99 Speedmart mini markets have more than 3000 kinds of groceries offered and highly organized environment easier for customers to choose and find the desired item themselves. They will put these mini markets strategically positioned in close proximity to residential areas and neighborhood customers to facilitate their daily expenditure. Nowadays 99 Speedmart supported by three distribution centers with a size of 80,000 square feet, 65,000 square feet and the third distribution center with size of more than 100,000 square feet. 99 Speedmart able to achieve economies of scale in bulk purchasing of goods, thus helping to improve efficiency and reduce costs. At 99 Speedmart, they always offer low prices every day and saving can be delivered to all customers. This store started in 1987 as a small grocery store and up to now have more than 300 branches throughout Malaysia.

99 Speedmart’s History
Starting at year 1987, 99 Speedmart with form of a traditional “mom and pop” sundry mart called Pasar Raya Hiap Hoe by Mr. Lee Thiam Wah in Tepi Sungai Klang. Mr. Lee starts a business with very humble beginning and only through personal interaction with suppliers and customers. After doing business for 5 years, which is in 1992, the first store of that name 99 opened in Klang Utama. Pasar Mini 99 named by Mr. Lee with a move for realizing the vision to build an integrated chain. Selection of number 99 symbolizes longevity and continuity in Chinese is the underpinning philosophy behind his vision. With sheer dedication and hard work, Mr. Lee expands Pasar Mini 99 to eight other outlets in Klang ala chain store format within 6 year operation in year 1992 to 1998. branches were opened at the time was at Klang Utama, Taman Sentosa, Bukit Kapar, Taman Eng Ann, Sri Andalas, Kampung Jawa, Port Klang, and Pekan Meru. In 2000, in the midst of the glory that lifted 99 mini markets in the eyes of all, 99 speedmart launched with the opening of its new branch in Batu Belah, Klang. To make the chain increase market penetration and share, they have their own intensive expansion strategy. 99 Speedmart also use the approach in rural areas and set-up to enhance comfort as well as ease of shopping around the area residents gets their daily convenience.
distribution centre was conceived in the October 2002 at a cost of RM6.5 million to meet the logistics demands of the rapidly expanding chain of 99 Speedmart outlets. This warehouse is an 80,000 square feet facility complete with centralized stacking, storage and warehousing capabilities. In a year 2006, 99 Speedmart made their history when they receive its first Consumer Choice Award from the Ministry of Domestic Trade, Malaysia. This milestone marking award is evidence for 99 Speedmart®'s success in winning customers' hearts and minds. The second distribution centre was conceived in late 2007, and completed in July 2008. After running the business around 11 years, on 1st November 2008, 99 Speedmart launches its 100th outlet in Pinggiran Batu Caves. 99 Speedmart's 200th outlet in Bandar Baru Selayang, Batu Caves is opened on 27th June at year 2010. As planned during 2009. Finally, 3rd warehouse locate at Balakong Jaya been successfully start operate on 14 October 2011. 300th outlets open at Banting Sg Emas at 25th December 2011. Until now, 99 Speedmart empires have expanded to several states in Malaysia, including Selangor, Kuala Lumpur, and Negeri Sembilan with 300 outlets and 3 distribution warehouses.

SWOT
1) STRENGTHS
99 Speedmart has continuously growing rapidly and became one of the major retailers in Malaysian FMCG industry. Their strength was one of the major contributors for their growth: Branding and Reputation

Right branding can result in great profit. Basically brand is the force that gave a product or services a recognition and popularity. There are companies that sell brands before they sell the product. 99 Speedmart is a brand which is simple and very catchy. This mini market has created a strong branding among the consumers. The 99 Speedmart has a strong brand which associated with quality, customer service and so on. The company has slogan which stated as 'Near n Save'. 99 Speedmart's brand is always associated with convenience for shopping and is located in your nearest neighbourhood (housing areas). This company helps to save consumers' time and money solely by heading to nearest 99 Speedmart for all necessities. The company also develops a strong recognition among the consumers which is a major strength for the company. This was proven when the company receives its first Consumer Choice Award in 2006 from the Ministry of Domestic Trade, Malaysia. This is a milestone marking award that shows the success of the company in winning consumers’ hearts and minds and also receives Fair Price Award in 2010. Besides that, its success was discovered by Forbes Asia labeling 99 Speedmart as Malaysia King of Mini-Marts.

Products
The 99 Speedmart offered a quality in their business. The company focused in selling only the essential products and daily use products to fulfill and satisfy customer needs. The company concept consists providing a quality items to the customers. Each of 99 Speedmart stores is stocked with an array of groceries. There are more than 3,000 items, from fresh milk to rice that suit consumer's needs and cravings. Making life become simpler, 99 Speedmart is a chain of mini-markets that fulfill customer’s needs by providing quality groceries conveniently and efficiently.
Price
Other than that, the 99 Speedmart has a strong strength in its pricing aspect. The company is able to provide goods in a cheaper price to consumers. The pricing tactics enable consumers to enjoy low prices and makes consumers feel reasonable to purchase the daily use product at 99Speedmart. They offered lower price compare to its competitors. Almost each and every product in 99 Speedmart is cheaper compared Tesco, Giant, Carrefour, Jusco etc. Their idea linked with economies of scale where they purchased goods in bulk and able to provide cheaper price for consumers. Besides that their low overhead cost enables them to pass the cost savings to consumers by reducing the price. According to one of the inside source, the owner is getting tax privileges due to his condition as a handicapped person. This enables him to keep the price low.

Place
The secret of 99 Speedmart’s convenience is linked to strategic positioning to ensure that this company is accessible almost anywhere. Each outlet is located in most neighborhood centers. ‘Near n Save’ concept save the valuable time of consumers by just getting the goods from their nearest 99 Speedmart. The outlets are usually located in commercial centers in housing area and easy to shop. Less Labor

The 99 Speedmart doesn’t have many labors. Their less manpower leads to higher productivity. Everyone at this small shop knows each other by developing friendly environment. The small shop and less manpower help to decrease the overhead cost which is ongoing expenses for operating a business. The cost whichever saved, will be passed to the consumer. The Owner

Founder and Managing Director of 99 Speedmart, Mr Lee Thiam Wah is wheelchair-bound, had only six years of formal education, and can’t speak English. He is founder of 300 Speedmart oulets which bring more than RM500 million in annual sales. Turn any corner in Klang we can see a 99 Speedmart store. Mr Lee Thiam Wah shared his success with Forbes Asia’s Noelle Lim with title as “Malaysian Lee Thiam Wah gives the big retailers a run for their money.” The owner has vast experience in retail industry where prior to opening the first 99 Speedmart outlet in 1997, he was running a sundry shop.

2) WEAKNESS
Although 99 Speedmart is a major force in Malaysia retail industry, they too have their some weaknesses which will be discussed as below: Insufficient staff
The 99 Speedmart doesn’t have many staff compared with other supermarket where more staff available to assist customers. In 99 Speedmart, we had to walk all the way to the check-out counter to inquire when we have any queries. There are only 2 counters in every outlet. Sometimes during peak hours, customers had to wait in a long queue. Some customers, who are impatient to wait, put back the items on the shelf and walk out from the premise. Besides that, during peak hours, usually staffs are not enough to attend to customer’s queries and to replenish the items on the shelf. Store layout and arrangements
The arrangement inside the store is very poor. Finding items in other store like Tesco is much easier than 99 Speedmart where every lane is labeled properly and items are grouped in a good manner. 99 Speedmart had a less catchy / attractive arrangement and lacked proper labels for their lanes. They don’t place much effort in making their display attractive.

No Centralized Distribution Center
The 99 Speedmart has about 300 outlets in Malaysia and the logistics activities is being supported by 3 distribution centers (2 in Klang and 1 in Balakong). All these distribution centers (DC) are operating individually and assigned to manage certain outlets. Therefore the centralization is not there and sometimes it leads to certain confusion and failures. Buyers had to allocate stocks for each distribution centers and there are incidents where wrong allocation been done. Suppliers too sometimes deliver the goods to wrong DCs. All this will cause delay in delivering the goods to the outlets and sometimes the products won’t be available in outlets at the right time. It’s difficult to manage the inventory, purchasing, and transportation activity of the DC without centralization. The performance of the DC too had to be monitored individually.

3) OPPORTUNITIES
Expand premises and diversify product
The 99 Speedmart can expand their current outlets which are small. Byexpanding the outlets, they can bring more products. They are able to diversify product range. Besides, providing the routine items, the company might be introducing other products like healthcare, beauty and so forth. By doing this, the company can find additional income and at the same time become challenge to competitors.

Partnerships with large mall owners
The 99 Speedmart might have a partnership with large mall owners to get place within the mall’s building. This partnership plans with popular and large malls will help to cut the rental costs of the buildings and ensure 99 Speedmart outlets placed at strategic location same as their competitors. New outlets

Most of 99 Speedmart’s outlets are located in Klang and Shah Alam area. They already became an instant hit and gained huge success in these areas. Once they conquered the Klang Valley, they can open more outlets in other states and expand their business throughout nation. This will enable them to attract more consumers and at the same time can gain more profit. Global expansion

Global expansion especially in the neighborhood countries would really be good earnings for this type of company. The 99 Speedmart can move to other countries such as Singapore or Thailand to open up their branches. They can form strategic partnerships with local retailer in that company (as what Tesco did in Thailand) and this will enable them to easily penetrate the market in that country. They may boost their sales and profit globally.
4) THREAT
Competitors
The 99 Speedmart is attempting to differentiate itself by offering low price items with its own ideas and strategies but other hypermarkets are doing the same thing. All hypermarkets now continue discounting and offering a variety of products through product development, promotional activity and better distribution and so on in order to attract consumers. Major competitors for 99 Speedmart are Mydin, Tesco, Giant and more. This competitor keeps on growing because people willing to pay in order to get better and quality product. At the same time, this competitor has their loyal customers who will remain with them. Suppliers too tend to give special services to these competitors who are bigger than 99 Speedmart in market. For example, recently there was some low stock of Fernleaf full cream milk powder in the market. The item was not available in most of the 99 Speedmart’s outlets. But Tesco, Giant, Carrefour and other big retailers managed to get the stocks. This is because when supplier was running low on these items, they allocate the items to these big retailers first.

New entries
The threat of new entrants in the market is a critical element. A growing market and the potential for high profits will attract new firms to enter the market and weaken the position. There will be competition, price war, company failure and so forth.

Technology
Technological factors can be barriers to 99 Speedmart. The new technologies benefit both customers and the company. Technology consists of inventions, new discoveries, research, information technology, internet, transportation, waste removal and so on. Technology helps in creating new market opportunities to promote the products even the outlet more often and wide. So 99 Speedmart should observe the current environment closely. For example, technology can make customers more satisfied because the goods can readily available and shopping becomes more convenient. Electronic Point of Sale (EPoS), electronic scanners have greatly improved the efficiency of distribution and stocking activities in Hypermarket. In general, the SWOT analysis for 99 Speedmart can be summarized as below: SWOT ANALYSIS

WEAKNESS
* Insufficient Staff
* Store layout and arrangement
* No centralized distribution centers

STRENGTH
* Branding and reputation

* Product
* Price
* Place
* Less Labor
* The Owner

THREAT
OPPORTUNITIES
* Expand premises and diversify products.
* Partnership with large mall owners.
* New outlets
* Global expansion

LEAN SUPPLY CHAIN APPROACH

In the last few years there have been many new retail stores in Malaysia. There is not just enough to buy the right goods at the right quantity and the right price but it also need to take into consideration the right supply chain approach in order to survive in competitive market. The 99 Speedmart’s products are functional products and they are embracing lean supply chain approach in their business. A lean supply chain defines how a supply chain should operate well by reducing / eliminating waste and non-value added activities. A well designed supply chain will operate by quickly and efficiently in terms of delivery of products to the end customer in a smooth flow without many obstacles. Lean supply chain will yield lower inventory cost, lower size lot, higher productivity and flexibility, and faster response time to the customers. “Lean is a systematic approach to enhancing value to the customer by identifying and eliminating waste (of time, effort and materials) through continuous improvement, by flow the product at the pull of the customer, in pursuit of perfection”. The 99 Speedmart has been in market for many years. They have a steady market demand and they keep on provide the goods to consumers continuously. This makes them specialized in their business and there should be only little room for improvement. Therefore the main objective will be more on reducing or eliminating the waste and improve efficiency through lean supply chain. The 99 Speedmart’s business concept is by achieving optimum economies of scale via bulk purchases of goods. Therefore their focus is to achieve efficiency and reduce costs. Below is some of the area where 99 Speedmart used lean supply chain approach to overcome some of its problems:

Warehousing
The 99 Speedmart examined warehouse processes to find out existing problems to eliminate waste of resources and non-value added activities. The company always concentrates on reduction of unnecessary inventory in warehouse. A lean supply chain will help to have minimal inventories and minimal amount of warehousing space required to store those inventories. The unnecessary inventory is the biggest problem in warehouse. The excessive inventory requires resources to store and maintain it. Besides that, the warehouse also might be congested. By reducing unnecessary inventory, a company can minimize warehousing space and will reduce the overall costs. When 99 speedmart’s warehouse becomes crowded with inventory, products might be damaged. Inventory typically gets handled multiple times in a warehouse. When each time it gets touched or moved there will be high chances to damage. Excessive inventory also create obsolete problem. One of the method used by 99 Speedmart to reduce the inventory holding and space congestion is by doing the cross docking. By using cross dock method, they are able to practice “Just In Time” (JIT) material management which will help in improving the space utilization and reduce inventory holding. Besides that, cross docking can reduce labor cost because it’s no longer require to do put away and storage in the warehouse. They had wholesale purchases in order to ensure continuous
supply without any fail to the current market demand. Lean supply chain approach is essential to overcome the above problems in warehouse. 99 Speedmart’s management is trying very hard to overcome these problems through lean supply chain approach particularly Kaizen.

Transportation
The 99 Speedmart often look to their transportation procedures to understand where they really can be reorganized. A lean supply chain will help to reduce the cost of moving inventory. The 99 Speedmart try to put their efforts to improve consumer satisfaction through transportation. By deliver the goods at the right time, company will be able to satisfy the consumer. Through lean supply chain approach, they are able to maximize the truck fill utilization. For example: there are 300 cartons can be loaded in a truck but if load only 100 carton it will be a waste of space and costly. By loading the right quantity, the company could reduce their transportation cost. Using lean approach study, the logistics team was able to come out with best mix of products to fully utilize the truck space and reduce the waste of space. Waiting

The 99 Speedmart provide functional products which are daily necessities for consumers. The delay in receiving goods from suppliers will impact the delivery to its outlets. Besides that it will also pull down the productivity of the staff in the warehouse and will incur additional cost in terms of overtime (need to wait until supplier’s truck reaches the warehouse). This will cause unnecessary waiting to consumers in order to get the goods. It’s also improve customer satisfaction by reduce the time to deliver to consumer. Again by using lean approach, 99 Speedmart management identified supplier delivery failure as one the unnecessary waste that increase their cost, impact their DOT to outlets and affects the product availability. The management has put up a KPI to its suppliers to ensure they meet the delivery plan.

THE DISTRIBUTION CHANNEL

The 99 Speedmart used direct distribution channel strategy in their business. This is the distribution channels which don’t have any intermediary levels. The 99 Speedmart sells products directly to consumers. Its distribution channel is shorter and faster. A direct channel of distribution is the best strategy for 99 Speedmart where products is deliver faster to consumer without any help of intermediaries. By this the 99 Speedmart have a chance to interact directly with its consumers and at the same time they can observe trends in the market as well as the preferences and need of consumer. They able to discover and capture real market demand. By selling direct to consumers, 99 Speedmart able to reduce the cost of having additional layer between consumers and them. When cutting down on such layer, the 99 Speedmart able to offer better price to consumers. When this company deals with the end consumer, they really can achieve the maximum customer service level. Other than that, 99 Speedmart has own distribution centres and outlets. By this, the company has a chance to build and promote their brand image to consumers which will add more value to the company and will boost their sales as well as their profit. This distribution channel also make ease of management for the company. Now, the company has a great control and accountability. They can measure the sales and they also can plan and forecast for the future. There is some drawback for 99 Speedmart by using this channel besides having some benefits. By using other channel, they might able to make use the expertise of intermediaries. 99 Speedmart good in send products directly to the end consumers but might not be good in other part such as marketing. Next, the cost associated with the direct distribution is high compared with indirect channel where there are intermediaries. It may incur more
transportation cost as the product will be delivered in smaller batches and more frequency by the company. The company only able to covers few places in Malaysia due to constraints in term of time, money and workforce and such constraints might result low profit in future.

99 SPEEDMART

CONSUMER

EFFICIENT CONSUMER RESPONSE (ECR)

The 99 Speedmart practices Efficient Consumer Response (ECR). The focus is integrating supply chain management with demand management. ECR require supplier-retailer collaboration. ECR improves and increase service to consumers through the value chain. Since 99 Speedmart already well-established in the market, their focus will be more on expanding the market while meeting the existing market’s demand. They will put their effort on efficiency, cost improvement, marketing and promotion. These initiatives will be jointly executed through collaboration with their supply chain partners. Both parties must ensure to work together to solve any problems along the supply chain. Most importantly is the information flow which should be transparent to all channel members so that they can improve customer service and able to respond faster to consumer’s demand and at the same time there will be higher availability of the products to consumers. ECR will enable 99 Speedmart to reduce the cost of transport since the goods can be arranged more efficiently. In order to ensure efficient supply chain management, they will work together on efficient category management, continuous product replenishment and enhancement in technologies.

ISSUES AND CHALLENGES

POOR WAREHOUSE LAYOUT

Warehouse layout is an important factor in any warehouse and DC as the proper layout will contribute to greater efficiency, productivity, security, reduction in travelling time and organized stock. The difference between 99Speedmart and other retail stores is that 99Speedmart tend to occupy the warehouse (existing building) first and later try to re-layout to accommodate their operation. This will make the warehouse congested as later the VAS needs to be done at normal operation area and inbound and outbound at same dock. The congestion in warehouse and other arising problem due to improper layout will pull down the speed and productivity of the warehouse operation. The layout in 99Speedmart’s warehouse is not proper. For example, staff walk away and forklift route was not properly defined. Both are sharing the same route and this is one of the reason for accidents in the warehouse. Materials were parked everywhere and forklifts could not move smoothly. The congestion made the travelling time of the goodsto increase which will eventually delay the operation.

SPACE UTILIZATION

Space is the largest capital cost so the utilization should be maximized. 99Speedmart is filling up the warehouse with the overload of its product. They arranged their product in between rack which makes the place became not in order. This is also sometimes contributed by storekeeper’s attitude. There may still be available space at the rack, but to get things done fast, they put away on the floor. They should be able to utilize the space while not disturbing paths for personnel or material handling equipment.
Multinational Company like Tesco does not waste the space with stockholding. Their practice is more on Just-In-Time System (JIT). They managed their stocks well by using this system and keep the inventory at low level.

Reverse Logistics
Reverse logistic is defined by most reviews as planning, implementing, managing the economic flow of raw materials, work-in-progress inventories, finished goods and wastages (Wee and Chung, 2009; Kumar et al., 2011). 99 Speedmart face problems implementing reverse logistic as specific management on handling the returned goods is not properly set up as efficient as finished goods management. Some local companies even opted to hire third party such as DHL to manage their reverse logistic. Lacking of fund state of the art information (i.e. technical expertise, advanced software) making it harder for 99Speedmart to keep up with multinational companies that have more capital and expertise to deal with reverse logistics. Local companies have troubles when returned goods are not being put back in inventory stock as no proper management is done (Wooi&Zailani, 2010). The returned goods might then mix up with the normal goods (i.e. not obsolete/returned goods) causing problems when picking and sorting later. The main problem is 99Speedmart does not have proper system to trace back the stock-keeping units (SKUs) of the returned goods, thus adding it back into inventory is a hassle and time-consuming. Details such as the reasons of returning, physical conditions of the returned goods and accounting balance could not be updated properly in most local companies implementing reverse logistic.

Inventory Integrity & Accuracy
Inventory plays an important part in maintaining a good flow of operation in any operation. A company that failed to oblige the inventory integrity and accuracy will not be able to sustain in the market and fulfill customer request. The problems in maintaining inventory accuracy and integrity would be differ between local and multinational companies as they are implementing inventory management that are differ to each other in so many ways. So does 99 Speedmart where their inventory management differs from those big MNCs such as Tesco, Carrefour etc. Local companies would usually opt for lower inventory level to ease in management and for economic purposes in terms of money flow or space. 99 Speedmart claimed that they are implementing advanced logistic system in their distribution centers to cover more than 300 mini markets throughout the whole Klang Valley (99Speedmart®, 2012). For each mini market, an average of 3000 units of inventory are stored and the company claimed that the inventory is well managed and with high buffer stock in hand (99Speedmart®, 2012). However, due to poor planning for their whole supply chain, 99 Speedmart® usually stock more than their capacity, resulted in unmanageable stock leading to breach in inventory accuracy and integrity. Multinational companies like Tesco, has much higher inventory level compared to 99 Speedmart, thus has more complex arrangement and technologies (computerized inventory management system) for purchasing and stock control. Compared to local company like 99Speedmart®. In United Kingdom, Tesco need to maintain their stock check and integrity at higher level as it provides online home shopping service as well.

99 Speedmart is still conducting manual daily cycle count rather than system sugested cycle count. Implementing manual count is laborious, tedious and prone to errors. The problem become bigger if any of the staffs do not perform regular stock check creating issues with the differences of the actual quantity in hand and the data in inventory. Theft cases could also be overseen as the inventory management is out of control if no proper
checking is done. Although the company, 99 Speedmart® assured that they are keeping high in-stock quantity to support each mini market as mentioned in their website (99Speedmart®, 2012), the company would face problems if there were sudden shocks of high demand for the groceries. This could happen because manual scanning could not confirmed that the inventory is up-to-date and minimum re-order level might be overseen due to errors or improper inventory management. As described in Urban (2002), product availability might contribute to the desire to purchase by customer. If the demanded items in 99Speedmart® are out of stock due and replenishment is impossible due to long lead-time, the company has high potential to lose customers as they will turn to other retailers to purchase. Security in 99 Speedmart is lacking where there is not enough security guards to secure the whole DC. There are many cases where staff themselves stole the items especially among foreign workers in DC who steal products such as batteries, tooth paste, tooth brush, instant noodles etc. An outlet does not have security guards at all and both staff and customers took this opportunity to steal the products. This is another factor why the physical inventory does not match against the system. Besides that during peak hours, the checking of inbound items from suppliers is not done properly resulted in inventory discrepancies.

Lack of IT capabilities
One of the problem or issue with 99 Speedmart is lack of IT capabilities or Logistics Information System (LIS) such as Warehouse Management System (WMS), Material Requirement Planning (MRP) and Enterprise Resource Planning (ERP) which are important tools in managing the warehouse operation and inventory planning. 99 Speedmart is using WMS, but they are not fully utilizing the system and only using the basic function of it. A warehouse management system forms the central kiosk of such a supply chain, governing the receipt, storage, and movement of materials within a warehouse and involving processes like transactions, shipping, receiving, picking, loading, unloading etc (MontansMeka 2006). The statement can be explained as below diagram:

The lack of LIS made the 99 Speedmart suffered in terms of inventory track and trace, inventory accuracy, productivity and high cost. The implementation of a WMS along with automated data collection will likely give you increases in accuracy, reduction in labor costs and a greater ability to service the customer by reducing cycle times (Dave Piasecki, 2012).

a) Rack Location Accuracy
Although 99 Speedmart is using computerized warehouse management system and wireless scanners (only for picking), their put away process is still manually done. The store hand put away the product at rack location and will update the product code and rack location on put away list. This list will be given to data entry to update the product location in WMS. If the store hand wrote the rack location wrongly or data entry staff made an error during updating the system, the particular product location will be wrong and pickers had to search the item which will delay the operation. Big MNCs such as Tesco and Carrefour use the wireless scanner to update the rack location where the store hand will scan the product's barcode and the barcode of the rack location. The location will be updated automatically and accurate. This requires a very capable IT personnel to upload the WMS system into the scanner and ensure the data transmitted properly. Besides that the IT personnel should be able to identify and source for a scanner that is capable to operate and interface with WMS. By doing daily cycle count, location accuracy can be maintained and it will speed up the picking and put away
process. b) High Labor Cost

99 Speedmart had to spend high cost on labor because most of the tasks need to be done manually such as data entry, put away, manual daily cycle count, etc. By fully utilizing the WMS, they can simplify the processes and will be able to reduce the number of staff and overtime. This will eventually increase their productivity and reduce the operating cost.

c) High Stock Holding

At times 99 Speedmart tend to keep high inventory due to their inability of accurate or close to accurate forecasting without Material requirement Planning (MRP). They are using a concept of re-order level (ROL) or re-order quantity (ROQ) which is more to comparison with current inventory on hand. The setback of this system is it's only based the on hand stock quantity for re-order or replenishment. MRP is more accurate as it also can advise the stock requirement for the period that we intend. An inadequate stock management system can order too much raw materials which results in overstock (Doug Brinlee, 2011). Sometimes the buyers will override the system computation and bring in more stocks. This usually happens when supplier offers them discount on bulk purchase. Some buyers in 99 Speedmart is not well verse in using the system and they manually calculate the forecast using excel spreadsheet. Sometimes they commit error by overlooking on the lead time, did not compute the set up cost and most importantly did not order based on economy order quantity (EOQ). This will results in last minute purchase which will increase their cost. Besides that they are also tend to over react (bull whip effect) with changing trend in volume especially during festive season. They usually over react by overrides the system forecast and bringing in high inventory to cater for the festive season and after the season over, they end up with high inventory balance. This is not a healthy sign because inventory is money and it’s risky to hold high inventories. MNCs such as Tesco, Carrefour, Giant etc has a very good MRP and MRP II system and managed to plan their inventory holding well.

d) Low Productivity

99 Speedmart is also suffering from low productivity because of too many things done manually and without proper computerized warehouse and inventory management system. As discussed before the use of WMS will shorten the process and provide fast inventory tracking. Therefore the picking will be faster, accurate (no need to worry about wrong picking) and on time. The MNCs are using barcode on the products and pick by using wireless scanner. This will eliminate the pick by using paper and manual data entry process which is still being done by 99 Speedmart. WMS will simplify the picking process by consolidating picking for all orders as below:

Order A
A 3 units

Order B
A 7 units

Instructions
A 10 units

This picking consolidation will make the picking even faster and improve the productivity. Another reason for low productivity in 99 Speedmart are due to delay in
tracing materials, manual data entry, picking using paper based pick instruction etc. All this delay will create zero man hour situations which will pull down the productivity. If 99Speedmartfully utilize their WMS and wireless scanners, they will also enjoy the improvement in productivity. The WMS is also able to track the productivity of the warehouse staff and able to generate productivity report. The local companies using basic warehouse system is handicapped in this area. The MNCs are also using Enterprise Resource Planning (ERP) which will calculate for them the resources required for the volume at mentioned time. This is another factor why their productivity always high because the ERP eliminates the wastage of resources. 99 Speedmart does not have this system and their productivity always suffers. Enterprise software gives information system with three important capabilities i.e. (Nick Mutt, 2008) 1. Consistency and reliability of business data across the organization 2. Streamlined transaction processing within and outside organization 3. Provides operations level reporting on a click of a button

e) Lack of Reporting Tools
99 Speedmart do not have proper reporting tools compared to their competitors such as Tesco, Carrefour and Giant. This again relates to warehouse computerized system capabilities. MNCs that are using advanced computerized system were able to generate various reports such as inventory balance report, inbound report, outbound report, aging report, empty location report, open PO report, handling in report, handling out report, productivity report and many others. 99 Speedmart is only using the basic function of their WMS and are only able to generate some basic reports such as inventory balance, inbound and outbound report. They are either not utilizing or don’t know how to generate the other important reports such as productivity, aging, empty location handling in/out and many more. The lack of reports made 99 Speedmart unable to get a full picture of their warehouse performance thus couldn’t properly plan for improvement. Inventory software helps in handling logistics more efficiently by providing real time inventory data, management of web-based order, smooth communication with clients, billing and tracking the orders/shipments or in house activities (RohitPatil, 2008). All transactions and activities will be captured and billed accordingly to customers. For example, a 3PL can assign transaction fees for each receipt, and shipment transaction, as well as fees for storage and other value-added activities (Dave Piasecki, 2012).” Based on the above discussions, it is very obvious that the lack of IT capabilities especially LIS such as WMS and MRP is a big disadvantage for 99 Speedmart. By fully utilizing their IT and their WMS, they can improve further in their supply chain management. Doug Brinlee, in his article, Stock Management, stated the importance of warehouse computerized system as below: “A computerized system is the most accurate method of keeping up with stock. For larger companies, it is also the most practical. It would be far too costly in manpower and resources to try to manually keep up with thousands of different items when a computer can do it faster, cheaper, and more efficiently. The use of a bar code makes a computerized system much easier than any other method (Doug Brinlee, 2011).”

Lack Of Cross Docking Operation Skills and Methods.
Cross docking usually practiced by distribution centers for fast moving consumer goods (FMCG) in retail industries. Companies such as Tesco, Giant, Carrefour and Jusco are using cross docking method to distribute the goods received from suppliers to their retail outlets. Retail Cross Docking – This process involves the receipt of products from multiple vendors and sorting onto outbound trucks for a number of retail stores (Martin Murray, 2012). Due to the speed of the material movements in FMCG industry, the retailers had to opt for cross dock operation which is speedier compared to normal
storage method. Besides that cross dock does not require big space as the warehouse or distribution centers serves only as a transit point. The foreign MNCs such as TescoDC has a very good method in cross dock operation and manage it in a very smooth, efficient and effective way. Of course the use of WMS is also one of the plus point for Tesco DC. 99 Speedmart’s distribution center is still struggling with cross dock operation. For example, cross dock picking in 99 Speedmart is done using ‘Pick By Pallet’ method, where the materials from suppliers remains on pallets and pickers will hold a manual pick list and pick the items from each pallets. They will go from pallet to pallet to search for items. The items will also be ransacked and won’t be organized when the next picker goes to that pallet. This will eventually contribute to lot of problems such as wrong picking, missing item, mix item etc. But TescoDistributionCenter manages their cross dock operation by using ‘Pick By Line’ method. There will be few lines for each individual store with a sign board bearing outlets name and barcode identifying the outlet. The picker will pull the pallet from supplier and at each line they will scan (using wireless scanner) the outlet barcode and the SKU on the pallet. Scanner will prompt whether the SKU needed for the outlet. If yes, they will pick that SKU and place it on an empty pallet and move on to next line. The other pickers will also follow the same process until picking completed. Once the total pallets where the picked items were placed reached one full truck load, it will be moved to loading area and load onto the truck. Definitely Tesco DC is managing it’s cross dock operation in a very effective and efficient manner compared to 99 Speedmart. Use of WMS made their work easier, faster, organized and cost effective.

Lack of Key Performance Indicator in ABC Sdn. Bhd. Another aspect that the 99 Speedmart lacking is Key Performance Indicators (KPI). The performance indicator or key performance indicator (KPI) is a measure of performance of the business in order to benchmark against the competition and explore the possibility to improve in order to gain competitive advantage (Vijay Sangam, 2010). The big MNCs such as Tesco and Carrefour has developed various KPIs to measure their operation performance and cost while 99 Speedmart is still based on the basic KPIs such as on time delivery, inventory accuracy, order fulfillment rate, overtime cost, loading and unloading rate. The MNCs have various KPIs as below:-

1. Cost – Cost of Receiving per receiving line;
2. Productivity – Volume received per man-hour;
3. Utilization – Receiving Dock door utilization %;
4. Quality – Accurate receipts %.
6. Direct Put-away – Put away directly to locations.
8. Batched and sequenced Put-away – to maximize the efficiency.
9. Interleaving – Combine put-away and retrieval to avoid empty travel
10. Cost – Cost per put-away line;
11. Productivity – Put-away per man-hour;
12. Utilization – Utilization % of labour and equipment;
13. Quality – Perfect put-away %.
15. Cost – Storage cost per item;
16. Productivity – Inventory per sq. foot;
17. Utilization – % Location and cube occupied;
18. Quality – % Location without inventory discrepancies;
19. Cycle Time – Inventory days on hand
20. Number of customers order processed per day
21. Average lead time for all orders
22. Order entry accuracy
23. Delivery in full and on time to customers
24. Percentage of customer claims
25. Product returns
26. Product damage
27. Invoice accuracy

Besides the above there are many other KPI to measure warehouse performance in big MNCs. These KPIs provide a snapshot of the total warehouse activity, performance and productivity. By analyzing the KPIs, the organization will know areas that they are strong at and areas that they are weak and plan for improvement. 99 Speedmart should start establishing KPIs as what the big MNCs so that they too know their warehouse performance by a glance at the KPI results. Speed Mart 99 and many other local companies are still concentrating on basic KPIs and do not have KPI for each and every activity of the warehouse (activity based costing). They are still handicapped when comes to costing and do not really knows on the amount spend to unproductive activities. KPI is really an important tool to measure warehouse performance and cost.

Lack Of Skillful / Incapable Staff
99 Speedmart also is facing issues with capability of their staff. They pool of exempt staffs are not up to the mark yet. For example, their outlet managers are mostly fresh graduates or those who came from rank and file. Their DC management staffs are not experienced enough in running a FMCG warehouse. The IT staffs too are not really skillful enough resulted in WMS was not fully utilized and explored as discussed before. 99 Speedmart's staff are able to run the operation as expected but they couldn't come up with ideas or innovation to improve the operation further and solve the above mentioned problems. The lack of skills of their staff made their supply chain management is not being managed at its full capacity and strength. There are many improvements that can be made if only the staffs are skillful enough. The business is actually a family owned business and most of the top management are from their family members. They are quite experienced in running the mini markets but not other functions such as logistics, finance, HR etc. The lack of skill sometimes made them to make wrong decisions.

Many industry expertises are reluctant to join 99 Speedmart because they look at 99 Speedmart as a small company and far below other big MNCs such as Tesco, Giant, and Carrefour etc. Besides that 99 Speedmart is offering quite low salary compared to other retailers in FMCG industry. They are offering very basic employee benefits and their DC operates 6 days a week with only one day off in a week. All these became a barrier for experienced staff to join them. In the end, 99 Speedmart was unable to attract experienced staff to join their organization and they end up getting inexperienced staff who are not able to perform as expected. Experienced management staff is very important to an organization which is craving to make big changes to their organization to be more competitive. These staffs will help the organization with their experience and knowledge.

RECOMMENDATION
Based on the above discussion, it is very clear that 99 Speedmart is facing some serious problem in their operation especially in their DC. They are keeping on expanding rapidly and unless they solve all these problems, it is hard to imagine how they will run their
supply chain efficiently. Below are some of our recommendation to solve the issues and challenges that 99 Speedmart is facing.

Poor Warehouse Layout

99Speedmart should well plan their layout before occupying a warehouse. The required size of the warehouse should also be determined so that the organization won’t end up with space problem. This is called designing a warehouse which will determine the space required and proper layout for the operation. The warehouse should have loading and unloading dock, staging area, staff walkway, forklift route, value added services (VAS) work area, office etc. With this proper layout, the warehouse will look organized and spacious. A warehouse with good layout will look as below:

Warehouse where the layout was not well planned will end up as below:

A proper warehouse layout would be as below:

The above layout shows one way traffic flow from goods receiving to delivery. It was well planned and will ensure smooth material flow in the warehouse. 99Speedmart should follow the footsteps of other MNCs where due emphasis should be placed on warehouse layout design before occupying the warehouse. Well planned layout will ensure the warehouse operates in an efficient manner.

Space Utilization

There are many operational concepts that can be implemented by 99Speedmart to better utilize the space: No| Operational Concepts| Methods|
1| Remove Excess Inventory| Companies can remove excess inventory by calculate the amount of inventory that should be carry compare with the actual amount of inventory on hand. The amount of the excess inventory after comparison can be removed. Hence, 99Speedmart can remove the excess inventory and use that space for right high volume products.|
2| Use of Vertical Space| Using vertical space is known as cubing out the warehouse. This means that the pallet racks are as high as the ceiling and put up on the walls. It allows stacking of items one over the other without causing any damage. From this manner, they able to utilize the space without disturbing the ground floor. Hence, 99Speedmart store can maximize the clear height of warehouse.|
3| Utilize Random Storage Method| A random storage allows a product to be stored in any empty storage location. The random storage method maximizes the use of empty locations and results in higher space utilization. This means rather than focusing certain rack for certain product, 99Speedmart should use up the empty space in the rack as much as possible. They should not limit the rack for certain product only. By this way, they can utilize the area without disturbing the walkway.
4| Perform Layout Assessment| Warehouses should also be designed based on current and future needs to such as facilitate changes in business growth, accommodate need for future loading, and business practice, such as "just-in-time" storage. The biggest decision on developing a new facility is using docks on one-side of the facility or both sides. Having docks on multiple sides of a building requires a multiple dock areas for unloading and loading products. This leads to the majority of facility being occupied by floor storage or wasted vertical space.|

Reverse Logistics

Local companies should invest in proper software to ensure accurate data capture. This able to interface warehouse management and accounting system and allocates a quarantine zone to put away obsolete items or returned goods. These might then ease
the process to separate the items accordingly as to throw away or dismantle and keep useful parts.

**Inventory Integrity & Accuracy**

In order to improve 99 Speedmart’s inventory accuracy we recommend the followings:- Currently the company is uses bar codes with RF scanner in inventory control. This technology is not only out of date but prone to errors. The most obvious drawback in the system is it’s time consuming as it requires the items to be in line with barcode reader. Barcodes system might breach inventory integrity as wrong information could be scanned if the barcodes are wet, scratched or damaged during handling and storage. To alleviate the problem we propose Radio Frequency Identification (RFID) tag which is more advance and reliable than barcode reading. A RFID tag, which is microchip with an antenna, would be placed on physical objects and RFID reader can sense the presence and movement of objects throughout 99 Speedmart supply chain. The inventory movements can be tracked from the point of manufacturing to point of sales. There are few big retailers such as Tesco and Giant which had implemented successfully this system. We observe 99 Speedmart is lacking of proper documentation especially in inventory control and integrity. The procedures documented here should not be limited to inventory issues, they should be complete procedure including quality, physical aspects and safety. The Standard Operating Procedure (SOP) should include everything the employee needs to know to complete his or her task. One aspect is still lacking in 99 Speedmart is lack of training of its employees in inventory control and maintenance as compare to big retail companies. The organization gives little emphasize on staff training since its lacking in training budget. The culture in the company is that the experienced staff to give guidance and training to the new staffs which we feel still inadequate. 99 Speedmart storage areas are crowded and disorganize thus becoming “black holes” for missing products. Crowded area also cause increase damage to the product that is often disposed of without inventory corrections being made. Therefore we suggest 99 Speedmart to adopt proper racking system, good lighting, shelf and product labeling as in big D.C that makes easier to stock, pick and count thus increase the level of accuracy. The examples of RFID items are as below:

As a solution, the 99 Speedmart can upgrade their barcodes system combined with advanced software to manage their inventory integrity so that the inventories are as controllable. Stringent schedule for stock check and regular inspections of any discrepancies are required if the barcodes system is continued. For the future, if they are planning to capitalize in their supply chain management, more advanced RFID system and state-of-the-art software that could support the system well such as EDI are suggested.

99 Speedmart need to improve their cycle count. We were told that the company only do once a year cycle count which we feel one of the reason for inventory inaccuracy. The cycle count should be on continuous basis to determine the accuracy of the inventory. This is one the best ways of identifying problems areas on a timely basis and providing an environment conducive to continuous improvement.

**Lack of IT capabilities**

99 Speedmart should find a very capable and knowledgeable IT person to manage their WMS and other related inventory systems. By having a very capable IT person, they would be able to fully utilize the WMS to its
maximum potential thus improve their operation and simplify the processes. Once the WMS has been explored to its full potential, 99 Speedmart can change their operation from labor driven to system driven. Using WMS together with wireless scanner will cut down the manual processes such as manual data entry, manual put away, manual cycle count etc. By simplifying the processes, they would be able to reduce the manpower and increase the productivity. Full utilization of WMS would also mean that they can explore the reporting tools in WMS. By using WMS, they would be able to generate the required reports and also customize the reports. By having these reports, it would assist them in monitoring the DC’s performance and progress which will eventually help them in planning for improvement. The DC management staff should be trained on navigating WMS to look for required reports and also how to download and print / generate the reports.

99 Speedmart should invest in MRP and strictly follow the MRP forecast. MRP works well because it is a forward looking system. ABC Sdn. Bhd. should also train their buyers to use their existing system and also MRP (once in place) and reduce the manual forecasting. The predictability of events allows for careful planning and a reduction in unnecessary inventory (Max Muller, 2003). By strictly using the MRP and follow the forecast suggests by MRP, 99 Speedmart would be able to avoid high stock holding or out of stock situation. Besides MRP, 99 Speedmart should also invest in ERP. The company is growing in a fast rate and they already opened 300 outlets. Besides that they have 3 DCs which are not centralized. In this situation it’s difficult for them to closely monitor and plan accordingly for all 300 outlets and 3 DCs. By using ERP, it will help them in resource planning and overcome their productivity issues. ERP not only will assist in planning for operation and supply chain, but also in other areas such as human resources, finance etc.

Lack Of Cross Docking Operation Skills And Methods
As discussed previously, 99 Speedmart is using “Pick By Pallet’ (PBP) method compared to Tesco that is using “Pick By Line” (PBL) method. Tesco’s PBL method is proven to be more organized, simple, and faster compared to 99 Speedmart’s PBP method. Therefore 99 Speedmart should adapt to Tesco PBL method in order to improve their cross dock operation which is very crucial in retail industry. They should hire a person who is knowledgeable in cross dock operation and can well plan for improvement.

Lack of Key Performance Indicators
99 Speedmart should revisit their current KPIs and develop more KPIs to measure their DC’s performance and cost. The KPI should be based on each and every activity. For example, for productivity measurement, rather than measuring the productivity of the whole DC, they should break it down by individual section such as receiving, put away, data entry, picking and dispatch. From the respective section, they should break it down further to individuals so that they will be able to identify the person that is not achieving the targeted KPI and pulling down the productivity. By using this method, the management will also be able to identify the section that is overstaff or understaff. As for the costing, they would be able to identify at the micro level cost for each activity, for example, handling cost per pallet, order processing cost per order, cost per truck etc.

Lack Of Skillful / Incapable Staff
The human resources department of 99 Speedmart should play a vital role in identifying and hiring the right talent for their organization. They should also revisit their
remuneration package and working hours to attract the industry experts to join their organization. As a company that does not have expertise in supply chain management, hiring of industrials experts is essential to bring the organization forward. By doing this, they would be able to overcome most of their problems related to supply chain and improve further. Besides that, the top management team especially important business units such as strategic planning, supply chain, IT etc. should not be dominated by the family members of 99 Speedmart’s owners. They should give way to those experienced and skillful candidates who can bring the company forward.

CONCLUSION
Lean supply chain management requires companies to analyze every process in their daily supply chain activities and find out the problems occur by using unnecessary resources. This will improve the company’s in term of reduce excessive inventory, increase profitability, improve customer service level, and so on. Based on above discussion, 99 Speedmart is surely a fast growing company. They already owned 300 outlets in Klang valley (Klang and Shah Alam). Their next target is to open their outlets in other area of Selangor and Kuala Lumpur. Once they achieved that, they will move to other states. Their business is very profitable and they are a cash rich company.

But based on the discussion above, obviously they are facing some serious issues and challenges pertaining to their supply chain management especially in warehouse/distribution center operation. They recommendation that we suggested, especially investing in IT should be considered by 99 Speedmart to improve their operation. The company has a bright future and is expanding further. Before they start to penetrate to other states, their DC / warehouse should start operating efficiently. This can be achieved based on our recommendation as listed above.

REFERENCES
1) www.speedmart.com.my