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Executive summary

This research aims to provide a general overview of plastic injection moulding sector in Selangor. It covers the development of the petrochemical industry and focuses on a strategic analysis of the plastic injection moulding sector, using Porter’s five forces model and value chain analysis. Prospects and challenges faces by this sector are discussed, e.g., high quality manufacturing capability, accessibility to local raw materials, shortage of skill labour and lack of mould making skill. The sector is subdivided into two types of injection moulding businesses for value chain analysis. The analysis shows that the plastic injection moulding sector has a bright future. The present favourable cost structure encourages the industry to tap the export market. Replacement of conventional material like metal to plastic is a way to increase the business opportunities for plastic injection moulding sector. Merger was recommended for strengthening the market position.

The Malaysian plastic industry started in the early 1950s as a cottage industry. In the last 47 years, the industry had gone through various economic challenges and recorded an impressive 5.9 billion Ringgit turnover in 1997. This research focuses on the injection moulding sector in Selangor.
Malaysia has committed heavily in the plastic industry. The clear evidence is the development of the petrochemical sector and the establishment of down-stream plastic moulding companies. As such, the plastic industry is important for Malaysia because it is a resource-based industry utilising our own fossil fuel for the production of the plastic raw materials.

The value chain analysis of injection moulding process shows that the added value of custom moulder is mainly restricted at the moulding process and the secondary process. However, custom moulders could increase their value added by manufacturing their own products. Own product manufacturer may choose to create their own brand image and make pricing decision for the plastic products.

Using competitive analysis, we could see that there are many new business opportunities for the injection moulding sector to tap the new material technology. The labour supply is expected to exceed demand in the foreseeable future. Labour cost is expected to decline and become so much lower than countries such as Singapore, Taiwan, China, Hong Kong, and the United State. The plastic industry has the necessary technology and local raw materials to be competitiveness in the market place. Putting more emphasis on human resource development program will produce more skilled labour for the industry.
In the short term, firms are advised to adopt strategy that will ensure their survival through the economic crisis. The injection moulding sector is recommended to adopt the following measure:

1. Avoid heavy capital investment
2. Take advantage of the current monetary policy (relatively low interest rate) by increasing export sale.
3. Achieve high added value.
4. Improve global competitiveness.
5. Increase market strength through mergers.

In the long term, the industry sector is recommended to adopt cost leadership strategy. Small firms should merge in order to gain economic of scale. The industrial sector is recommended to add value into its business process and tap the new business opportunities by adopting new plastic application developed in foreign countries. In addition, local companies should engage in R & D and develop new plastic applications for Asean markets. Furthermore, plastic firms should intensify their marketing effort to explore the export markets in the region as well as the developed countries.