Chapter 9

Conclusion and recommendation

All the car companies had implemented various strategies to overcome the economy turmoil. Some common strategies are cost cutting, increase sales volume, promotion, lower the car price to clear stock, attractive sale package (basic car, free gifts, etc), delay launching of luxury model (example Lotus Elise from Proton), freeze expansion, etc. However, most of these strategies are reactive action and the automotive companies implement these activities to resolve immediate problem when the economy crisis hit them. There are some lessons that automotive industries in Malaysia should learned from this economy crisis, so as to better prepare themselves if similar or other crisis were to hit them. As for Proton, lessons learned from this crisis are as following:

- Prudence in spending and investment.
- Total organization awareness on cost saving and better resources management.
- Reduce quality problem and waste which contribute to cost.
- Vendors play an important role to reduce cost and improve quality.
- Enhancement on employee skill to be competitive with other competitors.
- Explore oversea market in meeting challenges and opportunities arising from market liberalisation.
- Readiness to face market liberalisation.

However, one of the fears among local car makers is that AFTA would force open the domestic car market to enable consumers a greater choice of vehicles at more competitive pricing. As a result, local car makers would lose their dominant market shares. The latest statistics indicate that the bulk of passenger vehicle sales are national cars with non-national cars taking only a 7.5% share. However, it is unlikely that cheap cars would enter the market immediately. To enter a new market, a comprehensive infrastructure must be in place to ensure that foreign marques can have access to support facilities.
AFTA will be enforced in year 2003 where the automotive industries will face an open market and free of protectionism. National car company such as Proton will need to think carefully what they should do in order to compete with international car companies. To survive, Proton needs to strive for world class manufacturer standard. There are three main criteria Proton needs to consider before reaching world class manufacturer standard,

a. Provide cars that meet the customer expectation. This is made more difficult as the customer expectation is constantly changing. Besides, different groups of customers will have different need and requirement. For example, some people view cars as a mode of transport, other view car as status symbols. In early 1980, Van is popular and being view as the best utility vehicle which meet the customer expectation during that time. As time pass, people expectation change. In 1988-1990, 4x4 become popular as robust and rough feature are expected from the vehicle in tandem with construction boom. Today, as living standard improve, vehicle expectation change as well. MPV (Multi Purpose Vehicle) such as Mazda MPV, Toyota Estima, Honda Odessey are upgrade of cheap van to luxury and high performance vehicle which provide the status and reliability. SUV like Toyota RAV4, Honda CRV, Land Rover, Prado and other up market 4x4 has become the new life style. As such, Proton needs to determine the target market segments and study their needs continuously. The most important thing is to identify and transform such needs to the product – Proton cars.

b. Quality of cars to be of world class. Customers expect quality and quality sells. Proton needs to focus on overall built quality, engine refinement, engine reliability, electronic enhancement in car control such as ABS (Automatic braking System), airbag, traction control etc. From the day Proton as launched more than 15 years ago, there are still a lot of complaints on quality and reliability of Proton cars. Poor quality and quality inconsistency is the perception people have on Proton cars. Proton needs to develop its quality reputation like Honda, Mercede Benz, Audi etc to gain the good image. This will help Proton to get out of the doldrum of selling as the cheapest car in town.

c. Price competitiveness. In order to survive in year 2003, Proton needs to be competitive on equal footing without any duty protection. Meaning, Proton needs to
produce car with lower cost and able to sell its car with equal or cheaper price as compare with other car companies internationally and still make a “profit”

Though the plough of economy crisis seems to be over, it is still too early to tell we are totally out of the wood. We do not know when Malaysia government will lift the capital control policy and allow free flow of capital again. We do not know what is the next new policy is going to be in place. There is still a lot of unknown ahead of us. However, we know for sure capital control and protectionism is not forever. Nevertheless, Proton needs immediate solution to get over the current recession that has not been fully recovered. In the meant time, it needs to prepare for medium term and long term plan to face the challenge of AFTA, and as contingency plan to face any unforeseen disaster ahead if it were occur again.

Short Term Plan for Proton

For short term (within one year), Proton needs to look at short term plan which can ensure survival and some possible profit. Besides, such plans will form the foundation for medium and long term plan. On top of what Proton has done, Proton might want to consider the following:

Cost saving program

Cost saving program should be a continuous and proactive program. Proton should not view cost cutting exercise as a reactive action and stop it when problem are resolved. Proton might want to consider the setting up of one permanent department comprises of experts from all fields to look at cost saving programs on a year long basis. Some of the cost saving areas are as following:

- Productivity improvement. Proton needs to look at the production operation and its assembly cost. Proton has to pin point the direct and hidden cost in the process be it at engine section, car body section, window section, etc. This will enable further breakdown and analysis of cost to be done. For example, the cost might come
from long time taken to assemble certain part of the car, waiting time due to shortage of material, machine downtime, logistic problem, distance between related process is too far, low yield, long cycle time to complete a process, quality reject, frequent changing of setup, etc. Knowing where the cost come from will enable Proton to develop specific cost saving programs to focus on the specific areas. This will trigger efficiency and productivity improvement which will lead to cost saving. A bi-weekly meeting should be conducted to measure effective of cost saving program by comparing forecast and actual result.

- **Vendor cost down.** Proton should review its relationship with the existing vendors. They have to look at multiple sourcing of components. This will encourage the vendors to compete with each other and improve their business process, design, quality, price and delivery lead time. Proton needs to ensure the pricing given by the vendor is competitive.

- **Manpower retraining.** During peak season, there is always conflict between training and delivery. Usually, product delivery has higher priority than training. Over time, people skill will be stagnant and out dated by advance technology. Proton needs to recognize that people skill and technology know how is the company long term intangible asset. Proton should take this opportunity to retrain its employees and ensure its people are readied when the next challenge arises. People skill and knowledge is important as automotive industry is a high technology industry. This will earn Proton employees loyalty and appreciation toward the company. Besides, the trained employees can take up more roles and responsibilities later. Proton needs skilled workforce that could not only handle repairs and maintenance, production but also in service field like manage customer queries. Eventually, this will contribute to cost saving.

- **Financial Management.** Proton needs to review carefully all the financial charges, interest payment, bank borrowing, hedge fund (if any), account receivable, account payable, cash flow, capital expenditure, etc. Cash flow management at this point is important. Proton needs to ensure all collection being received timely, and no
interest penalty being paid due to late payment. Besides, Proton needs to establish procedure to control spending. For example, for item price more than RM3,000, it needs departmental manager approval, for item price more than RM5,000 it needs director approval and so forth. At this moment, prudent spending is very important.

- **Asset management.** Proton needs to be prudent on purchasing new asset. Proton needs to ensure optimum asset utilization and do not over invest. For example, equipment and machinery usage needs to be monitor. Most of the equipment and machinery are expensive and its full utilization is important. Some of the company needs to run 24 hours x 7 days to recover the cost of the machine. Besides, Proton might needs to review its plant maintenance activities. A good plant maintenance is important to ensure low machine breakdown and unexpected delayed.

- **Automation.** Proton has implemented an ERP (Enterprise Resource Planning) package called Systems Applications Product (SAP). The package integrates all application systems into one common system allowing data to be shared between various divisions for more effective decision making and analysis. Proton needs to make sure its employees take ownership and make full use of the SAP system. SAP provides integrated and transparency of information with security control. Proton can uses SAP as tool to remove silo between departments and divisions in addition to generating information required for management decision making. Besides, in view of the dynamic changing of business environment, Proton should starts utilize SAP as a powerful tool to analyses market trend, customer needs, competitors strength, forecasting product cost, Production bottleneck, vendor evaluation, cash flow management, inventory movement etc. Proton top management should assess with each department how effectively SAP being utilized to improve its productivity. This can be a stepping stone to e-commerce and supply chain management in near future.

**Improve quality level**

One of the common perception people has on Proton cars is poor and inconsistent quality. Quality wastage is one of the areas where Proton is focusing on now. As
stated by the Proton officer, the reject rate is between 10% - 15%. This is still long way to achieve target of zero-defect. This is an area where Proton really needs to focus on seriously. There is a lot of benefits gain by improving the quality level of Proton cars. Firstly, it will get a better image in long run. Secondly, it is less costly to repair and fixed before hand over the car to the customer. Thirdly, less customer complaint and replacement of part during warranty period. Finally, improve productivity, higher yield, less reject which will lead to cost saving. QCC should be emphasised in Proton to look at specific quality problem or project. Proton might want to review the goal of QCC and focus on TQM implementation as recommended below.

TQM (Total Quality Management) could be a good solution to Proton quality problem. Some basic principles characterize are, first, quality is built in, not inspected in. Second, improving quality saves money. If quality is viewed as the result of increased inspection, then quality cost money. But if quality improves because Proton improves the design of the car and its production process, Proton reduces rejects and wastage, saves money in production and increases customer satisfaction. TQM is an organization wide approach to total customer satisfaction and a continuous process of improvement. There are several requirements Proton must meet in order to successfully implementing TQM:

- Strategic quality planning
- Clear focus on "customers" satisfaction
- Continuous improvement of key process
- Effective collection and analysis of information
- Effective use of teamwork and training
- Effective design of products and services
- Effective leadership

In order for TQM to be successful, Proton's top management must understand the full concept and be committed so as to provide their full support to this program. Reason being TQM often represents a change in the organization style of working or corporate
culture. Awareness of TQM in Proton is important to improve quality level in the organization. Besides, a monitor system should be put in place to measure how successful is the program. Without proper data collection, feedback and continuous monitoring, TQM will not succeed. The challenges to Proton are the successful execution of TQM throughout the whole organization and a good monitor system to be put in place.

c. **Stock control**

Stock represents holding cost and financing. Proton should adopt JIT (Just In Time) concept in inventory management. The goal of JIT is to produce exactly what is needed to satisfy current demand – no more, no less. The system pulls materials as required to meet production requirements or demand. The root of all evil is inventory, because it hides problems, such as poor quality on the shop floor, obsolete components, poor traceability and large storage warehouse. The dramatic reductions in inventory levels, high levels of quality and short manufacturing lead times of JIT system in Japan quickly gained the attention of American managers. However, JIT system requires the coordination of production schedules and defect free output at each processing stage, because the system has so little slack (inventory). JIT needs Proton employees’ full involvement and commitment to be successful. Besides, vendor’s commitment to delivery part timely is important too and Proton should train all vendors to practice JIT in their factory too. One thing to be cautious is Proton needs to recognize where is the bottleneck in the shop floor. If due to some reasons (eg. long lead time, critical and unique part), some form of inventory is required to ensure no stoppage in production, Proton will needs to consider the optimum stock level of the materials or Kanban system. Proton is in the progress of implementing JIT, but I notice that there are still cars in the queue waiting for parts. Proton should make full use of the SAP MRP (material requirement planning) feature to plan its material requirement and control its stock level. Besides, warehouses should be located at strategic locations to facilitate just-in-time manufacturing and ordering processes. Similarly, some monitoring system should be in place to review the constraint of JIT and clear it as soon as possible.
**Business process reengineering**

Business process reengineering is the fundamental rethinking and radical redesign of business processes to dramatically improve cost, quality, service and speed. Reengineering a company means throwing out all existing structures, procedures and systems and inventing completely new ways to organize and accomplish work. It seeks quantum leaps in performance by starting over. One example is Ford Motor Co. reengineering its procurement process and reduced the headcount tremendously.

Proton top management might want to establish a project team to review business process of the whole organization for quantum leap. The team members should comprise of experience employees from different departments and external consultants who can contribute fresh and new ideas. Proton should do some benchmarking with other companies, both automotive industries and non automotive industries for comparison.

**Innovative marketing strategies and effective promotion programmes** so that complementary brands do not cannibalise each other. Proton needs to classify the market segment and adopt the right marketing and promotional strategy to the targeted market. Proton needs to be innovative and go strong for advertising and promotions to strengthen sales and after-sales services to ensure success. They need innovative marketing strategies in drawing buyers.

Strong **dealer networks** to ensure that different vehicles at different price points are available for customers to choose from.

**Information technology infrastructure** that not only links suppliers, dealers and head office to facilitate information exchange and quick decision making but also provide internet facilities for marketing purposes. Proton and EON had implemented some of the fundamental modules in the ERP software. The next step is to establish the interfaces between dealers, suppliers, distributors, branches and head office. Proton should aim for supply chain management where supplier, manufacturing plant, and customer are all link up.
Medium Term Plan

Proposal of medium term plan (2-3 year) for Proton to face future challenges are as following:

- Setup **cellular manufacturing**, a concept that groups the various products produced in a job shop according to common features, including size, processing step and materials. The part families produced by this grouping are assigned to manufacturing cells. The cells contain the machines necessary to complete most of the processing steps for that family of parts. Proton should review its production line and test practicality of cellular manufacturing for the part families. Cellular manufacturing might require to re-layout some of the departments or machinery to ensure smooth flow of material and production process. If necessary, Proton could use animated computer simulation techniques to evaluate alternative layouts.

Through cellular manufacturing, many companies have created a cluster of employees with the mix of skills and authority to complete the job in the cell. The employees can be motivated to take ownership of their job and empowered to do the job. In cellular manufacturing, the employees will be more efficient and able to handle multiple jobs. Team work is being encouraged and the employees working within a cell will be able to get good rapport from each others. This can be very effective and powerful tool when continuous cost saving program is targeted. In order to be successful, target must be set for each cell and actual result should be compared later. If required, initial benchmarking with other companies should be encouraged.

One of the automotive companies that setup cellular manufacturing are Volvo and it proved to be successful. The expected result from the cell are shorter cycle time, improve quality, higher yield and less wastage which will contribute to cost saving and better bottom line.

- Continuous business process reengineering which can be part of medium term goal.

- Continuous TQM program, an ongoing culture for Proton and can be part of medium term goal.
• Proton might want to consider **computer aided manufacturing** (CAM) relates to its control functions for manufacturing where computers are used to program, direct, and control production equipment in the fabrication of manufactured items. Such technologies include, but are not limited to, numerically controlled machines, robotics, flexible manufacturing systems (FMS), automated storage and retrieval systems and automatic identification systems. Automation of production process using robotic system is feasible if the job is difficult, or monotonous. Many high tech companies have invested in automation of material handling system, bar coding, wireless hand held computer to manage the stock/warehouse, electronic document management system, etc. CAM will be able to help Proton to improve its productivity and reduce quality problem drastically. This might be a major cost saving for Proton.

• **Vendor partnership program.** Proton should develop partnership program with the preferred vendors. This is to ensure part ordered flow smoothly to the factory dock within expected time frame and fulfill its quality specification. Some firms view vendor, subcontractor, and outsourcing partner as part of its factory operation and retain very close relationship with them. They will help the vendor, subcontractor, and outsourcing partner in term of product design, production process improvement, engineering knowledge transfer, manpower distribution, quality audit, IT infrastructure, etc. If the vendor can produce the part more efficiently with less cost and deliver on time, Proton will benefit more. This is a win-win situation for both. In order to be competitive in 2003, Proton needs to source the component at 30% reduce price. Under the competitive environment, close partnership with vendor has become very important. In addition, Proton has initiated some localisation program to develop the local automotive component industry as well as to encourage participation of local entrepreneurs. Proton might want to partner with its vendor to develop a core competency center to supply common components and value add services to car makers in ASEAN or Asian countries. According to Standard & Poor's DRI, Asia’s car and light truck market is likely to grow to around 15 million vehicles in 2004 and 19 million in 2009, from 11 million in 1999 (The Star, 18 Feb 2000). The market is sufficient for Proton to explore opportunity on economic of scale advantage.
However, for global competitiveness, Proton should look at the cost down activities such as identification of world component manufacturers and technology suppliers for parts resourcing and supply, multi-sourcing, development of world competitive vendors, and develop Malaysia into a production base for automotive components for the region which will spread-out cost.

- **Corporate organizational restructure.** Currently, there is about eleven level in Proton organization hierarchy from CEO to worker level. Proton might needs to review its organization structure and flattening it. This will cut down the red tape, reduce overhead cost, remove silo between hierarchy structure, remove communication gap, remove cronyism and staffs who accepted bribe from the vendors, etc. If there are some staffs accepted bribery from the vendor, the price of the parts will be more expensive then it should be. Eventually, the price of Proton car will be higher and consumers will need to absorb the cost. Organization restructure is one way to bring in new blood and fresh ideas. Proton top management should has an open mind in its restructuring exercise.

- **Financial control and prudent spending.** Proton needs to make sure their financial situation is solvent and be prudent on financing decision, investment decision and spending. A fixed amount of money allocated to each department. The departmental managers should be responsible for their own department spending and cost saving. This should be part of their goal to be reviewed at year-end performance appraisal.

- **Advancement in technology.** Proton has established Rapid Prototyping facilities to reduce component design time. However, compare with other global car makers, Proton needs a quantum leap in advancement on technology. Proton needs to strategize itself to achieve advancement in technology. Match making collaborative program can be a stepping stone, but might not be sufficient for quantum leap achievement.

**Long Term Plan**
- **Strategic alliance.** In run long, Proton might need to think about merger with larger and better run international automotive makers. This is the trend in the world now. For example, BMW merge with Rover and Jaguar, Mercedes merge with Chrysler, Audi merge with Volkswagen etc. The automotive companies have organized strategic alliances in an attempt to improve the competitiveness of each member company. The benefit of merging with other better automotive companies are:

  - Access to advance engineering, technology and design.
  - Able to share research and development cost. R&D cost is excessively high and it will be quite a burden to a company if it needs to absorb all the cost by itself. Proton needs to consider car makers which has good R&D facility.
  - Sharing of technical manpower and gain expertise Proton needs.
  - Gain entry into new market, access into other market outlet and sharing market information.
  - Enlarge vendor market to access opportunity to buy big bulk at lower cost.
  - Enlarge dealer network and service. In choosing strategic alliance partners,

Earlier, Proton has bought over Lotus, an automotive company which produce high-end performance sport car. This has not been fruitful since there is no big market for high-end performance sport car in Malaysia and wrong timing to introduce luxury model during economic crisis.

Proton need to be cautious that the most successful alliances are generally those joined by companies that have a long-term vision and an understanding of and appreciation for each other’s culture.

As summary, in order to survive and be competitive globally. Proton needs to focus on its short term, medium term and long term plans. Advancement in technology, business process improvement and efficiency, cost effectiveness can be key factors to determine its existence and success. In saying that, Proton top management support and
commitment is very important for the successful implementation of the plans. Measurement system on the execution of the plan must be in place to monitor the result.

Moreover, with the advent of AFTA and WTO by the year 2003, national car maker definitely needs to strategized itself for survival as it will face the open market and competitive price. To remain competitive, they have to start selling what Malaysians want to drive – understand what the market wants and make them for the market. That would be the benchmark in a totally liberalized market.

There is no doubt that none of the ASEAN countries is ready for full and open competition in the automotive industry. This industry is highly capital intensive and few players have the energy and resources to create a consistently profitable organization. The bottom line is usually national interests: a source of pride, a channel for employment, and a base to develop spin-off industries. In the era of tariff-free economies, such national sentiments do have a place, provided that these automotive companies can find their competitive edge and ensure that the edge is always honed to handle any future challenges.

Nevertheless a delay would give some breathing space to local car manufacturer, but they will still face the same problem later. Automotive industry players need to prepare themselves and be competitive early and when the doors are open, face the new competitor head on!