Chapter 5
Discussion and Conclusion

5.1 Discussion

After studied the activities of Supply Chain Management in XYZ Technology (M) Sdn. Bhd., this research project paper found out that XYZ Technology (M) Sdn. Bhd. had done a comprehensive activities. As mentioned earlier in this research, the supply chain is the total material flow from initial supplier until initial customer. In order to produce a good result, the coordinator should consider all aspect of supply chain. From the research, it shown XYZ Technology (M) Sdn. Bhd. had covered all areas well (downstream, upstream and internal of the supply chain channel).

In the downstream operation, there were a few activities that created a great positive value to the customer. The implementation of the weekly seihan enables the customer only commit 2-week operation quantity. The real market condition was transparent to the factory, which will encourage the factory to be flexible in adopting market fluctuation. This research believes weekly seihan has increased the competitive advantages of the factory and customer with principle of produce "the right product at the right time at the right quantity".

Second success aspect of Supply Chain Management is the AMEX system. Dell is famous for their "build to order" system; from this research it is to believe XYZ Technology (M) Sdn. Bhd. should be proud with the AMEX system. The AMEX system only takes 3 working days to deliver the cargo to customer in US. This successful strategy of AMEX strengthened XYZ Technology (M) Sdn. Bhd.'s position in US market.

Not to forget about outsourcing operation in downstream part also created a cost effective operation to XYZ Technology (M) Sdn. Bhd.. By implementing the out
sourcing operation on the Auto Mount process, XYZ Technology (M) Sdn. Bhd. was able reduce their investment in machine (Fix capital) which easily will cost around Ringgit Malaysia 1.5 million per machine. Beside that, the out sourcing operation on the OEM operation created a extra ordinal operation profit for total XYZ Technology (M) Sdn. Bhd. profit. By having the mark up price, XYZ Technology (M) Sdn. Bhd. able to enjoy the profit from the OEM operation.

Although we cannot see any financial figures in the upstream operation, but the strategies that adopted has shown a very significant to the total supply chain improvement. The philosophy partnership sourcing in procurement has created a great involvement of suppliers in XYZ Technology (M) Sdn. Bhd. operation. It started from the design stage until the mass production. With the involvement of suppliers in the daily operation, it created a strong commitment to ensure the new product can be produce smoothly and shorten the model introduction.

Beside the involvement from suppliers in the procurement operation, XYZ Technology (M) Sdn. Bhd. has transferring the knowledge of know how and information sharing to suppliers. With the "SPRIT" system, necessary information has been provided to the suppliers in order them to ensure a smooth daily operation. With the ability of supplier to plan their production and delivery will make sure that XYZ Technology (M) Sdn. Bhd. would not have any obstacle in the plan out put.

Supplier optimization created a strong cost reduction in Supply Chain Management. With the suppliers' optimization, XYZ Technology (M) Sdn. Bhd. will giving enough allocation quantity to suppliers in order them to produce their product under economy of scales. With the economy of scales production, the suppliers were able to bring down the production cost and finally bring down the product price. This chain reaction will indirectly bring down XYZ Technology (M) Sdn. Bhd. material cost and which finally will make the DVD product more prices
competitive in the market. This positive circle will go on and on until the product life cycle maturity.

The 3\textsuperscript{rd} part in the Supply Chain Management is the production activities. Production will determine the total product production lead-time. From the research it shown that XYZ Technology (M) Sdn. Bhd. has done a good job in compressing the production cycle time by using the "Sapphire operation". As shown in the figure 4c: Production Lead-time, there is 75\% lead-time reduction compare to before the Supply Chain Management activities. This time compression will indirectly contribute to the total cycle time compression.

In order to react to the market fluctuation, production has come out a cell system. Before the implementation the cell system, the model change tag time takes about 45 minutes, but after the implementation of the cell system the model change tag time has reduced to 20 minutes, which is a 56\% improvement.

In order to smoothen the in house material flow, XYZ Technology (M) Sdn. Bhd. has introduced the JIT system. The fundamental concept of this JIT system is the pull system; right quantity at right time at right place. By having the JIT system, the production schedule can be more flexibly. JIT operation is the backbone of the AMEX system that is similar with the "build to order" concept in Dell.

In the final part of the Supply Chain Management, we are looking into the customer satisfaction, which is related to the delivery performance. The major factor to determent the delivery performance is lead-time needed to deliver a cargo to the customer starting from point of receiving order. XYZ Technology (M) Sdn. Bhd. had achieved a fabulous improvement in the delivery time. The shipment time has reduced 57\% (7-weeks to 3-weeks). On the production lead-time, it has been reduced from 2-month to 2-weeks time. Thus in total, the order lead-time has reduced from 15-weeks to 7-weeks lead-time. By having a reduction of the lead-time, the customer needs not to wait for a longer period of
time to receive a delivery. Beside that, this will bring down the discrepancy of the forecast and the actual demand of the market.

Although no doubt the implementation of the Supply Chain Management creates a positive value to the XYZ Technology (M) Sdn. Bhd., on the other hand it also creates a secondary issue that we cannot ignore about it.

In the real world, systems do not operate with zero time delay, so stocks are required at various points throughout the supply chain to make up for delays and errors that may occur. Base on the JIT philosophy, the ideal case is to meet demand through very quick response, thus reducing the need for inventory and capital tied up in stocks. In practice, large multinational companies such as XYZ Technology (M) Sdn. Bhd. who have enough clout in the marketplace to dictate to their supplier the exact demand requirements can only generally achieve this. Although in practice, the XYZ Technology (M) Sdn. Bhd. may use JIT, the likelihood is that excess inventory will be held by the smaller suppliers to cover demand fluctuations, which will finally create a negative value to the suppliers.

The implementation of the Supply Chain Management did not only give a negative impact to the suppliers, but also creates secondary issue to the production. Due to the fluctuation of the demand change, the production also faced a difficulty to plan for the production. This may affect the rhythm of the production and which also will reduce the productivity.

Finally from this research, it found out that the campaign on the Supply Chain Management is not strong enough in XYZ Technology (M) Sdn Bhd.. The idea and understanding of the Supply Chain Management is not sent across the board. Basically on the management level know and understand about the importance of the Supply Chain Management. The down line has less awareness about the Supply Chain Management. The down line would then be having a
negative impression on the Supply Chain Management that they feel is troublesome for them to operate their daily operation.

5.2 Conclusion

From analyzing the strategies and performance measure, this research project agrees that the XYZ Technology (M) Sdn. Bhd. has successfully implemented the Supply Chain Management. The company has a well vital concept on know how to make the Supply Chain Management a success. Besides that, we should not forget about the importance of Production Planning roles the job in coordination that need to make the Supply Chain Management as a success story in XYZ Technology (M) Sdn. Bhd.. That is why the “management” word comes into the picture of supply chain. Finally, the concept of the fluctuation and velocity is the key word of the successful story of the Supply Chain Management.