S-CART- INTELLIGENT SELF CHECK-OUT TROLLEY IN HYPERMARKET

CREATION OF VALUE PROPOSITION FOR INTELLIGENT SELF-CHECKOUT TROLLEY

by

KOH PEIK SEE

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DECLARATION

Name   : Koh Peik See

Matric No   : P-COM0037/09

School   : School of Computer Sciences

Thesis Title : S-Cart, Intelligent self check-out trolley in hypermarket.

Creation of value proposition for intelligent self-checkout trolley.

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Table of Contents

List of Tables

List of Figures

List of Appendices

ABSTRAK

Disertasi ini ialah satu pelan perniagaan untuk memasarkan troli semakan diri, "S-Cart". Ia akan disasarkan pada semua pasaraya besar di Malaysia; ini adalah untuk memudahkan proses pembayaran menjadi lebih cekap dan berkesan. S-Cart akan dipasarkan oleh K-Trend, yang akan ditubuhkan pada tahun 2010. K-Trend terdiri daripada barisan pengurusan yang mempunyai kepelbagaian latar belakang yang seimbang dan sesuai dengan industri yang akan diceburi. Aktiviti utama akan ditumpukan pada penyelesaian untuk industri runcit di Malaysia. Ini termasuk pasaraya-pasaraya mini dan juga pasaraya-pasaraya besar di seluruh Malaysia.

Nilai saranan ialah suatu istilah penting untuk setiap produk baru, dan ia memainkan satu peranan penting untuk sebuah syarikat untuk menyaingi pesaing-pesaingnya. Ia dapat ditakrifkan melalui penerimaan pelanggan-pelanggan dan jangkaan pelanggan-pelanggan pada produk-produk tertentu. Maka, penyebaran secara lisan adalah satu cara efektif dalam menyebarkan berita-berita positif kepada pelaggan-pelaggan yang berpotensi. Bagaimanapun, ia mungkin membawa sesuatu halangan kepada penurunan organisasi. Oleh demikian, kajian kuantitatif dan kualitatif dijalankan bagi mengumpul maklumat daripada pembelanja dan pihak pengurusan pasar raya besar untuk memahami keperluan pasaran, dan menerima idea pengunaan S-Cart. Kajian kuantitatif adalah tertumpu pada kadar kepuasan pelanggan dengan saiz sampel 86. Kombinasi model "Servqual" dan model "Penilaian kepuasan pelanggan" digunakan untuk menjalankan tinjauan bagi menilai kepuasan pelanggan dalam pelbagai keadaan. Ini termasuk penilaian stor, ketepatan tanda harga, kualiti perkhidmatan dan kecekapan serta ketetapan masa, di mana, temu duga dijalankan untuk memahami keperluan pasaraya-pasaraya besar dan mengumpul maklum balas tentang idea S-Cart. Data telah dianalisis dan kesimpulan dibuat bahawa, S-Cart berupaya menambah nilai dari segi penjimatan kos, meningkatkan kepuasan pelanggan, dan memudahkan proses pembayaran menjadi lebih berkesan dan cekap. Berdasarkan data yang dipungut, ia

menjustifikasikan bahawa, nilai saranan S-Cart dapat disediakan sebagai satu penyelesaian untuk mengatasi kebanyakan daripada masalah semasa, seperti masalah-masalah dari pelanggan dan pasar raya besar. Input berharga daripada hasil kaji selidik dan temu duga, ia menyokong nilai saranan S-Cart.

ABSTRACT

This dissertation is a business plan to market the self checkout trolley, called "S-Cart". It is targeted at all hypermarkets in Malaysia and is designed to facilitate the payment process, to make it more effective and efficient. K-Trend would be a new startup company in the year 2010, and will consist of a balanced management team from various backgrounds to support and run the business. The major activities would focus on designing solutions for retail industry in Malaysia including minimarkets and hypermarkets. Value proposition is an important term for every new product, and it plays an important role for a company to compete with its competitors. It can be defined through the perception and expectation of customers toward a particular product. Hence, "word of mouth" or oral dissemination is an effective method in spreading positive news to all potential customers. However, it could also be an obstacle that could lead to the organization's decline. Hence, qualitative and quantitative methods were used to gather information from shoppers and hypermarket management to understand the market needs, and get an assessment of their acceptance to the idea of S-Cart. The quantitative research was focused on customer satisfaction rate with sample size of 86. With a combination of the "Servqual" model and "Evaluation of customer satisfaction" model, a survey was conducted to evaluate the customer satisfaction in various conditions. Among which were store house evaluation, consistency of price tags, quality of service and efficiency plus punctuality. Interview was also conducted to understand the hypermarket needs, and to gather feedback on ideas about the S-Cart. The data collected was analyzed and a conclusion was drawn that, S-Cart is capable of providing value for money in terms of cost saving, improved customer satisfaction, and the facilitation of the payment process to make it more effective and efficient. Based on the data collected, it can be justified that, the value proposition of S-Cart is capable of providing a solution to overcome most of the current problems, in the industry namely, the problems raised from shoppers and hypermarkets. The valuable input from the survey and the interview, too supports the value proposition of the S-cart.

1.0 Executive Summary

Hypermarkets in Malaysia are growing every year, and serving more than 27,730,000 Malaysians throughout all the cities (data gathered from Malaysia Population Statistics). The average number of shoppers today are at a rate of 750 to 1000 persons per hour. The population of Malaysia is also increasing every year. To serve the needs of more shoppers will be a challenge, whereby in the year 2013, the growth rate of hypermarkets will increase to 46.3% as stated in the Malaysia Retail Report, 2009. The major hypermarkets in Malaysia including Tesco (36 stores), Giant (39 stores), Carrefour (9 stores), The Store (75) and others have grown in their strengths and techniques in terms of the quality of their services. Based on our survey, most of them are facing several problems, like quality systems performance, customer satisfaction, and accuracy of price tagged on items, and staff attitudes.

From the shopper's point of view, they are frustrated when they have to line up in a long queue even if they have just purchased a few items. During peak days, long queues is a problem which is faced by all hypermarkets in Malaysia. Sometimes it happens because of the inexperienced cashier who had done a mistake by entering wrong figures, and it takes time to contact duty manager to solve the problem. Besides that, long queues also happen when credit cards take time to get verified. In addition, inconsistency of price tags also creates customer frustration during payment. Findings from the survey conducted, indicated that problems also existed due to ineffective and inefficient payment process and inconsistency in price tags.

Most hypermarkets view customer satisfaction as a must to thrive in the competitive environment as the growth rate of hypermarket is increasing every year. The growth of hypermarkets depends on their assets- *the number of customers*. Hence, customer satisfaction in

hypermarkets is vital; the better the services provided, and the shopper's behavior to repeat purchase will remain. Moreover, the positive news spread quickly to everyone if a shopper has experienced good quality service. Conversely, negative news will directly influence the stores image, not just temporarily but long term. Hence, front-end services are important in maintaining good relationship with customers. From the feedback by the hypermarket management team (*Tesco Store, Penang*), to further satisfy their customers, they are still defining solutions to solve current problems. These problems include shoppers' difficulty in checking the right price. For example when an item is tagged on two different bar code stickers, or shoppers failed to check item price when price checker is not functional. The "express counter" strategy/service will soon be terminated, as a lot of shoppers do not follow the instructions. According to the management, terminating the "Express counter" is not an effective strategy as hypermarkets also need to serve those customers who purchase only few items.

K-Trend is designing a solution to address consumers' frustration about ineffectiveness of checkout lines, inconsistency of price tagging, and other complaints. It will be the first technology of its kind in Malaysia, that would be used to replace some of the cashier's work and overcome some if not all current problems.   The "S-Cart" is designed with RFID technology. Shoppers will just need to drop in or take out item from trolley, and then S-Carts will automatically calculate the total price for them. When finish shopping, the shopper will just need to walk across to the exit door with protectors, and this will automatically deduct the total amount from shopper's card value (cash card/credit card).   This is an alternative method to reduce the cashier's work, an ingenious solution for long queue hassles. It is also an added value for shoppers in terms of fast payment process and avoiding long queues. The whole payment process will be done automatically without human control, and it is a reliable and secure payment process.

K-Trend would conduct a seminar by targeting top management from the retail industry including hypermarkets and supermarkets throughout Malaysia.   During the seminar, a brief introduction, on the values, and benefits of S-Cart would be presented directly to the top managements. The major purpose of this seminar is to attract potential customers to the concept of S-Cart.   K-Trend would base its presentation on the 4P's model (*Product, Price, Promotion and Place*) to manage and implement the S-Cart in the market. It is a model that can be used to retain existing and attract new customers to further increase the K-Trend revenues. K-Trend would focus more on the quality of products and features which can enhance customer confidence and comfort in using the S-Cart.   In addition, K-Trend would also create public awareness through trade show programs in Malaysia. The major purpose is to create awareness and enhance the availability of S-Cart to the public and attract potential customers to consider using the S-Cart.

K-Trend will introduce S-Cart in year 2011, due to the indication of researchers Neelima Sagar (2009) indicates the RFID cost would drop in near future (2011-2012). K-Trend would procure an amount of RM150,000 as seed fund to invest in this new technology. The money received will be used to bear the costs of research and development, and also the cost of human resources. K-Trend plans to rent an office and start to recruit suitable candidates for the vacant positions in K-Trend.   The office would be located at Suntech, Bayan Baru, with an area of 580 square feet.   Due to low cost operation, K-Trend would operate its incubator program at Kompleks Eureka, USM, by using the facilities provided.   K-Trend also plans to outsource S-Cart development prototype to China in the near future which will cost about Rm20,000, this would reduce the costs of development and to increase revenue. The return on investment will be seen in the third year.

K-Trend also has plans to increase sales of S-Cart by 50% yearly through its first 500 units of S-Cart. The 2nd and 3rd years will be targeted on a different group of existing/returning customers and also on first time or new customers. Once it is successfully implemented in Tesco, it is believed that the hypermarkets in other states will follow suit.

Price per Unit   :   RM2,608 (60% Profit Margin)

Sales Projection	2011	2012	2013
Total sales units	500	1000	2000
Total Sales Amount (RM)	1,304,000	2,608,000	5,216,000
Less: Cost of sales	(815,000)	(1,630,000)	(3,260,000)
Gross Profit	**489,000**	**978,000**	**1,956,000**

Figure 1.1: Sales Projections for three years

1.0   Introduction to the Company

1.1   Company Background

K-Trend would be a new start-up company, founded by Koh Peik See and Khoo Wai Mun. It will be located at an office space, 580 square feet, in Suntech, Bayan Baru, Penang. K-Trend will plan to register as a company in 2011. K-Trend consists of a balance management team with skills and knowledge in handling different tasks from different departments.

S-Cart – the intelligent self-checkout trolley will be the first product that K-Trend would invest in. The idea was a result from the analysis of the growth rate of hypermarkets in Malaysia, environmental needs ("Go Green" Campaign) and potential customers' needs. It is hoped that S-Cart will bring added value to the shoppers and the hypermarket management in terms of performance and cost.   In order to ensure S-Cart provides added value to the customer and the shopper, research conducted to get feedbacks from customers and shoppers was used to evaluate the hypermarket customer satisfaction rate and acceptance of the S-Cart idea.

Vision: ***To become a top leader in designing solution for retail industry.***

1.2 Business Intent and Clear Indication of Intended Business Activities

As a start-up business, K-Trend would focus on the retail industry by designing solutions for them through research on market opportunities as a mean to further enhance product design. Currently K-Trend is focusing on feasibility study for the business. Based on the business feasibility study, it has been found that the cost to introduce S-Cart is still high in year 2010. This is due to the costs of RFID tag (current price is at RM0.35 per tag). According to Neelima Sagar (2009), the adoption of RFID in retails sector would increase in near future (2011 & 2012) while Ari Juels (2004) forecasts that the price of RFID tag would drop to RM0.16 in next 2 years. Meanwhile, RFID tags would be widely used for each of the product in hypermarkets. Based on the indication, K-Trend decided to introduce S-Cart in year 2011. Hence, there is no funding is required in year 2010, and hope to acquire funding in year 2011.

K-Trend would design products for mini markets or hypermarket throughout Malaysia. For maximizing on company's revenues, K-Trend would outsource its development of prototype to China. The main reason for outsourcing to China is due to the fact that China offers the lowest costs in terms of manufacturing and has massive skilled technology resource pool. In the future, most of K-Trend's product designs will be evaluated before outsourcing to Asian countries, whereby a marketing team would be in-charge of marketing and opportunities research to further expand the business revenues.

The concept of S-Cart is formed through research carried out on market needs, environmental needs and the needs of the current trend in shopping. K-Trend is taking the opportunity to design a solution for hypermarkets in Malaysia and also a solution for consumers to have a pleasant shopping experience. It is hope that, the availability of S-Cart will enable shopping convenience for Malaysians with population size of 27,730,000 throughout all Malaysia cities.

Few business activities are involved, including market research, product design, prototyping test, quality check, marketing programs and after sales services. From the initial stage, K-Trend would do some market research through surveys and interviews, to acquire potential customers before proceeding to develop S-Cart.

The development of S-Cart activities is shown in Figure 2.1:
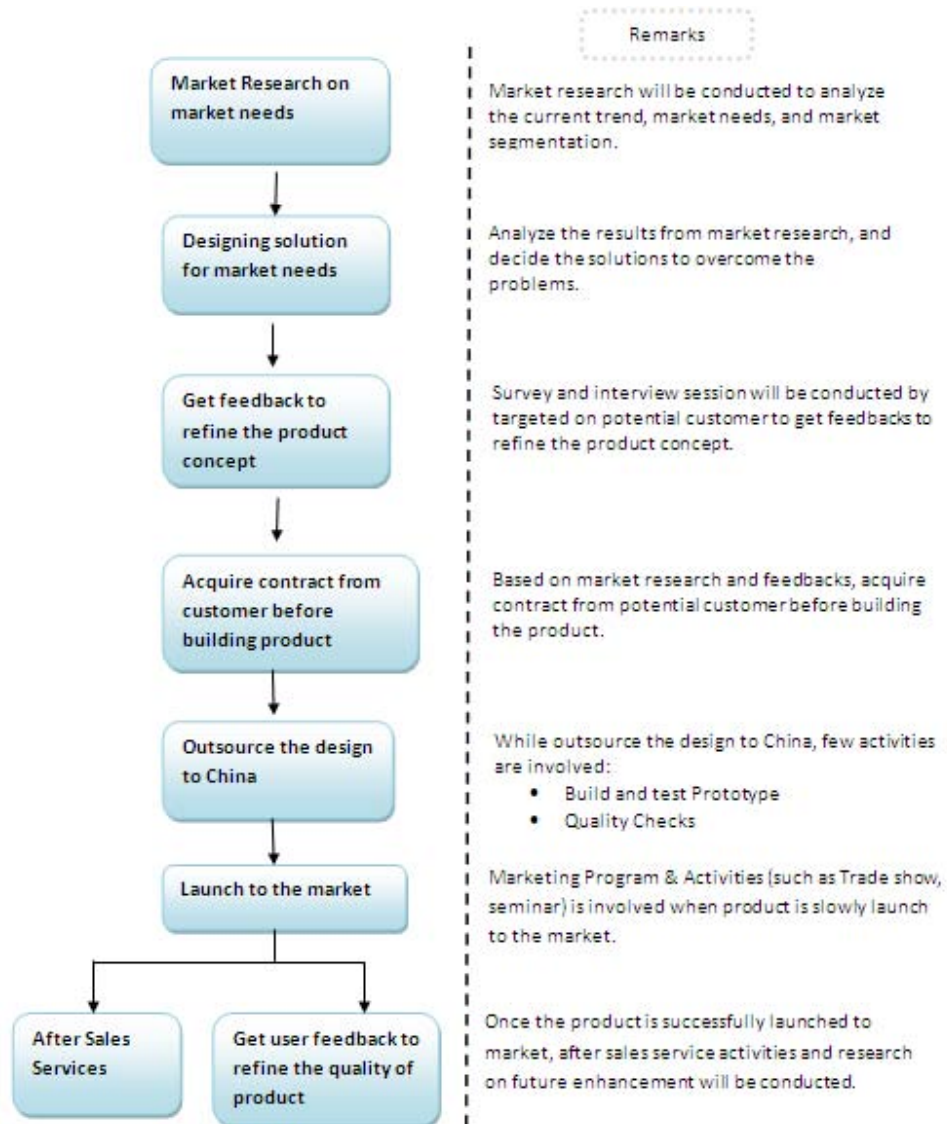
Figure 2.1: Activities involved in the development of the S-Cart

1.3 Growth Strategies

Competitive Strategies: K-Trend would be sustains itself in the competitive environment by using Michael Porter's competitive strategies. There are three approaches to out-performing other competitors in the industry namely, overall *cost leadership, differentiation*, and *focus*. (David A.DeCenzo & Stephen P.Robbins, 2005, pp. 105)

Cost Leadership: K-Trend would offer the lowest price of products and services to compete with competitors. To be lowest price leader, K-Trend would price the products lower than the competitors about 3% -5 %.

Differentiation: Product uniqueness is a value-added feature to the consumer. It is evaluated and analyzed from the competitors' products. K-Trend would then design solution for potential customer which will be unique when compared to the competitor's existing product.

Focus: Target on specific niche market will be based on the needs of the current trend and the environment, as K-Trend is focused on designing solutions specifically for the retail industry, including mini markets, supermarkets and hypermarkets in Malaysia.

To sustain itself in the competitive environment, K-Trend plans to follow a few strategies:

1.   Comprehensive study on customer behavior before designing the product in order to accurately study customer behavior. Marketing research will be focused on the geographical (*example: region, city size*), demographic (*example: age, income, occupation*), psychographic (*example: lifestyle, personalities*) and behavioral (*example: wanted benefits or quality, loyalty, readiness to buy and attitude toward product*) aspects. Decision will be made from the results of quantitative research (surveys and questionnaires) and qualitative research (interviews,

observations). The purpose of studying customer behavior is to figure out the market segmentation (psychographic and demographic profile), consumer's needs, to measure customer satisfaction, and also to get the scope for development of product.

2. Keep track of competitors' activities through clear analysis on competitors' movement and activities. A set of activities will be performed to monitor competitors' tactical and strategic development. The information will then be collected through trade shows, newspapers, and magazine articles, industry reports, and competitor's web sites on a daily basis. Lastly, analyze the data collected and decide on a strategy to compete with the competitors.

3. Internal training is a must to build up a good quality of team workers. External trainers would be invited to conduct training for K-Trend employees from time to time. The training programs would include leadership and management training (such as problem solving and decision making, time management skills), and soft skills training. K-Trend plans to conduct the training quarterly.

1.3.1 Financial Strategies

K-Trend has just started to invest in hardware development. By taking the opportunities of market needs and consumers lifestyle, K-Trend has confidence and believes that it is a timely move to invest in the S-Cart in view of the current problems faced by most of hypermarkets and shoppers in Malaysia.

Funding Strategies: Since K-Trend is focused on low cost strategy, it would seek funding from the government via grants for Small and Medium Industry (SMIs) to financing the start-up cost in the preliminary design of the S-Cart. Following is a list (Table 2.1) of government grant that K-Trend may apply.

Table 2.1: SMI Grant Scheme

SMI Grant Scheme		
Matching Grant for Business Start-ups	RM40,000	• Preparation of Business Planning • Related Feasibility Studies • Rental of incubators and business premises up to 24 months • Rental of Equipment and machineries • Development of Prototype • Product sample and testing
Matching Grant for Product and Process Improvement	RM 500,000	• Technology Feasibility Studies • Fee for technology transfer (eg. Technical licensing / disclosure / agreement / acquisition and blue print / drawing) • Development of prototypes and system design • Product testing • Product registration • Machine and Equipment testing and calibration • Initial patent registration / patent search / IP protection
Matching Grant for Productivity and Quality Improvement and Certification	RM 250,000	• Product certification • Quality improvement Practice eg. 5S, Six-Sigma and productivity Audit • Other related costs to comply to requirements of standards and certification
Matching Grant for Enhancing Product Packaging, Design and Labeling Capabilities of SMEs	RM 200,000	• Related costs and services for designing, packaging, marking and labeling • Trade mark and Patent registration

Adopted from Government Grants and Funding Assistance (2007 – 2010)

URL: http://www.macri.com.my/grants#one

Initially K-Trend would apply for the matching grant of RM40,000 for business start-up. Once the business is stabilize, K-Trend would apply for Rm500,000 for product and process improvement purpose. K-Trend would apply for the figures as listed above (Table 2.1) from government to support it at different stages of development. Besides that, since K-Trend believes that fund received from the Government grant will not be enough for further improvement, especially in product testing stage, thus, K-Trend would seek funds from MDEC (Multimedia Development Corporation) to finance from the product testing stage to ensuring the product meets an acceptable level of quality.

Alternately, if K-Trend failed to obtain government grant, K-Trend would look for angel investors, likes Internet Technology Asia Ventures Sdn. Bhd, located in Kuala Lumpur, Malaysia; this potential investor is based on searches from mycapital.com, who provides search engine services on potential investors. In case K-Trend fail to obtain fund from government and angel investor, K-Trend would seek fund through debt financing (Maybank, Public Bank, CIMB Bank) for short term borrowing.

1.3.2 Technology and Product Development Strategies

To sustain in competitive environment, it is based on the company ability to successfully introduce superior products into the market place (Norsiah Binti Mat, 2008). However, most of the innovation of products are declined due to improper planning and analysis. Most of the resources devoted to product innovations are spent on failure projects and 63% of company executives are disappointed with the results produced (Jasjit Kaur 2009). A study on innovation projects by Jasjit Kaur (2009), has mentioned about 54% are considered failures in innovation projects, and 23% considered successful and have achieved its objective. Another 23% is partly successful and has met 25 -50% of objectives.

By learning from case studies, K-Trend would implement and develop its products and services by using Total Quality Management concept. As mentioned by Ranjit (2008), Total Quality Management is an adoptive tool for all kinds of companies in attaining customer satisfaction at a minimum cost and to sustain in competitive environment. It is focused on:

Customer-Oriented: "*Everything is worth what its purchaser will pay for it.*"(James C. Anderson & James A.Naru 1998). Focus on customer satisfaction by providing better quality products and services at low costs.

Employee involvement and empowerment: Team work is important when quality improvement project is perform. Employees are empowered in all kinds of projects.

Organization-wide: Top management is involved and fully supports innovation in products/services. Other departments would take part as well to achieve better quality and sell the products at the right timing.

Continuous improvement: Quality improvement viewed as continuous tasks/projects.

Strategic focus: Focus is on quality, and viewed as a competitive weapon to compete with the competitors.

Process management: Focus is on quality control when building and producing products/services.

K-Trend would use TQM as a tool to maintain and manage the operations, activities and even quality of products/services. In addition, CRM (Customer Relationship Management) would also be considered as one of competitive strategies used to build good relationship and continuous increase in customer satisfaction. Meanwhile, brand management would be used to build customer loyalty to increase sales and revenue for the long term.

1.3.3 Marketing Strategies to Increase Market or Mind Share

K-Trend would apply different marketing strategies to obtain market share as listed below:

Trade shows: K-Trend would promote and brief on the features of the S-Cart during trade shows to spread the message of S-Cart to the public. The purpose is to create the awareness on the ability of the S-Cart, and try to attract potential customers to consider the S-Cart.

Networking: K-Trend would use face-to face strategies while explaining the product to customers, a brief explanation on the features will be given during presentation. Plus, follow-up on the customer's requirements or issues, and respond within a short period of time.

Publicity: K-Trend would arrange some seminar or presentation, a brief explanation on the current trend and product values will be given during the presentation. The purpose is to create awareness on the new technology that going to enter the market.

Newsletters: K-Trend would advertise products through multimedia, such as emails, with and without notification emails targeted on a specific group of customers.

Direct Mail: K-Trend would maintain relationship with existing customers by using the direct mail method. K-Trend would send special offers to existing customer to upgrade the system/products features.

1.4   **Target Market**

K-Trend has targeted all hypermarkets in Malaysia, but initially it will start from Tesco stores. Reasons are, from preliminary studies with Tesco store, they had shown interest in S-cart (refer to Appendix G for the letter of acknowledgement). About 79% of consumers from Penang state preferred to shop at Tesco. (refer to Section 5 for further details on research result). Based on this analysis, K-Trend decides to first target Tesco, Penang. It is believed that, once it is successfully implemented at the first market then, the marketing of the S-Cart for hypermarkets in other locations will be easy to implement as there exist a visible relationship among the hypermarkets.

Following are the potential markets for S-Cart (Figure 2.2, Figure 2.3 & Figure 2.4):

TESCO (36 stores, Source: Tesco Website)
URL: http://www.tesco.com.my/html/stores.aspx?ID=7&PID=99&LID=1

Figure 2.2: Total Outlets (Tesco) in Malaysia

Carrefour (9) (Source: Carrefour website)
URL: http://carrefour.com.my/newc4w/en/shopping_mall.php

Figure 2.3: Total Outlets (Carrdfour) in Malaysia

Giant (39) (Source: Giant Website)
URL: http://www.giant.com.my/location
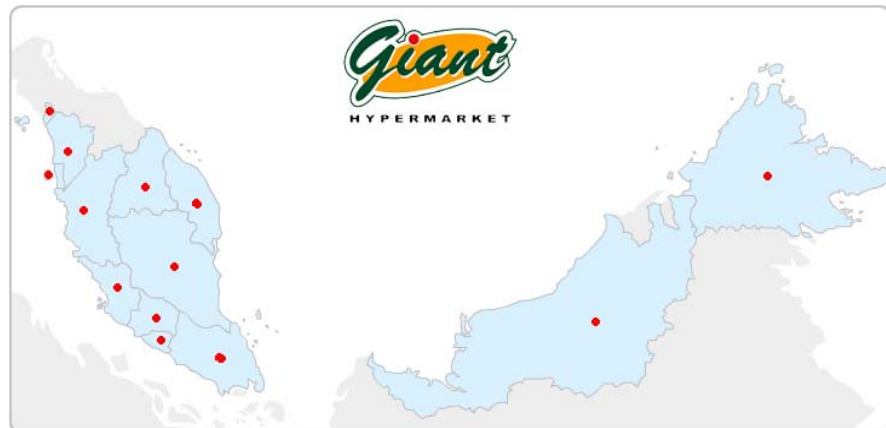
Figure 2.4: Total Outlets (Giant) in Malaysia

Within Malaysia, 13 states, Giant has established about 39 stores, and Carrefour has established about 9 stores, and Tesco has established about 33 stores.

18

Following Table 2.2 is a tabular representation for three potential customers of the S-Cart:

Table 2.2: Number of Major Hypermarket in Malaysia

	Giant Store	Tesco Store	Carrefour Store
Kedah	3	3	0
Perlis	1	0	0
Pulau Penang	1	3	1
Perak	3	5	0
Kelatan	1	1	0
Terengganu	2	0	0
Pahang	1	0	0
Kuala Lumpur & Selangor	15	13	6
Negeri Sembilan	3	1	0
Melaka	1	1	0
Johor	1	4	2
Sarawak	3	0	0
Sabah	3	0	0
Labuan	1	0	0
Total	**39**	**33**	**9**

Contingency Plan: As mentioned above, the Tesco store located in Penang would be the first to introduce the S-Cart into the market. If there is a failure in acceptance at Tesco, then the Giant located in Penang would be a backup plan. This is due to fact, from the survey most of the respondents frequented Giant hypermarket (70%), hence this could be next potential market for the S-Cart.

1.5   Revenue Model

The Figure 2.5 shows the business model of K-Trend:
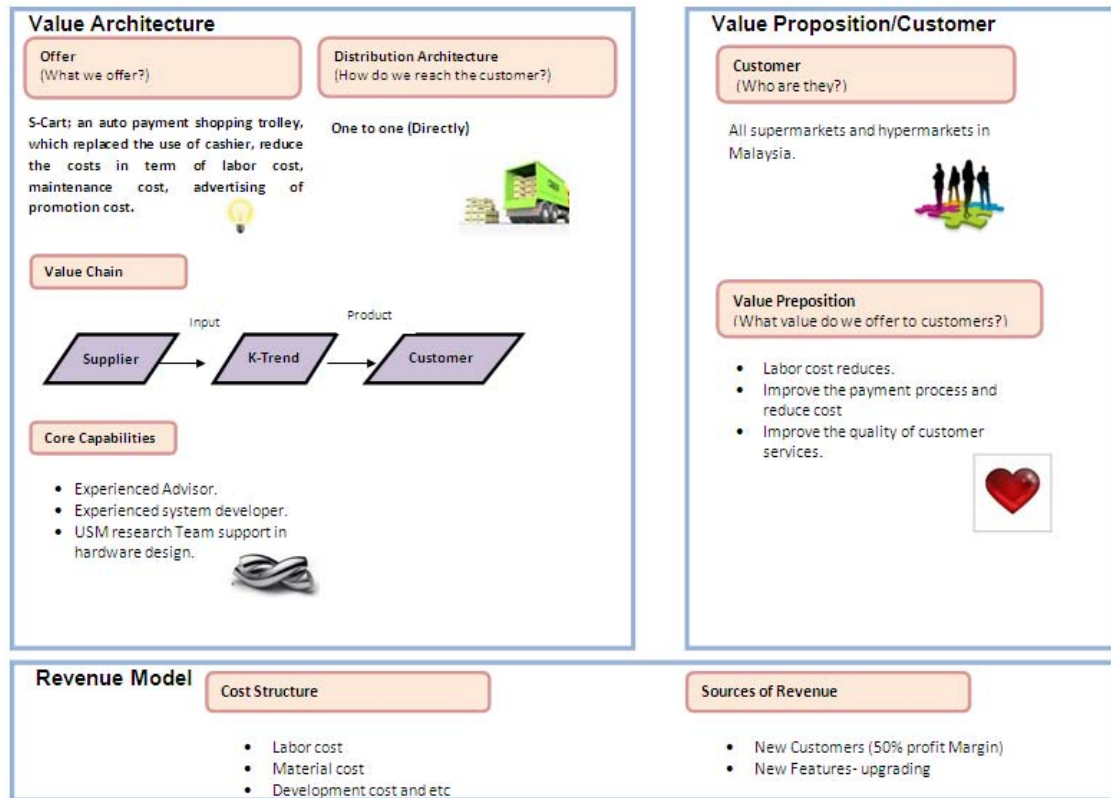
Figure 2.5: S-Cart's Business Model

The revenue of K-Trend is by selling S-Carts and upgrade features.   K-Trend will make 60% gross profit for every trolley sold.

As mentioned in section 2.2, S-Cart is the first product that K-Trend plans to invest in, and it would out-source S-Cart to potential contractors to develop in China. Thus, the cost of development is expected to be lower than the plan. Based on an estimation that each S-Cart would costs at RM1, 630 (refer to Appendix H for cost assumption for each unit of S-Cart), and expected to gain 60% of profit margin for each S-Cart. For example, revenue of 60% from costs of RM1,630, by selling 500 units at RM2,608, it is able to generate revenue about RM489,000 (subtract the costs of goods sold).

Other than that, selling in larger quantities, approximate 1000 units for each store in Malaysia. It is believed that, once S-Cart is successfully introduced in the first target hypermarket, the other same brand of store will follow to implement it. There is a visible relationship among the hypermarkets throughout Malaysia. From the survey, it can be seen that a high percentage of survey respondents would like to change their mind to visit the store if only a particular store is implementing such technology.

1.6 Operational Setup

As mentioned in section 2.1, K-Trend has planned to locate an office in Suntech (located in Bayan Baru, Penang). While S-Cart is still under the incubation process, K-Trend would participate in technoprenuer incubator program at USM, by using the facilities provided. It is located in Kompleks Eureka, USM, which is the main campus of USM with an area of 239.47 hectares. It is situated at Minden, which is about 9.7 kilometers from the city of Georgetown. K-Trend would setup a real office at Suntech once the initial setup fund is received.

K-Trend would take one year in research and development for S-Cart, including the design of S-Cart, sales and marketing, outsourcing of manufacturing and after sales services.

Since Suntech building is newly established in the year 2009, it is a prime location in the heart of Penang Cybercity. SUNTECH is also the perfect location with a wealth of convenience; it comes with conference rooms, meeting rooms, seminar rooms, and training rooms & with secretarial services, lounge at every floor, and shower/changing room, sauna & steam room, sky garden cafe with landscape. It is believed that setting up an office in Suntech would create a good environment for all workers and in turn bring out the best quality of ideas.

Besides that, as mentioned in section 2.3.1, K-Trend would obtain the funds from government grants to setup an office with a real office environment.

1.7 Long Term Goals of Company

K-Trend's plan to achieve its goal in the near future includes customer satisfaction rate continuous increase in sales rate, continuous innovations which are high quality and sustainable. K-Trend hopes that someday it will be able to achieve the status of a public listed company.

1.8 Market & Competitors Information

In Malaysia, S-Cart is a new technology in the retail industry. A similar product has been introduced in a few countries such as Japan, Korea, and United Kingdom. Furthermore, a similar product that successfully launched in other countries has obtained positive feedbacks (Washington 2005). Moreover, Singapore would be introducing the "Futurecart" due to positive feedbacks is created on similar product in other countries (S.Luo 2008 & Mike Hanlon, 2005). If any of these manufacturers wish to extend their business to Malaysia, it would pose a strong competition to the S-Cart.

Although there is no such product in Malaysia as yet, but there has a potential of competitors in the future. Those industries which focus in RFID products/services, electronic product would be considered as potentially high competitors for the S-Cart. They have few years of experience in hardware development, stable business, and group of team members, which in turn may become potential threat to the S-Cart.

Based on our research, Table 2.3 is the competitor's analysis:

Table 2.3: Comparison of S-Cart's Competitors

Features	S-Cart	U-Scan Shopper(Fujitsu)	Futurecart
Area	Malaysia	United State & Japan	Singapore
Languages	3 languages: English, Malay, Chinese	Only available in English	Only available in English
On sales item	Shows on main screen, shoppers allow to navigate the screen through navigation button.	Required download shopping lists from retailer's Web site for in-store reference	No
Information display	The item nutrition, ingredient, details (Price, expired date and etc) will display when shopper dropped an item into trolley.	Attached with price checker and scanner to scan item information.	When the shopper roams near the item, the LCD screen flashes nutritional information
Setting for over spent	Yes	No	No
Support loyalty card	Yes	Yes	Yes
Live chat with customer services	Yes	No	No
Price	RM2,608	US$1,200 (RM3840) (Mike Hanlon, 2005 & (E.Schuman, 2005)	US$1,200 – US$1,600 (RM3,840 – RM5,120) (S.Luo, 2008)

1.8.1 SWOT Analysis

Table 2.4 shows the SWOT analysis of K-Trend:

Table 2.4 : K-Trend SWOT Analysis

Strengths
Experienced team of system developers: K-Trend has a team of experienced system developers to build up the S-Cart system to be more effective and more valuable. Based on experience, they would design the interface of S-Cart to be more user friendly and easy to use. And, this in turn would create a high likelihood of acceptance by the end-user.   **Passionate team members:** K-Trend consists of a team of members who are highly inspired and passionate to work together, and to produce good quality work.

Weaknesses
Lack of experience in hardware development: Lack of experience in hardware development will cause to failure of the S-Cart.   As K-Trend only has experience in systems development, it needs some time to spend in training and learning more about hardware development.   *Strategy to address: Outsource the product development prototype to China.*   **Lack of marketing experience:**   Lack of marketing experience will cause the lost of customers, failure to promote the products to all hypermarkets or supermarkets Malaysia, especially in building up customer relationship.   *Strategy to address: Participate in marketing training programs, compare and analyze from different industries company advertisements and promotions activities, and also recruit experienced marketing personnel to further enhance the marketing activities.*