 No. of Pages = 07

THE INSTITUTE OF CHARTERED ACCOUNTANTS OF SRI LANKA

TOP CA CASE STUDY EXAMINATION - MAY 2012

Important - This question paper should be answered entirely in the **ENGLISH** Language only.

THE EXAMINATION QUESTION, INSTRUCTIONS AND ADDITIONAL (IMPACT) INFORMATION

Time allowed : 4 Hours **Marks :** 100 marks

Instructions

1. This question paper should be answered entirely in ENGLISH language.

2. Your answer must be submitted in the answer booklets provided at the Examination Hall.

3. Any pre-prepared papers included in your answer WILL NOT be marked.

4. After the instruction to stop writing at the end of the paper, you will be given five minutes to assemble your answer.

Extension to Migaya Ceramics Case Study

The meeting held on January 25, 2012 in the corporate boardroom of the Colombo headquarters for the senior management of the Migaya group headed by Visal Masakorala, Group Managing Director became an eye opener for everybody. Despite the initial frustration created in some minds, the message communicated at the meeting was taken seriously by all simply because Migaya has so far looked after its employees well. The feeling of everybody was rather identical that nobody could let Migaya to fail. The situation led to a series of formal as well as informal meetings within divisions, subsidiaries and the entire group. A number of proposals passed through Visal to the Board of Directors of the group. The Board has been impressed with the following four proposals.

1. Entering into a joint-venture franchise agreement with a foreign partner
2. Introducing an Enterprise Resource Planning (ERP) System and upgrading sales outlets
3. Envisaging lean journey
4. Exporting tile products to India

The Board wants your expert opinion on each of these proposals. You are required to prepare an Executive Report as at end of May, 2012 to be presented to the Board of Directors concentrating on the following areas. Your analysis should be based on the prevailing financial and business environment in Sri Lanka. State clearly any other assumptions you make.

1. Pros and cons of each proposal.
2. Impact of each proposal (as per provided information) on the cash flows, gearing and long term sustainability of the firm.
3. Order of implementation and timing of implementation of each of these proposals.
4. The possible sources of funding to finance these proposals.
   Note: Full evaluations of projects using capital budgeting techniques such as NPV, IRR are not expected.

The four proposals are presented to you with some background information hereafter.

1. Entering into a joint-venture franchise agreement with a foreign partner

The management of Migaya finds that in the recent past the tile industry has become increasingly competitive, while the future of the bath-ware segment appears promising, with an opportunity for expansion. So far the company has been successful in attracting profitable customers in the bath-ware segment by offering a variety of high quality products in attractive designs. However, as currently all the bath-ware fittings and accessories in its sales outlets are standardized imported items, Migaya at times has failed to supply matching accessories to support its sales. It has even lost some customers due to this problem.

Within this backdrop, the two main product designers who have immensely contributed to Migaya's success with innovative designs, has put forward an initiative to enter into a franchise agreement to set up a local manufacturing plant. As these designers explained, Migaya has the design capabilities to come up with innovative bath-ware accessories. It however lacks the technical know-how in production. The management of Migaya also understands that the costs involved in embarking on such a venture would be substantial. It is thus of the view that a franchise agreement would be a great help at this juncture.

The accessories produced locally would reflect the company's distinct flavor benefiting from the expertise of its designers and be more suited to its bath-ware products. Basically, it would help Migaya to uniquely position itself in the market with a bundle of goods, as there will be sales increases in all areas; bath-ware, tiles and accessories.

With the recognition of the franchise business model, the company approached one of its key bath-ware accessory suppliers, Brohe in Italy, a world leader in this range of products. High powered teams of the two companies met on several occasions both in Rome and Colombo and visited each other's manufacturing facilities. The two teams have recommended a joint proposal for the final approval of their Boards of Directors. The proposal suggests *inter alia*:

1. Form of the franchise shall be a joint-venture franchise where each venturer, the franchisor (Brohe) and the local partner Migaya, make contributions for the establishment of the local entity. The name of the local entity would be "Brohe-Micell (PVT) Ltd".

2. Brohe requires a Royalty payment of 10 percent of gross sales for the next 10 years. Net profit will be shared equally by the two companies. After 10th year there will be no royalty payment.

3. The total manpower requirement of the project is 30 people which include a resident manager and two technical personnel coming from Brohe, Italy. The balance staff will be drawn from Migaya. (With this project Migaya will relocate about 25 of its excess staff and avoid an otherwise Golden Handshake payment of Rs. 110 million approximately.)

4. Brohe shall provide technical training in Italy to 5 selected employees of Migaya free-of-charge. However, Migaya has to spend for their air passage and living allowance which will approximately cost Rs. 3.6 million.

5. Estimated capital requirement of the project and suggested sources of funding are as follows.

		Rs. '000
Estimated capital requirement:		
Factory building		200,000
Machinery		600,000
Licensed fees and other expenditure		100,000
Working capital		300,000
Total estimated capital requirement		**1,200,000**
Sources of funding:		
Equity capital:	Migaya	400,000
	Brohe	400,000
Loan from	Brohe	400,000
Total Capital		**1,200,000**

6. Brohe, as a part of its responsibility will purchase the required machinery and send them to the site in Sri Lanka. The balance Rs. 200 million will be remitted in cash. Brohe will charge 10 percent rate of interest for the loan. The principal repayment will start from second year of the project equally over 7 years. Machinery will be depreciated over 8 years equally.

7. Migaya is responsible for the construction of the factory building. The balance Rs. 200 million will be contributed in cash. The factory building will be constructed in a 3 acre land in Meepe owned by Migaya. (The current commercial value of this land is Rs. 120 million which has not been taken into account in estimating the capital requirement.) The cost of factory building will be depreciated equally over the next 25 years.

8. Marketing of the product in Europe will be looked after by Brohe. It has agreed to promote other products of Migaya in the European market. However, Migaya has to invoice its other products to Brohe at a 5 percent discount.

9. The future cash flows of the project are yet to be estimated. However, both companies are optimistic of the project's success.

2. Introducing an Enterprise Resource Planning (ERP) systems and upgrading sales outlets

Morin Almeda, Director Marketing had a number of meetings with her managers of the sales outlets and the warehouses. She finds that the company's Inventory Management System (IMS) is in an utter chaos. She is convinced that the current stand-alone/fragmented IMS of the company entails excessive manual processes, limited reporting capabilities, little integration between head office and branches, and also incapable of tracking the on-time availability of inventory at sales outlets. This has created some issues, in particular relatively high stock holding and stock-out costs. Inaccessibility to available stocks in different designs and sizes in various points of sales and warehouses is another issue in the current system. As a result, an outlet manager cannot take orders beyond stocks available in his or her outlet. It is also observed that when a particular design becomes out of production, there was no point of keeping small quantities of that design in many outlets. Sales team is of the view that sales could be improved if such small quantities are amalgamated and kept in few outlets in right quantities. The sales team also pointed out that there were frequent inquiries from some customers for the same tile after years of their initial purchase due to their home repairs/renovations. If the warehouses can keep a minimum stock of those designs which have reached out of production status, the company could get a premium price by directing such inquiries to the relevant warehouse.

According to the marketing department, the tile market is price sensitive. The demand for grade 1 tiles mainly comes from up-end market consisting of large contractors and affluent individual home builders. They do not compromise beyond grade 2 tiles. Small contractors and people in the middle class and below always demand for grade 2 and 3 tiles. Therefore, it is suggested to upgrade a selected set of sales outlets mainly located in Colombo, its suburbs and other main cities to super grade outlets to sell only grade 1 and 2 tiles. The remaining outlets will sell only grade 2 and 3 tiles. According to Morin, this arrangement would help to avoid annual discount sales in special locations that currently cost lots of money.

In this backdrop, Marketing Department has suggested to modernize the current outdated IMS system together with other changes to improve the associated business processes. Accordingly, the main solution is the introduction of an Enterprise Resource Planning (ERP) system, a software solution which integrates information and business processes enabling better coordination among different divisions of the organization, so that current issues on inventory management and business processes can be mitigated. This proposed system will network all sales outlets, warehouses, head office and manufacturing plants. The cost of the proposed system is Rs. 30 million which includes costs of installing the system with necessary software, expenditures for implementation including consultancy, system maintenance and support and staff training for the first 3 years. The company has to pay up-front Rs. 15 million and at the end of each year Rs. 5 million during the first 3 years. Only the initial outlay of Rs. 15 million will be capitalized and depreciated equally over next 5 years. It is also proposed to upgrade 30 sales outlets to super grade outlets during next 3 years. The total cost for the project is estimated to be Rs. 60 million, which will be spent Rs. 20 million per year for the next 3 years. Each Rs.20 million will be spent at the beginning of each year to upgrade 10 outlets per year. This expenditure will be capitalized and depreciated equally over 5 years from the expenditure date. The expected benefits and other expenditures over next 8 years are estimated as follows.

All figures given in the table are in **Rupees millions.**

Year	**1**	**2**	**3**	**4**	**5**	**6**	**7**	**8**
ERP System maintenance cost				1.2	1.2	1.2	1.2	1.2
Expected net change in inventory	(70)	(250)	(350)	(175)	(50)	(20)	30	30
Other savings from improved inventory system	3	5	7	10	12	13	13	13
Before tax net revenue from improved sales	7	12	14	16	18	20	20	20

The company's plan is to extend the ERP system intended to introduce under this proposal to other areas resulting in a fully automated Accounting Information System (AIS), Human Resource Information System (HRIS) and Customer Relationship Management System (CRMS). Cost - benefits of these extended plans are yet to be estimated.

3. Envisaging a lean journey

Young managers with high credentials in management and industrial engineering who joined managerial cadre during the past three to four years are now debating with senior management on the timeliness and appropriateness of positioning the entire group on a lean journey (introducing lean manufacturing). They have found Justin Wedamulla, Deputy General Manager Operations as a constant source of inspiration especially due to his training on the subject in Japan. And also, Wedamulla finds this as a window of opportunity to gain prominence within the company as he felt him being marginalized some time ago.

One of the underlying arguments most of these young managers have built is the huge waste that almost all plants in the group have been experiencing. Together with Wedamulla, they are of the view that there are significant wastes in forms of overproduction, waiting, inefficient transporting of materials, inappropriate processing, unnecessary inventory, unnecessary or excess motion and defects.

Moving well beyond contours of conventional wisdom of defining waste, these managers have presented new types of waste to include, but not limited to, waste of untapped human potential and waste of energy and water. Their answer to the current crisis is companywide application of lean principles focusing more on operations without delay. Conversely, a handful of relatively old managers cast doubts on the appropriateness of lean manufacturing and they believe that lean may create new politics and power culture in the organization. The debate on the relevance of positioning the entire group on a lean journey thus goes on.

Amidst these views, Wedamulla and his team has convinced the senior management on the significance of introducing lean principles at this critical juncture for the survival of the organization in competition. They have drawn the attention of the senior management to the need of constituting a project team to do the initial work for educating the entire workforce on lean manufacturing and identifying a suitable plant for rearranging under lean principles to start with. As the Group Managing Director, Visal Masakorala wanted Wedamulla to lead the team, he called Wedamulla for a meeting and requested him to prepare a document estimating costs of redesigning one of the company's plants to a lean manufacturing setup and costs of training employees to work in a lean environment. The Group Managing Director has insisted that Wedamulla work in collaboration with Amal on financial matters keeping in mind the financial discipline the organization has been endeavoring to inculcate.

Wedamulla cannot make up his mind to work with Amal. Retrospectively, Wedamulla reminds himself of Amal shouting at him on couple of occasions highlighting that he has no sense of finance and accounting. Nevertheless, in response to Group Managing Director's directive, Wedamulla has prepared a draft document with the assistance of the other members of the team and sent it to Group Managing Director. The document includes some basic information on costs as follows:

i) for conducting awareness building program across the board drawing lean experts from the industry – Rs. 1 million
ii) for doing initial documentation work – Rs. 0.3 million
iii) for sending a core team of employees to study lean manufacturing at Toyota Motor Corporation and another reputed ceramic factory, Nagoya, Japan – Rs. 8.5 million
iv) for building initial lean architecture at shop floor level of the Meepe factory – Rs. 24.4 million (This cost includes changing machine layout, fixing additional accessories required and training of shop floor employees. The loss of production stoppage during the period of the factory setup has not been taken into account.)

In their report, the project team headed by Wedamullla has highlighted the need of closely working with supervisory and shop floor level employees and the necessity of empowering them to achieve the task. They have further highlighted that as large benefits are expected over time with the implementation of lean reforms, HR and finance people together have to plan how in part these benefits are shared with employees involved.

4. Exporting tile products to India

Janaka Bandaranayake, Deputy General Manager (Exports) has been successful in convincing the senior management and the Board of Directors on the need of exploring new export markets for the range of products offered by the company especially in the light of gradual decrease of demand from the Migaya's traditional clients in the US and Europe.

As a result, Migaya sent a team headed by Janaka to the Building Construction Trade Fair of India recently held in Bangalore. Janaka was impressed with the high response received for their stall at the fair. On their return Janaka and his team started corresponding with some potential clients in India. Moreover, the team began investigating the Indian tile market. It was found that compared to the quality of available tile products and the market structure, there is a great potential for Migaya to capture a considerable segment in the Indian tile market. The team has gathered some relevant facts from official sources. Accordingly, there is a significant growth in the Indian tile market from INR 110 billion in 2009, to INR 161 billion by the end of 2011. A major characteristic in this market is that it's being dominated by the unorganized (informal) sector which accounts for approximately 60 percent while the rest is being served by the organized sector. It is widely acknowledged that the informal sector in India suffers from a kind of low productivity syndrome, compared to the formal sector. The Indian tile market can be classified into four segments based on price range – High end tiles (Porcelain and Glazed), High end ceramic tiles, Ceramic tiles and Vitrified tiles.

According to some Indian studies, its tile market is driven by growth in housing, low per capita consumption, growth in real estate and replacement market. There are some possible threats as well; dumping of ceramic tiles in India by Chinese tile manufacturers, competition from unorganized sector with handmade designs etc. However, it is expected that through a joint business with an Indian partner can mitigate such threats. It is expected that if Migaya can focus on excellent designs of Porcelain and Glazed tiles, it would be able to compete with Chinese designs.

One of the successful correspondences Janaka and the team could so far maintain has been with Nath Govindarajan, who is a leading distributor of ceramic and tile products mainly in Northern part of India. His presence is restricted to 5 Indian States (their main cities) namely, Haryana (Delhi), Uttra Pradesh (Lacknow), Rajasthan (Jaipur), Karnatak (Bangalore) and Maharashta (Mumbai). Over 80 percent of his business concentrates on supplying to building contractors.

During subsequent discussions held between Janaka's team and Govindarajan, the following aspects were discussed though not finalized.

i. Govindarajan requested to be the exclusive sole agent of Migaya's products in India.
ii. Migaya requested that Govindarajan shall not make any dealerships with other tile manufacturers in Sri Lanka.
iii. Govindarajan requested 4 months trade credit from Migaya.
iv. Sri Lanka Export Credit Insurance Corporation has agreed to provide credit insurance at a premium of 2 percent of export value.
v. The invoice price would be mutually decided by the two parties on a transaction to transaction basis.

In the event of this contract materializes, Migaya can expect average monthly sales of Rs. 300 million with an annual growth potential of 10 percent for the next 5 years and thereafter at a moderate growth rate of 4 percent a year . As per the Article 10 (a) of SAPTA (1997) agreement, there is a potential for duty free access to the export market within the SAARC region. In addition, Migaya becomes entitle to a duty rebate on imported raw materials used for exports. Cost of imported raw materials is around 15 percent of the cost of production.