style-type: none"> • Growing number of local manufacturers going into surgical gloves production • Some multi-national companies are interested in disaster recovery and new product tests, which are unable to be fulfilled by the current local contract packagers • Growing emphasis on the packaging process and final product quality and reliability • Machine packed products has a better quality image in the eyes of the manufacturers clients • Labour shortage and increase in labour cost • Provide a great selling tool to the sales of new machines • Opportunities in other medical devices market such as catheters & syringes. 	<p>Strategies to Capitalise on Opportunities</p> <ul style="list-style-type: none"> • Seek out and keep close contacts with the local and new surgical gloves manufacturers and invite them to visit the facility aiming to boost their confidence in Doyen machine and service capabilities. • Convince the existing clients to develop the facility together for mutual benefits • Continue market the benefits of machine packed products such as conducting seminars on validation • Sales personnel need to be trained to sale both the machine and the contract packaging services • Need to explore further into the other medical devices for marketing the other Doyen product lines as well as the possibility of packing their products with the 4SS machine.
<p>Strengths</p> <ul style="list-style-type: none"> • Possess the machines and technology know how • Machines are flexible with ability to cater for various package dimension • Have good reputation in market as 	<p>Strategies to Capitalise on Strengths</p> <ul style="list-style-type: none"> • Market the contract packaging service as an avenue for prospects to improve on their packaging without having to buy the machine • Focus on existing machine users that have high regard of Doyen to

<p>the leader in surgical gloves packaging machines with reliable and superior technology</p> <ul style="list-style-type: none"> • Current local employees possess surgical gloves packaging knowledge as well as Doyen's machine service and maintenance, having a combined of more than 20 years of experience • Synergy with existing business, providing in-house maintenance capabilities as well as providing avenue to give demonstration of the machine capabilities and the importance of validation to potential machine buyers • The only medical packaging machines manufacturer with local service team 	<p>have disaster recovery contract as well as new product development at Doyen facility.</p> <ul style="list-style-type: none"> • Use existing machine users are referrals to convince prospect to have contract with Doyen. • Satisfied contract packaging clients will have high possibility to opt for purchase of the machine used in the contract pack or a new Doyen machine as their volume grows thus justifies having their own machines.
<p>Threats</p> <ul style="list-style-type: none"> • Competitors Reaction; the current contract packagers have very low capital investment with the major operating cost to be the foreign labour cost. Most of the contract packagers have been in the business for years with long-term relationship with their existing clients. Besides that they are also carrying out examination gloves 	<p>Strategies to Overcome / Minimise Threats</p> <ul style="list-style-type: none"> • Develop the facility together with existing multi-national companies clients for the disaster recovery and new product development contracts first thus not threatening the existing contract packagers in the market • Emphasise on quality of the packaging process and the packages themselves and not on the

<p>packaging for these same clients, which is the main business for these glove manufacturers.</p> <ul style="list-style-type: none"> • Gloves manufacturers may change their packaging style, material type and package dimensions • No clear indication of approval by MIDA for machines' import duty exemption and guarantee of income tax incentives. Although the most recent announce Malaysian budget stated that supporting business to the manufacturing business would be given tax incentives, MIDA officers do not have clear directives on the issue. • The intention of local packaging material company of offering contract packaging services will increase the competition. They have the advantage of lower packaging material cost as well as ability to offer a more complete scope of supply/service without the clients having to purchase the packaging material separately. 	<p>cost.</p> <ul style="list-style-type: none"> • Uses machines that are flexible to cater for clients changing requirement and lock them up with a contract of longer period to at least recover the investment on the changes. • Look into variations of manufacturing business categories in order to maximise the government incentives receive. • Consider partnership or strategic alliance with packaging material supplier or reliable existing manual contract packager.
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<p>Weaknesses</p> <ul style="list-style-type: none"> • Machine Price • Machine packed packages will be of larger size for both the inner wallet and the outer pouch, thus increase the cost of packaging material, transportation and sterilisation costs. • Current local employees have no experience in contract packaging business • Lack of knowledge and relationship with the local surgical gloves manufacturers 	<p>Strategies to Overcome Weakness</p> <ul style="list-style-type: none"> • Need to educate the machine buyer prospects including by demonstrate the ability and the importance features of the machines, which is one of the main objectives of the proposed new business. • Need to emphasise on the packaging process and finish quality, which could increase the surgical gloves, image thus increase the product selling price. • Share information and experience with Doyen US office that has some experience in the contract packaging business, having started this business last year. Also can draw advices from Doyen's clients that previously outsource their packaging needs. • Need to get into the circle of the local manufacturers including attending the functions organised by them or associations such as MARGMA
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Table 5.1: SWOT Analysis and Strategies to Capitalise on Strengths & Opportunities and Strategies to Overcome or Minimise Threats & Weaknesses