SUCCESS STORIES

MODULAR LEARNING SYSTEM IN SUPPLY CHAIN MANAGEMENT
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Success Story: Bangladesh - Dhaka Chamber of Commerce and Industry (DCCI)

By Syed Asgar Ali

Ali Asgar is the Country Procurement Manager (Head of Procurement and Spend Management) of BOC Bangladesh Limited. He is also a trainer with the MLS-SCM @ Programme attached to the Dhaka Chamber of Commerce & Industry.

[Keywords: Energy, Multinational, Private Enterprise, Supplier Management]

In 2010, BOC Bangladesh Procurement, under my leadership, has achieved 185% cost savings over the stretched target, and we ranked second among 10 countries of South East Asia where Linde/BOC are operating. This performance was acknowledged and is highly appreciated by our country and regional management of South East Asia.

The cost savings on Liquid Argon Procurement were around 50% in 2010. This was achieved by switching over from a third party supplier to our internal Linde group sources.

We also achieved 27% cost saving on Medical Cylinder procurement by switching over from Japanese to Chinese suppliers without a trade off in quality or our own Linde/BOC standard in 2010.

The review of our sourcing strategy is a continuous process in order to capture opportunities and avoid risks. We are in the process of having a frame contract with newly developed suppliers for the continuation of supply at the right quality level, timely availability of product, at a pricing formula viable to market response, and with a performance recording and feedback system that will enable us to sustain and improve our service level in the future.

Please see below some examples of Supply Positioning of the Material Group Family (MGF) for certain commodities, and Suppliers’ Supply Positioning for selected items against the expenditure of 2009 used in BOC Bangladesh.
Supply Positioning for Bulk and Automotive Commodity:

Suppliers’ Supply Positioning for selected items for Bulk and Automotive Commodity:
Success Story: Bangladesh – DCCI

By Syed Asgar Ali

Syed Asgar Ali is the Country Procurement Manager (Head of Procurement and Spend Management) of BOC Bangladesh Limited. He is also a trainer with the MLS-SCM® Programme attached to the Dhaka Chamber of Commerce & Industry.

[Keywords: Energy, Multinational, Private Enterprise, Supplier Management]

I led the journey of transforming BOC Bangladesh into a High Performance Organization (HPO), which yielded savings of 2.6 Million EUR, the highest in the South East Asian Region of ten countries (in both the terms of volume and percentage spent) during the 2009 fiscal year (FY09). Our target was 1.5% savings over FY09 spent, where we have achieved 15%. This performance was acknowledged by our country, regional, and global management. I received the Country Excellence Award in the category of Performance Excellence for FY09. The HPO initiative is a global programme of Linde Group, but I find most of the elements common to MLS-SCM.

We have organized the BOC Bangladesh Procurement Department, with a focus on strategic activities, in line with business portfolio (Refer to Module 1). We have also partially implemented new tools and standards, and changed working procedures, which share similarities with MLS-SCM modules (Refer to Modules 4, 5, 6). We are focusing on Demand and Supply Planning (Refer to Module 2), as well as Supply Market Analysis (Refer to Module 3). I have found that the MLS-SCM Programme gives me quick conceptual understanding and implementation opportunity of Linde HPO initiative, more than others.

The qualitative information, which yielded savings by being more commodity-focused and/or market-focused, and changed of system include:

- After discussion, we were able to cancel some orders, previously booked at a higher price, compared to the point of supply time, and re-negotiated with suppliers for a better price (learning gained through Module 7).
- We closely monitored the supply market for the favourable time to buy, particularly during the time of the economic downturn, so we could have the best price from the market without being stuck with a higher price (in light of Module 3).
- We generally placed orders through competitive bid, where applicable we did negotiation/re-negotiation, and the source could be changed among approved suppliers (with help from Modules 3, 6, and 7).
- In 2009, the total quantity was purchased from TATA (for MS Wire Rod), through a competitive bid where we received a volume leverage for price (Refer to Module 6 and idea of leverage from Module 14).
- We have also developed competitive sources for relevant materials and services (Refer to Modules 3, 5, 6, and 7).
This is a success story of a lubricating oil for a gas compressor (GC), in a power plant where my company was in agreement to supply 110 mega watts (MW) of electricity to the customer. The plant had four gas compressors manufactured by Borak Compression System (BCS), which were used to compress the natural gas pressure from 450 pounds per square inch (psi) to 5,000 psi, before injecting into the engines as fuel. Lube Seal EH640 was the recommended lubricating oil from BCS, which was very important for lubricating the packing and liners of the high pressure GCs. We were experiencing difficulties in maintaining a safety stock level of EH640, and this was always causing concern for the procurement team. We decided to plot this particular item in the Supply Poisoning Model to address our concern, and to set targets to overcome the difficulties.

First, we determined the annual consumption of this item from the previous year’s trend, and we found the projection for the following years to be approximately 14,400 litres. The cost of EH640 at that time was $7.44 per litre, meaning the total annual expenditure of this particular was projected to be $107,136.00. The total projected budget for procurement was $1,400,000.00 for the year, of which $325,000.00 was the total cost of all lubricants; the remaining were the costs for other supplies (e.g. spares, chemicals, tools, new equipments, consumables, and services). It was revealed that the cost of EH640 was 7.6 % of the annual budget and the item was ranked as sixth in the “Top Twenty” items list.

We analyzed the potential impact on the business, and it was clear that running out of stock of this lubricating oil would result in shutting down of the gas compressors, which would result in shutting down of the power plant. As per contractual obligations, Liquidated Demurrage (LD) was chargeable at the rate of $2,175,360.00 per day. This indicated that apart from the loss of profit, the LD alone was going to have a very high impact of the business, if the plant went on outage for a single day.

We also noticed that the Supply Risks were also very high. The minimum required lead time for EH640 was 26 weeks. This particular grade of lubricant was produced only in France, we were the single customer of this grade of lube in Bangladesh, there was not any other supplier who could supply a substitute product, and the minimum order quantity was one FCL, which was equivalent to 16,640 litres – more than one year’s requirement. By plotting expenditure against impact and supply risk, these items were classed as a critical supply item.
Targets were set for this item to reduce lead-time, reduce cost, reduce inventory cost, and standardize the grade to any common grade, supplier support.

As our search for the substitute products from the local market was unsuccessful, we communicated with the manufacturer of the gas compressors. It may be added that our idea was to get approval from the manufacturer, in the event that we found a substitute product. We were able to explain our situation to the manufacturer. In response, they appraised that their research was going on in the test bench with an alternative grade of lubricant, and we had to wait for months before they could give us any answer. It should be added that the gas compressors were worth of more than millions of dollars each.

After three or four months, we heard back from the manufacturer with the recommended substitute grade from the same brand of lubricant. When we contacted our local supplier on the information, they confirmed that they had that particular grade - Lube Gear 633. From our supplier (Lube), we also learned that the annual requirement for Gear 633 was 75,000 litres, the unit price was $2.00 per litre, delivery time was four weeks, minimum order quantity was 2,400 litres, and increased supplier support was due to existing customers in the market. Since we already had Call Off contract with this supplier for other grades, the contract was going to work fine.
We can see from above that the impact of this particular lubricant on the business was still high, but the supply risk was tremendously reduced with the new grade of lubricant. The resultant rating of Impact/Supply Risk, when represented on the vertical axes against Expenditure, the new position of the lubricant moved down to the Low Zone in Supply Positioning Model.

The price reduction is as follows:

<table>
<thead>
<tr>
<th>Grade</th>
<th>Quantity (litre)</th>
<th>U Price $</th>
<th>Total Price $</th>
</tr>
</thead>
<tbody>
<tr>
<td>Lube Cool EH 640</td>
<td>14,400</td>
<td>7.44</td>
<td>107,136.00</td>
</tr>
<tr>
<td>Lube Gear 633</td>
<td>14,400</td>
<td>2.00</td>
<td>28,800.00</td>
</tr>
<tr>
<td>Cost Reduction</td>
<td></td>
<td></td>
<td>78,336.00</td>
</tr>
<tr>
<td>Percentage Reduction</td>
<td></td>
<td></td>
<td>73.12</td>
</tr>
</tbody>
</table>

It is important to mention that I did not use actual names of the manufacturers, and this story is not intended to offended anyone, but it is based on real events.
This is the case of a power plant equipped with 8 very large Diesel engines to generate electricity. The engines were operated on 180cSt fuel oil. The plant was operating excess fuel oil consumption, which we calculated to be about 150 metric tonnes per month at a cost of US$ 324,000 per year. The first question we asked ourselves was if we were receiving the correct volumetric quantity as per the documents of delivery. We observed that the receiving flow-meters at the inlet of the fuel tanks could function within a certain volume flow-rate, but outside this range the accuracy of the meters was not reliable. The other consideration was that excess fuel was consumed by one or more of the engines that resulted in inventory shortfall. Flow-meters were not installed in any of the engines, so the loss of oil from engines couldn’t be validated. We decided to procure flow-meters and install them at the inlet of the tanks and on the engines to monitor fuel consumption in each engine against the power generated.

We analysed supply markets for availability of the required flow meters. During our initial communication with manufacturers we specified the application, its functional requirements and operating conditions, as per Annex “A”. A description of the existing condition was detailed to the manufacturers as follows:

“We are the operators for an 110MW power plant having eight diesel engines. We are sourcing flow-meters for fuel oils receiving lines and for the inlets and outlets to the engines. It is important to mention that we have electronic flow-meters but they perform satisfactorily only when the operating conditions are within the set limits. For example, there is a min and max flow range. If the flow drops below the range, the meter shows an error. To be more precise: When the bunker is starting or tanks are being changed in the supply barge, or when the rate is slow at the finishing stage, the meter doesn’t register the flow. The meter has also a range for density and temperature.

In addition to the above integrated design, we require mechanical type flow-meters, which are reliable and provide standardized outputs; i.e. volume corrected as per API Standard. The flow-meter should provide reliable output during the entire operation range, as described above. We require one flow meter as we wish to try out the system prior to making further decisions. The unit needs to certify to NIST; the certification may be obtained from Independent Inspection Companies e.g. SGS or ITS Caleb Brett. The meter should be capable of handling abrasive particles normally associated with this type of fuel. We have a filter strainer in the fuel line but not a fine mesh type”.

The vendor replied to our communication as follows: “Thank you very much for your enquiry. Based on your information supplied, I am sure we do have a solution for you. In order for me to provide you with a proper solution, I need your help to provide me with a bit more detail of your application. I have included in this email the application questionnaires for you to fill-in. Kindly email it back to me once you are ready and I’ll work on your request immediately. Thank you and I look forward to your reply”.

The vendor’s questionnaire was filled in and returned, see Annex C. We also sent the chemical composition of fuel oil as described in Annex B.

We procured the flow-meters at a cost of US$ 125,000. The units were installed at the inlet line of fuel tanks and on the engines. The job was completed in about six months. Upon satisfactory installation it was revealed that
some of the engines were consuming fuel in excess of the design parameters when compared to the generated power. Through increased maintenance on the identified engines we were able to reduce the consumption by 20% or US$ 5,400 per month. That equalled to savings of approximately US$64,800 per year. The investment was recovered in two years. It not only saved the company significant recovery operational cost, but also helped the environment by reducing green house emissions.

Annex A

XYZ Ltd.

Specification of Flow Meters

<table>
<thead>
<tr>
<th>Flow Meter for Fuel Oil Feeder Unit</th>
</tr>
</thead>
<tbody>
<tr>
<td>Fuel Oil Description</td>
</tr>
<tr>
<td>Fluid Viscosity cSt at 50 °C</td>
</tr>
<tr>
<td>Density @ 15 °C</td>
</tr>
<tr>
<td>Operating Temp °C</td>
</tr>
<tr>
<td>Flow Rate, max litres/hour</td>
</tr>
<tr>
<td>Working Pressure, BAR</td>
</tr>
<tr>
<td>Accuracy Desired %</td>
</tr>
<tr>
<td>Installation</td>
</tr>
<tr>
<td>Inline filter availability</td>
</tr>
<tr>
<td>Flow meter type</td>
</tr>
<tr>
<td>Engineering Units</td>
</tr>
<tr>
<td>Meter Counter</td>
</tr>
<tr>
<td>Quantity</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Flow Meter for Fuel Oil Bunker Line</th>
</tr>
</thead>
<tbody>
<tr>
<td>Fuel Oil Description</td>
</tr>
<tr>
<td>Fluid Viscosity cSt at 50 °C</td>
</tr>
<tr>
<td>Density @ 15 °C</td>
</tr>
<tr>
<td>Operating Temp °C</td>
</tr>
<tr>
<td>Flow Rate, max litres/hour</td>
</tr>
<tr>
<td>Working Pressure, BAR</td>
</tr>
<tr>
<td>-----------------------</td>
</tr>
<tr>
<td>Accuracy Desired %</td>
</tr>
<tr>
<td>Installation</td>
</tr>
<tr>
<td>Inline filter availability</td>
</tr>
<tr>
<td>Flow meter type</td>
</tr>
<tr>
<td>Engineering Units</td>
</tr>
<tr>
<td>Meter Counter</td>
</tr>
<tr>
<td>Quantity</td>
</tr>
</tbody>
</table>

Note: The alternative is to install two meters in 90mm dia pipes, two parallel meters.

## Annex B

**Fuel Quality.**

<p>| | | |</p>
<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Density @ 15C</td>
<td>kg/m3</td>
<td>988.1</td>
</tr>
<tr>
<td>Viscosity @ 50C</td>
<td>mm²/s</td>
<td>182.2</td>
</tr>
<tr>
<td>Water</td>
<td>%V/V</td>
<td>0.1</td>
</tr>
<tr>
<td>Micro Carbon Residue</td>
<td>%m/m</td>
<td>14</td>
</tr>
<tr>
<td>Sulphur</td>
<td>%m/m</td>
<td>3.08</td>
</tr>
<tr>
<td>Total Sediment Potential</td>
<td>%m/m</td>
<td>0.04</td>
</tr>
<tr>
<td>Ash</td>
<td>%m/m</td>
<td>0.06</td>
</tr>
<tr>
<td>Vanadium</td>
<td>mg/kg</td>
<td>58</td>
</tr>
<tr>
<td>Sodium</td>
<td>mg/kg</td>
<td>24</td>
</tr>
<tr>
<td>Aluminium</td>
<td>mg/kg</td>
<td>65</td>
</tr>
<tr>
<td>Silicon</td>
<td>mg/kg</td>
<td>80</td>
</tr>
<tr>
<td>Iron</td>
<td>mg/kg</td>
<td>10</td>
</tr>
<tr>
<td>Nickel</td>
<td>mg/kg</td>
<td>19</td>
</tr>
<tr>
<td>Calcium</td>
<td>mg/kg</td>
<td>4</td>
</tr>
<tr>
<td>Magnesium</td>
<td>mg/kg</td>
<td>8</td>
</tr>
<tr>
<td>Lead</td>
<td>mg/kg</td>
<td>LT 1</td>
</tr>
<tr>
<td>Zinc</td>
<td>mg/kg</td>
<td>LT 1</td>
</tr>
<tr>
<td>Phosphorus</td>
<td>mg/kg</td>
<td>LT 1</td>
</tr>
<tr>
<td>CCAI (Ignition Quality)</td>
<td>-</td>
<td>857</td>
</tr>
<tr>
<td>Aluminum + Silicon</td>
<td>mg/kg</td>
<td>145</td>
</tr>
</tbody>
</table>
# LIQUID APPLICATION QUESTIONNAIRES

<table>
<thead>
<tr>
<th>Contact Person</th>
<th>Momtaz H Khan</th>
<th>Email:</th>
</tr>
</thead>
<tbody>
<tr>
<td>Company</td>
<td>XYZ Ltd.</td>
<td></td>
</tr>
<tr>
<td>Address</td>
<td>110MW Barge Mounted Power Plant, Chaaripur, Bandar, Comilla</td>
<td></td>
</tr>
<tr>
<td>Contact No.</td>
<td>880 2 9131945 ext 218</td>
<td>Fax No.: 880 2 9130669</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Liquid Description</th>
<th>Bunker Fuel Oil</th>
</tr>
</thead>
</table>

<table>
<thead>
<tr>
<th>Operating Temperature (°F / °C)</th>
<th>Min 25</th>
<th>Max 55</th>
<th>Norm 50</th>
</tr>
</thead>
</table>

<table>
<thead>
<tr>
<th>Fluid Viscosity</th>
<th>150–350 CP/cSt/SSU at</th>
<th>°F/°C</th>
<th>SG/Density: 0.9–0.991</th>
</tr>
</thead>
</table>

<table>
<thead>
<tr>
<th>PH</th>
<th>% Solid:</th>
<th>Which pass through Mesh screen</th>
</tr>
</thead>
</table>

<table>
<thead>
<tr>
<th>Flow Rate (GPM / other _____)</th>
<th>Min</th>
<th>Max</th>
<th>Norm</th>
</tr>
</thead>
</table>

<table>
<thead>
<tr>
<th>Pressure (PSIG / BAR)</th>
<th>Min</th>
<th>Max</th>
<th>Norm 7</th>
<th>Pressure drop</th>
</tr>
</thead>
</table>

<table>
<thead>
<tr>
<th>Piping: Sizing / Sch</th>
<th>Material:</th>
<th>Preferred End Fitting</th>
</tr>
</thead>
</table>

<table>
<thead>
<tr>
<th>Flowmeter Type</th>
<th>Turbine</th>
<th>PD</th>
<th>Ultrasonic</th>
<th>Insertion Probe</th>
</tr>
</thead>
</table>

<table>
<thead>
<tr>
<th>Installation</th>
<th>In-line</th>
<th>Clamp-on</th>
<th>Display Required: Yes</th>
<th>No</th>
</tr>
</thead>
</table>

<table>
<thead>
<tr>
<th>Power Available</th>
<th>VDC</th>
<th>110/60 VAC</th>
<th>220–240/50 VAC</th>
</tr>
</thead>
</table>

<table>
<thead>
<tr>
<th>Signal Output Req’d</th>
<th>Pulse</th>
<th>0–10 VDC Analog</th>
<th>4–20 mA</th>
<th>Batch Relay</th>
</tr>
</thead>
</table>

<table>
<thead>
<tr>
<th>Engineering Units</th>
<th>Volumetric Actual</th>
<th>Volumetric Standard</th>
<th>Mass</th>
</tr>
</thead>
</table>

<table>
<thead>
<tr>
<th>Display Mounting Configuration</th>
<th>Meter Mount</th>
<th>Wall Mount</th>
<th>Panel Mount</th>
</tr>
</thead>
</table>

<table>
<thead>
<tr>
<th>Enclosure Connections</th>
<th>Conduits Hubs</th>
<th>MS Connectors</th>
</tr>
</thead>
</table>

<table>
<thead>
<tr>
<th>Hazardous Environment</th>
<th>No</th>
<th>Yes</th>
</tr>
</thead>
</table>

<table>
<thead>
<tr>
<th>Class/Div/Group</th>
<th>IIC</th>
</tr>
</thead>
</table>

<table>
<thead>
<tr>
<th>Accuracy Desired</th>
<th>% of reading</th>
<th>% of full scale</th>
</tr>
</thead>
</table>
By Shaffudin Ahmad Mahi (2009)

Shaffudin Ahmad Mahi works in the Department of Planning and Supply at GlaxoSmithKline Bangladesh Ltd. He is also a MLS-SCM® candidate with the Dhaka Chamber of Commerce and Industry (DCCI).

[Keywords: Pharmaceuticals & Life Sciences, Multinational, Private Enterprise, Supplier Management]

GlaxoSmithKline

Chittagong Site
JDI Project Initiation Form

<table>
<thead>
<tr>
<th>Site</th>
<th>Chittagong</th>
<th>Submitted by</th>
<th>S.M. Sharfuddin Ahmad Mahi</th>
</tr>
</thead>
<tbody>
<tr>
<td>Project Title</td>
<td>“Procurement” The 1st Step of Saving</td>
<td>Project Membership Team</td>
<td>Mr. S.M. Ashrafur Rahman. S.M. Sharfuddin Ahmad.</td>
</tr>
<tr>
<td>Department</td>
<td>Procurement Planning &amp; Supply</td>
<td>LS Expert/ OE Champion</td>
<td>Mr. Mujib U Rehman.</td>
</tr>
<tr>
<td>Master Control no/proj ect code</td>
<td>JDI/Ctg----</td>
<td>Project leader</td>
<td>S.M. Ashrafur Rahman</td>
</tr>
</tbody>
</table>

Project Details

**Purpose**

1. To develop new source to obtain price benefit
2. Simplify the supplier chain of distribution.
3. To ensure business requirement i.e. (AQSCIR)

**Description/Scope:**

**Background:**

At present in GMS Chittagong the Grocery items for Lunch Room, Canteen & Tea Bar (Soya Bean Oil; Rice; Pulse; Sugar; Milk Powder etc.) are procured from retailers (Retail Market). As a good quantity of above mentioned materials are procured from the retailers and the size of spend is also significant. So, there is a scope to make the supply chain simple and effective by eliminating middlemen that is buying directly from dealer instead of retailer which may also give us some financial benefit. In this practice, a team is comprised with different representatives from various Depts. Such as Procurement; HRD & from CBA. The team physically visits the market to ensure the rate, quality etc. Moreover, in present practice, they have to carry with them a significant amount of cash to purchase the goods which is in fact a major security issue for the company.

**Present Supply Chain:**

Manufacturer → Distributor/Dealer → Whole Seller → Retailer → GMS Chittagong Site
Keeping in consideration the business requirement (AQSCIR) as well as make the present procurement process more simple, robust and transparent, we proposed & developed the following Supply Chain:

**Proposed Supply Chain:**

- Manufacturer → Distributor / Dealer → GMS Chittagong Site

A good **sourcing & negotiation strategies** are done with the manufacturer to achieve the competitive advantages.

**Implementation cost:** Nil

<table>
<thead>
<tr>
<th>Cost of poor quality/Savings:</th>
<th>GBP 51.85 K</th>
</tr>
</thead>
<tbody>
<tr>
<td>Soya bean oil (Mustafa Brand)</td>
<td>TK 7000</td>
</tr>
</tbody>
</table>

If this procurement policy is applied to procure above-mentioned grocery materials, no doubt our company is certainly able to save thousands of Taka per month.

<table>
<thead>
<tr>
<th>Benefits:</th>
<th>Measures:</th>
<th>Benefit Yielding Period</th>
</tr>
</thead>
<tbody>
<tr>
<td>•</td>
<td>Monthly Financial Report</td>
<td></td>
</tr>
</tbody>
</table>
I work as a Production Planner with GlaxoSmithKline BD Ltd., and it is my great pleasure to let you know that I have successfully applied the what I learned from the MLS-SCM Training, to develop the system of our supply chain. In brief, my experience is described below:

**Demand and Supply Management:**

- Fortnight production planning (production and material planning), scheduling (i.e. manufacturing), and packing as per commercial demand to equalize between demand and supply;
- Monitor the product supply based on transfer schedule adherence;
- Review of manufacturing capability considering cycle time of production process (granulation, compression/filling, and packing), plant maintenance, procurement of materials, available working days/utilities, by organizing meetings and requesting information, where changes take place;
- Formation of the production planned volume, in line with the commercial demand of upcoming months, and sales budget;
- Monitor the outputs of daily production, based on production schedule adherence;
- Preparation of export documents (i.e. EXP-form, invoice, country of origin certificate, etc.); and
- Overall active support in logistics and planning.

**Key Learning from MLS-SCM:**

Each module has its own appeal to the young learner, and encourages one to think in quite a different way. The following modules helped me as they are well related to my role as a Production Planner.

- **Module-2:** Specifying Requirements & Planning Supply
- **Module-3:** Analysing Supply Markets
- **Module-4:** Developing Supply Strategies
- **Module-10:** Managing Logistics in the Supply Chain
- **Module-11:** Managing Inventory

**Application of Learning:**

- **MLS-SCM Learning Session:** 2008-2009
- **Application year (In practical work):** 2008-2009
- **Result Calculation:**
  - 2007 - Before application, and 2008 - After application
  - 2009 - Preparation of comparison and project closing
Being a Production Planner, I have to coordinate the total supply chain function. As a result, I need to know the process time (door-to-door time). In 2008, I received a project (under the training of “Leading & Managing Lean Sigma”) where I had to ensure the efficient production planning to improve the productivity-material loss-yield, among other things. At the time of production planning, I had to ensure the proper material planning. Efficient material planning helps me to achieve the optimum level of inventory. Before that, I have to do the demand allocation for uninterrupted production. The production volume is arranged considering the facts of seasonal variation, cyclical variation, etc. Then I do the campaign-based production planning which helps me to achieve the following:

- Reduction of change over through production planning by 39.4 % (target - 10 %);
- Productivity has increased in topical by 54 %; and
- Non-production hours required for change over is reduced by 30 %, i.e. effective production hours has increased which increased the productivity in the Tablet Dept.

**Unit-1:**

<table>
<thead>
<tr>
<th>Parameters</th>
<th>2007</th>
<th>2008</th>
<th>Change</th>
<th>% of Change</th>
</tr>
</thead>
<tbody>
<tr>
<td>Total Packs:</td>
<td>2,231,760</td>
<td>2,174,012</td>
<td>(57,748)</td>
<td>2.58%</td>
</tr>
<tr>
<td>No. of Change Over</td>
<td>355</td>
<td>215</td>
<td>140</td>
<td>39.4%</td>
</tr>
<tr>
<td>C.O./ 1,000 Packs</td>
<td>6,287</td>
<td>10,112</td>
<td>3825</td>
<td>39%</td>
</tr>
<tr>
<td>Req. Hours (C.O.):</td>
<td>1,625</td>
<td>1,133</td>
<td>492</td>
<td>30.2%</td>
</tr>
<tr>
<td>Foil Loss in KG</td>
<td>643.51</td>
<td>413.7</td>
<td>229.81</td>
<td>35.71%</td>
</tr>
</tbody>
</table>

Total saving = (Saving from Packing Material + Saving from Man hours involved in C.O)

Total saving = TK. (173,925.00+49,200.00) = **TK. 23,125.00**

**Unit-2:**

<table>
<thead>
<tr>
<th>Parameters</th>
<th>2007</th>
<th>2008</th>
<th>Change</th>
<th>% of Change</th>
</tr>
</thead>
<tbody>
<tr>
<td>Total Packs:</td>
<td>11,662,883</td>
<td>10,175,023</td>
<td>(14,878,60)</td>
<td>12.7%</td>
</tr>
<tr>
<td>No. of Change Over</td>
<td>82</td>
<td>65</td>
<td>17</td>
<td>20.7%</td>
</tr>
<tr>
<td>C.O./ 1,000 Packs</td>
<td>142,230</td>
<td>156,539</td>
<td>14,309</td>
<td>10%</td>
</tr>
<tr>
<td>Average Yield:</td>
<td>2,288</td>
<td>3,535</td>
<td>1,307</td>
<td>54.50%</td>
</tr>
</tbody>
</table>
Success Story: Bangladesh – DCCI

By Mr. Kamruzzaman

Mr. Kamruzzaman works as a Materials Manager at ICCDDR in Bangladesh. He is also a MLS-SCM® candidate with the Dhaka Chamber of Commerce and Industry (DCCI).

[Keywords: Logistics, Operations, Sustainability]

We went through Value Analysis / Value Engineering (VA/VE) for the logistics/distribution process, and found that we could reduce our delivery cost significantly if we used Compressed Natural Gas (CNG) instead of petrol and/or diesel. Use of CNG has an additional environment friendly feature; it has less CO₂ emissions than petrol and/or diesel. We converted 76% of its distribution fleets to CNG, which reduced operating expenses by €71,760 in 2007, and expected saving was €97,556 in 2008. In addition to this, it reduced CO₂ emissions by 79 tons in 2007. As I left the organization in July 2008, I do not have the final data for 2008, but it is expected that there will be approximately 100 tons less CO₂ emissions in 2008. This project also encouraged other companies to follow suit, thus contributing even more to the impetus of environmental protection.

We won “Sanofi-aventis Climate Change Awards 2008” for this contribution towards environment.
When I enrolled on the MLS-SCM® Programme, I began to check if our work may benefit from some improvements. Electronic bidding (e-bidding) is a new quoting method, which is generally used for some simple products having clear SPEC; generally we can get a more competitive price through e-bidding.

I found one component I handled—caster has improved space. This caster did not have a special SPEC requirement, though there were some factories in China that are able to produce it, and Caster’s EAU is 3,200,000.

We set up a bidding event on a website, and invited six potential qualified suppliers to participate in the e-bidding in January 2010. The bidding was very successful, and we received a good quotation, which brought about $120,000 in cost savings.
Success Story: China – BV Management Consulting

By Wang Hong Qiang

Wang Hong Qiang works with Foxconn on Printed Circuit Board (PCB) Connectors and Flexible Printed Circuit (FPC) Connectors as a Sourcing Manager. She is a MLS-SCM® candidate with Shanghai Zili Education Institution.

[Keywords: Private Enterprise, Purchasing, Operations, Supplier Management]

1. After learning from the MLS-SCM programme, I analysed the market supply status and fixed the annual Printed Circuit Board (PCB) Connectors and Flexible Printed Circuit (FPC) Connectors purchasing strategy. Follow the strategy, on an annual basis we maintain a 10% decrease in costs, and there has been no line shut-down caused of PCB/FPC shortage over the past years.

2. We keep an open mind to all PCB/FPC industry stakeholders, and not only focus on local suppliers. We certified about 10 competitive new suppliers, saving 2 to 5 Million USD for the company every year.

3. Based on the different suppliers segment, we apply a different strategy to ensure the company gets a total low cost, while still achieving quality, supply, and service requirements.

4. As we had learned much about negotiation skills, we have enough confidence to implement a Quarterly Cost Down Programme on PCB/FPC commodity, and we can get a total of 10 % reduced costs each year.

5. We used the knowledge to do a cost break down and understood the PCB/FPC cost structure detail, and now easily to get competitive price from suppliers - it is helpful.

6. Applying the Supplier’s Reduction Programme, we reduced a total of 20 PCB suppliers in the past years, and then combined group demand to get a more competitive price and much better service.
Success Story: China – Tianjin Chogxin

By Chu Lingling

Chu Lingling is Chief of Research at QingDao HeXin Supply Chain Management Engineering Technology Research and Development (R&D) Centre, and Assistant President Zun He group company. She is also a MLS-SCM® candidate with Tianjin Chongxin.

[Keywords : Software & Services, Multinational, Private Enterprise, Operations, Supplier Management]

After Master’s courses in 2006 during which I was a management trainee, I entered a German multinational called SUNTRANS. Suntrans uses a virtual production model. In order to make the entire supply chain more manageable & smoother, Suntrans continues to develop a comprehensive range of supply chain services. In addition to managing a series of product-centred activities including market research, product design & development, raw material procurement, suppliers selection and production monitoring, it also manages a range of import and export clearance procedures and local logistic arrangements, including import and export documents management, customs clearance, arranging export transportation and local transportation. I am involved in purchasing raw materials – identifying & selecting potential suppliers, factories, wholesale importers and retailers.

I used MLS-SCM programme on the whole supply chain to further analyse each link and planning, developing strategic arrangements with suppliers, replenishment of inventory and other programs that seek to optimize the supply chain operations. In brief, Suntrans supply chain management’s main purpose is to manage buying the right products at a reasonable price and shorten delivery cycles. Depending on customer demand, Li & Fung Trading orders are created for each one of the most cost-effective supply chains, providing customers with cost-competitive products.

The services provided to customers include:

1. All kinds of market research to understand consumer demand, to provide customers with the major market trend information;
2. Research and development of raw materials, such as fabrics, lace and electricity in parts, as well as raw materials for the customer to collect the latest information;
3. Depending on the latest market trends, design and development of products to meet market demand;
4. Matching customers to the best sourcing countries and regions for manufacturers to implement “without borders” production & supply of raw materials and supply capacity to achieve the globalization of production value;
5. Monitoring procurement, shipping and configuration of raw materials and components to factories in countries;
6. In the factory production process, provide technical assistance to ensure product quality and ensure various production processes meet customer’s production requirements;
7. Rapid responses in order to meet production schedules, monitor the supply of major raw materials, and the strategic management of inventory and timely replenishment of stocks appropriate;
8. Develop plans for transport and shipping delivery services;
9. Application of information technology in product development, sourcing new suppliers and overseas buyers through tailor-made web pages meeting specific requirements.
Example of specific plans is as follows:

**To resolve specific issues, various SCM action plans were developed**

**Issue 1: Number of suppliers**

The industry's number of suppliers are too many with too mixed capabilities. Need to streamline suppliers. Management to promote objectives: to screen and evaluate suppliers to identify the most efficient suppliers.

Detailed plans to address above issue is in the following table:

<table>
<thead>
<tr>
<th>NO.</th>
<th>Detailed plans</th>
<th>Completion Date</th>
<th>Person Responsible</th>
<th>Department Responsible</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Develop Purchasing Supplier Category Accreditation Scheme</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
| 2   | Establish parts suppliers categories by determining qualified suppliers based on the following criteria:  
A) Qualified suppliers must sign long-term cooperation agreements, including technical support, pricing policy, quality and delivery management requirements, service priority, service charges and must comply with company requirements.  
B) The purchase price for the year of more than half a million units  
C) For the same product no more than three suppliers.  
D) In principle, must be a direct supplier of factory, foreign suppliers in principle, and an agent supplier |                | Purchasing Department  
Technology Centre  
Quality Division  
Technology Department  
Finance Department  
Service Department  
Logistics Department |                        |
| 3   | Segregate parts suppliers according to Categories, setting up temporary supplier directories. |                | THE SAME AS ABOVE |                        |
| 4   | Development of proprietary supplier development program, clearly exclusive supplier directories, management measures, and counselling programs. |                | PURCHASE DEPARTMENT |                        |
| 5   | To build a supplier evaluation system, statistics supplier quality, delivery-related data, monthly evaluation of vendors. |                | PURCHASE DEPARTMENT |                        |
**Issue 2: Unclear relationships and scope of cooperation with suppliers**

Management to promote objectives: Different types of spare parts supply requires different strategies and modalities of cooperation and appropriate contracts.

Detailed plans to address above issue is in the following table:

<table>
<thead>
<tr>
<th>NO.</th>
<th>Detailed plans</th>
<th>Completion Date</th>
<th>Person Responsible</th>
<th>Department Responsible</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Purchasing Department to develop a strategic supplier partnership model system for program</td>
<td></td>
<td>Purchasing Department</td>
<td></td>
</tr>
<tr>
<td>2</td>
<td>Mode of assessment of a seller's suppliers and contract templates</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>3</td>
<td>Review the general model of outsourcing providers and contract templates</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>4</td>
<td>Accreditation of large commodity suppliers to model and contract templates</td>
<td></td>
<td>Purchasing Department</td>
<td></td>
</tr>
<tr>
<td>5</td>
<td>Review Canadian Class foundry suppliers and contract template model</td>
<td></td>
<td>Purchasing Department, Technology Centre, Finance</td>
<td></td>
</tr>
<tr>
<td>6</td>
<td>Accreditation Office class suppliers to model and contract templates</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>7</td>
<td>Accessories supplier review simple contracts templates</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>8</td>
<td>Mode of assessment of import and export suppliers and contract templates</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

The principle of cost optimization goal: the market price of the supply company's purchase of raw materials management and cost control in management activities, through price standards, established with the supplier's market-clearing standards.

1) To ensure that the offered price is in line with the company's cost management standards, objectives and expectations of profits of suppliers.
2) Standard price control should be approved by the Committee.
3) Supply Chain Management Department in the implementation of the PMC standard process and results of price monitoring.
4) Supply Chain Management Department will be purchasing cost trends and analyze the company's goals on cost reduction.

**Action measures**

In order to ensure the concrete implementation of cost optimization and implementation of goals, we must first unify their thinking, to develop concrete action plans to develop a detailed action plan and specific implementation measures and integration to the specific operating procedures document the implementation. Specifically by the procurement, planning departments to implement, finance, General Manager's Office and other departments for supervision.

Through technology to standardize work, in particular, is to integrate components to strengthen the modular, standardized design & reduce parts variety. Production technology department needs to do a good job in the machining division and planning and the corresponding interface work, make the appropriate preparations and plans. For the processing of parts by suppliers, identify parts, processes, vendor completion cycles.
**Issue 3: Cost Optimization**

Management to promote objectives: the market for different types of spare parts supply, the formulation of corresponding programs, through bidding, standardization and modularity, process adjustment, re-adjustment and the suppliers to achieve cost control, price and other purposes.

Detailed plans to address above issue is in the following table:

<table>
<thead>
<tr>
<th>NO.</th>
<th>Detailed plans</th>
<th>Completion Date</th>
<th>Person Responsible</th>
<th>Department Responsible</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Formulation of cost reduction plans and specific measures, the establishment of the tender management committee.</td>
<td></td>
<td></td>
<td>Finance Department, Technology Centre</td>
</tr>
<tr>
<td>2</td>
<td>Revise vendor management programs and procurement process management documents.</td>
<td></td>
<td></td>
<td>Finance Department, Purchasing Department</td>
</tr>
<tr>
<td>3</td>
<td>A clear corporate supplier management program, with clear procurement processes in all sectors, responsibilities and requirements.</td>
<td></td>
<td></td>
<td>Finance Department, Purchasing Department</td>
</tr>
<tr>
<td>4</td>
<td>Discussion of modularity, standardization, and organization of the program implementation</td>
<td></td>
<td></td>
<td>Technique Centre</td>
</tr>
<tr>
<td>5</td>
<td>To discuss a one-time operating system and organize the implementation of this program.</td>
<td></td>
<td></td>
<td>Purchase Department</td>
</tr>
<tr>
<td>6</td>
<td>Review and update processes in procurement pricing program files.</td>
<td></td>
<td></td>
<td>Purchase Department</td>
</tr>
<tr>
<td>7</td>
<td>The establishment of Price Group to approve the price.</td>
<td></td>
<td></td>
<td>Purchase Department</td>
</tr>
<tr>
<td>8</td>
<td>Organize relevant parts and components procurement tendering exercise.</td>
<td></td>
<td></td>
<td>Purchase Department</td>
</tr>
</tbody>
</table>
Issue 4: Part processing division and the planning

Management to promote objectives: planning for the new plant equipment and logistics planning, existing products purchased outside the Union to re-organise parts, completion and the external co-supplier planning.

Detailed plans to address above issue is in the following table:

<table>
<thead>
<tr>
<th>NO.</th>
<th>Detailed plans</th>
<th>Completion Date</th>
<th>Person Responsible</th>
<th>Department Responsible</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Development of plan and implementation of various products for factory machining</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
| 2   | According to the formation of each product, "gantry machining centre machining planning," the following:  
B, requires a clear process for each line of machining parts, machining parts and components of their own or by the supplier of processing, and rough capacity planning to complete a specific cycle, and so on. |                  |                    | Manufacturing Engineering Department |
| 3   | According to the formation of each product machining rules and requirements are as follows:  
A, the list of requirements is attached.  
B, requires a clear process for each line of machining parts, machining parts and components of their own or by the supplier of processing, and rough capacity planning to complete a specific cycle, and so on. |                  |                    | Life Skills |
| 4   | According to the formation of each product machining planning, requirements are as follows:  
A, the list of requirements is attached.  
B, requires a clear process for each line of machining parts, machining parts and components of their own or by the supplier of processing, and rough capacity planning to complete a specific cycle, and so on. |                  |                    | Life Skills |
| 5   | External co-carding of the existing machining suppliers. |                  |                    | purchase department |
| 6   | According to three plants in the planning, completion of the supply of business planning and processing-one correspondence, which is required for each machining parts outside the Association must have explicitly identified suppliers, including production, delivery and other areas |                  |                    | purchase department |

These are areas of my work based on MLS-SCM programme of knowledge. It reflects the application of parts of MLS-SCM programme concepts in actual work, which not only improves the working efficiency, but also for the company to be competitive, win higher industry recognition and better profits. The more I am on the MLS-SCM programme, the more understanding of practical operations within SCM. I would like to be at the ITC Network Roundtable in Nairobi, to gain experiences of other members and share with friends in the network on procurement of and supply chain management, as well as, listen to students who have gained valuable experience from the MLS-SCM programme to promote better supply chains and work together.
Success Story: China – Xaimen Paying

By Guo Yaying

Guo Yaying is a Supply Chain Manager at Xiamen Comfort Science & Technology Group as the Executive. She is a MLS-SCM® candidate with Xaimen Paying.

[Keywords : Technology Hardware, Local Large Enterprise, Private Enterprise, Operations]

After taking part in the MLS-SCM Programme, and applying its principles, I have been able to achieve the following:

1. The even lead-time of vendor is shortened by 30%;
2. The quality pass rate of IQC is evenly raised by 25%;
3. The cost is cut down 8% annually, not including raw material hike;
4. The contracts are carried out 100%;
5. The finished goods delivery time is observed 100%;
6. The through quality pass rate of finished goods is raised by 6%; and
7. The customer satisfactory degree is raised by 5%.
By Dong Han

Dong Han works in the Purchasing Department of NITTO DENKO (TIANJIN) CO.LTD. She is a MLS-SCM® candidate with Chongxin Training Centre.

[Keywords : Education, Local Large Enterprise, Private Enterprise, Supplier Management, Operations]

First of all, I have learned a lot from the modules. I will continue to finish modules 10, 11 and 12, and will do the examination. Until now, the outcome of my work has resulted in the following two points:

1. The inventory of raw material has reduced from a turn-over-day 31 days to 10 days (turn-over-day = inventory / sales amount * 30 [the date is from the end of each month]). Reduce inventory is equal to reduced cost; the project team gained the bonus last year.

2. Our group held telephone or television meetings every month, and companies come from Belgium, Japan, Tianjin, Shanghai, Foshan, Malaysia, and Thailand took part. All of the purchasers from local companies discussed the method of reducing the cost and suppliers management. After collecting information, we learned that centralized buying is necessary; bigger volume and cheaper price. I am in Tianjin’s company, which is the youngest one in the group.

Right now, the entire world focuses on China. It is the challenge and chance for us Chinese.

Thank you very much for the professional education in China as an economic transforming country.
What I got from MLS-SCM programme is not only purchasing knowledge, but I also learned the following on the working way.

1. Managing purchase contracts

Most purchasing contracts in our company belong to project contracts. Therefore, the delivery time is very important. Before I learned from the MLS-SCM programme, I had no idea how to control the risk of delivery time. It happened so often that the product we ordered arrived later than it should have, which caused the manufacturing to be postponed. However, things changed after I studied Module 9 “Managing the Contractor and Supplier Relationships”. I realized that most risks could be avoided before they happen. Module 9 listed almost every possible condition, which might result in the risk of the production schedule. I learned that, as a purchaser, people should consider every risk from the date of signing the contract. Once a potential risk was identified, we should make a countermeasure as early as possible. Now, this knowledge practically directs my daily work. Within the scope of my responsibilities, applying this way to control the delivery time, I no longer experience delays from manufactures on the material I purchase.

2. Making supply strategies

I learned from the MLS-SCM programme how to manage the supply of a routine item. For materials, spare parts, tools, and accessories, each item is now purchased from only one supplier who can offer both good service and a competitive price. The price was fixed in advance and the supplier only invoices us once a month or once every three months, no matter how many times we bought during the period. In this way, not only money but also energy is saved. In addition, the time I save from this way of purchasing is devoted to purchasing other items, which contain more value and have more importance to the company.
3. The form below is a simple list of some of the improvement I made in my career.

<table>
<thead>
<tr>
<th>Item</th>
<th>Module</th>
<th>Knowledge Point</th>
<th>Benefits or Actions</th>
<th>Effect</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>5</td>
<td>Supplier Appraising</td>
<td>Established a supplier-appraising standard for my company according to Module 5 “appraising &amp; short listing suppliers”. For a new established company, this part is more like a guidebook, which offered a complete appraisal of supplier. Most content can be used directly in my company.</td>
<td>A supplier assessment system was set-up in our company based on the knowledge gained from Module 5.</td>
</tr>
<tr>
<td>2</td>
<td>6</td>
<td>Obtaining and Selecting Offers</td>
<td>Reply to the supplier whose quotation was not selected.</td>
<td>Supplier became more willing to respond to our requirement.</td>
</tr>
</tbody>
</table>
| 3    | 8      | Risk Transfer and Incoterm           | MLS-SCM Programme offered explanations for each item, which are the best explanations that I have ever read. | 1. Gave supplier a better explanation when I request them to quote in one of these terms.  
                                               2. With good understand of each term, I usually negotiated with supplier for better price under the same term. |
| 4    | 7      | Negotiating                          | Knowing that preparation for important negotiating is necessary. With the knowledge of this Module in mind, I can make a quick reactions and countermeasures against supplier’s request, especially on the aspect of negotiating price and payment terms. | Convinced more suppliers to accept our company’s payment terms. Obtained a more competitive price from suppliers. Became more flexible in negotiating with suppliers. |
| 5    | 4      | Developing Supply Strategies         | According the Supplier Positioning Model. Divided all suppliers of our company into these 4 items. Give more energy to Key items and Bottleneck items.  
                                               1. Communicate more with Nickel Powder supplier, paid on time, offered forecast for each quarter, increased quantity of each PO.  
                                               2. Develop one more supplier for Alloy and could, as backup, make sure the price from new supplier was lower than present price.  
                                               3. Found three more suppliers for Nickel tab and gasket. New price was 10 % lower than the present price. | 1. Delivery delay is zero.  
                                               2. Reduced the material cost by 2% in 2008. |

I finished studying Modules 1 to 12 successfully. Now I am expecting that Module 13, 14, 15, and 16 can be started soon in China, since much of my work is involved in environmental procurement and group purchasing. I am sure I can benefit a lot from these Modules.
Success Story: China – Shanghai Zili Education Institution

By Li Quanjia

Li Quanjia works with Doosan Heavy Industries & Construction as Sourcing Manager in China. He is a MLS-SCM® candidate with Shanghai Zili Education Institution.

[Keywords: Construction, Multinational, Private Enterprise, Supplier Management, Operations, Purchasing, Logistics]

Thanks to MLS-SCM programme, my improvements would be impossible if without the input from this training programme.

1. My analytical skills are improved, my boss and other colleagues agree more on my supply market analysis report, and I have been involved in more strategy making and planning activities.

2. Using supply positioning model and other tools, we re-categorized our purchasing items more rationally. This enabled us to put more time and resources into critical items. The sourcing performance is about 50% higher than in 2007.

3. Through more collaboration with our engineering and having suppliers involved in early development, we enhanced our company’s Design to Cost, and Integrated Design and Purchasing initiative. Recently, we have saved more $7,000 on a $2 million equipment purchase, just with a small change in design specifications. This saving is a joint effort among design engineer, purchasing people, and supplier. We will save more by standardizing this design in our future projects.

4. We have dramatically decreased the loss rate by improving packaging and logistic methods. The company I work for is an Engineering, Procurement, and Construction (EPC) contractor. Normally, the equipment is very large and cannot be delivered in one piece. Most of the equipment consists of many parts (bolts, nuts), and small items need to be assembled on job sites. Due to the poor storage conditions and on-site management, parts were frequently lost; this caused conflict with suppliers. Extra costs were also incurred and the delivery schedule was jeopardized. After a joint workshop and collaboration with suppliers, however, we have developed a container package method. Suppliers can buy old containers as outside packaging materials, of which both sides will share the cost. This new method has been warmly welcomed by on-site project management teams and owners.

5. By using the negotiation skills learned from the course, and by putting more time into preparation and the strategy-making process, we are now sure every member is clear. This kind of preparation usually makes our negotiations with suppliers smoother and more fruitful.

6. My company has contracted more with Chinese suppliers, since we started China sourcing three years ago, and we have implemented contract management. Through the collaboration of members from design, logistics, accounting, production, and installation, we can now quickly identify the risks and solve the problems in their early stages. All these efforts are well recognized by the leadership from our headquarters.

7. Personally, after taking MLS-SCM programme, my performance evaluation score is higher than last year. I get a pay rise and they let me take more responsibilities.
8. By comprehensive sourcing activities we have achieved more than 20% saving on average than competitors in other countries during 2008.

9. Thanks to the supplier relationship management (SRM) programme. We have established strategic relationships with two more suppliers, and ensured supply for critical components and equipment. With the SRM established in 2007, we secured material supply with competitive price, when supply is in shortage and increasing price. We designated a special supplier account manager to keep a good relationship, and manage the supply with these suppliers. I believe MLS-SCM is a good choice for every purchasing and supply professional. It provides practical guides, and useful tools for every aspect of SCM. The MLS-SCM programme can be a useful tool to increase productivity for every enterprise.
Success Story: China – Shanghai Zili Education Institution

By Li Quanjia (2010)

Li Quanjia works with Doosan Heavy Industries & Construction as Sourcing Manager in China. He is a MLS-SCM® candidate with Shanghai Zili Education Institution.

[Keywords: Construction, Multinational, Private Enterprise, Supplier Management, Operations, Logistics]

Thanks to MLS-SCM. None of the following improvements would have been possible if I had not pursued this training programme:

1. My company is very happy that I took the initiative to improve my skills and my performance.

2. My market analysis skills have improved. Thanks to the Module 3 (Analysing Supply Markets) and other related information in other modules, an increased number of colleagues now agree more on my supply market analysis report. In addition, my inputs are valued more and I am now more involved in strategy and planning activities.

3. Although the global economy has been difficult in the last year, I was still successful and doubled purchasing volume in the China area. I was involved in signing several strategic cooperation agreements with important suppliers, in order to secure future supply. It turned out to be a very good decision; when the market recovered quickly this year, many suppliers’ capacity was suddenly in short-fall.

4. I lead a sourcing programme for the new gas turbine business, applying a thorough analysis of Chinese suppliers and their technology. By utilising the price advantage and good quality products in China, it was of great help to win several million-dollar contracts in Korea and the Middle East.

5. By using the negotiation skills I learned from the programme, we have now clearly defined every member’s role, putting much more time on preparation and the strategy generation process. This kind of preparation usually makes our negotiation with suppliers smoother and more fruitful.

6. My company has contracted more with Chinese suppliers since we started China sourcing four years ago, and we have implemented contract management. Through the collaboration of members from design, logistics, accounting, production and installation, we can more quickly, identify the risks, and solve problems in their early stages. Delivery is on time and costs are under control. All these efforts are well recognized by the leadership in headquarters.

I truly believe everyone can benefit from the MLS-SCM Programme in some way. It is a good choice for a purchasing and supply professional to have a programme, which combines theory and practices. MLS-SCM is a useful tool to increase productivity and performance.
Success Story: China – Shanghai Zili Education Institution

By Zhang Chunxia

Zhang Chunxia works with Suzlon Energy (Tianjin) Ladas as Purchasing Engineer. She is a MLS-SCM® candidate with Shanghai Zili Education Institution.

[Keywords: Energy, Local Large Enterprise, Private Enterprise, Supplier Management, Operations, Purchasing, Logistics]

Through the study of the ITC MLS-SCM Programme, from which I learned a number of ways and means of purchasing and supply chain management, I have had the opportunity to apply my knowledge, and gained a strategic vision to address procurement supply.

As production of the Department of East China purchasing manager, taking into account the cause of an important raw material used by the Department of milk powder volatile domestic and world prices, in order to ensure the effective supply of key raw materials, and can effectively control the cost of procurement department of Division. I centralized the demands of milk powder which all plants of division need for the next two years, the purchasing department implemented a unified strategic procurement.

In accordance with Division the next two years of milk powder procurement requirements, our department directly contacted with Fonterra, and directly involved in Fonterra’s global online auction.

Through Fonterra’s global online auction, buying opportunities across various contract terms over successive months provides customers with greater choice and control over purchasing strategy, for example whether to buy large blocks a few times per year or spread purchases throughout the year, We have greater control over securing supply. We also choose our desired mix of contract maturities and hence our own exposure to commodity price risk.

Milk powder through the implementation of strategic procurement, East Production Division of the continuous supply of milk powder is not only effective, but also cost-effective optimization of purchasing milk powder directly to the Division to create a profit. The Ministry and administered by the Department won the 2009 Business Award, and in 2010, I was promoted to the headquarters Supply Chain Purchasing Manager, responsible for the bulk procurement of raw materials for all Business Unit.
By Gu Tianming

Gu Tianming is responsible for indirect purchasing at a company which focuses on auto telematics. She is enrolled at the MLS-SCM® programme with the Shanghai Zili Institute since 2007.

[Keywords: Professional Services, Local Large Enterprise, Private Enterprise, Supplier Management, Operations, Purchasing]

I was in charge of purchasing for “sales and marketing” services in 2008. From September to December 2008, I achieved a purchasing volume of RMB 2.15 million with savings amounting to RMB 470 thousand. The saving rate was up 21.71%, which hit the highest record among team members. I was the star performer in the company.

In 2010, I achieved on average 17% savings for new cases compared to the overall budget that was 70% higher than the original target. I also achieve 6% saving for repeated contracts compared to last year, 20% higher than the benchmark. My immediate manager praised me for these great achievements.

<table>
<thead>
<tr>
<th>Individual Performance Goals (in January)</th>
<th>Results Achieved (at the end of December)</th>
</tr>
</thead>
<tbody>
<tr>
<td>10% Cost Saving in comparison with Budget for New Cases</td>
<td>16.59%</td>
</tr>
<tr>
<td>5% Cost Saving in comparison with Last Year Price for Framework Cases</td>
<td>6.09%</td>
</tr>
<tr>
<td>Purchasing Cycle Time: 90 days from PR release to PO release</td>
<td>69.73</td>
</tr>
</tbody>
</table>

I feel more confident in negotiations by using the workflow and strategies from MLS-SCM. The skills and technics mentioned in the book empowered me and gave me advantages for making good preparations and formulate good negotiating strategies.

I am a key member in designing and implementing purchasing systems in the company from scratch, including working processes, tables, tracking systems and compliance consulting.
Success Story: China – Shanghai Zili Education Institution

By Lu XiangMing

Lu XiangMing is responsible for purchasing at Boeing Shanghai, a joint venture of Boeing. He made a career switch after studying the MLS-SCM® programme at the Shanghai Zili Institute.

[Keywords: Technology Hardware, Multinational, Private Enterprise, Purchasing]

Before I joined Boeing Shanghai, the company always shared its international agreement with an American supplier “D” for PCs and presented the demand as routine demand. The buyer didn’t have the awareness to look for cost reduction. When I became responsible for the PC purchase, the first thing I did was to suggest to my supervisor to present the demand as a leverage demand. I selected several original vendors for PCs and made the bidding. After several rounds of bargaining, the supplier “D” give us a good discount of nearly 20%. This result tells us that the right location for the demand in the supply positioning model is very important as it will show us the way for dealing with different cases.

In the next 3 years, with the rapid development of our company, I cooperated with our IT department in order to change the PC configuration and improve the position of our PC demand as a critical case. By sharing our goal with the vendor, we helped the supplier to customize the products so that they can help us save costs from the advertisement effect.
Success Story: China – Shanghai Zili Education Institution

By Yimin Hu

Yimin Hu is a Purchasing Officer at an international trading company, which mainly imports steel wire ropes and sells them in China. She is a candidate of the MLS-SCM programme with the Shanghai Zili Institute.

[Keywords: Professional Services, Local Large Enterprise, Private Enterprise, Supplier Management, Operations, Purchasing]

After attending the MLS-SCM courses, I tried to put the concept of “Buying into Competitiveness” into my boss’s head. Once he started paying more attention to improving the existing problems within the Purchasing Department, we were able to implement the following changes:

1. Restructuring the Purchasing Department taking into account our company’s real situation, by setting up the goals, policies, processes, and strategies necessary for the Purchasing Department to function as an integral part of the company.
2. Inspired by the Supply Positioning Model, we broke our items into Bottleneck, Routine, Critical and Leverage Quadrants and assigned specific staff to take care of each quadrant, prioritizing our efforts accordingly.
3. As per the Supplier Perception Model, we assessed the value and attractiveness of our business to certain suppliers, and found out our customer’s motivation to do business with us. We set up flexible Supplier Management Strategies to treat different suppliers.

The time frame of this change-project is end of October 2010 till now.

The above changes are very basic and structural, yet they essentially rebuilt the whole Purchasing Department, and turned out to be effective.

Generally speaking, the restructure of the Purchasing Department improves the internal management and operational processes a lot. The functions of a typical Purchasing Department come into shape, which is really important for a strong Department itself and also for the company. The status of the Purchasing Department within the company rises. Other Departments begin to recognize the existence and importance of the Purchasing Department and cooperate with it more readily. Also, the staff within the Purchasing Department become more self-involved with their jobs. With a clear job responsibility, purchasing staff begins to be more concentrated on their assigned scope, and become more expert at things. It creates a proper and steady working process within the Department, which increases the working efficiency a lot.

Under the core idea of the Supply Positioning Model, we measured the annual expenditure percentage and impact of most items that we purchased accordingly, and broke them into four different quadrants. As per special features that each item quadrant has, we adopted different strategies, which increased the working efficiency a lot. We become more confident and knowledgeable in the field that we are responsible for. We’re not only assistants anymore, but become more like real purchasers. With certain purchasing authorizations, we could purchase items that were urgently needed by our customers, and thus save time as we did not have to wait for our boss’s approval. This improved the goods’ availability and customer’s satisfactions a lot. Furthermore, with a specific item purchasing scope, each of us had more time and energy to study a specific item and its supply market; this enabled us to be more sensitive to the purchasing price, which brings
down costs and improves cost effectiveness. Meanwhile, with a better knowledge of items, we avoided wrong purchases, which again saves cost.

Our company mainly imports steel wire ropes from world’s most famous manufacturers and sells them in the Chinese market. Our core competence and advantage is the supplying source that we own. We have very good and exclusive relationships with those manufacturers. It could be fatal if we lost the cooperation with those suppliers. So it’s important to maintain a good relationship with our customers. We would be in a relative bad position if we came into a conflict with them.

Steel wire ropes are definitely our critical items. On the other hand, as a new company, even though we are one of the top three special rope suppliers in the Chinese market, for those world famous steel rope manufacturing giants we’re not so important.

Regardless of price, we used to have a big problems with long delivery times from our suppliers. The only strategy we had before was to just chase them very softly and kindly, when the required delivery time was close. However, this doesn’t work very well. The goods were still delayed and we didn’t do a lot to claim anything from them.

With the knowledge of the Supplier Perception Model, we studied our position with each rope supplier from their point of view and tried to figure out a proper way to cooperate with each of them. We began to figure out what power and leverage we have in front of different suppliers. For those big and precious suppliers, we are in a marginal quadrant; so we play the good customer and try to be as cooperative as possible. With those who put us in a core quadrant, we try to be strong. The results are not obvious right now, but we feel that it could become quite promising.

The most important benefit from this course is that we got an overall view of Purchasing and Supply Management and are working on improving it. We’re confident that we’ll gain a lot in the future by applying the concepts learned from MLS-SCM and will make good progress.
In 2008, my department, through our international trading business salesroom, made more than US$ 10,000,000 (ten million US dollars) in revenue. Yet nobody was satisfied because we were exhausted doing a job we felt we could not control; in fact, it seemed the events controlled us. We were neither able to analyse our business nor plan constructively. We were just following the business around and did whatever came up or had to be finished, without planning the next steps. It looked like a mess.

As of 2009, after we studied the MLS-SCM programme, we were able to recognize all the mistakes we did. Right now, we know how to make plans and how to do our business according to plan. We chose 3 new suppliers for each part of our production line. By doing so, we saved over 20% compared to previous years. We also reduced our stock quantity by 50% and smoothed out transport arrangements from suppliers to clients. The transport time was thereby reduced from 21 days to around 12-14 days.
Success Story: Colombia – Universidad de los Andes (UNIANDES)

By Alexis Fernando Garrido Anaya

Alexis Fernando Garrido Anaya works as a Purchase Management Advisor for Transportadora de Gas Internacional S.A., a Public Utility Company (“TGI”). He is a MLS-SCM® candidate with UNIANDES.

[Keywords: Energy, Multinational, Private Enterprise, Supplier Management, Operations, Purchasing, Logistics]

A) MANAGEMENT OF CORPORATE CULTURE:

- The “Island-like Purchase approach” was replaced by the “Purchase Function” approach.

- The approach “let us budget everything with an increment of x % and then see what we’ll have to buy” was replaced by “Strategic Purchase Planning” where purchases are allocated based on objectives, goals and supply action plans aiming at a corporate business strategy, using management tools such as the Annual Purchase Plan, the Provisioning Model and the Formulation of Purchase Strategies.

- Management of commitment and backup to the top management level regarding the development of PRODECO.

- The company changed from having uninformed and untrained officials in the function of purchases and supply to having employees duly trained who apply their International Trade Centre knowledge, techniques, and contracting and purchase concepts. Memory helpers such as the case of the “PACC Mobile Magic Circle” and Purchasing Strategies were developed (a copy is enclosed to this report).
**B) MANAGEMENT AND FOLLOW-UP OF THE ANNUAL PURCHASE PLAN (PAC):**

The PAC management tool helped TGI identify the human capital corporate way of thinking about purchase planning (see the blue line in the graph below) and the real way how they execute these purchases (see the green dashed line in the same graph). This strategic finding allowed the reprogramming and adjustment of purchases in 2010 by identifying the bottlenecks and re-orienting the strategies to consider the internal demand, simplify the quantity of purchase processes that must be conducted and extend the due dates of the contract beyond the current calendar terms (see the graph below).

Those contracting processes conducted outside PACC planning were identified analyzing their causes and consequences (the Pareto Methodology):
PACC management has contributed to the analysis of the quantity of processes per type of purchase and to discover the correspondence between the type of impact in monetary terms and the quantity of processes. This equilibrium has re-directed strategies and resulted in grouping of contracting processes under other contract forms:
PACC management has also helped analyse the initiation schedule for contracting processes and perform the follow-up to the development of such processes. A graph illustrating the high impact of maintenance activities in gas pipelines is presented below:

C) CONSOLIDATION OF RELATIONS WITH SUPPLIERS

**Appraising & Short-listing of Suppliers:** This project has contributed to the creation of a potential supplier database that has been duly classified according to the types of goods and services offered. The project also ensured the pre-grading of potential suppliers.

Furthermore, it has enhanced the communication with the universe of potential customers by introducing Webinars, sending information in real time by e-mail (which is very necessary for the company because its infrastructure is located in several places in Colombia), providing permanent consultancy services, and awards, among other things.
**Events with Suppliers and Web Page:** The approach to suppliers has rendered the following achievements:

The first TGI contractor satisfaction level measurement yielded a score of 8.38 points out of 10 (see graph).

Interactive communication with the supply market and publication of documents related to Lessons Learned, Procedures, Guidelines, Event Communication, Awards, Purchase and Contract Awards.

**D) SPECIFIC RESULTS OF THE IMPLEMENTED PURCHASE STRATEGIES**

The high-impact strategies implemented by TGI have generated savings amounting to approximately USD$6.000.000 (six million dollars). The Purchase Saving Indicator was negative in 2008 (-19%). At present, this indicator is a positive number (1.5%) and represents an important impact of EBITDA revenue (see graph below):

In addition, the benefits of these strategies are summarized as follows:

**(a) Strategy: Connection of New Customers to the Gas Transportation System**

- Reduction of connection response timing (from 8 months to 4 months).
- Standardization of engineering design for connections.
- Subscription of a framework contract for supplies and civil works, reducing the timing in the pre-contractual and contractual stage.
- Improvement of corporate image.
- Additional income corresponding to 4-month connection per customer.

**(b) Strategy: Management of Obsolete Assets**

- Subscription of a three-year framework contract with three development phases.
- Income from the sale of obsolete assets for approximately USD $1.000M.
- Warranty for the auction of TGI future obsolete assets in order to attain appropriate reverse logistics, additional income, and decrease of hidden administration, possession, and obsolescence costs while these assets remain in storage.
- Generation of work capital and care for people and the environment.

**(c) Strategy: Intelligent Tool Run (Pipeline Intelligent Pig)**

- Attainment of the lowest costs in the market.
- Approximate savings for USD$ 300M.
- Improvement of quality in the future.
- Decrease of environmental risk.

**(d) Consultancy and Geotechnical Construction Strategies**

- Attainment of the lowest prices in the market.
- Reduction of administrative costs.
- Improvement of service quality.
- Coverage of new infrastructure stretches of transportation infrastructure.
- Mitigation of geotechnical events.
- Contribution to safe operation.

**(e) Strategy: Supply of oil for compression stations**

- Savings amounting to approximately USD$ 500M.
- Reduction between issuing of an order and the effective delivery.
- Promotion of training and implementation of lubrication good practices for the specialized personnel of the company.
- All these processes have resulted in the improvement of performance indicators regarding the purchase function in terms of time, savings, and quality of contractors (in terms of their quality, industrial safety and occupational health, and environmental and social management, as it is shown below):

**(f) Strategy: Major maintenance works and remanufacturing of WAKESHA spare parts for compression stations**

- Approximate savings of USD$ 1.000M.
- Testing of equipments and reliability-based maintenance.
- Decrease between the ordering time and the effective maintenance
- Savings resulting from equipment remanufacturing.
g) Strategy: Major maintenance and remanufacturing of CATERPILLAR spare parts for compression stations

- Approximate savings of USD$ 1.000M.
- Management options of INCOTERMS alternatives to manage discounts based on logistic optimization administration with logistic operator.
- Reliability-based testing of equipment and maintenance procedures.
- Decrease between the ordering time and the effective maintenance.
DESIGN OF THE ANNUAL SUPPLY PLAN FORMAT AND ITS INCORPORATION INTO A SAP SYSTEM SOFTWARE (PACC PROJECT) OF TGI SA ESP:

During the year 2009, we organized a pro form to build the Annual Supply Plan (ASP) or PACC (in Spanish “Plan Anual de Contratación y Compras”). For this purpose we developed a project to put this information into the SAP System Purchase Module of the company. This design is not a SAP standard in the SAP systems. It is a special development, which was designed by Transportadora de Gas Internacional SA ESP (TGI SA ESP).

This project included some activities, as well:

1. Design of the objectives and the activities of the project.
2. Management of the Process to select the appropriate Supplier (SAP Consultant) in the suppliers market in Colombia.
3. Design of the fields of information in a PRO FORMA (FORMAT) in order to consolidate all the information of goods and services necessary for the organization for the next year. This format included information in reference to:
   - Object of the purchasing.
   - Background of the purchasing.
   - Actual situation and technical requirements.
   - Possible suppliers and analysis of the supply market.
   - Possible strategy of purchasing.
   - Specifications of products and services required.
   - Cost centre, account, and amount of money in local currency, Dollars and/or Euros.
   - Type of product (Critical, Bottleneck, Routine, Leverage).
   - Schedule of the buying process.
   - Impact in HSEQ (Health, Security, Environmental, Quality).
   - Attachments of specific documents in order to get more information about market analysis, specialized considerations for the purchasing or suppliers, etc.
   - Some pictures of the format are below:
In this part we can consider some details of the Cost Centres, Budget accounts and amount of money in local currency, Dollars and/or Euros. Some scenarios of planning we can consider in this fields of information.
PACC – Plan Anual de contratación y compras

(Format of the PACC - Plan Annual de Compras – Annual Plan of Supply – Page 3
Supply Market Analysis)

PACC – Plan Anual de contratación y compras

(Format of the PACC - Plan Annual de Compras – Annual Plan of Supply – Page 4
Schedule of the PACC)
Impact:

1. We have formulated new strategies to get better relationships with the suppliers.
2. Team work between TGI SA ESP and the SAP Consultant to get the format into the SAP System.
3. Coaching to the employees of the company in order to get training to handle the transactions implemented in the SAP System.
4. Implementation of the new form to build the PACC in the TGI for the budget of 2010.
5. The culture of the organization has incorporated this new tool and it has been a high impact in the process to build the budget in the company (formats, requirements, meetings to the presentation of the budget, etc).

Results:

1. We get an automatic tool in the SAP System to build the Annual Supply Budget of the company with a new methodology focused in the real requirements of supply with a development designed by TGI SA ESP.
2. The PACC for TGI SA ESP has provided a large opportunity to formulate new strategies of purchasing and new options to get better relationships with the suppliers system.
3. The PACC gets more information in a better presentation to identify the “Pareto” (list of requirements, which represent the 80 % of the expenses of the company) of the goods and services that requires TGI SA ESP from the suppliers.
4. This development allows the company better organization of the planning for each process of purchasing, in terms of reminder messages through a Microsoft Outlook tool to remind all the people about the date to begin preparation of the documents, requirements, invitations, etc, for the buying process.
5. This tool can handle different states of planning, to get a background of the planning and all the PACC in the company.

6. The control of the measurement of savings has been improved, because we can review each process of purchasing orders in the company.

7. The company determinates in the PACC, the classification of its requirements into the kind of products, as the methodology of the International Trade Centre, as next:

8. Actually, all the company has incorporated a new form to do things, in terms of the preparation of the planning of purchasing (PACC). It has been a very good experience in the management of the change and the culture of the organization, to focus better achievements in the purchasing and the supply chain management.
The challenge was to secure the Flow Line Construction Services in a market with many suppliers but few with the quality, performance, adequate relationships and management of the surrounding community that was required for our operations. Additionally, there was an increased demand for these types of services and thus securing this supplier was very important to us.

The first analysis tool that was implemented to define the strategy to ultimately contract these services was the “Supply Matrix”, which allowed us to understand how critical the service was to the operation and the type of relationship we needed to have with the suppliers, as they are a critical part of the development of the project.

Following this, we researched the market and identified which possible suppliers were available. Then, we undertook a pre selection process, which allowed us to segment the market. As a result of this segmentation, we identified that the supplier we had on board at that time was the leader in the sector. We then chose as a contracting strategy to negotiate directly with the supplier in order to capture the best value possible within the market. In order to do this, we used the negotiation scheme model proposed by the programme. Before commencing the process we defined a specialized team and clear goals for this negotiation, analyzed the market, identified the variables that could possibly be a point of negotiation, developed a deeper understanding of the service required, and finally defined boundaries within which to negotiate for each of the variables identified. We then planned a clear negotiation strategy with roles and responsibilities assigned to each one of the members of the team.

Understanding the activities was a fundamental factor in the negotiation whereby its complex nature required us to analyze 77 different activities for 6 different geographical areas, for 6 different tube diameters and 4 different tube thicknesses. In order to do this we developed a tool that helped us analyze 2,800 UPA (Unit Price Analysis for Activities) in less than 3 hours, which changed with the rhythm and tone of the negotiation as required. In total we analyzed 10 different proposals from the supplier. At the end of the negotiation the number of the UPA’s were reduced from 2,800 to 331 due to the fact that we were able to analyze and thus identify similar characteristics which allowed us to eliminate many APU’s when the activity varied slightly because of the complexity of the geographic area or zones, tube thicknesses and tube diameters.

There were many tangible and intangible results as well as improvements and benefits that we achieved by implementing the above strategies. After structuring the process for negotiation, we formed a team of 4 people, made up of two contract and negotiation specialists and 2 technical analysts. The results of the process, which took almost 6 months to complete, are described below.

- We retained the leading supplier in the sector, their knowledge base and their valuable human resources.
- We reduced costs associated with operations by 5 - 10% for each project.
• We negotiated a contract for 5 years (long term).

• All financial implications of this agreement made at that time were applied retroactively for two years. The effect of this agreement was a credit note worth approximately $750,000 USD.

• We negotiated an ‘open book’ agreement with the contractor.

• We defined a framework in which we were able to limit the claim on unforeseen costs.

• We developed a robust new tool to analyze information such as APU’s for other contracts, agreements and negotiations for other projects in the future.

In order to sustain the benefits, we have developed a structure to manage this agreement effectively and efficiently by appointing a contract manager who has a deep knowledge of the terms, conditions and details of this contract. This person is in charge of monitoring and making sure that all agreements are fulfilled in a timely manner. Cost control, project control also work around this agreement to ensure that all aspects are being adhered to. The PSCM team is responsible for monitoring and measuring the performance, every 6 months in terms of quality, delivery, financial costs, HSE and other key indicators of this agreement. Throughout the term of the contract we have the ability to renegotiate any terms or conditions should we identify any opportunities for improvement. This is possible due to our having negotiated an ‘open book’ agreement with the supplier. As such, this contract has been a benefit for all parties involved.

The most noteworthy achievement for the company is to include the use of the ‘Supply Martix’ and a clear negotiation process in the supply chain management process.
Success Story: Colombia – UNIANDES

By Iván Pinzón (2011)

Iván Pinzón is the Procurement Office Director at Bogotá’s Energy Group (GEB). Mr Pinzón also teaches some of the MLS-SCM® Modules at both levels at the Universidad de Los Andes since early 2007.

[Keywords : Energy, Local Large Enterprise, Private Enterprise, Supplier Management, Operations]

Tools for the supply process

Applying the MLS-IPSCM modules, we emphasize three tools to add value to the procurement function:

- **Market survey e-mail:**
  Upon identification of a high impact/risk requirement, the contracting capacity of the bidders needs to be updated. Vendor registration is normally valid for one year. Their information is not always up to date, with the risk that the best bidders on the market are not selected.

  - The e-mail to be sent to a broad universe of bidders is to identify:
    - A homogeneous group of companies with technical and financial competencies and the required resources and availability that are interested in attending to the Company’s needs.
    - Potential exceptions of the bidders to the expected terms and conditions.

  - The e-mail is structured as follows:
    - Brief description of the supply scope.
    - Requirements for the requested proposals: commercial terms, characteristics of the invitation, schedule, conditions to evaluate proposals.
    - Information requested from the bidders: expression of interest in bidding, basic company information, similar experience, exceptions and suggested performance indicators.

  - Once the responses are analyzed, a shortlist is prepared of the best bidders qualified to submit proposals. The bidder’s expectations are measured and an RFQ is issued.

During 2010, 20 processes were carried out with excellent results.

- **Cost structures:**
  In Colombia, a frequent modality to remunerate consulting services applies a multiplier on salaries for the recovery of social benefits, general expenses and profit. This multiplier is a “black box” that hampers balanced negotiations between the parties.

  The GEB scheme for the remuneration of the aforementioned services is:

  - **Salary ranges:** Places the various professionals in keeping with their experience and performance; invoicing is done on a per “man-hour” bases.
  - **Social benefits:** Payable as a percentage of salary as established by law.
  - **General expenses:** Payable as an hourly factor for the recovery of administrative costs.
  - **Fees:** Reward experience, risks, responsibility and availability.
  - **Innovation** is the “general expenses factor” that correlates administrative costs with the man-hours “installed” during the same period.
The system recognizes:
- General expenses as a function of the organization in each company.
- Costs that are not easily weighed, such as: unproductive time and personnel training.
- A fair balance for both the GEB and the consultant.
- The standardization of proposals, sensitivity analysis and major deviations that could compromise the selection.
- Performance indicators for trends identification.

Seven processes undertaken in 2010 in the amount of COP 3,099,915,728 (US$ 1,683,000) generated savings of 22%.

- Getting closer to micro, small and medium-sized enterprises (SMEs):
A programme to democratize supply has been undertaken, aimed at improving the competitiveness of 20 SMEs, providing them with economic support, technology and knowledge transfer for the implementation of the Colombian standard NTC 6001, aimed at administrative and operational standards. The programme required co-financing by a government entity. Resources were not available, so a mechanism was developed to satisfy the SMEs' expectations, maintaining excellent communications until the programme could be resumed. The economic newspaper ‘La República’, one of the most important daily publications nationwide, published a special report in May called “100 key points for a successful SME.” They agreed to publish daily tips & hints for entrepreneurial actions, which started to be delivered on August 10th, 2010 to 100 SMEs, including the 20 mentioned above. As of January 25, 2011, 90 tips had been sent out. For instance, tip 33 stated: “Invest in training: Training and nurturing human talent is a determining factor for personal development and for organizational growth and strengthening. Consequently, efforts to promote training are key and spending on training is to be considered as an investment."
Success Story: Colombia – UNIANDES

By Ivan Pinzon

Ivan Pinzon works with Bogotá Energy Group as the Procurement Director. He is a MLS-SCM® candidate with UNIANDES.

[Keywords: Energy, Local Large Enterprise, Private Enterprise, Supplier Management, Operations]

The MLS-SCM programme has been a referent for the structuring of a policy and strategic plan for supply. The improvements, impacts and programmes that are underway are related to several of the modules in the aforementioned programme, and have been based on its conception and development:

2009

- The PACC at Transportadora de Gas Internacional (International Gas Transportation Company) – TGI, its acronym in Spanish – the Natural Gas Business Unit, during its first year (2009), ensured a much more satisfactory coverage level:
  - 93% of the supply needs, equivalent to US $ 41.400.000 (US $ 1 = Colombian pesos $ 2,153.30)
  - 73% of the supply processes, equivalent to 288.

- The Transportadora de Gas Internacional - TGI – Business Unit achieved savings in its supply plan for US $ 10.700.000 equivalent to 4.3% of the budget, versus an expected 5% goal. The budget included supplies and services in the expansion of the gas infrastructure, amounts that were excluded from the PACC exercise.

2010

The strategic supply plan, based on the MLD-SCM programme model, has been accepted throughout the GEB as a tool that permits Senior Management to control and follow-up on supplies during 2010. US $1 = Colombian pesos $ 2,048.50

<table>
<thead>
<tr>
<th>Business Unit</th>
<th>Estimated budget: US $</th>
<th>Estimated savings:</th>
<th>Number of supply processes:</th>
</tr>
</thead>
<tbody>
<tr>
<td>TGI</td>
<td>193.845.000</td>
<td>760.000</td>
<td>414</td>
</tr>
<tr>
<td>Maintenance</td>
<td>1.230.000</td>
<td></td>
<td>60</td>
</tr>
<tr>
<td>Projects</td>
<td>5.856.000</td>
<td></td>
<td>67</td>
</tr>
</tbody>
</table>

- At the corporate level, the information corresponding to the routine process quadrant permitted the articulation of a democratization programme for contracting micro, small and medium-sized enterprises - Mipymes, their acronym in Spanish – which covered 20 companies that would receive training, consulting and accompaniment in the strategy, marketing and sales areas, and their productive, finance and accounting processes, among others.

- The half-year review of the PACC made it evident that there was a need to migrate from dynamic Excel tables for information management to an integrated ERP application in the Group, in this case, SAP, which is already available.
• The MLS-SCM supply position model is being expanded to the international sphere to two GEB projects, as follows:

  o Guatemala: Provision of the electricity transport service. The project consists of 6 lots with a total of 850 Km of 230 kV transmission lines, the construction of 12 new sub-stations, and the expansion of 12 existing sub-stations.
  o Peru: A 30-year concession for the transmission and distribution of natural gas at the Ica Department in Peru. Estimated length for the pipeline network: 280 Km. Estimated investment: up to US $ 270 million. To date, a request for information has been submitted, following the MLS-SCM guidelines, for the supply of pipes for the lines, with excellent results: over 13 responses on a worldwide scale.

• The induction for internal clients in 2009, permitted starting 2010 with the following supply strategies:

  o Contracting and purchase of intelligent inspection tools in gas lines.
  o Connections in TGI SA ESP’s own gas lines.
  o Consulting in Geotechnics.

• An information management system was started up this year to evaluate and standardize suppliers, following the MLS-SCM programme, which shall cover the pre-qualification and short-listing of suppliers for the presentation of proposals and the subsequent performance evaluation when they are engaged as contractors.
Success Story: Colombia – UNIANDES

By Andrés Hernando González Delgado (2011)

Andrés Hernando González Delgado works as Supplying Adviser for Empresa de Energía de Bogotá S.A. ESP. (GEB), a Colombian multi-utility type holding company. He is a MLS-SCM® candidate with UNIANDES.

[Keywords : Energy, Local Large Enterprise, Public Organisation, Supplier Management, Operations]

After just three years of existence, the Procurement Office reached an important position not only at the company’s main level but also within the business units. The Procurement function has adapted to support both the growth expectations and operational efficiency. Once the alignment of the Procurement Function with the core business strategy1 was obtained and stated in the Policy of Procurement, the following benefits were obtained since its deployment in 2010:

A. Impact on financial statements:
   • There is a strategic link between the Procurement Function and the corporate objective “To optimize the costs and the expenses” and, through this one, a link to the corporate goal “to increase the economic and financial value for the shareholders” via improvement of the operational results.
   • It establishes as objective the periodic supply planning (the Annual Plan of Purchasing and Contracts – APPC), increasing the effects of strategies that can be derived from the implementation of MLS-SCM modules. The proper planning has allowed savings of more than 7% in the projects’ capex budget, and that influenced the EBITDA is a positive way, growing more than 3%.

B. Impact on productivity:
   • The design of sourcing strategies intended for achieving the goals of the APPC were formulated as objectives. These strategies were so designed as to be an integral part of the expansion projects the company plans, and in very early stages be part of the projects’ management. There was a very positive impact on the business results in Peru, Colombia and Guatemala, eliminating the costly bottle necks associated with supply.

C. Impact on competitiveness:
   • Another objective is “to implement world-class standards in supply”. In this sense, inter-sectoral meetings have been promoted with the goal to identify and to share the best market practices. By doing that, the businesses’ competitiveness can be constantly improved.
   • In order to guarantee “sustainable competitiveness” for the company, the following objective has been postulated: “To develop reliable supply networks by associative models and to promote mutually beneficial partnerships”. The work associated with this objective is to search for new supply networks and improve the existing ones, to increase the response capacity against our own demand and to guarantee “the best business”.
   • The policy establishes the commitment “to transform technical and professional competences for purchasing and negotiation of our personnel”. As a directive, both external training with ITC accredited organizations and internal training have been encouraged, also to standardize the knowledge in Peru, Guatemala and Colombia where more than 20% of our colleagues benefitted from the training.

D. Impact on satisfaction of stakeholders:
   • In order to take care of the expectations and needs of the stakeholders, it has been stated as objective “To guarantee the effectiveness of the supplying processes according to the cost, the risk, the impact and the

1 Exhibit E: Alignment procurement-core business strategy – Note: This document is available upon request from ipscm@intracen.org
opportunities of the market”. To achieve this, the criteria have been well formulated to maximize the objectivity for our Supplying Position Model, made from the APPC. A monthly report is presented to top management to monitor the performance of the supplying process and to guarantee their satisfaction.

E. Impact on public image:

- The Policy establishes the commitment “to extend the corporate values, the code of ethics and the practices of Corporate Social Responsibility of GEB towards the supplying networks”. This way we ensure that the condition of “better business” is fulfilled and prevent the reputational risk that comes with suspicious contracting.

- Good work was done in “contributing to the social development and the success of the entrepreneurship projects of the population located in our zone of influence”. Here, the social impact has been remarkable as regards enhancement of supply networks that are composed of suppliers considered vulnerable; an achievement that has been recognized and awarded at the national level.
Establishment of a procurement area:

With 12 persons working on two groups: local, and OCONUS. The first group was dedicated to the purchase of goods and services, which can be purchased locally in Colombia. The second group was focused in purchases outside Colombia, especially United States. These are the operational bases of procurement.

Additionally, we have senior procurement specialists, one for local, one for OCONUS purchases, and one contract compliance specialist. This group is in charge to develop strategic alliances with key suppliers, long-term contracts and leverage requisitions (tactical). A procurement supervisor (strategic) in charge to coordinate the entire operation, meets with the requestors in order to review forecasts, negotiates with suppliers, analyzes procedures in order to find bottlenecks or performance plans. This allows the company to highly fulfil expectations for the Aviation programme, helping the company to renew the Colombian National Police contract for four more years (2002-2006 to 2006-2010), an example of this is the target for the programme was “to sustain a 75 % OR rate while at the same time reducing total ownership cost” for 2008 the rate was above 95 %.

Moving from an operational procurement process (day-by-day purchases), to a fully integrated procurement system with strategic partnerships with suppliers and long-term relationships. First, the identification of categories as aviation consumables, aviation parts and spares, Aviation Repairs, Facilities maintenance (services and materials), office supplies, and special projects, among others. After that, establish different strategies to assure the continuous supply for the operation. Examples of that was the development of contract, which not only penalizes the supplier if they don’t meet the requirements, but helping the supplier to perform their services. This includes balance scorecards, frequent feedbacks, and physical visits to the supplier’s facilities. Despite this, we had a cost reimbursable contract; the monthly savings obtained was around the cost of the entire procurement group salary. In addition, the lessons taught in the training help us to start our ISO certification process.

At the beginning of the contract, we only participated in the company staff meetings when they had an issue related with supply, and we were involve in “emergencies” such as the company running out of office supplies. After a consistent improvement of the process, participation of the procurement area in the staff meetings was a constant. The combination of this successful process and the training received in the MLS-SCM programme, I could move to a Multinational Company called “Electronic Data System” in the position of Supply Chain Business Partner for Andean Region and Central America, covering the procurement operations of 12 countries in Latin America. This company was bought by Hewlett Packard (HP) in 2008, but due to my training and experience, HP decided to keep me as Global Supply Chain Strategic Manager and leader of the procurement operations in Colombia (+40 MM USD annual), the position I am actually occupying. One of the improvements was to be part of the GSCS integration team for Latin America, integrating the procurement process, suppliers and tools for both companies.
Success Story: Colombia –UNIANDES

By Ines E. Shuk

Ines E. Shuk works as a Purchasing and Supply Chain Manager with BP Colombia. She is a MLS-SCM candidate with UNIANDES.

[Keywords: Energy, Multinational, Private Enterprise, Operations]

Results and improvements driven by the MLS-SCM programme are plenty, yet I would like to describe three specific outcomes that have produced the highest degree of value to our business:

a) Price escalation for the oil and gas business accounted for ca. 50% of extra on average in the 2006–2008 period. Companies in this industry were struggling to combat market inflation as the oil price increase over US$100/bbl was setting higher margin aspirations for suppliers. Our business in Colombia and Venezuela has a production decline rate of ca. 30% p.a., making this an even more important aspect to manage. In light of this, we embarked in a cost mitigation program in 2008. It included stronger market intelligence and critical to face the challenge, hence I decided to budget and promote attendance of all SCM specialists, senior specialists and team leaders to the programme. The cost mitigation programme delivered US$44 millions in cost reduction and cost avoidance in 2008, versus US$17 millions in 2007. In 2009, we set an even more aggressive target and the team was on track to deliver this promise.

b) A great asset from the MLS-SCM programme is the access it provides to students to up-to-date data, concepts, processes and subject-matter literature. Based on this information, my team structured a performance management system for our SCM function to measure the different relevant aspects of an integrated supply chain. Currently we are measuring and tracking key aspects of procurement, materials management and logistics, and we are providing the business with objective data measure the contribution of this function to the business. Measuring our performance has made the MLS-SCM’s contributions more visible to the business.

c) As stated before, all the SCM team has or is in the process of attending the MLS-SCM programme. Roughly 50% have achieved accreditation with distinction. The fact that it is delivered locally and in Spanish, has made it very accessible to our team, as opposed to other accreditation programmes offered in the US or Europe. Those who have attended have gained significant skills, professionalism, and self-confidence, and their careers have found a positive turning point after the programme. This been a true motivator to our staff; they are more proud than ever of working for this function. Motivation and skill are critical to the attainment of results, and results have clearly over-compensated the time and financial investment that BP made in its Andean SCM team.
These are the performance results that we were able to achieve thanks to the training we have taken:

**Corporate level results.**

- Procurement’s initiative to start working closely together with our suppliers towards a mutual goal, customer satisfaction, and the good results obtained had help us negotiate excellent strategic partnership that ended in obtaining Peru C130 CLS sole source contract - $10M (2009). Using this concept and achievement, CCE is bidding a Mexico C-130 CLS contract (~$7.5M+) in 2010 as part of the Merida Initiative.

- CCE’s success to date, going from a $3M company in 2000 to virtually a $100M company at the end of 2008, while maintaining profitability, is rooted in its approach to business/proposal development and subsequent project execution. Procurement cost saving adds to this accomplishment, our contract is -$32M+ and we have accomplished 5% of cost saving to USG government.

- The corporate strategic planning identifies the Procurement system as corporate strength.

**Function level results**

- The US Department of State Bureau for International Narcotics and Law Enforcement Affairs, establish a Task Execution Plan (TEP) that will give the readiness, responsibilities and also measure the performance of the contractor for the aviation, maintenance and logistics support program. This document clearly states, *“The main goal of the logistics organization is to provide the parts required to sustain a 75% OR rate while at the same time reducing total ownership cost”*. The first measurements before we took the course were around 60-65%. Now we have been stable between 98-100%

- During our transition stage form the last contractor we analyzed that the Turn Around Time (TAT) for US repair cycle was at average in 180 days we have accomplish so far 90 Days and we are aiming and planning to bring it to 60 Days. The TAT that we have accomplished for the UK is 100 days.

- The agreements have been a powerful tool that had helps us guarantee the continuous supply along the planning required. For consumables our fill rate has been stable at 100% in the last 6 months with local suppliers.

**Operational level results**

- Our first standard comparison with companies that supported this same type of contract was that a buyer could process three lines per day. Today with our agreements already in place we have measure 12.3 lines per buyer per day.
• In reality e-procurement has the advantage of taking supply chain management to the next level, therefore CCE developed an internal module in the database integrating these types of e-procurement:
  
  o Electronic sourcing (e-sourcing): Identifying new suppliers for a specific category of purchasing requirements using Internet technology.
  
  o E-tendering: Sending requests for information and prices to suppliers and receiving the responses of suppliers using Internet technology. (RFI, RFQ, RFP and reverse auctioning).
  
  o E-informing: Gathering and distributing purchasing information both from and to internal and external parties using Internet technology.

This saves time and money that are reflecting in achievements already mentioned

• The time distribution for the procurement function has matured to the following:

<table>
<thead>
<tr>
<th>Activity</th>
<th>First Year Contract</th>
<th>Third Year Contract</th>
</tr>
</thead>
<tbody>
<tr>
<td>Purchasing transaction</td>
<td>85%</td>
<td>5%</td>
</tr>
<tr>
<td>Vendor Development</td>
<td>0%</td>
<td>8%</td>
</tr>
<tr>
<td>Material Administration</td>
<td>0%</td>
<td>7%</td>
</tr>
<tr>
<td>Development of processes</td>
<td>10%</td>
<td>2%</td>
</tr>
<tr>
<td>Supply Strategy &amp; Analysis</td>
<td>5%</td>
<td>70%</td>
</tr>
<tr>
<td>Others</td>
<td>0%</td>
<td>7%</td>
</tr>
</tbody>
</table>
Khaled Gamal ElShaer

Khaled Gamel ElShaer is a Purchasing Manager of Egyptian Group for Pharmaceutical Industries (EGPI) Pharmaceutical manufacturing company in El-Obour city, Egypt. He is a MLS-SCM® candidate with FTTC.

[Keywords: Pharmaceuticals & Life Sciences, Local Large Enterprise, Private Enterprise, Operations, Purchasing]

After understanding our corporate environments and our supply markets risks and opportunities, we put a new goal and culture for our purchasing departments to reduce lead-times.

**Challenge:** Enhancement of the role of the purchasing in the New Products development process searching for the best marketable product to build a competitive advantage.

**Solution:**

This is occurred by aligning with our purchasing members by integrating our suppliers into the new products development process.

As purchasing acted as an intermediary between suppliers and our R&D pharmacists and registration department, by supplying them with the recommended new molecules (active pharmaceutical ingredients), that considered as a new market trend in the pharmaceutical industries.

In addition we supported them with all documents and materials required for new product "after conducting market research for product opportunity in market" like "Drug Master File" for registration purpose, "Recommended Drug Formula and raw material samples" for R & D purpose, etc.

**Result:**

- Our company now pays attention to new opportunities in the market that may increase our company's competitive advantages "Through workshop and partnership with suppliers to get keeping supply chain of applicable innovative ideas".

- Many new recommended products are under registration.
Success Story: Egypt – FTTC

By Nadia El Sayed

Nadia El Sayed is a Purchasing Manager of Egyptian Group for Pharmaceutical Industries (EGPI) Pharmaceutical manufacturing company in El-Obour city, Egypt. He is a MLS-SCM® candidate with FTTC.

Keywords: Pharmaceuticals & Life Sciences, Local Large Enterprise, Private Enterprise, Operations, Purchasing

After understanding our corporate environments and our supply markets risks and opportunities, we put a new goal and culture for our purchasing departments to reduce lead-times.

Challenge: Reducing the delivery lead time of the imported active pharmaceutical ingredients by 10 days.

Solution:

This occurred by

1. Aligning with the planning department by building up an annual plan to determining all our required imported APIs
2. Purchasing Department made an analysis for the delivery lead times for all suppliers to exclude the suppliers that did not execute the lead time.
3. Getting the import authorization for all imported items once

Result:

- Reducing the delivery lead time by two weeks per each shipment
- Saving money by 2 % per each shipment
As a consultant, I used to develop and restructure the logistics management function of my clients’ enterprise.

That is why I attended the MLS-SCM programme.

I was using a tool for providing a manufacturing / logistics solution named “The total Manufacturing Solution”. After studying the SCM modules and being involved in training as a certified master trainer, now I’m able to use that knowledge to help my clients much better, in addition to training activities. The collective exhaustion of the programme, and the numerous practical tools that it comprises, have increased so far the efficiency and effectiveness of my consultation career.

A few years ago, one of my clients that I served before was having problems in managing the production planning, inventory and purchasing functions. At that time I came up with a suitable logistics solution for the client. They were suffering interruptions in stock, both in raw materials and finished goods, and they were threatened to lose part of their market share, which is why they asked for my help. I decided to make a new offer to my client, to improve my previous logistics solution for their enterprise. I reworked my previous solution based on MLS-SCM programme, and came up with a sample of the total solution I intended to execute.

During my total analysis of my client’s business, I applied the supply positioning model (SPM) to a sample bill of materials (BOM) used for manufacturing the refrigerators. I identified two the critical items. In my previous analysis using other tools, I identified one component (compressor - two types: QA 77 and GL 70) as the most critical item.

After using the SPM tool, however, I discovered that it is not, and the most critical item is one I have not even think of as it is shown in the following steps and illustrations: (I had to add more space outside the box)
## Expenditure analysis for the next year based on the historical data.

### Expenditure analysis for the next year

<table>
<thead>
<tr>
<th>Expenditure Rank</th>
<th>Product to be Purchased</th>
<th>Annual Expenditure</th>
<th>Accumulated value</th>
<th>Accumulated value %</th>
<th>Value</th>
<th>Items</th>
<th>Item value %</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Components, 339</td>
<td>$ 1,650,000</td>
<td>$ 1,650,000</td>
<td>38%</td>
<td>79%</td>
<td>25%</td>
<td>37.9%</td>
</tr>
<tr>
<td>2</td>
<td>Insulator</td>
<td>$ 715,000</td>
<td>$ 2,365,000</td>
<td>54%</td>
<td></td>
<td></td>
<td>16.4%</td>
</tr>
<tr>
<td>3</td>
<td>Plastic HIPS</td>
<td>$ 616,000</td>
<td>$ 2,981,000</td>
<td>68%</td>
<td></td>
<td></td>
<td>14.1%</td>
</tr>
<tr>
<td>4</td>
<td>Metal sheet, black</td>
<td>$ 480,000</td>
<td>$ 3,461,000</td>
<td>79%</td>
<td></td>
<td></td>
<td>11.0%</td>
</tr>
<tr>
<td>5</td>
<td>Compressor 77</td>
<td>$ 300,800</td>
<td>$ 3,761,800</td>
<td>86%</td>
<td></td>
<td></td>
<td>6.9%</td>
</tr>
<tr>
<td>6</td>
<td>Heater</td>
<td>$ 136,641</td>
<td>$ 3,898,441</td>
<td>90%</td>
<td></td>
<td></td>
<td>3.1%</td>
</tr>
<tr>
<td>7</td>
<td>Thermostat 2 doors</td>
<td>$ 114,000</td>
<td>$ 4,012,441</td>
<td>92%</td>
<td></td>
<td></td>
<td>2.6%</td>
</tr>
<tr>
<td>8</td>
<td>Plastic ABS</td>
<td>$ 79,125</td>
<td>$ 4,091,566</td>
<td>94%</td>
<td></td>
<td></td>
<td>1.8%</td>
</tr>
<tr>
<td>9</td>
<td>Welding coil, silver</td>
<td>$ 58,659</td>
<td>$ 4,150,225</td>
<td>95%</td>
<td></td>
<td></td>
<td>1.3%</td>
</tr>
<tr>
<td>10</td>
<td>Screws, special</td>
<td>$ 40,000</td>
<td>$ 4,190,225</td>
<td>96%</td>
<td></td>
<td></td>
<td>0.9%</td>
</tr>
<tr>
<td>11</td>
<td>Thermostat 1 door</td>
<td>$ 37,000</td>
<td>$ 4,227,225</td>
<td>97%</td>
<td></td>
<td></td>
<td>0.8%</td>
</tr>
<tr>
<td>12</td>
<td>Filter, copper</td>
<td>$ 23,188</td>
<td>$ 4,250,413</td>
<td>98%</td>
<td></td>
<td></td>
<td>0.5%</td>
</tr>
<tr>
<td>13</td>
<td>Stickers</td>
<td>$ 20,000</td>
<td>$ 4,270,413</td>
<td>98%</td>
<td></td>
<td></td>
<td>0.5%</td>
</tr>
<tr>
<td>14</td>
<td>Lamp base</td>
<td>$ 17,391</td>
<td>$ 4,287,804</td>
<td>98%</td>
<td></td>
<td></td>
<td>0.4%</td>
</tr>
<tr>
<td>15</td>
<td>Lamp switch</td>
<td>$ 16,666</td>
<td>$ 4,304,470</td>
<td>99%</td>
<td></td>
<td></td>
<td>0.4%</td>
</tr>
<tr>
<td>16</td>
<td>Terminal, wire</td>
<td>$ 15,000</td>
<td>$ 4,319,470</td>
<td>99%</td>
<td></td>
<td></td>
<td>0.3%</td>
</tr>
<tr>
<td>17</td>
<td>Thermostat freezer with Board</td>
<td>$ 14,500</td>
<td>$ 4,333,970</td>
<td>100%</td>
<td></td>
<td></td>
<td>0.3%</td>
</tr>
<tr>
<td>18</td>
<td>Thermostat freezer</td>
<td>$ 12,500</td>
<td>$ 4,346,470</td>
<td>100%</td>
<td></td>
<td></td>
<td>0.3%</td>
</tr>
<tr>
<td>19</td>
<td>Lamp</td>
<td>$ 8,000</td>
<td>$ 4,354,470</td>
<td>100%</td>
<td></td>
<td></td>
<td>0.2%</td>
</tr>
</tbody>
</table>

**Total Annual Expenditure:** $4,354,470 100%
1. Pareto analysis for the next year expenditure
2. Compressors stock analysis (QA 77)

Compressors Stock analysis(QA 77, GL 70

Critical item

This analysis shows how bad the inventory management of the stock of such critical item was.

4. Setting supply targets for selected purchased components / materials

<table>
<thead>
<tr>
<th>PIP rating</th>
<th>Supply objectives</th>
<th>Supplier</th>
<th>Plastic ABS Rate</th>
<th>Lamp switch Rate</th>
<th>Insulator Rate</th>
<th>Overall PIP rating for the Item</th>
</tr>
</thead>
<tbody>
<tr>
<td>M</td>
<td>Identify competitive suppliers and source higher quality compressors</td>
<td>Secure contract with new supplier by 31 October</td>
<td>N/A</td>
<td>N</td>
<td>N/A</td>
<td>N</td>
</tr>
<tr>
<td>M</td>
<td>Ensure that the performance reliability of key components is improved to the target offer</td>
<td>Maintain performance reliability rating of 99.5%</td>
<td>L</td>
<td>Upgrade the performance reliability rating of 99.5% to 99.9%</td>
<td>M</td>
<td>M</td>
</tr>
<tr>
<td>L</td>
<td>Maintain 95% availability rate of spare parts at all maintenance centers</td>
<td>Maintain one month average stock at the main store</td>
<td>N</td>
<td>Maintain one month average stock at the main store</td>
<td>L</td>
<td>L</td>
</tr>
<tr>
<td>H</td>
<td>Reduce the average supply cost of components by 10%</td>
<td>Reduce delivered cost by 5%</td>
<td>L</td>
<td>Reduce delivered cost by 10%</td>
<td>H</td>
<td>H</td>
</tr>
</tbody>
</table>

This is only a sample to follow in developing an integrated solution for the enterprise logistics and supply chain management.
As a consultant, rather than a master trainer for the MLS-SCM programme, I am now able to offer to my clients more comprehensive solutions for their logistics and supply chain management problems. That way the awareness of SMEs in Egypt is raised, and the owners and managers are encouraged to seek and attend the MLS-SCM training courses. On the consultation side, I can offer more profound restructuring schemes for the logistics and supply chain functions of my clients’ enterprise.

Now I have one client, which is a small business, and another two medium business, which are potential clients, and I am expecting to increase my clients’ base in the Egyptian market, and in the Middle East; especially the SMEs as they are the most needing for the logistics and supply chain knowledge.
Mossad Ghoneim works as a Consultant with different companies in Egypt helping them develop and restructure their logistics management function. He is a MLS-SCM® Lead Trainer and candidate with FTTC.

[Keywords : Professional Services, SME, Private Enterprise, Supplier Management, Logistics]

SCM-TNA: The enterprise manager/owner fills in a simple questionnaire (Units Objectives = Competencies) on line or on a hard copy form. The consultant, then, analyzes and designs a customised training programme (= Modules) that suits the Individual / Enterprise needs. Below is an extracted sample of some features of the application design: forms, analysis and results.

<table>
<thead>
<tr>
<th>Module</th>
<th>M1</th>
<th>M2</th>
<th>M3</th>
<th>M4</th>
<th>M5</th>
<th>M6</th>
<th>M7</th>
<th>M8</th>
<th>M9</th>
<th>M10</th>
<th>M11</th>
<th>M12</th>
<th>M13</th>
<th>M14</th>
<th>M15</th>
<th>M16</th>
<th>Totl</th>
<th>Avr</th>
</tr>
</thead>
<tbody>
<tr>
<td>Unit 1</td>
<td>Objctvs</td>
<td>2</td>
<td>2</td>
<td>1</td>
<td>1</td>
<td>2</td>
<td>2</td>
<td>3</td>
<td>2</td>
<td>1</td>
<td>3</td>
<td>6</td>
<td>2</td>
<td>4</td>
<td>4</td>
<td>4</td>
<td>2</td>
<td>41</td>
</tr>
<tr>
<td>Unit 5</td>
<td>Objctvs</td>
<td>4</td>
<td>5</td>
<td>4</td>
<td>3</td>
<td>4</td>
<td>2</td>
<td>2</td>
<td>4</td>
<td>6</td>
<td>4</td>
<td>5</td>
<td>4</td>
<td>3</td>
<td>4</td>
<td>7</td>
<td>4</td>
<td>65</td>
</tr>
<tr>
<td>Unit 9</td>
<td>Objctvs</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>8</td>
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<td></td>
<td></td>
</tr>
<tr>
<td>Totl units</td>
<td></td>
<td>6</td>
<td>5</td>
<td>5</td>
<td>8</td>
<td>8</td>
<td>6</td>
<td>5</td>
<td>9</td>
<td>8</td>
<td>7</td>
<td>5</td>
<td>5</td>
<td>5</td>
<td>6</td>
<td>6</td>
<td>99</td>
<td>6</td>
</tr>
<tr>
<td>Totl Objvs</td>
<td></td>
<td>21</td>
<td>18</td>
<td>23</td>
<td>16</td>
<td>28</td>
<td>16</td>
<td>25</td>
<td>33</td>
<td>29</td>
<td>26</td>
<td>28</td>
<td>16</td>
<td>17</td>
<td>20</td>
<td>29</td>
<td>18</td>
<td>279</td>
</tr>
</tbody>
</table>

Self Assessment Form: Core Competencies of Supply Chain & Logistics Management

<table>
<thead>
<tr>
<th>COMPANY FORM</th>
<th>Date</th>
<th>……../……/……</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Give each competency the Score you believe it equals to its IMPORTANCE to your enterprise' supply chain management (1 min - 5 max)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>2. Give each competency the Score you believe it equals to its EXCELENCE in managing supply chain in your enterprise (1 min - 5 max)</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Code</th>
<th>Ser</th>
<th>Competency Description</th>
<th>Competency IMPORTANCE</th>
<th>Competency EXCELENCE</th>
</tr>
</thead>
<tbody>
<tr>
<td>111</td>
<td>1</td>
<td>Identify which are the major decision areas regarding the purchasing &amp; supply function that are influenced by the corporate environment</td>
<td></td>
<td></td>
</tr>
<tr>
<td>112</td>
<td>2</td>
<td>Specify which are the main dimensions of the corporate environment that have an effect on the purchasing &amp; supply function</td>
<td></td>
<td></td>
</tr>
<tr>
<td>612</td>
<td>10</td>
<td>List three prerequisites to obtaining offers</td>
<td></td>
<td></td>
</tr>
<tr>
<td>711</td>
<td>11</td>
<td>Recognize the importance of negotiating and how it can contribute to increased effectiveness in purchasing and supply</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
Know the impact of inventory on the financial health of an enterprise

Map out where inventory accumulates in your organization

Explain what CRM is in terms of its key elements and purpose

Explain the need for CRM in terms of its significance in view of the changing business environment and customer’s role

**Recommended Modules for training**

**First Priority**

12. Measuring and Evaluating Performance

01. Understanding the Corporate Environment

04. Developing Supply Strategies

07. Negotiating
09. Managing the Contract & Supplier Relationships

Second Priority

05. Appraising & Short-listing Suppliers

15. E-Procurement

Third Priority

Grand Total

<table>
<thead>
<tr>
<th>SCM Competencies Self-Assessment</th>
<th>Code</th>
<th>Competency Description</th>
<th>Obj Competency Rate</th>
<th>Obj Competency Weight</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>411</td>
<td>Identify the main elements of your supply strategy</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>431</td>
<td>Know the meaning and implications of using the following 6 main types of buyer supplier relationships:</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>4311</td>
<td>Spot buy</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>4316</td>
<td>Joint ventures</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>432</td>
<td>Decide for the benefits and drawbacks of making a product or providing a service internally as opposed to purchasing it</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>461</td>
<td>Develop supply strategies for specific bottleneck items in terms of:</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>4614</td>
<td>- Operational strategies</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>471</td>
<td>Develop supply strategies for specific critical items in terms of:</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>4711</td>
<td>- Number of suppliers to use</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>4712</td>
<td>- Type of supplier relationships</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>482</td>
<td>Aware of the main issues relevant to purchasing commodities through commodity exchanges</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
The specific results that I have been able to achieve as a result of the MLS-SCM training programme include, but are not limited to, the following:

1) I have become actively involved at the early stages of the preparation of the requirements and specifications of the supplies required by the user departments of the MoE. This has helped in the drawing-up of specifications that allow effective competition. Previously, the use of brand specification was common owing to the lack of expertise in developing specifications of various supply requirements. Thanks to the courses that I took in the MLS-SCM training programme, we introduced a combination of technical and performance specifications, depending on the type of supplies required. Besides, my involvement in specifying requirements of service contracts, i.e. in the development of terms of reference (TORs) for consultancy services has greatly helped in better articulation of the contents of the TORs per se, which are developed in accordance with the templates of the various financiers of our education program; namely, the International Development Association (IDA), of the World Bank, the African Development Fund (ADF), as well as the European Union. The immediate outcome of this include the time required to clear the TOR by the respective financiers is shortened. Moreover, the terms and conditions of the consultancy contracts have become clearly defined, and this in turn helps avoid ambiguities on what is actually expected from the assignments.

In addition, I have been able to advise the technical personnel, who are directly involved in the preparation of the specifications and requisitions to initiate a procurement process for the required supplies, to take market conditions while drawing-up the specifications and budget estimate into account. To be specific in this case, I once suggested the requests to take the actual market price as a reference for the purchase of science laboratory equipment for secondary schools, and to do so I provided them with the prices of similar items procured under previous contracts. I am confident that this has enabled them to develop a rather realistic budget estimate, and it also became apparent that with the available budget that we can purchase three times the initially required quantity of these same items, and so was done. The impact of this was that we were able to optimize our requirements and obtain competitive prices as a result of the increased volume of the supplies.

2) I have introduced grouping/packaging of similar supply requirements of the various departments of the MoE that I am charged with to purchase in order to get economic advantage in purchasing those items. I would like to further elaborate this by providing a brief story regarding the procurement of science laboratory equipment for secondary schools. Initially a requisition was made by the concerned user department for biology, chemistry, and physics laboratories. The purchase was conducted, in line with the procurement procedures of the financier of the project (IDA), through an international competitive bidding (ICB) method of procurement. Once bids were opened and evaluated we came to realize that the sum of the offers of the two successful bidders was less than a fifth (1/5) of the estimated budget for this particular tender, thus there was budget available to be utilized for other purposes. As there was a need to equip other schools in the country, the MoE requested our office to initiate another procurement process to purchase similar goods with larger quantities.
To that end, two different proposals were made on how to go about with the second procurement. The first scenario was to procure additional lab equipment, which are equivalent in quantity to those already purchased from the two companies on a direct contracting basis – in which case the unit price remains unchanged – and then equip at least some of the laboratories as quickly as possible. This argument was supported by the fact that it was possible to do so as far as the World Bank procurement guidelines are concerned. Once this was done another competitive bidding could be conducted to purchase similar items with quantities that the available budget allows. The second scenario, which I proposed to the management of our project, was that, we should group together/package all the required items and quantities and initiate one big tender. I based my argument on the two main principles/hallmarks of public procurement, namely, economy and transparency. Hence, I strongly objected the first scenario as the issue of timing could be compromised to obtaining competitive prices and other benefits, and I insisted to go for the second one. Eventually, the management of our organization agreed with my proposal, and thus gave me the opportunity to prove the practicability of my argument. Accordingly, we initiated another procurement process through ICB, which proved to be economically much more beneficial. In comparison with the first proposal, I helped my organization to save US$ 31,522.09; only from the lot containing the biology lab equipment. Therefore, it can be said that on average our organization was able to save about US$ 95,000; only from the purchase price of those items – biology, chemistry, and physics lab equipment. This amount will be used to cover the budget constraints in other components of our program.

3) I started to apply the lessons from the training programme by clearly articulating the rights and obligations of the contracting parties. This included that stipulation of the need to receive shipping documents by the purchaser, before the supplies arrive at the port/airport of destination so as to avoid any delays in clearing them from the customs premises. Further, the consequence of not complying with these terms and conditions was clearly indicated in the contracts. Therefore, the contracts clearly specify that all expenses in relation to warehouse for the goods stranded in the ports/airports as well as demurrage for containers that could not be released due to the delay in receipt of shipping documents, is charged to the account of the supplier. As a result, we are now able to help our organization not to incur unnecessary expenses. There were some instances when demurrages accrued due to the delay in sending shipping documents, and these were charged to the account of the suppliers who paid or agreed to pay without any dispute or argument. This would have not been possible to achieve had we not clearly stipulated the condition in our contracts – it would have raised disputes between the parties at the minimum.

4) One of the innovative approaches that I have introduced in our organization is to purchase an insurance policy for inland transportation of supplies imported from foreign markets by sea freight, this is thanks to the lessons I have taken in Module 8: Preparing the Contract, where International Commercial Terms (INCOTERMS) are dealt with in detail. Prior to taking this training, no insurance coverage was made during the inland haulage to deliver the supplies to their final destination (i.e. from Massawa Port to Asmara), which is a distance of about 110 kilometres. In general, the goods used to have an insurance coverage until Massawa Port, since CIF Massawa is the commonly used INCOTERMS in our contractual agreements. Therefore, should anything happen to the consignment while being transported by trucks then the burden would have fallen on the shoulders of our organization. However, we have now managed to minimize this risk by introducing a system to purchase insurance policy for inland transportation. Thanks to the MLS-SMC training I have learned the concept of transfer of risks and costs in international transactions.

5) Finally, I found the MLS-SCM training programme inspirational in pursing my career as a purchasing and supply management expert, and in looking for other training opportunities; in this field of specialization. Hence, I am searching for training institutions that could provide programmes in supply chain management to further advance in this area.
ESDP procures goods, works, and services related to the Education Sector that are of diverse nature. The last six months have been particularly efficient because many pieces of procurements of photocopying services were relinquished and a new mechanism introduced that lumps together various procurement requests. Offers for a package for the procurement of photocopying services foreseen to be requested for six months to come were submitted in accordance with the instructions and requirements of the Request for Quotation (RFQ). The procurement of photocopying services by our organization, based on the information provided in the graph below, is a “BOTTLENECK” item.

**Graph 1: EU support – percentage of photocopying service**

It is a bottleneck item because it constitutes a small chunk of the overall expenditure of the organization (around 9%), yet it is crucial, since its absence would put in jeopardy any training, workshop, and programs.

All the formalities related to specifying requirements are, thus, provided priorities. The MLS-SCM® programme advises to “**invite a selected number of suppliers**”. I would, however, note that the efforts to obtain offers are more effective and efficient if we have a wider competition through wider publicizing.

In view of the concepts, techniques, ideas, and models taken from the aforementioned modules, I suggested lumping together various requests that we receive from all the Departments of the Ministry of Education.
As a result of the above mentioned changes, ESDP achieved the following quantifiable improvements and benefits:

1. **Cost:**
   In an attempt to measure the cost impact of the changes introduced, I have identified 37 photocopying services procured since 2008. During this period, an overall 1,316,477 A4 sheets of papers were photocopied at an average ERN 1.08 per sheet. In June 2010 we concluded a contract with a per sheet copying charge of ERN 0.79. This constitutes a 27% price reduction. As part of the contract, we have copied 1,983,284 papers in the second half of 2010 alone. Thanks to the newly introduced changes, we could save ERN 569,792.13, an equivalent to USD 37,986.14. Moreover, the tremendous administrative costs associated with 37 different procurements have been totally eliminated.

2. **Quality:**
   Quality photocopying services refer to provision of services per agreed specifications. Neatness and orderliness are measurable outcomes in such services. I conducted 15 telephone interviews with Directors (Division Heads) of the Ministry of Education, who regularly submit requests for photocopying services to our office. I asked the Directors if they are happy with the quality of photocopying services they are receiving from the company. Twelve Directors (80%) viewed the new service as being excellent and three (20%) as very good. According to the Directors, there were instances of delayed delivery and lower quality services before the new method was introduced.

3. **Efficiency:**
   Efficiency with respect to the foregoing procurement refers to the provision of the beneficiaries with the intended services at the right time and at the right place along with other supplementary services. The Directors mentioned above were also asked if they are getting the services on time. All of them (100%) responded they received the services on time.

4. **Availability:**
   Availability means timeliness in terms of providing the intended services and exclusivity for the task. All the Directors said that they are happy with the availability of the service provider.

5. **Responsiveness:**
   This item refers to the versatility of the service provider in terms of providing solutions to emergency situations. For example, the service provider has been instrumental in providing services even when called on short notice. Thus, it has been providing uninterrupted services, and all the Directors confirmed that the service provider is responsive.

6. **Customer Satisfaction:**
   Customer satisfaction is a measurement that is subjectively interpreted. It is more or less a culmination of the above mentioned improvements and benefits. Asked if they are satisfied with the services provided, the Directors unanimously responded that they are fully satisfied with the services provided.

In summary, the feedback I received from the interview of all division heads (beneficiaries) is shown in the graph on the following page:
The aforementioned benefits have been attained in the second half of 2010. Our organization, in its efforts to ensure sustainability, has recently launched another bidding process as we felt that the market price for photocopying services per paper (sheet) dropped to only ERN 0.67. As we are expecting to photocopy 2,200,000 papers, the saving would be 38% (ERN 831,761.16 or USD 55,450.74 for the coming year). This time the bidding considered the caveats that have been observed during the previous contract, and thus various precautionary instructions and provisions are incorporated that will further ensure sustainability.
The benefits I gained from my MLS-SCM training, have contributed towards a better performance in my career. In addition, the benefits helped my institution and myself in terms of minimizing expensive activities. Such activities are related to specifying requirements and preparations of Terms of Reference, supply market analysis, evaluation, negotiation, contract management, logistics, and inventory. These are all very important processes for the successful implementation of procurement activities if handled properly add value and make businesses cost effective. I participated in negotiations (as part of the negotiation procedure that the Practical Guide (PRAG) of the EU). I try to put in an adaptive contract management, such as in choosing less onerous INCOTERMS. While preparing Contract Dossier, I now pay attention to being meticulous in putting in all relevant conditions (legal, commercial, technical, financial, social, environmental etc). The training on SCM provided many enriched topics in well-designed modules. The contents were useful in preparing different manuals. Business Plan Manual, Performance Evaluation Manual, Negotiations Manuals, as well as others could be formulated by extracting the main points of the MLS-SCM programme modules.

Some of the outcomes are therefore as follows:

- I assisted the beneficiaries in the preparation of requisitions and ToRs. Requisitions are the starting point of any procurement. Providing beneficiaries with the required procedural information saves the time that it takes in getting approval to proceed to the next steps.

- My skills on identifying potential suppliers, consultants, contractors in different areas of specialization by segmenting markets, and setting criteria almost similar to that of “POCKET” enhances our efforts of procuring goods and hiring of consultants. Therefore, with the skills I gained from the training, I managed to have a database of shortlist of suppliers, consultants, service providers, and contractors.

- I prepare many bidding documents and Request for proposals, which are approved by the financiers who have to view them whether they are procedurally compliant. I am also involved in the evaluation of various offers, in selecting the least evaluated responsive bidder, and notify an award. My contributions in these regards are invaluable.

- I am involved in negotiations of many contracts in which I used the various strategies of negotiation, which I gained from the training on SCM.

- I prepare many contracts. In contract preparation one need to be proactive. Therefore, with that in mind, I prepare contracts that make life easier when managing them. As of now, I have prepared many contracts that are signed with suppliers and consultants in USA, Europe, Asia, and Africa. Their management have been smooth reflecting good supplier relationships. In addition, I hold numerous communications with agencies directly or indirectly involved in the management of contracts. Banks, clearing and forwarding agencies, local agencies, Insurance Companies, other ministries such as Ministry of Finance and Ministry of Information are some of these. The training that I received on contract preparation and management made me competent in getting contract agreements approved.
• With the training of SCM I became aware of the relation between procurement and environment. For procurement and its outcome to be sustainable, green procurement is important. It is with this perception that I, in as much as possible, procure goods that are environmentally friendly. Environment is given due consideration when procuring goods, starting from the inception of procurement in specifying requirements until it is to be disposed (from source to sink).

• Now in a technology age, businesses use Internet, and e-mail and other subsidiary technologies to facilitate procurement activities. In my case, though we are not fully involved in electronic procurement (E-Procurement), my involvement and usage of such technologies manifested by fast communication, tracing of messages and goods, are some of the manifestations of e-procurement that I am highly involved in.
Success Story: Eritrea – ENCC

By Kassa Mengistu Tesfamariam

Kassa Mengistu Tesfamariam works as a Market Research and Planning Officer for a Food Manufacturing Industry. He is a MLS-SCM® candidate with ENCC.

[Keywords: Agriculture, Multinational, Private Enterprise, Purchasing, Operations]

One of the areas where I made knowledgeable application of the MLS-SCM programme is when I proposed to establish a private MLS-SCM training institute. Starting a business is more difficult than sustaining it and, therefore, I was keen on finding out how to get to a viable start with the MLS-SCM training programme. By incorporating the strategy setting process, I identified many opportunities that the project would have, such as:

- It enters a non-competitive business environment where training institutes providing international professional training certification programs in the field of SCM are almost non-existent.
- In the long term, the number of people in need of this type of training will increase. This project could satisfy the needs of many professionals in the local market and there is potential for market growth with a growing number of businesses in need of professionals in the field of SCM.
- Its trainers are professionals in the field and very familiar with local business owners.

However, the potential threat is whether or not to get enough trainees willing and able to pay the offered price in order to at least break-even in the start-up phase.

Cost and price are key parameters; a cost/price model was developed based on factors that determined the price.

**Pie-chart – 1: - The Cost/Price Model**

Based on that, various options were developed and analyzed aimed at finding the best strategy.
**Option – 1:** Offer the cost-based quantity price break at 30 trainees per level

**Option – 2:** Offer the cost-based quantity price break at 20 trainees per level

**Option – 3:** Offer the cost-based quantity price break at 30 trainees per level but change the nature of the cost type from fixed to variable for a given time period

<table>
<thead>
<tr>
<th>Table – 1: Cost-based quantity price breaks</th>
</tr>
</thead>
<tbody>
<tr>
<td>Service: Training</td>
</tr>
<tr>
<td>Service features &amp; conditions</td>
</tr>
<tr>
<td>Option - 1</td>
</tr>
<tr>
<td>Option - 2</td>
</tr>
<tr>
<td>Option - 3</td>
</tr>
</tbody>
</table>

These options are then screened using:

- Break-even analysis
- Profit, and
- Potential impact on profit rating

- A break-even analysis is made and a break-even chart is constructed for each option:

**Break-even chart**

- **Option – 1:**

![Break-even chart](image-url)
Option – 2:

Profit is computed, a Profit chart is developed for each option and the result is presented below:

Option – 3:
Table – 2: - Determine Profit

Service: - Training; Market: - Asmara

<table>
<thead>
<tr>
<th>Service features &amp; conditions</th>
<th>Break-even trainees/level</th>
<th>Margin of Safety/level</th>
<th>Profit per level</th>
</tr>
</thead>
<tbody>
<tr>
<td>Option - 1</td>
<td>20</td>
<td>10 trainees</td>
<td>ERN 22,534.20</td>
</tr>
<tr>
<td>Option - 2</td>
<td>14</td>
<td>6 trainees</td>
<td>ERN 18,138.60</td>
</tr>
<tr>
<td>Option - 3</td>
<td>10</td>
<td>20 trainees</td>
<td>ERN 22,534.20</td>
</tr>
</tbody>
</table>

PROFIT CHART

A potential impact on profit rating was constructed:
- If break-even trainees out of the target trainees are < 10%................. N
- If break-even trainees out of the target trainees are 11% - 35%....... L
- If break-even trainees out of the target trainees are 36% - 60%........ M
- If break-even trainees out of the target trainees are >61%.............. H
Table – 3: Determine Potential Impact on Profit (PIP)

<table>
<thead>
<tr>
<th>Service features &amp; conditions</th>
<th>Break-even trainees out of the target trainees</th>
<th>Potential Impact on Profit rating</th>
</tr>
</thead>
<tbody>
<tr>
<td>Option - 1</td>
<td>67%</td>
<td>H</td>
</tr>
<tr>
<td>Option - 2</td>
<td>70%</td>
<td>H</td>
</tr>
<tr>
<td>Option - 3</td>
<td>33%</td>
<td>L</td>
</tr>
</tbody>
</table>

Once screened, the options were compared in terms of the number of trainees for break even, profit, and potential impact on profit if trainees can’t be found at and above the break-even point.

<table>
<thead>
<tr>
<th>Option - 1</th>
<th>Option - 2</th>
<th>Option - 3</th>
</tr>
</thead>
<tbody>
<tr>
<td># of trainees for break-even</td>
<td>20</td>
<td>14</td>
</tr>
<tr>
<td>Profit</td>
<td>ERN 22,534.20</td>
<td>ERN 18,138.60</td>
</tr>
<tr>
<td>Potential Impact on Profit rating</td>
<td>H</td>
<td>H</td>
</tr>
</tbody>
</table>

Thus, a selection is made and option 3 is selected as a strategy determining the best way forward in achieving the stated objective by alleviating the potential threats identified.

The selected option has the following characteristics:
- Breaks-even earlier than the other options and requires a minimal number of trainees to start-up the training at all three levels.
- The potential impact on profit in case trainees can’t be found at and above the break-even point is very low as compared to the other options.
- The margin of safety before experiencing a loss is wider than with the other two options.
- The profit is higher until the programme reaches a steady growth, meaning 16 trainees at all three levels.
- The same cost incurred as with option 1 and 2.

Finally, to successfully implement the selected option as a strategy requires prioritizing activities towards that end. One of the major activities is making arrangements to persuade the core factor, the trainers, to the option selected. For example, instead of paying trainers a fixed amount per course and level, paying them per trainee per level is better.

**IMPACT:** The impact of incorporating the model results with the best strategy has enormous benefits. Some are listed below:
Since each trainer feels as partner of the programme he works to maximize his/her leverage; the training programme is better promoted.

Trainers’ belonging and devotion to the programme develops and creates quality service.

“Cash users” become “Cash generators”.

With a given cost and price, signify how to leverage a programme.

Program’s sustainability is ensured as all parties have a vital role to play.

Eliminate the uncertainty regarding the number of trainees willing and able to pay for break-even at all three levels.

Build confidence in starting-up a viable MLS-SCM Training programme at all three levels.

The model presents various options to signify which one to be followed as a strategy in the long-term.

Last but not least, it might serve as means of information sharing among network members in alleviating difficulties that arise in start-up phases.
Since I have taken the MLS-SCM programme, I can now imagine the wide range of its incorporation within my organization. Here below follows two of the applications that I have done.

- The first incorporation was the application of the Supply Positioning Model (SPM) into the organization. This served as a base in implementing the scope of activities undertaken by the Purchasing and Supply function.

In preparing the Supply Positioning Model for Red Sea General Mills, what I have done is:

**Step-1:** List all the organization’s operational requirement for production and non-production;

**Step-2:** Formulate groups for the purchase requirements based on their similarities and as a result created about eight groups, namely raw-material, packing material, stationary, electrical parts and components, cleaning and sanitation, building materials, components and spare parts, and fuel oil and lubricants.

**Step-3:** Analyze the annual purchase expenditure of each item in a group based on the usage value and thereof the group:

<table>
<thead>
<tr>
<th>RANK OF PURCHASE EXPENDITURE</th>
<th>GROUPS</th>
<th>AVERAGE NUMBER OF EACH GROUP OUT OF THE TOTAL IN %</th>
<th>PURCHASE EXPENDITURE OF EACH GROUP OUT OF THE TOTAL IN %</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>RAW-MATERIALS</td>
<td>5%</td>
<td>97%</td>
</tr>
<tr>
<td>2</td>
<td>PACKING MATERIALS</td>
<td>7%</td>
<td>2%</td>
</tr>
<tr>
<td>3</td>
<td>COMPONENTS &amp; SPARE PARTS</td>
<td>7%</td>
<td>0.44%</td>
</tr>
<tr>
<td>4</td>
<td>ELECTRICAL PARTS</td>
<td>16%</td>
<td>0.23%</td>
</tr>
<tr>
<td>5</td>
<td>BUILDING MATERIALS</td>
<td>29%</td>
<td>0.15%</td>
</tr>
<tr>
<td>6</td>
<td>FUEL OIL &amp; LUBRICANTS</td>
<td>5%</td>
<td>0.07%</td>
</tr>
<tr>
<td>7</td>
<td>STATIONARY</td>
<td>21%</td>
<td>0.06%</td>
</tr>
<tr>
<td>8</td>
<td>CLEANING &amp; SANITATION</td>
<td>10%</td>
<td>0.05%</td>
</tr>
</tbody>
</table>

**Step-4:** Using Pareto’s 80/20 Rule, I arrived with the result that:

- 19 % of the groups take about 99.44 % of the annual purchase expenditure of the organization, while
- 81 % of the group take about 0.56 % of the annual purchase expenditure of the organization.

**Step-5:** Analyzing the impact that each purchase group has on the organization in terms of supply targets:
### TABLE-2: IMPACT ANALYSIS

<table>
<thead>
<tr>
<th>Purchase group</th>
<th>Quality</th>
<th>Availability</th>
<th>Responsiveness</th>
<th>Cost</th>
<th>Overall impact</th>
</tr>
</thead>
<tbody>
<tr>
<td>Raw materials</td>
<td>M</td>
<td>H</td>
<td>H</td>
<td>H</td>
<td>H</td>
</tr>
<tr>
<td>Packing materials</td>
<td>M</td>
<td>L</td>
<td>M</td>
<td>L</td>
<td>M</td>
</tr>
<tr>
<td>Components &amp; Spares</td>
<td>M</td>
<td>H</td>
<td>H</td>
<td>M</td>
<td>H</td>
</tr>
<tr>
<td>Electrical parts &amp; spares</td>
<td>L</td>
<td>L</td>
<td>L</td>
<td>L</td>
<td>L</td>
</tr>
<tr>
<td>Building materials</td>
<td>N</td>
<td>L</td>
<td>N</td>
<td>N</td>
<td>N</td>
</tr>
<tr>
<td>Fuel oil &amp; lubricants</td>
<td>L</td>
<td>L</td>
<td>L</td>
<td>L</td>
<td>L</td>
</tr>
<tr>
<td>Stationery</td>
<td>N</td>
<td>N</td>
<td>N</td>
<td>N</td>
<td>N</td>
</tr>
<tr>
<td>Cleaning &amp; Sanitation</td>
<td>N</td>
<td>N</td>
<td>N</td>
<td>N</td>
<td>N</td>
</tr>
</tbody>
</table>

**Step-6**: Analyzing the supply risk of each purchase group in their respective supply market:

#### TABLE-3:- SUPPLY RISK ANALYSIS

<table>
<thead>
<tr>
<th>Purchase group</th>
<th>Supply risk rating</th>
<th>Reason</th>
</tr>
</thead>
<tbody>
<tr>
<td>Raw materials</td>
<td>H</td>
<td>Seasonal in nature</td>
</tr>
<tr>
<td>Packing materials</td>
<td>M</td>
<td>Available but a need for tailor-made</td>
</tr>
<tr>
<td>Components &amp; spares</td>
<td>H</td>
<td>Subject to sole supplier</td>
</tr>
<tr>
<td>Electrical parts &amp; spares</td>
<td>N</td>
<td>Standard and off-the-shelf</td>
</tr>
<tr>
<td>Building materials</td>
<td>N</td>
<td>Are abundant and easy to source</td>
</tr>
<tr>
<td>Fuel oil &amp; lubricants</td>
<td>N</td>
<td>Are standard and available from well-known suppliers.</td>
</tr>
<tr>
<td>Stationary</td>
<td>N</td>
<td>Standard items with a wider supply options</td>
</tr>
<tr>
<td>Cleaning &amp; sanitation</td>
<td>N</td>
<td>Are abundant and easy to source.</td>
</tr>
</tbody>
</table>

**Step-7**: Combining the balancing factors, expenditure vs. impact and supply risk, come up with the module for the organization and thereof the category to which each group belongs:

#### TABLE-4:- CATEGORY OF EACH GROUP

<table>
<thead>
<tr>
<th>CATEGORY</th>
</tr>
</thead>
<tbody>
<tr>
<td>ROUTINE</td>
</tr>
<tr>
<td>GROUP</td>
</tr>
<tr>
<td>- Electrical parts &amp; spares</td>
</tr>
<tr>
<td>- Building materials</td>
</tr>
<tr>
<td>- Fuel oil &amp; lubricants</td>
</tr>
<tr>
<td>- Stationary</td>
</tr>
<tr>
<td>- Cleaning &amp; sanitation</td>
</tr>
</tbody>
</table>

➢ The second incorporation is to share with and give training to colleagues based on the knowledge that I got from the MLS-SCM Programme. The first of such kind that I prepared and conducted in local language for such end use was “Basic concepts of Warehouse and Inventory”. This was meant for store heads and their assistances. It is prepared in a way to be much more relevant and incorporate practical application of the subject matter to their work place. Such training aims to enhance the expertise and performance, contributing to the overall competitiveness of the organization.
The training is made to comprise issues of the following:

- The first part of the training to cover issues related to Warehouse: The means and needs of Warehouse; Objectives for Managing Warehouse; Functions of Warehouse; and Evaluating warehouse performance;

- The second part to cover issues related to Inventory: The means of inventory and managing inventory; the importance of managing Inventory; types of Inventory and reasons for holding them; impact of inventory on financial health of the organization; inventory valuation method; inventory categorizing method; types of stock replenishment techniques; Inventory placement method, and evaluating inventory performance;

- As much as possible, incorporate practical application to each issue raised;

- I adopted Pareto’s 80/20 rule in managing the training and I found that 20% of the issues raised took me 81% of the eight hours I apportioned to the whole training. These issues are vital and required a more effort in designing a practical application. These issues are: types of stock replenishment system; inventory categorization method; and types of inventory and reason for their stocking;

- I came up with findings that two of the four stock replenishment systems are applicable to our raw-material store. These are:

  1. **Re-order level stock replenishment system**: This applied to raw-wheat. The reason is that its product, flour, has a constant demand throughout the year. As a result:

     - The Economic order Quantity (EOQ) is at about 12% of the annual wheat requirements.
     - The level that triggered for re-order is at about 18% of the EOQ.
     - There also graphical presentation of the outcome of the system.

  2. **Periodic review stock replenishment system**: This applied to semolina. The reason is that its product, pasta, has a demand that varies throughout the year. Hence,

     - The EOQ is at about 21% of the annual semolina requirements.
     - The periodic review for such raw material has to be every two months and two weeks.
     - It is applicable to the other raw-materials used as ingredients in the production of baby food.
     - There also graphical presentation of the outcome of the system.

Using the ABC System, one of the two inventory categorization method, to our raw material store, I came up with the findings depicted below.

- Those raw materials account for 40% - 50% of the total usage value/ total annual purchase expenditure and accounts for 15% - 30% of the total raw materials are classified as Class A. In this case the raw materials-Semolina and Wheat.
- Those raw materials account for 1% and below of the total usage value/total annual purchase expenditure and accounts for 40% of the total raw materials are classified Class C. In this case the raw materials-vitamin and mineral mix and iodized salt.
- Those raw materials account for 20% - 10% of the total usage value/total annual purchase expenditure and accounts for 15% - 30% of the total raw materials are classified as Class-B. In this case the raw materials Groundnuts and Chickpeas.

I incorporated graphical presentation as a means to brief and to explain in detail for each type of inventory in relation to the organization’s raw materials and their corresponding products in the heading “Type of Inventory and reasons for their holding”.

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Abrahaley Kidane Weldeab works as Procurement Officer at the Eritrean Education Sector Development Programme – Programme Management Unit (EESDP-PMU) of the Ministry of Education. He is a MLS-SCM® candidate with ENCC.

Keywords: Education, Multinational, Public Organisation, Purchasing, Operations

There are many tangible and intangible improvements and benefits achieved by our organization driven by the MLS-IPSCM training programme. Following are a few brief improvements and benefits achieved by our organization as a result of the above changes:

- Previously, our organization had looked for all possible suppliers to meet their needs for all purchase items, leading to heavy administrative costs and long lead times. However, thanks to Module 4, Purchasing strategy, I realized that we have to review our approaches to the supply strategy to reduce supply costs, leverage purchases with the suppliers and guarantee availability. To avoid the time and cost associated with negotiating with many individual suppliers, I made use of the supplier positioning model to manage the routine items such as stationery materials, photocopy and clearing agent and other similar items and services that were standard and required frequently by the ministry. I suggested and applied the supply positioning model and set up a term contract - call-off contracts, covering as many of our routine purchases as possible. This model greatly helped our organization minimize our effort in re-tendering, evaluating and negotiating the contracts with many individual suppliers, and the cost associated with switching suppliers. This item grade selection based on the Supply Positioning Model and focused on developing its supplier relationships has been an improved process for selecting and working with suppliers; supply lead times were reduced by 50% and we achieved substantial cost savings. These initiatives and support of my colleagues, improved not only our finances, but lots of effort and time were saved, too. This has allowed us to concentrate more on urgent and important issues while delegating other non critical issues to subordinates and end users which maximizes the resources available without decreasing the service levels given to the ministry. Therefore, this is a big success to the procurement section in general and to me in particular. This improvement has a great impact to my organization and will keep giving the maximum benefit by maintaining the optimum effort and reducing my organization’s total purchasing and supply cost.

- We have purchased teaching aid materials for the secondary schools in 2008. There were five bidders who submitted their offer before the deadline. The Bid Evaluation Committee (BEC) found out that four of the bids quoted costs similar to the available budget of the Ministry. Only one of the bids quoted significantly below the others. Its bid was about 1/5\textsuperscript{th} below the other four bid prices. Though the technical specification of the lowest evaluated bidder was exactly the same as our specification in the bid document, its bid price did not reflect the market condition of that time. BEC discussed and decided to award the contract to the bidder with the lowest evaluated bid. I insisted the BEC questioned the extreme low price quoted by the bidder and recommended to make a pre-shipment inspection, which was part of the conditions stipulated in the bid document. On my insistence the BEC decided to send a team to undertake a pre-shipment inspection and found that the bidder was neither technically nor commercially compliant in terms of its preparations, company’s manufacturing capacity, and the materials produced were of poor quality. Therefore, the contract was awarded to the next bidder with the least price.

This way, our organization procured materials of good quality and I have been able to save about USD 76,000.00. Thanks to the training I received through the MLS-SCM programme, especially through Module 6 - Obtaining &
Selecting Offers, and Module 9- Managing the Contract & Supplier Relationships. I have been able to step in in many cases where my organization has been exposed to risks that could be prevented or at least their exposure minimized. The knowledge that I gained from this programme was a great strength for me and my organization and we were able to achieve the above benefits.

- I introduced the concept of sharing experiences, skills and knowledge with my colleagues and with staff from cross-functional teams of our organization, based on the MLS-SCM training programme. The aim was to improve the knowledge and understanding of the supply chain management and increase their performance in overall purchasing and supply management of the organization. The introduction and continual sharing of our skills, knowledge and experience about the MLS-SCM programme in our organization has given our staff an awareness of future possibilities in supply chain management. This was well recognized and appreciated by the higher management team. I hope that in the future I will do my best to continue contributing my experience, skills and knowledge I gained from this programme to the benefit of all staff in my organization, my friends, and others, both from public and private enterprises. I use this opportunity to market and promote the MLS-SCM training programme. Many of the participants have shown a strong interest in the training and want to improve their knowledge in this area.

With the current global economic crises, I found that the MLS-SCM programme was the right choice to build capacity and get a truly international experience of learning about the best practices in purchasing, procurement and supply chain management.
Success Story: Ethiopia – Business Creation and Development (BCaD)

By Tigist Koru

Tigist Koru works with Sunshine Construction PLC in Addis Ababa. She is a MLS-SCM candidate with BCaD.

[Keywords: Construction, SME, Private Enterprise, Operations, Purchasing]

In Ethiopia most companies did not give much attention to this department, and Sunshine Construction is also same like the other company. A company at its beginning stage of the business the owner knows all the movements and the purchasing items and all decision is made by him like he did it now. Any business at its beginning stage it is easy to control but when it comes at maturity stage much attention must be given and there must be a good system to apply and company must concentrate on how can I compete with others and how can I stay at this stage.

In Sunshine Construction we don’t have procurement manual, policy and procedure normally what we use is the purchase cash limit government rule but for other things we don’t have a system. In sunshine starting the owner they didn’t give much attention for the acquisition and supply of item but in construction the main cost lay in this department and finance.

First of all we didn’t use position model or putting the item by their categories. Because of that it is difficult to prioritize the purchased item and give much attention for it. However, thanks for the training I took at B-cad it help me a lot. In our company every department ask their need but what I do is before the training by discussing with the requesting department I set simple not systematic prioritizing but our company owner decision in prioritizing the purchased item is always towards the techniques department because the old staff have power to persuade the boss because of that we have problem.

After taking the training what I did was having all request from all department and organizing by its type without asking the department but what I ask them is detail specification and the use of the material that help me to categorize and prioritize the item after that according to the priority we buy the item that help us a lot. Therefore, this brings one step change.

The other thing what I get from the training is method or tactic of handling the supplier especially for bottleneck and critical item I applied and the supplier impressed at me. For our company fuel is important and critical item and we have account manager from the supplier side and I will always communicate with him and always when we communicate I always appreciate their performance and quality product they have and in addition to the fact that they know how our company is attractive to them. I also guaranty and give my word then our account manager always says that you are important and good for your company as well to us ok even if you don’t pay your credit we expect the payment within two weeks and they release the fuel. After that I push the company to pay on that day. Therefore, this lesson helps me a lot for different aspect. But now since March 15, 2010 I change my job to Morrell Agro Industry and it is a new company and they expect me to do a lot so the training might help me their too.
Success Story: Ethiopia – BCaD

By Desta Yilma

Desta Yilma works with SETS GENERAL TRADING P.L.C. in Addis Ababa. He is a MLS-SCM candidate with BCaD.

[Keywords: Construction, SME, Private Enterprise, Operations, Purchasing]

Sets General Trading, is a family-based medium-sized enterprise, which considers its core business in the construction sector. Sets manufactures and installs door and windows for buildings, and supplies and installs other related finishing materials.

My role is to head the Engineering Department, and represent the department in the management team. Thanks to the MLS-SCM programme, from Module 1, I started implementing what I learned in to our enterprise. I thought to myself: Is this programme tailored for our organization or what? It was clearly showing us our wrong-doings and the ways to correct them.

As I mentioned above, this family-based enterprise is led by the General Manager (owner), Co. General Manager (brother of owner), and three Deputy General Managers (who are son and daughters of the owner). The company has a well designed hierarchical organizational structure, but it was very difficult to adopt the clearly mentioned responsibilities. Decisions were not centralized and came from different directions, which confused most of the employees. There was also duplication of purchase or operation orders authorized by the management. I was able to convince the higher management team explaining the pros and cons of different kinds of organizational structure, and the one we are following is applicable to our organization, but only if we let the job to be handled with assigned persons and let him or her report their work progress frequently. It will be difficult to go out of the trained culture immediately, but we have seen a lot progress and created a healthy working environment.

Let me come to the main accomplishment I have gained through this programme. I know I can achieve a lot; starting from the store management I made a significant change to our organization on utilization of over-stock raw materials and accessories. As we have not yet formed an official supply chain team, which eventually should be incorporated into our organizational structure, I organized a team of four (two from the engineering section, and two from the finance department) to perform a value analysis and value engineering structured approach to obtain an optimum solution on the existing over-stock raw materials and accessories, valued over 37 million Birr. Out of this, 26 million Birr stock is for recognized on-going projects, and 6 million Birr is for a three-month stock items that runs the day-to-day activities, and the remaining were just rolling-over from time-to-time unutilized.

We were able to identify over 3,000 line items raw materials and accessories in a Supply Positioning Model, which allowed us to weigh the relative importance of our stock, and helped us to prioritize our effort in developing strategy. Previously, the raw materials and accessories, which are critical items, were purchased through the finance department by taking the individual engineer request for granted, without counter-checking with the stock we have at hand as we do orders project by project. We felt this was incorrect, and devised a system that every concerned department like engineering, finance, and store and off course the new department that will handle the purchasing should agree on the inward supply of materials and accessories. If by any chance materials or accessories are left-over from a completed project, then the items should be converted to a usable stock immediately.
• 2.4 million Birr worth of material and accessories were converted to usable stock by assessing different projects. These items were tied up under the completed project and just rolling-over from time to time. This in effect will reduce the next regular order by a certain figure, which cannot be applied entirely on the next order, but through time may be fully liquidated.

• Obsolete or unutilized materials and accessories worth over 0.8 million Birr were segregated (i.e., shutter, louver accessories), and their profiles are old-fashioned and the demand is almost negligible and sold as is basis to a local market.

• Some old, unbalance profiles in stock were re-engineered to serve as alternate profile by trimming, cutting and slicing the profile to change its shape to a usable profile, and add them to a line-up for production. Their value were around 0.45 million Birr.

• Old profiles that cannot be converted as alternate materials, as well as scratched and damaged profiles, were sold as scrap to generate 0.25 million Birr.

• We identified over 1 million Birr in raw materials and accessories, apart from those we gained from assessing different projects as over-stock materials and accessories, which, in subsequent orders, we have to consider this items to reduce our coming order quantities.

Generally, even without forming the supply chain management with this temporary team we could save the enterprise a substantial amount of money. All the higher management agreed that this department should be formed, and be a part of the organizational structure, so as to function properly.
By Merid Mulugeta

Merid Mulugeta works with Myung Sung Christian Medical Centre in Addis Ababa as Purchasing and Logistics Officer. He is a MLS-SCM candidate with BCAD.

[Keywords: Health Care Services, SME, Private Enterprise, Operations, Purchasing]

I try to apply the training I received, on the procurement of locally purchased, printed items. The printing items are an advantage to have in the hospital.

To apply for a call of contract for one year, I selected a bid by inviting nine printing presses to give their price for 25 of the printing items. Through the technique of obtaining and selecting offer and suppliers selection method, I made a call of contract with one printing press for one year, which fulfilled our requirements and supplied the target company a name called Amanuel Printing Press. I was able to minimize the overall expense by 25% annually.
Success Story: India – Indian Institute of Materials Management (IIMM)

By Vikas Bhure

Vikas Bhure works with Cummins India Limited, Pune, as the Deputy General Manager. He is a MLS-SCM candidate with IIMM.

[Keywords: SME, Private Enterprise, Operations, Logistics]

MLS-SCM programme has really helped me in my job.

After joining the course when we faced a serious problem in procurement of one of the “C” series engine parts (Valve Cover). I applied all that I studied in a systematic way, and achieved the following results:

- Eliminated recurring quality problems which was regular irritation of the plant
- Eliminated rework and retesting of engines, which was non-value adding extra work on engine
- Cost avoidance of investment for making new dies worth Rs 30 lakhs (USD 60,000)
- Salvaged non-moving material worth Rs 7.5 lakhs (USD 15,000)
- Effective utilisation of idle assets worth Rs 25 lakhs (USD 50,000)

The work was recognised by the Plant Head and General Manager – Operations, as well as the Deputy General Manager – Quality, for improving quality, cost saving and elimination of non-value added work.

Below is a copy of the project:

Feedback from Plant Head on the Project

Rajneesh Sah
General Manager - Operations
3 June 2009

The project completed by you on Standardisation of Valve cover has given immense benefit to Plant II.

This project not only has given an opportunity for improvement in quality but also a major Cost Reduction and Inventory Reduction.

By this project we have been able to achieve a major improvement in arresting C series leakage. This has resulted in ZERO customer irritation and ZERO leakage in testing improving test cell utilisation and reduction in diesel consumption. We have been able to eliminate 100% inspection which was required for the old valve covers.

We could utilise around 900 units of Auto Valve covers which were lying as dead inventory. We could save a huge investment of more than 25 lacs for the die of Valve cover.

Thanks for completing this project on way footing as it has reduced our worries about both Quality and Quantity.
Feedback from Quality Head on the Project

After implementation of the Automotive breather cover in genset application we have overcome quality issues related to:
1) Casting defects
2) Improper sealing

Both the above issues led to leakages during engine testing and also in field. Till date after implementation we have not come across leakage during testing and even field results are encouraging so far (though it is very easy to comment on field results).

The efforts taken by you are really appreciable and am sure this problem is resolved from root.

Ms Kavita Kaushik
Deputy General Manager – Quality
25 May 2009
Success Story: India – IIMM

By Ganesh Apte

Ganesh Apte works as a Purchasing Manager. He is a MLS-SCM Trainer and National Secretary and Treasurer with IIMM.

[Keywords: Household & Personal Products, Local Large Enterprise, Private Enterprise, Operations, Purchasing, Logistics]

1. My previous employment was in FMCG and the Company was the third largest manufacturer of toothpaste in India. We used to procure 10 million tubes every month of various sizes and brands. As per the traditional purchasing system, requirements of 10 million lami tubes were distributed amongst the three suppliers. During this period there were a lot of hassles faced. Suppliers used to dictate terms, always insisting for longer lead times of four to five weeks (and were still late in supplying), and suppliers would insist on a minimum order quantity of 100,000 tubes per sku (while the response for quality issues was poor).

2. Subsequently it was decided to enter into partnership with one supplier, assuring them 80% of the requirement. This has resulted into various benefits such as:
   a) Price reduction in tubes around 7 %
   b) Reduction of Lead Time from 4 weeks to 2 weeks
   c) Minimum quantity reduced from 100,000 to 30,000
   d) Reduction is lead-time for new product development from 45 days to 21 days.
   e) Task Force for improving quality, cost reduction, service improvement was set up, which included employees from both organizations.
   f) Quarterly meetings were held to discuss various issues and monitor progress.
   g) There was annual performance appraisal meeting lasting a whole day, followed by party in the evening.
   h) The change in the working relationship was noticed very much at various levels.
   i) Response was faster.
   j) The involvement of top management, including the Managing Director made a difference.
   k) It was a really good experience to enter into a partnership.

I have shared my experience with participants of MLS Training programmes, which were appreciated very much, and highlighted the importance of new tools and techniques, which we discuss in MLS programmes.
I work as a Strategic Purchasing Manager India in Rohm and Haas in their Mumbai office. I devise and implement strategies for various raw and packing materials, and I buy and use the Michael Porter Model for source selection, and the strategic sourcing tool for devising strategies for handling the items falling under various quadrants of Supplier Positioning Model.

In 2008, we at Rohm and Haas could achieve a total saving of US $665,917 (INR 33.2 Million) in the Indian entity from purchase function. Of this 117 KUS$ is cost avoidance and US $549 is cost savings. This amount was added to the company’s bottom line.

Based on the success last year, this year for 2009 we have taken a stretched saving target of US $1,000,000 (INR 52.0 Million)
Success Story: India – IIMM

By Mr. Sadri

Mr. Sadri is the Deputy General Manager of Materials & Quality Management, Shapoorji Pallonji & Co. Ltd. He studied the MLS-SCM programme with IIMM.

[Keywords: Construction, Local Large Enterprise, Private Enterprise, Operations, Purchasing]

Constructing supply chain management capacities in India

Shapoorji Pallonji & Co. Ltd. (SPCL) is one of India’s oldest construction businesses and brings almost 140 years of experience and quality workmanship. Our company has been the beneficiary of an ITC MLS-SCM Programme conducted on 25 & 26 June 2003 by the Indian Institute of Materials Management (IIMM).

We found the very structured programme contents of the modules of great benefit to our participants. It is also visible in their applying their newly acquired skills in their respective works places.
Success Story: Indonesia – Pusat Pengembangan Manajemen Pengadaan Indonesia (PPMPI)

By Muhammad Basir

*Muhammad Basir works with PT Aneka Tambang Tbk. (ANTAM) as Senior Manager Supply Chain Management. He is a MLS-SCM candidate with PPMPI.*

*Keywords: Mining and metals, Local Large Enterprise, Private Enterprise, Operations*

After we attended series of MLS workshops, ANTAM improved its policy and procedures and changed the procurement function to become SCM. We did change the SCM organization structure to make it more flat and promote specialization to its staff. Finally, we adopted an e-Procurement software to automate all our procurement and material management processes. Overall, ANTAM did total procurement restructuring program as part of company goal to operational excellence.

After two years of the improvement program we achieve the following results:

**A. Tangible**

1. Reducing procurement lead-time process up to 50 %;
2. Get better offerings and more competitive prices more than 10 %;
3. Reduced procurement costs up to 40 %; and
4. Obtaining more than 5 % of the contract price through more effective contract negotiations.

**B. Intangible**

1. Better management of the contract and supplier relationships;
2. Transparency and fairness processes;
3. Reduced clerical work and promote more analytical activities;
4. Easy to measuring and evaluating performance process and vendors performance;
5. Better way of short-listing the suppliers;
6. Managing inventory for routine stock by long-term strategic contract;
7. Better negotiating skill;
8. Better satisfaction level on users and vendors; and
Success Story: Indonesia – Prasetiya Mulya Business School (PMBS)

By Kho Viminyaty

Kho Viminyaty works with PT Capsugel as a Supply Chain Manager. She is a MLS-SCM candidate with PMBS.

[Keywords : Local Large Enterprise, Private Enterprise, Operations, Supplier Management, Purchasing]

The leverage items for our company are carton box as packaging materials. Prior having the knowledge from the training at Prasetiya Mulya Business School, we purchased only from one preferred supplier which we usually purchased from. We have to follow every policy from the supplier, being either price increases or postponed delivery schedule. After training, I learned that carton box packaging materials are a leverage item, since it is easily available from many suppliers, and the value of the contract is high. The dimensions of carton boxes, and the printing on the carton boxes are customized to our requirements, but the specifications of the thickness of the paper are standard.

Based on the quantity we require for the next year, we collected three suppliers from our approved vendor list, based on our requirements including:

- Total quantity in contract
- Delivery schedule: weekly with certain quantity
- Delivery requirement: documents attached with every deliver
- Quality conformance to our purchasing specification
- Stocking keeping as buffering for two weeks. Since our request for delivery is weekly
- Payment condition

With this knowledge and implementation, average cost saving we accomplished was 17.6 %

We evaluated the annual vendor performance, based on the quality conformance to specification, on time delivery and responsiveness. We also conducted the audit and site inspection to vendor’s facility to assess the supplier’s commitment to the contract requirement; the stock keeping for our needs in particular.

The contract is renewed yearly, based on the vendor performance and company requirements.
Managing supplies of spare parts for tractors in Indonesia

I work as a Parts Marketing Manager at PT United Tractors Tbk in Indonesia, followed the MLS-SCM programme run by Prasetiya Mulya Business School in Jakarta.

The topics I found most relevant to my work included analysing supply markets, developing supply strategies and obtaining and selecting offers.

I was able to apply the Supply Positioning Model, which I learned during the course, to the selection of suppliers for the company.

Previously, the company had looked for all possible suppliers to meet their needs for all purchase items, leading to heavy administrative costs and long lead-times.

The company changed to item grade selection based on the SPM, and focused on developing its supplier relationships.

The result has been an improved process for selecting and working with suppliers, supply lead-times reduced by 75% and substantial cost savings.
Better inventory management to make meters in Indonesia

I work as a Purchasing Manager at PT Mecoindo-Actaris – a company manufacturing electric meters, water meters and testing equipment in Indonesia – followed the MLS-SCM programme run by Prasetiya Mulya Business School in Jakarta.

The topics I found particularly useful to the company I work for included developing supply strategies, managing inventory and measuring and evaluating supply performance.

As a result of applying what I learned in the course, my company adopted the ABC classification and review system for its inventories and the Supply Positioning Model for its purchases.

It also initiated in-depth analysis of high value inventory items and adopted a blanket ordering system, consignment stocks for imported items and Kanban delivery for certain local items.

Average inventory and associated costs were reduced significantly; supply availability was improved through supplier partnerships; and the company was able to secure much better prices for its purchases of commodity materials.
Success Story: Malaysia – Mapics Consultancy

By Tan Shiao Hui

Tan Shiao Hui works with Agilent Technologies, Penang, Malaysia. She is a MLS-SCM candidate with MAPICS.

[Keywords: Technology, Hardware, Private Enterprise, Operations, Supplier Management, Purchasing]

- For example, when issuing a PO, one must understand exactly what the end user want (such as the brand, the size, colour, delivery date, etc), and should not made any assumption.

- It also helps to understand how important our roles and accountability. We are the bridge between the internal customers and the external suppliers, if we did not pass the specific requirement to the supplier, we might receive wrong parts and hence we will spend a lot of time in disputes and order replacement. This is time consuming and ruins the relationship.

- Besides, we also need to do some pre-work and have contingency plan in mind, just in case of any eventualities. By doing this, we can help on the cost saving, on time delivery and hence achieve customer satisfaction.

- The rating metrics is very useful for us to choose which product, which we need to focus on. For example, we can plot the chart for one of the LLM (Lower Level Material, such as resistor) and study on which supplier can provide us best cost with min requirement.

- We will be able to identify which product is fall under cash cow, star, question mark and dog category in the PLC. This helps us to focus and strategies the action plans.
Enterprise requirements planning and materials requirements planning are complicated tools. However, with the ITC tools and techniques, the problem solving has been made easier for the team. In Module 1 Porter’s value chain illustrated the primary activities and supporting activities to achieve the right margin. Supposing the margin is lesser than 8%, a manager has to review the primary activities that require Just-in-time (JIT) implementation. Supported by Module 2, companies could use forecasting techniques to project future seasonal performance using time series.

In the event of conflict to leadership, Module 7 negotiation allows the team members to use negotiation zone to determine the needs. Module 7 allows contract to be written and post-contract management becomes efficient using Module 9. The tools and techniques of project management allow the negotiation goals to meet its time, cost and quality criteria.

Module 12 supply chain management key performance indicators allow students to use the appropriate indicators to measure Company’s performance. The use of Balanced Score card in Module 12 allows the students to align the four perspectives with the company vision. Without the alignment with mission, the purpose of the organization may be inefficient. The use of financial perspectives, customer perspectives, learning and growth perspectives and internal business processes perspectives allow the deployment of strategic management.

Module 13 Environmental Purchasing allows the buyers to procure materials according to RoHS, Restriction of Hazardous Substances, WEEE, Waste of Electrical, Electronic and Equipment for Europe and the United States.

Any organization can see potential saving of USD 1 million when implementation of logistic is maintained at 14% maximum of sales. Majority of companies uses 18% for delivery costs. An improvement of 4% of USD 25 million sales will result a saving of USD 1 million.
Success Story: Malaysia – Mapics Consultancy

By Cheah Tee Ying

Cheah Tee Ying works with Agilent Technologies as a Supply Chain Planner. She is an MLS-SCM candidate with MAPICS.

[Keywords: Technology Hardware, SME, Private Enterprise, Operations, Supplier Management, Purchasing]

Here is one of the noteworthy improvements that I have achieved after attending to this training. When I carried out my job role as a Supply Chain Planner, I was accountable for shipment to one of the Agilent’s key customer, namely Company X. Company X is renowned for its hand phone business. As a supplier to Company X, we produce different types of customized handset system to them, which function as test station for its various types of hand phones. Handset normally looks like a station, which assembled from different types of instruments, cables and other necessary hardware. All these necessary parts often assembled on a shelf, where we call this shelf as “rack”. This rack is a highly customized item and is only customer-made for Customer X to cater its need of the unique system. This rack is also the fundamental part that required at the early stage of production. Without this rack, production unable to carry on with further integration. The expenditure of this rack is high, and it often contributes one of the most expensive parts that made up the test station. The risk it has is also critical. Any deviation from the required performance of this rack could bring serious consequences for the efficiency and effectiveness of the whole process. Often, if the rack was not delivered as desired, it will cause a halt to the whole manufacturing process. Moreover, the delay will then lead to a loss to customer, in both satisfaction and profit-making area. Unfortunately, there isn’t much supplier in the market that has the expertise and interest to supply this custom-made rack.

We only open to one supplier to provide us the rack, namely Supplier L. Supplier L is a local supplier from Malaysia. For every rack that required producing Company X handset system, we will go after Supplier L for supplies. This appears to be a norm for our division whenever there is any rack related order. Inevitably, this supplier always has the higher power against us. The pain point is the quality that Supplier L delivers is occasionally below par and delivery date de-committed often happens from this supplier. After going through Module 5 (Appraising & Short listing Suppliers), I decided to bring this up to the team, and discuss if we could beneficial from this training.

The Improvement Activity

I will take the example on one of the rack we successfully made improvement, which is Slimmer Rack. This rack is the core part for Slimmer system to Company X, where the system serves as a test station to test on hand phone’s frequency, specification and power. During 2008, Company X decided for mass production on their hand phones using these Slimmer systems, which involves demands for hundreds of Slimmer systems in Company X manufacturing area across the world, especially India and China. This could be a golden opportunity for us to win the big deal from Company X if we’re able to provide attractive price and delivery lead-time. In order to achieve this, we decided to focus on the longest lead-time material, which is the rack.
Before we moved on with the improvement, we first position our purchase item (the rack).

<table>
<thead>
<tr>
<th>Criteria</th>
<th>The Slimmer Rack</th>
</tr>
</thead>
<tbody>
<tr>
<td>Level of annual expenditure on the item</td>
<td>High</td>
</tr>
<tr>
<td>Supply impact, opportunity and risk</td>
<td>High</td>
</tr>
</tbody>
</table>

We can now conclude the Supply Positioning Model belongs to **Critical**. *(Refer to below model)*

---

**The Supply Positioning Model**

Later, we conclude that we need to aim at determining the supplier ability and willingness to reduce both cost and supply risk, and also to develop a partnership-type relationship with the supplier since this is a critical purchase item. In order to assess and compare the supplier, we have approached another potential supplier and open the offer to them, namely Supplier M. Supplier M is also a local supplier in Malaysia which doing sheet metal business.

After giving the related drawings and designs to these two suppliers and going through the detailed specification and requirement with them, we then gave them a time period to response us on the lead time and quotation. We also require both of these suppliers to build “First Article” unit, so that we could access these two suppliers in depth. Before the assessment activity carried out, we informed both suppliers on the offer we opened to them, and make them aware on the existence of each other as competitors.
Criteria to Appraise a Potential Supplier

Here're the criteria we took to assess these two potential suppliers, and also our result after assessing them.

<table>
<thead>
<tr>
<th>Criteria</th>
<th>Supplier L</th>
<th>Supplier M</th>
</tr>
</thead>
</table>
| Quality                         | 1. Occasionally deliver disappointing quality in past shipment to us. However, the “First Article” unit of this Slimmer rack is rather impressive as obviously there is improvement on the quality. During the material delivery, supplier also assigns a quality engineer to assist us on the quality checking.  
2. Has previous experience with similar products, and is in this rack business for long time.  
3. Provide flexibility in specification and last minute changes requested from us. | 1. Better quality delivery during the “First Article” unit for a first time deal in rack business.  
2. This is their first time doing rack business, and they consistently assured us that its design and other critical process will take place in controlled and effective manner.  
3. Provide flexibility in specification and last minute changes requested from us. |
| Availability                    | 1. Supplier’s production has the overall capacity to meet our requirement but often de-commit the delivery date.  
2. Supplier does not hold stock, only keep some common parts and long lead time material.  
3. Consistently take action to improve lead time.  
*Please refer below table for the lead time reduction and comparison.* | 1. Supplier’s production has minimal capacity to support our requirement, as this business is new to them, but willingly to make prioritization for us if we could forecast a demand upfront.  
2. Supplier does not hold stock.  
3. Often being pessimistic in lead time reduction due to the unavailability of one of the lower level material, the slider.  
*Please refer below table for the lead time reduction and comparison.* |
| Responsiveness                  | 1. Give priority to us when we require urgent support.  
2. Supplier always responds to complaints promptly.  
3. Have a dedicated customer service team that is available during our hours of business. | 1. Give priority to us when we require urgent support.  
2. Supplier always responds to complaints promptly.  
3. Do not have a dedicated customer service team that can be available anytime because they are still new in the business. However, they assured us that they will try their best to arrange a dedicated team. |
| Cost                            | 1. Price is costly  
2. Willing to give discount to us depends on the quantity we ordered.  
*Please refer below table for the MOQ (minimum ordered quantity) price and comparison.* | 1. Price is costly  
2. Willing to give discount to us depends on the quantity we ordered.  
*Please refer below table for the MOQ (minimum ordered quantity) price and comparison.* |
| General Supplier Capabilities & Business Attitudes | 1. Supplier overall reputation is good.  
2. Its workers are generally satisfied with the company.  
3. The size and volumes of business of this company with our company is not compatible. They have rather small volume of business and share market. | 1. Supplier overall reputation is good.  
2. Its workers are generally satisfied with the company.  
3. The size and volumes of business of this company with our company is not compatible. They have rather small volume of business and share market. |
Criteria: Availability

<table>
<thead>
<tr>
<th></th>
<th>Before Improvement</th>
<th>After Improvement</th>
</tr>
</thead>
<tbody>
<tr>
<td>Supplier L</td>
<td>Commit delivery lead time of 7 weeks</td>
<td>Commit delivery lead time of 5 weeks</td>
</tr>
<tr>
<td>Supplier M</td>
<td>Commit delivery lead time of 8 weeks</td>
<td>Commit delivery lead time of 8 weeks</td>
</tr>
</tbody>
</table>

Note: Above illustration and data is Agilent Confidential.

Explanation: Supplier L is able to improve the delivery lead time from 7 weeks to 5 weeks, and this has added a competitive advantage to them as Supplier M can only remain their initial lead time.

Criteria: Cost

Explanation: Apparently, Supplier M provide better unit price as compared to Supplier L, it is a 30% difference on the unit price for Qty1. Besides, Supplier M also offer better MOQ price for Qty20 as compared to Supplier L. There is a 17% difference.

However, Supplier L allows more flexibility on the minimum ordered quantity choices, where they go as far as 5, 10, 20, 50 and 100. Meanwhile, Supplier M only allows minimum ordered quantity for 20 and 50. This has again, giving Supplier L an added value. Although the unit price Supplier M offered is still much cheaper than Supplier L for Qty5, Qty10 and Qty100, Supplier L still has its unique added value because the MOQ they offer has comparatively shown a price reduction. In different point of view, Supplier L has shown initiative providing us a better price. This is one of their ways of showing their interest of doing business with us. As shown above, Supplier L tendered better price than Supplier M for MOQ of 50, 4% lesser than Supplier M offered.

Determining Supplier’s Overall Level of Motivation: After assessing the criteria of potential supplier, we then moved on to determine the supplier’s overall level of motivation.

<table>
<thead>
<tr>
<th>Min. Ordered Qty</th>
<th>1</th>
<th>5</th>
<th>10</th>
<th>20</th>
<th>50</th>
<th>100</th>
</tr>
</thead>
<tbody>
<tr>
<td>Supplier L Unit Price</td>
<td>$8,651.16</td>
<td>$7,710.35</td>
<td>$7,129.47</td>
<td>$7,129.47</td>
<td>$5,381.45</td>
<td>$5,223.17</td>
</tr>
<tr>
<td>Supplier M Unit Price</td>
<td>$6,014.56</td>
<td>-</td>
<td>-</td>
<td>$5,919.59</td>
<td>$5,603.04</td>
<td>-</td>
</tr>
<tr>
<td>Variance</td>
<td>$2,636.59</td>
<td>-</td>
<td>-</td>
<td>$1,209.88</td>
<td>($221.59)</td>
<td>-</td>
</tr>
<tr>
<td>Variance (%)</td>
<td>30%</td>
<td>-</td>
<td>-</td>
<td>17%</td>
<td>-4%</td>
<td>-</td>
</tr>
</tbody>
</table>

Note: Above illustration and data is Agilent Confidential.
Note: Price shown is in USD currency.

<table>
<thead>
<tr>
<th>Criteria</th>
<th>Supplier L</th>
<th>Supplier M</th>
</tr>
</thead>
<tbody>
<tr>
<td>Value of Business</td>
<td>High</td>
<td>High</td>
</tr>
<tr>
<td>Level of Interest</td>
<td>High</td>
<td>High</td>
</tr>
</tbody>
</table>
We can now conclude the Supplier Perception Model for both Supplier L and Supplier M belongs to Core. (Refer to below model)

**The Decision Made**

Since both supplier falls under the same category in The Supplier Perception Model, we decided to weigh the assessment criteria seriously and in detailed. We have come out with a Supplier Capability Ratings to determine which suppliers get the higher scores. This will also help in making the decision.

Both suppliers have consistently showing the same or almost identical scores in Responsiveness and General Capabilities and Business Attitudes area. We need to reconsider the appropriate supplier based on the Quality, Availability and Cost area. Supplier L has scored 12% better than Supplier M in the Supplier Capability Rating, as shown in below table.

We had made our decision to go after Supplier L due to be reasons:

- Supplier L has significantly showed aggressiveness in doing this business with us because they are able to reduce the delivery lead time to as 5 weeks.
- Though Supplier L has quoted a higher price than Supplier M, we could always take the advantage of the MOQ 50 as this price is 4% lesser than Supplier M MOQ 50. Since Company X is going to lay a mass production, and needs hundreds of Slimmer systems, we can take the advantage of this MOQ 50 and provide similar quotation to Company X.
- Company X is dramatically reducing the forecast input to us, and with this forecast invisibility, it is almost impossible to provide accurate forecast to supplier. Since Supplier L is not new in this business, and they are also doing other rack business, we believe they should have kept some common part items; which compared to Supplier M who is still new to the rack market, would not take the risk to keep inventory.
- Furthermore, existing Supplier L already has a dedicated customer support team to us. During this mass production, this service is rather important to us just in case there is any sudden breakdown or damage found in the rack, and the support team can take immediate action to resolve.
- Existing Supplier L has a better capacity to support the rack business. Therefore, they could turn around faster than Supplier M whenever there is huge quantity required from supplier.
### Supplier Capability Ratings

<table>
<thead>
<tr>
<th>Appraisal Criteria (and comparison with allocated weights)</th>
<th>Supplier L</th>
<th>Supplier M</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Score</td>
<td>Wtd. Score</td>
</tr>
<tr>
<td>1. Quality</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Quality of the &quot;First Article&quot; unit (4)</td>
<td>2</td>
<td>8</td>
</tr>
<tr>
<td>Experience in doing this business (2)</td>
<td>3</td>
<td>6</td>
</tr>
<tr>
<td>Provide flexibility in specification changes (4)</td>
<td>3</td>
<td>12</td>
</tr>
<tr>
<td>2. Availability</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Available capacity to meet our requirement (3)</td>
<td>3</td>
<td>9</td>
</tr>
<tr>
<td>Availability of inventory (3)</td>
<td>3</td>
<td>9</td>
</tr>
<tr>
<td>Lead Time Delivery (4)</td>
<td>3</td>
<td>12</td>
</tr>
<tr>
<td>3. Responsiveness</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Give priority when we require urgent support (3)</td>
<td>3</td>
<td>9</td>
</tr>
<tr>
<td>The speed supplier response to complaints (4)</td>
<td>3</td>
<td>12</td>
</tr>
<tr>
<td>Availability of dedicated customer service team (3)</td>
<td>3</td>
<td>9</td>
</tr>
<tr>
<td>4. Cost</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Unit Price (5)</td>
<td>2</td>
<td>10</td>
</tr>
<tr>
<td>Initiation taken to reduce price (5)</td>
<td>2</td>
<td>10</td>
</tr>
<tr>
<td>5. General Supplier Capabilities &amp; Business Attitudes</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Overall reputation (4)</td>
<td>2</td>
<td>8</td>
</tr>
<tr>
<td>Attitude of supplier’s workers (3)</td>
<td>2</td>
<td>6</td>
</tr>
<tr>
<td>Size and volumes of business of this company (3)</td>
<td>2</td>
<td>6</td>
</tr>
<tr>
<td>Total Weighted Scores:</td>
<td></td>
<td>126</td>
</tr>
</tbody>
</table>

*Max possible scores = 150*

<table>
<thead>
<tr>
<th>Supplier</th>
<th>Overall Capability Ratings</th>
</tr>
</thead>
<tbody>
<tr>
<td>Supplier L</td>
<td>126 / 150 = 84%</td>
</tr>
<tr>
<td>Supplier M</td>
<td>108 / 150 = 72%</td>
</tr>
</tbody>
</table>

### Scoring Supplier Performance

<table>
<thead>
<tr>
<th>Not Acceptable</th>
<th>May not be Acceptable</th>
<th>Acceptable</th>
<th>Excellent</th>
</tr>
</thead>
<tbody>
<tr>
<td>0</td>
<td>1</td>
<td>2</td>
<td>3</td>
</tr>
</tbody>
</table>
Success to Agilent

After making the decision, we then inform both suppliers on the result. Then, we move on to prepare cover letter and quotation to Company X, revising our price and delivery lead time, in order to win the Slimmer systems big deal over our competitors.

We have proposed to deliver Qty48 Slimmer systems to Company X, with the selling price of USD $ 8,000, and with delivery lead time of 6 weeks (1 week manufacturing lead time + 5 weeks rack delivery lead time). Previous delivery lead-time to customer is 9 weeks (1 week manufacturing lead time + 8 weeks rack delivery lead time), where we have successfully made improvement of 3 weeks delivery lead-time. Company X is thrilled with the effort we have given, and then agree to place the order to us.

Though Company X is happy with the shorter lead-time; they have requested us to make the shipment in four batches. The main reason is because, each production line of Company X required 12 units of Slimmer systems and they will not run the complete 4 production lines simultaneously. Therefore, customer has given us green light to ship Qty12 per batch. In addition, Company X needs some times to deal with custom on the paper works, which is always one of the critical areas to be aware of in China. In the mean time waiting for Company X to prepare the purchase order, we have then proceed to get supplier to produce the racks first as Company X has verbally confirmed on the purchase and trigger a pre-buy. In this case, we can proceed with material purchasing first and inevitably shorten the lead-time between the order entry dates versus the ship date.

Here’re the batches of shipment we had made, and the revenue recognized. With the momentous improvement we had delivered, we could foresee a flourish of the Slimmer order going to happen in near future.

<table>
<thead>
<tr>
<th>Batches</th>
<th>Qty</th>
<th>Order Entry Date</th>
<th>Ship Date</th>
<th>Lead Time Taken for Each Batch</th>
<th>Revenue Recognized</th>
</tr>
</thead>
<tbody>
<tr>
<td>1&lt;sup&gt;st&lt;/sup&gt;</td>
<td>12</td>
<td>08-07-2008</td>
<td>24-07-2008</td>
<td>17 days (approx. 3 weeks)</td>
<td>$ 96,000.00</td>
</tr>
<tr>
<td>2&lt;sup&gt;nd&lt;/sup&gt;</td>
<td>12</td>
<td>08-07-2008</td>
<td>04-08-2008</td>
<td>28 days (approx. 4 weeks)</td>
<td>$ 96,000.00</td>
</tr>
<tr>
<td>3&lt;sup&gt;rd&lt;/sup&gt;</td>
<td>12</td>
<td>08-07-2008</td>
<td>11-08-2008</td>
<td>35 days (approx. 5 weeks)</td>
<td>$ 96,000.00</td>
</tr>
<tr>
<td>4&lt;sup&gt;th&lt;/sup&gt;</td>
<td>12</td>
<td>08-07-2008</td>
<td>18-08-2008</td>
<td>42 days (approx. 6 weeks)</td>
<td>$ 96,000.00</td>
</tr>
</tbody>
</table>

Note: Above illustration and data is Agilent Confidential.

With this training, it has helped to define the most suitable supplier that should supply one of the critical purchase items for us. The correct decision made has also constantly put Agilent in a compatible situation whenever Company X is comparing us with our competitors.
Promoting supply innovation in the technology sector in Malaysia

The Modular Learning System (MLS-SCM) training offered by MAPICS is not merely another professional development programme but a user-friendly, practical and interesting programme which covers all aspects of supply chain management. It has enabled me to reap the advantage of new opportunities and reduce my organization’s total purchasing and supply costs.

It has also opened my horizon and scope by applying the right techniques and methods needed to develop innovative approaches in purchasing activities and supply chain management, and excel in an environment of globalisation. For current and future purchasing personnel, the MLS-SCM not only provides value for money but is also fun and an enjoyable form of the art of learning.”
Success Story: Malaysia – Mapics Consultancy

By Ong Seng Hock

Mr. Ong Seng Hock, Dell APCC, August 2004. He studied the MLS-SCM® programme with Mapics.

[Keywords: Private Enterprise, Operations, Supplier Management, Customer Management]

Developing suppliers for better results in Malaysia

I have been able to enhance my career performance with the tools and methods I am learning through my MLS-SCM training at MAPICS, especially the Supply Position Model and the Supplier Perception Model. Although my job did not directly involve dealing with vendors or suppliers, I have still been able to apply the concept of SPM to drive my teams to develop suppliers and achieve results. With my increased understanding of Supply Chain concepts, the MLS-SCM has also enriched my search for innovative solutions in new areas when confronting issues arising in my job. In addition, I find it very efficient and easy to apply.

The MLS-SCM training is really providing me with a good learning opportunity and enhances my skills. I hope to share this experience with all my friends.
Success Story: Malaysia – Mapics Consultancy

By H.C. Lau

Mr. H.C. Lau, Purchasing Manager, Tim Electronics Sdn Bhd., Malaysia, August 2004.
He studied the MLS-SCM® programme with Mapics.

[Keywords: Technology Hardware, Private Enterprise, Operations, Supplier Management, Purchasing]

Supply Chain Management in the electronics sector in Malaysia

The introduction and continual sharing on ITC’s MLS-SCM program by Mapics Consultancy Sdn Bhd has given us full awareness of the future possibilities of supply chain management. We have found the MLS-SCM training program to be useful and relevant in developing our purchasing & materials staff and also other departments’ personnel whose work involvement cuts across the internal and external supply chain.

We started in 2002 with Module 7 (Negotiations), and subsequently continued sending staff for training on other modules based on feedback received from staff attending the workshops. The practical exercises from the workbooks given out to participants during the training help to open up their thoughts and sharing experiences. Some of the trainers’ real life sharing contributes to a maximum learning exposure, which makes the learning so much easier and understandable. Our staff found the case studies particularly helpful to stimulate their minds ... especially after the lunch break.

Regarding course impact, important concepts such as Incoterms provide effective and useful information not only on local compliance but also strengthened the participants’ knowledge on international requirements. They have also been exposed to 3PL (3rd party logistics), which is current practice at most factories to reduce the cost of inventories. One of the most useful MLS-SCM modules features good negotiations, which comes in handy in their work.

In our efforts to achieve best operational effectiveness, we will be constantly sending staff for MLS-SCM training to MAPICS, to prepare them to manage our supply chain and to meet our company’s needed to eliminate inefficiencies and improve customer satisfaction."
Success Story: Malaysia – Mapics Consultancy

By Reagan Teoh

Mr. Reagan Teoh, Buyer/Planner, Malaysia, August 2004. He studied the MLS-SCM\textsuperscript{®} programme with Mapics.

[Keywords: Operations]

Building a professional purchasing career in Malaysia

The ITC MLS-SCM covers the total supply chain, and provides a complete course for International Purchasing & Supply Chain Management. Through this course, I widened and strengthened my purchasing knowledge. In addition, it helped me to prepare myself for the next level of management in my future career. I found some concepts that are useful to apply in our daily tasks, depending on our job functions. The MLS-SCM Trainers at MAPICS are well trained, experienced and knowledgeable.
Sharpening buyers' skills in Malaysia

First of all, I would like to say thank you to MAPICS for its efforts in arranging the MLS-SCM course. In this half-year course, I learned a lot that helped me to enhance my career path, in terms of sourcing, materials planning, shipment arrangement and sharpening my negotiation skills. For me, this knowledge is very valuable and has given me more confidence to handle my new roles as a buyer.

Besides that, this course did provide a valuable opportunity for me to learn from various MAPICS lecturers. Their working experiences, sharing and knowledge enhanced my thoughts on how to be a better person, both as a Supervisor and as a subordinate; I hope that this course will continue to be conducted for interested Dell employees and also other companies’ employees.

Thank you very much MAPICS Consultancy Sdn Bhd for bringing in the MLS-SCM program to Malaysia.
Nepal is a land locked country, situated between China and India. About 28 million people occupy geographically diverse land, size of Greece. Unlike other South Asian countries Nepal was never part of any foreign empire and this made Nepal socially, culturally very independent and unique. Nepal geographical diversity, unique cultural heritage and friendly people have made it one of favourite tourism destination in the world. Direct and indirect travel and tourism economy is expected to account for 7.4 % of GDP and sustain 6, 14,000 jobs (5.8 % of the total employment). Development in Tourism Industry has created opportunity for many SME's to manufacture tourism related goods. One of such SME our client is Hiland Sports Pvt. Ltd. (name has been changed for privacy and commercial purpose) this SME manufacturers Tents for the trekking and mountaineering expedition. Simple tent is a vital tool in trekking and mountaineering expedition in Nepal. With some of toughest and harsh climatic conditions in these expedition tent is vital for not only for success of the expedition but sometime also for the survival.

**Hiland Sports Pvt. Ltd. Tent Pole Supply Positioning Model**

- Tent Pole purchase from local trading company
- 50% value of the total raw materials
- Critical
- 20% of items = 80% of value
Company knowledge on particular tent pole

- It was made in Korea
- No information on materials
- No information on manufacturing company

Direct fax and letter to Korean tent pole manufacturers listed on biz directory were not replied

E- Procurement through B2B

As the manufacturer of Tent Pole were from Korea enquiry as a buying was posted on Korean B2B ec21.com. There was no knowledge on the specification of the tent pole or materials, so following picture was also posted.

Picture Posted on the ec21.com
Three replies received

The tent company for the first time knew now the specification of the Tent pole it was high strength aluminium alloy AL 7001. Tent Pole AL 7001 8.5mm x 396cm x 7 sec x 1line, Both L/K Tips

The Result

Purchasing directly from the Korean trading company reduced cost of tent pole purchase up to 50%. Partnership relation has been developed directly with the tent pole manufacturer.

Now high altitude above 6,000 meters tent is planned to be manufacture by Hiland Sports Pvt. Ltd. Using Aluminium Scandium Alloy one of the most hi-tech tent pole in the world.
Success Story: Nepal – IEDI

By Chakra Bahadur Gurung

Chakra Bahadur Gurung, Procurement Manager, GTZ Nepal. He is a MLS-SCM candidate with IEDI.

[Keywords: Commercial Services, SME, Private Enterprise, Operations, Supplier Management, Purchasing]

Background of the case:
We usually import different materials; raw, semi-finished, finished goods from manufacturers, distributors and dealers from around the world. Materials coming from different parts of the world means there are different lead time, ordering time, mode of shipments, packing and processing time. Generally we import and test these materials and integrate these units into a Solar Home Lighting system, and sell them to rural part of Nepal where there is no electricity from the grid lines.

Some consignment of the materials come in full container load, some in LCL, some are shipped by sea and some by air. Therefore, ordering process of these goods has to be done through proper planning otherwise the complete chain of functional activities: inventory, production, quality control and sales would go haywire. And the promised delivery date for the customer would not meet on time. However, the one of the component of the system, battery arrival from the USA was always late and having problem to complete a system manufacturing on time, I applied different steps to reduce the lead time and pricing, and in some extent we’ve been able to minimize the risks.

The major items for a solar home system are as follows and they’re being imported under following lead times.

<table>
<thead>
<tr>
<th>Major Items</th>
<th>Country of Origin</th>
<th>Lead Time</th>
<th>Mode of shipment</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Solar PV modules from SolarWorld Asia Pte Ltd., Singapore (formerly Shell Solar Pte, Ltd.)</td>
<td>Singapore</td>
<td>30-45 days</td>
<td>Sea</td>
</tr>
<tr>
<td>2. Solar lights and controllers from Sundaya, Indonesia</td>
<td>Indonesia</td>
<td>35-50 days</td>
<td>Sea</td>
</tr>
<tr>
<td>3. Deep cycle batteries from Trojan Battery Company, USA</td>
<td>USA</td>
<td>75-90 days</td>
<td>Sea</td>
</tr>
<tr>
<td>4. Solar charge controllers from Staca, Germany</td>
<td>Germany</td>
<td>15 days</td>
<td>Air</td>
</tr>
<tr>
<td>5. Solar inverters from ASP, Switzerland</td>
<td>Switzerland</td>
<td>15 days</td>
<td>Air</td>
</tr>
<tr>
<td>6. Solar charge controllers+ inverters from Fronius, Austria</td>
<td>Austria</td>
<td>15 days</td>
<td>Air</td>
</tr>
<tr>
<td>7. Inverters from Xantrex and Outback, USA</td>
<td>USA</td>
<td>25 days</td>
<td>Air</td>
</tr>
</tbody>
</table>

Our main target was to reduce the lead time by doing proper planning and negotiating with the manufacturer and shipping agent. Simultaneously the price of the batteries were too high to compete with the local brands, therefore reduction on the unit of price battery has also to be taken.

Projected Improvement Plan:
Main target were to :
- Reduce the lead time by 7 days to 10 days
- Reduce the existing landing cost
- Streamline the supply line of batteries and to decrease the out of stock of situation.
<table>
<thead>
<tr>
<th>Improvements Action Plan</th>
<th>A. Direct Plan</th>
<th>Action taken</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Reduce lead time from Purchase order placement to shipment pick-up.</td>
<td>We supplied an annual project procurement plan for batteries and stucked with our planning, and placed our every order at stipulated time.</td>
<td></td>
</tr>
<tr>
<td>2. Reduce lead time from Pick-up date to ship on board.</td>
<td>We negotiated with the freight forwarder for a regular order and fixed a freight amount on the basis of annual increment. We asked for better shipping line who can allow free container detention for at least 14 days after delivery. We worked closely with freight forwarder and the manufacturers in the place of origin.</td>
<td></td>
</tr>
<tr>
<td>3. Reduce port clearing days at Calcutta port</td>
<td>We asked freight forwarder to supply a copy of shipping document prior to sending to the bank, so that no discrepancies will incur and nor detention at the port. We supplied the same shipping documents to the Clearing agent at Calcutta so that in case of any discrepancies we could inform to the freight forwarder at the origin. This ensures that there would be no delays on port clearance of container. Every time the shipping document was supplied 7 days ahead of the vessel arrival at the port, so that the clearing agent processed everything before the vessel is docked.</td>
<td></td>
</tr>
<tr>
<td>4. Reduce transit time from Calcutta port, India to Custom entry point Nepal</td>
<td>We shifted the custom entry point of our every consignment from Kakarvitta point to Birgunj (See map of Nepal) for which we asked 14 days container free days from the shipping lines, so that the transporter could drop the container at Birgunj port and returned to Calcutta on time.</td>
<td></td>
</tr>
<tr>
<td>5. Reduce the custom clearing time and shipment to Kathmandu</td>
<td>Before the container arrived at Birgunj custom point, every time we supplied complete custom processing shipping documents to the Custom broker at Birgunj. The custom broker examines the documents and confirms everything. Once the consignment arrives, he simply custom clears and ship to Kathmandu.</td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>B. Indirect Plan</th>
<th>Action taken</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Negotiate with manufacturer for mode of payment and payment terms</td>
<td>We negotiated with the manufacturers to work on Usance Letter of credit at 60 days instead of at Sight. This would help us for payment and cash flow management to our finance department.</td>
</tr>
<tr>
<td>2. Timely payments to vendors</td>
<td>All the vendors associated in this supply chain, we made a regular and on time payment in order to expedite the physical and information flows.</td>
</tr>
<tr>
<td>3. Projected sales and projected purchase plan.</td>
<td>Weekly meeting with sales and other depts. on projected sales and purchase plan, and reviewing the plans to make it more accurate.</td>
</tr>
</tbody>
</table>
Unlike other countries the procurement processing is quite costly and time consuming in land locked countries especially in the case when we are importing or exporting goods from overseas market. We have however in some extent been able to minimize the risks by better negotiating with all the intermediaries in the supply chain. Perhaps we have been able to convince our suppliers about our geographic difficulties. This has been possible of course with the knowledge gained from MLS IPSCM. The study course made me a confident procurement executive to interact with international suppliers and manufacturers.

**Major Outcome:**
1. Reduction on unit price from the manufacturer and established supplier relationship to partnership.
2. Reduced the landed cost of the battery.
3. Reduction on freight and custom clearing cost, and improved on service delivery from Freight forwarders and clearing agent. Established the relationship from arms length to part of the supply chain team.
4. Increased credibility and enhanced credit limit with the bank by providing Usance Letter of credit instead of Sight Letter of Credit.
5. Right selection made by switching the custom entry points. Due to the insurgency period in Nepal, there were lot of bandhs and strikes going on, which could have effected if transported via previous custom entry points.
Success Story: Nigeria – Empretec Nigeria Foundation (ENF)

By Debbie Ubaru

Debbie Ubaru is currently employed at Eco Travel and Tours as Head of Operations. She is also a full time trainer at ENF, as well as a MLS-SCM® candidate.

[Keywords: Professional Services, SME, Private Enterprise, Operations]

I have always believed that you sell well what you believe in. I have seen my personal improvement and growth that came from studying for and writing the first set of the MLS-SCM exams and passing them. As a young trainer I have earned respect from knowledge. I have been able to convince other trainers to write the exams starting with at least one module because I have seen that it can actually make you a better trainer. It’s a lot easier to teach what you know. The first exams were held in September 2010; 6 trainers register for exams but only 3 showed up (including myself). Two of us passed the module exams 1 – 6 and were given the certificates while one trainer only passed modules 2 - 6 and will have to retake the exam for module 1.

By March 2011 we had 6 trainers registered to write exams taking advantage of the free exams for trainers till December 2011; 3 trainers (including myself) will write exams for modules 7 – 12 and 3 trainers will sit exams for individual modules.

We have successfully done one training so far and are finalizing negotiations with more companies to do more training. We have been invited to give advice on different functions in the supply chain, using our knowledge obtained by studying different modules and applying this knowledge to help the company grow.

We have seen that MLS-SCM is a standalone course that covers all aspects of the supply chain and it should be mandatory that companies, especially the indigenous ones, go through the programme to increase competitiveness, market share and profits.
Success Story: Nigeria – International Institute of Business & Logistics (IIBL)

By Kenneth N. Agary

Kenneth N. Agary is employed as a Buyer at SC Johnson Nigeria Limited. He is a candidate of the MLS-SCM program with IIBL.

[Keywords: Household & Personal Products, Multinational, Private Enterprise, Operations]

By working closely with our suppliers, we were able to improve the quality of materials we were receiving from them for our production processes e.g. the supply rejection index for last year (LY) was 7.7% compared to less than 5% in the current year (CY). This has reduced the production costs since re-work was reduced. The average reprocessing inventory cost for this CY is down by 6% against LY.

Lost time due to defective components, which increased production costs as a result of wasted productive hours, has also declined from 10% for LY to less than 6% this CY. We experience lower rejection rates, improvements in productivity, line efficiencies as well as improved customer service. The Overall Equipment Effectiveness (OEE) was 40% LY against 43% this CY.

We are able to meet our large sales orders since we experience less interruption of the production lines resulting in fewer incidences of Out-of-Stock of finished goods (OOS). OOS of finished goods has dropped from 5% for LY to less than 3%. This has created improved customer service.

Our efficiencies have so improved that we are now able to export quality finished goods to our neighbouring sister company in the West Coast of Africa. We were able to export goods worth US$ 2.4m (two million four hundred thousand dollars) in the last FY 2009/10.

All this was made possible by applying the MLS-SCM modules in our supply chain operations.

We have also benefited from the Trade Liberalization Scheme called ETLS- (Ecowas Trade Liberalization Scheme) in our export operations to Ghana. The scheme affords us enjoyment of duty free export on all our registered products covered by the scheme.

We accumulated savings of about $240,000.00 (two hundred and forty thousand dollars) from the ETLS scheme and we are still enjoying the benefits today.
Success Story: Nigeria – IIBL

By Meshileya Olufolabi Timothy

Meshileya Olufolabi Timothy works with Saipem Contracting Nigeria as the Purchasing Leader. He is a MLS-SCM® candidate with IIBL.

Keywords: Professional Services, SME, Private Enterprise, Operations

After my training, I was appointed as the Lead Buyer for a project in Nigeria tagged the OBOB project and the Client was Agip.

I was able to procure with my team all the LLI for the project in record time and within budget. The project is on track now and my company will save a lot of money from possible delays in delivery, which might have been the case if the SC was not properly followed.

To quantify the gains to my company is difficult because I have assumed the role of section leader for purchasing activities in the company and I have been able to save the company in many ways.

For example, when buyers send a draft Purchase order to subcontractor, most subcontractors will reject clauses related to insurance, types of Liquidated damages, HSE issues, transit procedure issues, etc. with my knowledge from MLS-SCM programme, I know the importance of these clauses and where the tradeoffs should be.

I have been able to step in many cases where my company would have been exposed to risks that could be prevented or at least to limit the exposure.
Success Story: Nigeria – IIBL

By Amina Sule

Amina Sule works as Deputy Purchasing Manager for Delta Afrik Engineering in Nigeria. She is a MLS-SCM® candidate with IIBL.

[Keywords: Construction, SME, Private Enterprise, Operations, Supplier Management, Purchasing]

All six modules used for the certification program is a detailed encapsulation that bridged my understanding in relation to the full Purchasing and Supply Cycle. For Instance, I was able to grasp in detail, reasons for inviting one or more suppliers to quote for specific materials or services and how this affected purchasing risk, time management, process flow and cost reduction for the company.

I will explain a specific example of how this certificate program contributed to the improvement of my job function. A problem faced by my company-purchasing department in the purchase of steel products. Saipem is an EPC contractor specialized in turnkey projects, building and construction of power plants, jackets, etc. The company has over 12 different projects running and important commodities required for project construction are steel materials. These materials are usually used for line pipes and fabrication activities, which are core contents that impact on company’s performance.

Constraints to operational success were:

1. An average of 18 requisitions was received each week for steel purchase by the purchasing department, which results in creating at least 18 Purchase Orders. This resulted in added cost for the company, waste of processing time and monitoring delivery. At the time, it cost the company a minimum of $50 to create one Purchase Order using SAP application.
2. Materials were always urgently required and there were specific instances that the local market could not provide such materials within stipulated time frames.
3. Some of these request had incomplete specifications or irregular dimensions of steel plates, which could not be locally sourced.
4. End users request for specialized grade of steel materials in small quantity was difficult to source locally as the product was not produced in Nigeria and manufacturers would not attend to purchase orders if it did not reach a minimum order.
5. There were also few suppliers registered with the company thereby creating a cartel amongst the players, which led to fixation of price and posed constraints for price negotiation.

I was able to redefine the procurement strategy for the purchase of steel products for all projects by creating frame agreements with two qualified suppliers to provide the materials requested with a qualitative level that complied with Saipem Standard. This was on the assessment of status, experience, capability and technical competence and which resulted in decreasing the rate of Purchase Order issuance, cost and processes.

Using the experience gained from taught materials Module 2 (Specifying Requirements & planning Supply) I was able to apply the concept of this course book by requesting all project managers to compile from their individual Materials take off list (MTO) all steel requirements they envisaged for a one year period, and also specifying the time frame and forecast of when such items will be required at site. This specification included all size, grade, unit of measurement, etc., which was later, reviewed by the engineering department.
The requirement was overwhelming and truthfully I initially never believed I would ever conclude this task. The material specification was a list of 813 items. In addition, Module 6, which captures obtaining and selecting offers, helped me understand the procurement method to be used, the number of suppliers to invite and how to evaluate such offers. An open tender was called for in order to know interested suppliers who met the specified criteria.

This was necessary, as we wanted to explore and identify suppliers who had the potential capability of fulfilling our requirements in order to avoid any uncomfortable surprises during execution of the agreement. This route was approved, as we wanted to promote competition, apply good commercial practice and achieve best value for money for the company.

The procurement process was well documented with a procurement plan. Thereafter, a competitive bid was issued which indicated all important evaluation criteria, which we would use to evaluate the suppliers. This was done to ensure that suppliers took account of these criteria’s when preparing their bids. Submitted offers were evaluated in line with suppliers’ technical proposal, materials proposed, available grades, lead-time delivery, financial stability, etc. After a period of 13 weeks, I was able to wrap up two frame agreements for two different steel suppliers. As this agreement lasted for a period of one year, the taught module 9 courses managing the contract and supplier relationship helped me understand how to monitor the contract performance, which enabled us to deal with any surprising risk or any change and variations in price. In addition, I was able to improve my negotiation skills by integrating negotiation variables and components learnt from the Module 7 Course book (Negotiating) like trade-offs with regards to payment terms, importation options etc that resulted in formalizing the agreement which allowed joint-cost reduction strategies. Even more, prices offered were bench marked for price reasonableness with our overseas subsidiary. This was a worthy exercise that impacted the bottom line profit of the company and part of this knowledge was as a result of the training program from the SCM module.

Finally, I would like to add that the contents of the modules are very useful as one can always make reference and seek knowledge in relation to any purchasing and supply process by picking up the related course book for easy referencing. Till date I still flip back and browse concepts I might have forgotten.
The sheer fact that our company bore a loss of 0.3 million dollar in year June 2009 heightened the awareness that something serious was wrong with our SCM system. The expectations on the part of my Company had risen as they were expecting me to play a significant role in determining the core causes. I figured out that expired stock and excess stock or dead stock was a significant contributor to our loses.

I also realized that analyzing our system that our forecasting demand system needed improvement. I implemented forecasting demands techniques & minimal quantity order level. The result of implementing forecasting demand techniques & minimal quantity order level has saved us 0.2 million dollar this year. We also found significant evidence where in a large number of our customers indicated a much increased level of satisfaction.

One of the most satisfying aspect of applying the MLS SCM techniques was during the phase of selecting new supplier that is our courier. Our company was not satisfied with the supplier & asked me in December 2009 to change this supplier. Our per month courier billing was 15000 dollar & courier services meant critical items for us because of high expense & high supply risk. So we were giving a lot of important to this purchase. When I was stating the appraisal I was very confident about my skills. In whole procedure I took guidance from the acquired procedure of ITC’s training. This whole procedure helped me a lot to identify potential supplier with the right training. This whole procedure helped me a lot to identify potential supplier with the right motivation & capability both. We were also able to get better rate from these suppliers. This has contributed significantly towards our customer satisfaction.
Let me start by stating that I was assigned to a company that provides water services to more than one million households in the East Concession area of Metro Manila, through more than 811,753 water service connections and 51,000 sewer service connections. More significantly, of the more than six million people connected to the water network, 1.6 million people, or about 274,962 households, belong to low-income communities. I believe that this illustrates the challenge of improving the Supply Chain Management system in this company, especially when clean water is the most basic need of a human being. With this in mind, I would like to share certain remarkable milestones that I have experienced together with the Manila Water team who took and applied the MLS-SCM modules that we learned in our work:

Supply and Just-in-Time Delivery of 15mm Water Meters – One the most tangible projects that we have undertaken overtime after taking into consideration the lessons we learned from MLS-SCM is exhibited in this project. One of the basic requirements and needs for the company is the installation of 15mm household meters. These meters are our basis for billing, and thus indispensable for the survival of the company. By implementing the knowledge of the MLS-SCM programme we drastically changed the way we buy, conduct delivery and supplier support and the way we consider our relationship with our suppliers. From the start we re-drafted the contracts that we are currently awarding to suppliers of water meters. We were able to establish the type of relationship that we wanted to pursue with our suppliers; at the same time were able to come up with a win-win contract wherein both the supplier and our company were satisfied with the requirements. By drafting a contract according to the requirements and according to the points from MLS-SCM part on drafting a contract, the company was able to save an considerable amount. Before, deliveries were to CIF-Manila Port, and by negotiating a partnership with the supplier, we were able to come up with DDP-MWCI. This also ensured us the continuous availability of the material since we were not requesting quarterly bids anymore, but instead drafted a yearly contract with the “just-in-time delivery” as an integrated part of the contract. This project started in the last quarter of 2008, after finishing the basic certification for the MLS-SCM programme. The drafting of the contract, the bidding and the management of the contract followed in 2009. This year, we have already bidded out the same requirement which in turn has improved MWCI’s financial position.

Another important highlight is the setting up of a Vendor Department, which will deal with the supplier sourcing and evaluation and also include the supplier performance evaluation. We were able to come up with this department based on MLS-SCM key concepts and were able to adapt and localize the idea in the Philippine setting. We were able to come up with parameters for evaluating the supplier capability and increased our supplier base for every requirement of MWCI – for suppliers of same products and alternatives. Through application of the MLS-SCM programme, we improved customer satisfaction of the end-users when the company established a separate Department which catered to this specific need. The department was established in early 2007, but we were able to guide the process of the Vendors Department modernization that was completed by 2009.
By Pathirage Gayan Erantha Perera

Pathirage Gayan Erantha Perera is a Procurement Manager with Fonterra Brands Lanka (Pvt) Limited, one of the largest FMCG, multinational companies in Sri Lanka. He is also a trainer of the MLS-SCM programme at ISMM.

Keywords: Food, Beverage & Tobacco, Multinational, Private Enterprise, Operations, Purchasing

In 2008, a cross functional project team was formed in my company to improve working capital efficiency under the name “Project Liquid Gold”. The project team looked at this task under three main areas:

1. Purchase to Pay
2. Forecast to Fulfil and
3. Customer to Cash

I was a team member representing the Supply Chain function and was responsible for managing the “Forecast to Fulfil” area, which mostly covered effective inventory management and improved forecasting. Inventory was the most important area that had to be managed in order to achieve better working capital efficiency. Through various initiatives, we managed to reach a single digit working capital efficiency ratio in just two years. As a team member, and especially as the person who was in charge of improving the inventory management, I concentrated on a variety of activities that had direct and indirect impact on the inventory holding of the company and managed to bring efficiency. Given below are some of the areas that we concentrated on improving while working to achieve overall efficiency.

- Better alignment between demand and production by implementing weekly planning cycles and better coordinating between demand planning and production.
- Improving forecast accuracy through monthly sales and marketing activity planning meetings.
- Refining safety stock levels to be maintained for all raw materials and finished goods.
- SKU Prioritization when capacity or supply constraints are experienced
- Increasing frequency of raw materials deliveries (splitting orders in to weekly deliveries).
- Reducing stock levels of locally purchased raw materials and packing materials.
- Having arrangements with suppliers to hold a minimum stock in their facilities to meet sudden changes in demand

In the process of achieving success in these areas, concepts, techniques and ideas discussed in the MLS-SCM Module 10 on Managing Logistics in the Supply Chain and Module 11 on Managing Inventory helped me a lot.

Given below are the results achieved at the end of the second year of project implementation (and we are already half way through the third year of starting the project “Liquid Gold”). We are confident that despite all the challenges in the local and global economies (especially the continued increase in milk powder prices in the world market and in the price controlled local market) we will end this year with further improvements to working capital efficiency and be able to remain a member of the prestigious "single digit club".
Change of Working Capital Efficiency over last two years
At the end of year one – 13% improvement
At the end of year two – 24% improvement over the previous year
Overall improvement two years after the start of project – 34%

• Forecast to Fulfill Inventories
At the end of year one – inventory days reduced by 15%
At the end of year two – inventory days reduced by 18% over the previous year
Overall inventory reduction two years after the start of project – 31%

• Customer to cash receivables
  o Debtor days maintained at around 6 days
  o Overdues at less than 2% of the total receivables

• Source to Settle Payables
  o 90% of the major suppliers moved from a 30 days to 90 days credit
Union Assurance (UA) PLC that I work for is a leading insurer, of which 80% is owned by giant conglomerate, John Keells PLC. Union Assurance underwrites both life and general insurance risks in the local market and the company has been in existence for 24 years. Company is represented in 56 cities, basically covers all major townships in the country.

Company operates in a hyper competitive environment with 16 players and undercutting by players has brought the industry into a state where everything else in the country has gone up except insurance. Hence, reduction of cost is the secret of success to stay competitive.

Motor insurance accounts for more than 50% in general insurance income. However, motor at UA was making losses due to high claim ratios. In above context I was assigned to bring down the cost of motor claims. At the time of taking over, the claim ratio was 93% (Approx 93 ml in SLR) per month. This was disturbing the management and management was under severe pressure to bring it down.

I had no previous involvement with motor claims. At the beginning of my assignment employees at the claims, were not cooperative due to me being an alien to their department.

In my study it was revealed that claim expenditure was mainly on garage payments made in respect of repairs of vehicles and spare parts. Further, it was observed that those parts that we buy are mainly reconditioned parts and not originals bought from an accredited agent. This is because our country has a large reconditioned vehicle fleet (95% and mainly from Japan) compared to brand new vehicles. This context leads to fewer sums to be insured and less insurance premium being paid. Therefore insurer is compelled to provide reconditioned spare parts when such vehicles meet with accidents, instead of original parts, which are relatively expensive in order to make the repair cost minimum.

As per the motor insurance policy conditions, we are supposed to take care of the vehicle after the claim intimation until the insured takes the possession of the vehicle after repairs.

Under the previous arrangement which was subsequently changed, we had 148 garages called ‘registered garages’ to attend to accident repairs and our company did not own any those,—Further, it was found that no pre-agreed rates in respect of activities and also no control on prices of spares.

A good relationship between garages and the company is important which would provide a solution to staging claims, which is a common feature in the industry that benefits both repairer and the claimant. The meaning of staging is, making a fraudulent claim by the insured without an accident, in many instances fixing borrowed damaged parts just to report the accident. This is one of the toughest challenges faced by all insurers in the industry.

In respect of spare parts, we found no proper contractual arrangement to buy parts. It has been all spot buying since day one. As per my findings, company has purchased the same part at different prices from different sellers within the period of less than a week and those price differences were as high as 30 to 40%. Nobody had any clue
with regard to the mark-up of those sellers in respect of spare parts due to those differences in prices, which could have been averted by negotiations through better relationship. Hence, my first aim was to evaluate the auto spare market in the country in order to find following.

a) To find their average mark-up.
b) To find their source (navigate further upstream)
c) To find the dominant sellers with the intention of tying it up.
d) To find the practices and trends in the market.
e) To find the best way to use the buying power for our advantage.

Since my initial approach made directly to main buyers was not successful I approached state custom to find the top buyers to be sure of the target, which worked immensely, subsequently.

Our assumption was whoever who imports large quantities could give us the best price for parts mainly due to shipping cost and other advantages associated with economies of scale buying.

Seven suppliers were short listed based on information and finally selected one to tie up with. With this connection I discovered their buying process and their mark-up. Findings are as follows.

a) Main parts sellers buy parts through auctions of which access is limited to membership.
b) Price of any reconditioned part is dependent on the steel weight of the part, which is far less than the price that anyone could imagine.
c) Average mark-up range between 60 to 125%.

My participation in the E-auction, gave me a clear idea of mark-ups of the sellers who sell reconditioned parts locally. Having known mark-ups and big players whom could afford discounted prices, we approached them without any intermediaries. After having initial discussions with five of such players we tied up with one of them. We agreed prices for initially for 1500 parts, which move on regular basis. Due to the fact that parts being added continuously and need to avoid errors in pricing we both decided to have connection with each other using web base technology. At present prices are updated once in a fortnight electronically. Our next step is to give the direct access to field assessors in order to minimize the client servicing time and we are currently working on it. The said system brought transparency to the system, which was not there before, and we build management information on this and intend to use such data at partner conferences to make the process further effective. It is important to note here how I prepared the spare part database, due inefficient MIS in the company there was no information available that I could rely on. It was a contact of mine who works for accredited agent for a giant Japanese car company helped me out. Today we have a solid database that we can be truly proud of. I have attached the initial part list for case reference that gave us a kick start.

Having sorted out spare parts sourcing, we then concentrated on garages. As mentioned, we had 148 garages island wide to service our clients. Those garages had been grouped on labour rates. However, we had no proper documentation with regard to prices and other value added services being provided to our clients by those garages. Major weakness in the arrangement was that the company was not the customer of the garage and the decision maker was the insured who decides solely as to which garage to go to, for the repair. Our job was just to facilitate. This had led to situation both client and the garage owner jointly cheating the insurer by overcharging, repairing non accident related damages, even staging false claims. In many cases parts dispatched were returned due to incorrect specifications due to poor coordination or else rejecting parts without any specific reasons. This is mostly done wilfully as most garage owners make money on sourcing of parts. So central sourcing had not worked at all. This is mainly because of lack of cooperation and coordination with the registered garage. An arrangement that saves cost only becomes possible with the fullest cooperation of the partner (garage) who finally attends to the repair. In this instance, it is realistically depending on the level of benefits that partner enjoys. This aspect had not been looked at by the pervious scheme.

We diplomatically de-listed all garages. This did not create much of problems as some even had not realized that we have removed our branding materials from the site. Some garages had not got any business since being listed
so they were simply not bothered. This arrangement had never been significant from their point whether it is business or any other. Hence it had got erased from their minds due to following reasons.

   a) Arrangement does not generate any revenue for the garage.
   b) No planned reinforced communications by the Insurer and no investment to build relations.
   c) No management information being captured. Therefore, no proper management of the whole thing.
   d) Insurer being their not their client.

I decided to appoint six garages to cover the entire island instead of 148. This is with the idea to give those garages better revenue to make us feel significant. Until we account for significant proportion of their total business we would never be able to demand distinctive treatment.

Locations were decided mainly on customer date (sales), business potential and results scored on the evaluation criteria. Evaluation criteria that I developed had four parts. The criteria are attached for case reference.

   a) Owner’s profile
   b) Price for selected repair activities.
   c) Equipment
   d) Workforce

Since we had no detailed activity list I had to rely on an accredited Japanese car agent to prepare the same within a quick period of time. Repair activity list too attached here to for reference.

We have tied up with 3 garages and other two will be on board probably by end of May. Target is to have all six in operation by end of May 2010. Other than the price we have managed to secure better value added services for our clients, particularly in one of the regions, the offer currently serves as USP (unique selling point) making regional sales easy for us. Some characteristics of the present arrangement are as follows.

   a) Insurer has become garage’s client not wise versa.
   b) Insurer canvases business for the garage. Field staff is supposed to canvas business for the partner garage assigned and they are given targets to achieve. They are rated on their achievements, which are connected to their salary increments & bonuses.
   c) Field staffs (Assessors) performance is evaluated through a carefully designed performance tool, which is attached here to for references. This has been designed to be in line with the arrangement in order to secure their commitment. Without such a tool it is impossible to secure and coordinate in the existing culture.
   d) Development of MI in respect of partners and share such MI for the benefits of all the partners. Insured that drives out of the garage on completion of their repairs shall be contacted in order to gauge their satisfaction levels and such data will be shared with the right partner for improvements. Further, renewal of partnership will be dependent on those data.

Partner garages will be referred to as “our garage” and their details will appear in our corporate literature. This is publicity from the partner’s perspective and opportunity to stay closed with a prominent established brand in the country.

   e) Creation of win - win environment for all partners to ensure no attempt of exploitation.

This whole arrangement has worked well for the company. Under the new pact we can deliver any spare part to any part of the island within 48 hrs delighting our customers. We now apply same mechanism for Indian parts and Japanese windscreens, which too has contributed to achieve our goal to save cost.

At the beginning of the assignment motor claim ratio, which was 92%, had been brought to 72% within the period of less than six months. Generally one digit is equal to 20 ml in SLR. This was achieved despite business volumes, which affect the motor ratio in terms of received premiums. Motor ratio is briefed here in for better understanding.
**Motor Claim Ratio**

Motor claim ratio is the key indicator of incurred motor claims for a specific period. Which can be calculated for class wise, branch wise, broker wise, sale person wise for various decision making purposes including pricing and assessing profitability of products. Claim ratio has two aspects,

1. Gross Claim Ratio
2. Net Claim Ratio

Gross Claim Ratio can be calculated as follows:

\[
\text{Gross Claim Ratio} = \frac{\text{Gross Claims}}{\text{Net Earned Premium}} \times 100
\]

Gross claim ratio indicates Gross claims as a percentage of Net Earned Premium (NEP) during specific period of time.

Net Claim ratio can be calculated as follows:

\[
\text{Net Claim Ratio} = \frac{\text{Net Claims}}{\text{Net Earned Premium}} \times 100
\]

Net claim ratio indicates Net claims as a percentage of Net Earned Premium (NEP) during specific period of time. Net claims can be calculated excluding total losses and Reinsurance recoveries from Gross claims amount.

\[
\text{Net Claims} = \text{Gross Claims} - (\text{RI recovery on claims} + \text{Total Losses})
\]

Net Earned Premium is the net income earned during the specific period of time. It can be calculated excluding Reinsurance, XOL payments and adjusting UPR from the Gross written premium (GWP).

<table>
<thead>
<tr>
<th>Gross Written Premium</th>
<th>XXX</th>
</tr>
</thead>
<tbody>
<tr>
<td>Less: Reinsurance &amp; XOL</td>
<td>(xx)</td>
</tr>
<tr>
<td>UPR Adjustment</td>
<td>(xx)</td>
</tr>
<tr>
<td><strong>Net Earned Premium</strong></td>
<td><strong>XXX</strong></td>
</tr>
</tbody>
</table>

The main difference between Gross claim ratio and Net claim ratio, Gross claim ratio includes both Total losses and RI recoveries on claims, but when calculating Net claim ratio those two items are not considered.

Now with this system, CEO and some selected staff who have been provided access can find out price of any given part within the matter of seconds. This is a tremendous plus factor for them particularly when signing off bills. Field staff too has been given the opportunity to find out prices of spare parts locally and also to purchase in order to bring down the ratio in their region, which they are responsible for. This mechanism does the market appraisal automatically on regular basis.

We changed the reporting structure of the field staff (Assessors) to facilitate this process. Please look at the performance tool for assessors for better undersigning. We are looking forward to appraise the field staff for the first time under the new scheme June this year the referred tool and we strongly feel IT system modifications would be done to facilitate the process in all aspects. Without proper performance tool expected result would never be a reality. I managed to convince all concerned regarding the new scheme particularly IT, and they submit to my view in this regard.

At present we have embarked on the success modifications to the ordering system currently used to facilitate data capturing in order to develop better MI. In addition, we are working towards-on system linkage, which connects the dealer (spare part seller) with assessors to minimize servicing time and also to introduce e-auction platform to say “goodbye” to the conventional salvage yard. At present we use a salvage yard to store salvages and obtain the...
services of a professional auctioneer to sell salvage items. We strongly believe that our proposed e-auction platform will create the system of disposal, more efficient and effective.

Our planned partner convention is scheduled to be held in June and at that forum we intend to use our data which was developed in house for better analysis and with the intention of developing a value mechanism that benefit all our clients with support of our partners over the other players in the industry and also to gain a competitive advantage.

Ex Roadside assistance at a breakdown, motor clinic. We are currently looking into branding aspect in detail to make it our product and to be distinctive from the rest of competitive offerings.

I have attached garage evaluation criteria for your reference. Also attached performance tool developed for assessors, spare part dealer and garages.

I sincerely believe that the knowledge gained in through SCM learning was the success behind realisation of this project.
Success Story: Sri Lanka – ISMM

By Visuddha Piyathilake

Visuddha Piyathilake works with the South Asia Gateway Terminals (Pvt.) Ltd as a Mechanical Engineer. He is also a MLS-SCM® candidate with ISMM.

[Keywords: Commercial & Professional Services, SME, Private Enterprise, Operations, Customer Management]

This success story illustrates how I have reduced the Stock Holding Cost (SHC) of the Engineering Stores of my organization, by 16% - 19% range in 4-6 months time span with the learning benefit of the MLS-SCM® programme.

Please note that the actual information involved in this Success Story would not be revealed, However indicators, which reflects the actual figures, would be used throughout this writing.

The SHC was a big headache to SAGT in year 2009, with the recording of highest SHC as 100% in the month end of July, 2009. There were a bunch of root causes, which has lead to this problem and its uncontrollability. However the root causes, which created to raise the SHC to 100%, go back to the beginning of year 2008.

Being the 27th best port in the world [http://www.slpa.lk/news_events_128.asp], the service levels and efficiency levels give a competitive edge to the Colombo port as well as SAGT to be a competitor in the global shipping industry.

To cater the operational requirements of the Operations Department at SAGT, which is the heart of our business, the key inputs are coming from the Engineering Department by ensuring the terminal handling equipments are made available for operation. To achieve this, they conduct maintenance programmes for different equipment fleets and enable them to the operations to give a high service level. Minimum breakdowns in the machine fleets and faster breakdown services results a maximum availability of equipments. Engineering Stores holds the direct responsibility of catering these Engineering Service requirements (This covers Preventive Maintenance Activities, Repair Activities, Breakdown Services, etc) in terms of ensuring the availability of spare parts and engineering consumables. Further the Engineering Stores is responsible for specifying and requirements planning, on time ordering, order follow up, etc to give an effective service to the Engineering programmes.

For the simplicity of explaining the success story is broken down in to three sections as follows.

Section I  - Root causes for SHC rise in 2009
Section II  - Recession, Its consequences and Recording of highest SHC
Section III  - SHC reducing project, key initiatives, implementation and results

Section I - Root causes for SHC rise in 2009

SAGT started its journey in 1999 and by the year 2003 SAGT has started to fully operate with the completion of final stage of the peer expansion and commissioning the entire equipment fleet. Generally equipments operate in its highest efficiency in the first years of the operations and within 4-6 years they meet the requirement for major overhauls in the engineering perspective. The first reason for the increase of the SHC was increasing requirements of the equipment fleets and it resulted in creating new inventories and increasing volumes of existing inventories. Further to that SAGT volumes (This is measured in Twenty Foot Equivalent Units) has rose dramatically throughout these years, i.e. from 2003-2008, and it has also lead the spares inventory to increase significantly and it has reached a value of 53% by the beginning of year 2008.
In the meantime SAGT Engineering Stores has experienced few occasions where un-availability of supplies resulted in major equipment outages. At that time there were no clear practices and procedures in the Engineering Store and there were some loop holes in the processes, which needed a special attention to mitigate these bottlenecks and associated risks.

Having realised the strategic importance of the Engineering Stores to the terminal operations the Top Management of SAGT has appointed a Warehouse Consultant and a fresh Manager to look after these issues and to streamline Inventory operations.

In that era I have joined SAGT as a Trainee Manager and subsequently became the Assistant Manager of the Engineering Stores and worked jointly with the Warehouse Consultant to improve these processes and eliminate fire fighting activities attended in the past for day’s survival. The Warehouse Consultant has come up with a plan to mitigate immediate problems such as making master inventory data live, responsibility reallocation, drawing-up procedures, etc to get the Engineering Store to the right track. We understood that one of the major reasons for the stock outs is not having accurate inventory data such as re-order levels, maximum and minimum stock levels, etc in the system. Therefore a major inventory policy review was conducted in June, 2008 with the help and inputs taken from responsible engineers. However in this exercise we have not gone to the depth of a theoretical work-out and re order levels (ROL) were merely based on engineers’ mandatory requirements to mitigate the immediate risk of stock-outs. Changing the ROL in the system has created another reason to increase the stock value gradually from June, 2008 after the major inventory policy change as illustrated in the Stock Value Indicator graph.
Section II - Recession, Its consequences and Recording of highest SHC

The next step of the plan was to optimise the stock value after eliminating the immediate problem of stock outs. In the mean time, the global economic downturn resulted several changes in the organization and everyone was under pressure to perform their duties. As a result of that the Warehouse Consultant who has worked jointly with me in this exercise had to resign in April, 2009 from the company before the completion of his contract period. Subsequently the work pressure has dramatically increased and I had to assume the sole responsibility of the Engineering Stores from April, 2009 and I was struggling to regulate the SHC even though I had some plans in my mind to carry out the second stage of the exercise. It was not a big headache for me as I was a stage I student of the MLS – SCM® programme at that time and I took over the total responsibility of Engineering Stores.

By the month of July, 2009 the SHC has risen to 100% and Top management urged to take measures to reduce this SHC to a manageable amount and a target was given to reduce the SHC to 80% to 85% range by March, 2010 (end of the current financial of SAGT).

It was obvious that the lifetime of the machines, changes happened in fleets, major inventory policy review based on the understanding in 2008 with regard to the SHC resulted the steep rise in the SHC day by day.

However I was confident enough and I had answers as to how the SHC can be reduced and controlled with the help of MLS – SCM® experience. Subsequently I had to do a presentation to the Top Management in terms of finding immediate initiatives to control the SHC, immediately reducing the SHC to 80% - 85% range in 4 – 6 months and recommendations for further improvement.

Section III - SHC reducing project, key initiatives, implementation and results

The section III illustrates the SHC reducing project, the key initiatives proposed, how the initiatives have been implemented and its results in step by step.

Preparation and presentation Stage

- Firstly a brainstorming and a fundamental analysis is done with respect to critical areas of the inventory and its contribution to the SHC increase. At SAGT inventories are categorised in to different equipment groups as mentioned in the below table and these individual groups stock values were compared as at July, 2009 with the starting month of the previous financial year (March, 2008). That has guided us to attack the critical areas of the inventory and in this exercise more or less the well-known concept the Paretto analysis was used to find the critical areas.

<table>
<thead>
<tr>
<th>Inventory Category</th>
<th>Stock Value Indicator As @ 31-Mar-2008</th>
<th>Stock Value Indicator As @ 31-Jul-2009</th>
<th>Value Increase %</th>
</tr>
</thead>
<tbody>
<tr>
<td>Lubricants</td>
<td>4</td>
<td>8</td>
<td>107%</td>
</tr>
<tr>
<td>Spares Quay Cranes</td>
<td>52</td>
<td>100</td>
<td>94%</td>
</tr>
<tr>
<td>Spares Rubber Tyred Gantry Cranes</td>
<td>39</td>
<td>59</td>
<td>52%</td>
</tr>
<tr>
<td>Spares Spreaders</td>
<td>10</td>
<td>15</td>
<td>49%</td>
</tr>
<tr>
<td>Prime Mover Spares</td>
<td>17</td>
<td>23</td>
<td>34%</td>
</tr>
<tr>
<td>Consumables</td>
<td>7</td>
<td>6</td>
<td>-13%</td>
</tr>
<tr>
<td>Tyres</td>
<td>12</td>
<td>7</td>
<td>-36%</td>
</tr>
<tr>
<td>Project Items</td>
<td>0</td>
<td>18</td>
<td>N/A</td>
</tr>
<tr>
<td>Miscellaneous</td>
<td>7</td>
<td>19</td>
<td>N/A</td>
</tr>
</tbody>
</table>
In this analysis we have identified 5 critical areas capturing 80% of the problem. We identified that these 5 areas should be addressed first to get the maximum benefit of SHC reducing project in the shortest period of time. In this analysis we have combined Paretto analysis with the gut feeling.

- Highest value increased categories - first 4 categories up to 49%
- Newly created categories where inventories are accumulated without collecting by users brought down for special projects and anticipated repairs – Project Items Category

Then we have done a detailed analysis of one inventory category to find the theoretical re-order levels and it was compared with the actual re-order levels, which were set in the system. Further we have considered some practical inputs such as mandatory spares requirements, supplier minimum order quantities, etc finding the best suitable ROL for particular items. These results were presented to the Top Management in the presentation and we got the ok to proceed with other 4 groups subsequently.

Other than the detailed inventory policy reviews the following recommendations were proposed aiming at controlling and reducing the SHC.

- Reduce Re-Order Levels & Re-Order Quantities of items ordered in fixed quantities and increase order frequency. Ex: Two alternative inventory plans with different order quantities (Q). This idea was captured from the MLS – SCM® programme in respect of the module 11 and it was a practical option to optimise the stock values.

- Gradual decrease from Plan A to Plan B in declining stages.
- Giving higher attention to deliveries in the plan B under the responsibility of procurement department
- Carrying out cost benefit analysis for individual groups for different order quantities before ordering
- Improving the inventory module in the current ERP system to facilitate periodical based ordering in the system itself. Currently the system is only capable of generating replenishment orders based on Quantity based ordering system and periodical based ordering is carried out manually.

In the particular presentation the need of support from other departments such as procurement department by timely placing and delivering orders on time in full and IT support from the IT department was highlighted to get them involved in the project.
Implementation Stage

- The immediate measure was applied to the Project Items where the inventories were accumulated without collecting by users brought down for special projects and anticipated repairs. Responsible engineers for these accumulated project items were directly contacted and they were informed to use these items and plan their projects and special repair activities without a prolonged delay. This has resulted to use more than 75% of the project items in first three months of the implementation phase. It is visible from the Stock Value Indicator diagram that this initiative lead to a significant reduction in the SHC in first three months after recording the highest SHC.

- One month time frame was targeted to analyse and change re-order levels in the ERP system. This was started in parallel with the other initiatives and closer to 1000 inventory items were analysed in respect to these 5 inventory categories based on the class of the item.

- Class A, B, C items were selected to analyse and theoretical ROL was calculated based on the average lead time, average monthly consumption, lead time consumption, buffer stock, minimum order quantity, mandatory inventory requirements specified by engineers, etc. Some examples of this exercise is mentioned in the following table for illustration purposes

<table>
<thead>
<tr>
<th>Stock Code</th>
<th>Stock Description</th>
<th>Class</th>
<th>Re-Order Method</th>
<th>Avg Cost</th>
<th>Avg Monthly Usage (4Q)</th>
<th>Monthly Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>30-10-0250</td>
<td>Disc, Brake, Trolley Travel</td>
<td>A</td>
<td>Min - Max</td>
<td>435,881.90</td>
<td>0.2</td>
<td>72,646.98</td>
</tr>
<tr>
<td>30-10-0430</td>
<td>Roller, Guide, Diam, 63St (with shaft)</td>
<td>A</td>
<td>Min - Max</td>
<td>9,803.26</td>
<td>27.8</td>
<td>272,857.26</td>
</tr>
<tr>
<td>30-10-0555</td>
<td>Rope, Rubber, Dia.20x 4.50m</td>
<td>A</td>
<td>Min - Max</td>
<td>11,312.44</td>
<td>13.1</td>
<td>148,004.42</td>
</tr>
<tr>
<td>30-10-0100</td>
<td>Disc, Brake, Main Hoist, Working Brakes</td>
<td>B</td>
<td>Min - Max</td>
<td>316,897.10</td>
<td>0.2</td>
<td>52,816.18</td>
</tr>
<tr>
<td>30-10-0552-A</td>
<td>Rope, Tension Relief, Dia.8/10x 7.00m (Locally Fabricated)</td>
<td>B</td>
<td>Min - Max</td>
<td>8,350.00</td>
<td>1.4</td>
<td>11,829.17</td>
</tr>
<tr>
<td>30-10-0553</td>
<td>Rope, Rubber, Dia.20x 2.94m</td>
<td>B</td>
<td>Min - Max</td>
<td>9,211.67</td>
<td>3.0</td>
<td>27,635.01</td>
</tr>
<tr>
<td>30-10-0540</td>
<td>Spring, Rubber (Lift cable holder Rubber Flap) Alimak Elvat. Bushing Kit, Brake model SB 28-710-301/8 BB, Main Hoist, Impsa, QC</td>
<td>C</td>
<td>Min - Max</td>
<td>7,270.00</td>
<td>0.8</td>
<td>6,058.33</td>
</tr>
<tr>
<td>30-10-1660</td>
<td>Contactor, Magnetic, Shihlin# S-P111, 110V Coil, QC, Impsa</td>
<td>C</td>
<td>Min - Max</td>
<td>55,173.36</td>
<td>1.0</td>
<td>4,597.78</td>
</tr>
<tr>
<td>30-20-2790</td>
<td></td>
<td>C</td>
<td>Min - Max</td>
<td>2,303.75</td>
<td></td>
<td>2,303.75</td>
</tr>
</tbody>
</table>

- Then these recommended ROLs were compared with the actual ROL set in the ERP system and mandatory requirements, etc and the final result was updated to the system. We were able to complete all 5 areas by the beginning of September, 2009 within the target time period.

- Re-Order Quantities were not alerted at this point and it is carried out as a continuous exercise when the particular item comes for replenishment.

- This initiative has resulted in a further and continuous decrease in the SHC in the next 5 months after recording the highest SHC in July, 2009 as illustrated in the stock value indicator graph.
<table>
<thead>
<tr>
<th>Stock Code</th>
<th>Avg Supplier Lead Time (LT)</th>
<th>Internal Lead Time (Assumption 5 days)</th>
<th>LT Consumption</th>
<th>Buffer Stock</th>
<th>ROP (Theoretical)</th>
<th>ROP (Current ROP in System)</th>
<th>Remarks</th>
</tr>
</thead>
<tbody>
<tr>
<td>30-10-0250</td>
<td>104</td>
<td>5</td>
<td>0.6</td>
<td>0.5</td>
<td>1.1</td>
<td>2</td>
<td>Keep ROP at 2 (Critical Item - Brake Spares)</td>
</tr>
<tr>
<td>30-10-0430</td>
<td>112</td>
<td>5</td>
<td>108.9</td>
<td>81.6</td>
<td>190.5</td>
<td>30</td>
<td>Keep ROP at 30 (Qty/Crane=30, Higher consumption in the past due to festoon trolley project)</td>
</tr>
<tr>
<td>30-10-0555</td>
<td>55</td>
<td>5</td>
<td>26.3</td>
<td>19.7</td>
<td>46.0</td>
<td>50</td>
<td>Keep ROP at 50</td>
</tr>
<tr>
<td>30-10-0100</td>
<td>92</td>
<td>5</td>
<td>0.5</td>
<td>0.3</td>
<td>0.8</td>
<td>2</td>
<td>Keep ROP at 2 (Critical Item - Brake Spares)</td>
</tr>
<tr>
<td>30-10-0552A</td>
<td>21</td>
<td>5</td>
<td>1.2</td>
<td>0.6</td>
<td>1.9</td>
<td>2</td>
<td>Keep ROP at 2</td>
</tr>
<tr>
<td>30-10-0553</td>
<td>55</td>
<td>5</td>
<td>6.0</td>
<td>3.0</td>
<td>9.1</td>
<td>15</td>
<td>Change ROP to 10</td>
</tr>
<tr>
<td>30-10-0540</td>
<td>55</td>
<td>5</td>
<td>1.7</td>
<td>1.0</td>
<td>2.6</td>
<td>5</td>
<td>Change ROP to 3</td>
</tr>
<tr>
<td>30-10-1660</td>
<td>70</td>
<td>5</td>
<td>0.2</td>
<td>0.1</td>
<td>0.3</td>
<td>2</td>
<td>Keep ROP at 2 (Min Eng. Requirement)</td>
</tr>
<tr>
<td>30-20-2790</td>
<td>5</td>
<td>5</td>
<td>0.3</td>
<td>0.2</td>
<td>0.5</td>
<td>2</td>
<td>Keep ROP at 2 (Eng. Min Requirement)</td>
</tr>
</tbody>
</table>

- As mentioned in the preparatory stage other recommendations proposed were initiated after changing ROLs in the ERP system. Reducing order sizes and increasing the frequency of ordering aiming at reducing the average stock value of the particular items were considered as the next step.

- We have identified that the Consumable Category is the best possible area which we can practice this initiative. As a pilot project this model was applied to Filter Consumables used in some equipment. Previously the practice was to order one quarter’s requirement in one batch for filter consumables and we have made arrangements to gradually decrease it to 1 month’s requirement. However tight control and follow-up was there to ensure, that we are receiving the orders in a timely manner OTIF, as we have faced some delays from the procurement department. This resulted in a further decrease in the stock value and currently we are in the process of identifying and apply the same principle in some other areas.

These initiatives and the support received from my own staff lead me to reduce the SHC to 84% by February, 2010 and subsequently to achieve the target. Therefore it can be considered as a big success story of the Engineering Stores as well as for me. I was given a target to reduce the SHC to 80-85% within 4 - 6 months and MLS-SCM\textsuperscript{®} programme given me a great help and valuable inputs given in all course modules. Especially the Module 11 – Managing Inventory, helped me a lot, in terms of how to optimise the SHC with different initiatives with a more practical sense. I believe that carrying out a special task like this in a pre determined time period with the fullest confidence is one of the greater outcome come that I got from the MLS-SCM\textsuperscript{®} programme.

There’s a great impact to the organization with this improvement and it will be highly reflected in the financial reports of the company. However what I did was not a one off task and it is continuous process that I should follow to give the maximum benefit to the company by maintaining the optimum SHC. Currently I have given the responsibility of maintaining the optimum SHC figure and it is considered as a key result area of my individual performance. However I’m fully confident that the experience gained through the MLS-SCM\textsuperscript{®} programme and this success story is a valuable asset to me in terms of achieving this target throughout the coming years.
PURCHASING OF ASSEMBLED DESKTOP COMPUTER

Desk tops can be categorized into Core development quadrant & it goes under assets to our Organization.

Specification received from the Logistics department for assembled computer giving “Dual core assembled computer with Operating System”. Prepared RFQ sent to suppliers but the received quotes from suppliers are not up to the expected standards. Therefore, Bid committee decided to collect fresh quotes from the same suppliers.

As a person who is learning international purchasing using the knowledge of detailed specification & past purchases of computers manage to draft detail specification for request for quote (RFQ) with much more details such as operating system: Window Vista, Processor: Intel Dual Core, Memory: 2 GB, Warranty details:; Monitor: 19” LCD.

Using the knowledge of supplier perception model manage to recognized the item which falls into the core business category & explain the suppliers about the use of building the relationship with the organization & increase of the sales by long term relationship.

Applied the negotiation style Deal Maker to myself & enjoy the bargaining using the current market price trend.

Manage to get competitive prices such as A Company: SL Rs. 66,500/=, B Company: SL Rs. 77,500/= Company C: 78,000/= & Company D: 80,800/=.

Manage to select the assembled desktop computer with best price of Rs. 66,500/= with advance configure as according to the organization requirement.

<table>
<thead>
<tr>
<th>No</th>
<th>Month</th>
<th>Unit Price (Rs)</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Aug-09</td>
<td>83,000.00</td>
</tr>
<tr>
<td>2</td>
<td>Sep-09</td>
<td>83,000.00</td>
</tr>
<tr>
<td>3</td>
<td>Mar-10</td>
<td>66,500.00</td>
</tr>
</tbody>
</table>

**Price variance**

\[
\text{Price variance} = \frac{\text{Rs. 83,000} - \text{Rs. 66,500}}{\text{Rs. 66,500}} \times 100 = 19.88\%
\]
I’m working as the engineering materials manager at an international airline and I’m responsible for the management of aircraft spares (i.e. rotables, repairable, expendables, consumables, tools, mod-kits, etc.) for the whole of our aircraft fleet. Apart from that I need to handle material requests from other airlines when they are faced with aircraft on ground (AOG) situation due to materials which can be anywhere in the world. Even though I’ve had several years of experience in managing inventories of various types, there has been a considerable overall improvement not just in my thinking but also in my application after I started following the MLS-SCM course last year.

The different variations of “supplier positioning model concept” which runs through several modules of the MLS program has enabled me in focusing accurately & managing the inventory more efficiently utilising the minimum required resources as well in finding solutions for material requirements cost effectively without compromising on safety. Safety is the highest priority in air transportation & needs to be 100% accurate all the time, as many lives will depend on the decisions we take as aircraft engineering personnel. I have primarily used the supplier positioning model concept in categorising items for replenishment planning as well as in classifying issues & problems that come up during daily operations.

The location of our base in Sri Lanka, which is an island situated far away from the original equipment manufacturers (OEM’s) and other logistical limitations (i.e. freighter frequencies & capacities, size of the cargo hauls of aircrafts operated, handling of dangerous goods - DGR items in passenger aircrafts, long time taken for naval transport) to Colombo makes my job that much difficult from a materials managers job elsewhere (i.e. in USA or in Europe) where they can just airlift or truck the item from source (OEM or otherwise) to the airport as & when needed. The possibilities of loans & exchanges for items are also increased for them due to the vast number of airlines operating in those regions. The size of our aircraft fleet, which is comparatively small, therefore the consumption low makes the planning & ordering of engineering materials that much difficult unlike in the case of larger airlines where the items can be cross utilised & can be ordered in bulk. The conventional aircraft inventory management thinking & processes needs to be revamped to suit our requirements & surroundings while trying to balance the cost Vs availability argument.

I have made use of the supplier positioning model categorisation of items routine, leverage, critical and bottleneck based on the expenditure against the supply impact/risk. This involves minimising the administration burden on routine items (e.g. nuts, bolts, o-rings etc.) by standardising items & adjusting the replenishment levels to cater to a longer durations. I’ve managed to reduce the supply impact/risk of bottleneck items (e.g. paint, thinner, sealant etc.) by adopting a mixture of strategies which involved increasing the inventory levels without making them subject to expiry (i.e. most of these items are life controlled) and focusing on consolidation of requirements (i.e. similar items grouped) in order to focus on long term contracts with suppliers.

The bottlenecks can happen due to the type of item (e.g. DGR items) or the size (e.g. large items like landing gear components). With regard to leverage items (e.g. workshop material) where the expenditure is high but the impact is comparatively low, we have reduced the variability of items, thus reducing the required quantity from different items as well as adopting vendor managed inventory concepts.
The most important or critical items (e.g. rotable components) are being managed using several strategies like equipment pooling & vendor managed inventory. In addition, we have forged several key partnerships with vendors with specific service levels where they keep a pool of equipment in a base location (e.g. Singapore) at their cost & we can use them as & when required. Since we have daily flights to Singapore, it is easier & cheaper to use this method.

Similarly I’ve used a variation of this model to tackle issues/problems that come up frequently where importance/impact/risk of the issue matched against the probability or urgency of it happening. This has allowed me to concentrate more on more urgent & important issues while delegating other non critical issues to subordinates and also delaying (based on subjectivity) non-urgent matters, which maximizes the resources available without decreasing the service levels given to our customers.
Through this programme, I was able to create a new vision for the procurement process of the bank and achieved an overall success in the performance levels of this process. I learned from this programme, I was applied new methodology to minimise purchasing cost in the procurement functions without deviating from the established guidelines and rules of the government of Sri Lanka and my bank. I decided to apply this selected theories through my research topic of “Minimize Purchasing Expenditure Through Positioning the Items And Developing Supply Strategies at the People’s Bank”. And new theories were applied in my research period, involving methodologies introduced by the MLS-SCM such as “Supply Positioning, Model”, Purchasing Strategies, Pareto Analysis, Inventory control systems as well as designed instructions guidelines on “Fixed Assets Management System”, and new formats for controlling and preventing critical cost effective areas for achieving the above target.

I have gathered data and information for analysing and implementing procedures to reduce total purchasing cost of the bank. The bank was able to observe the results gained from implementation of the new methodologies introduced by MLS-SCM programme. During the two year period (2007/2008), we have achieved remarkable total cost savings (SLR 16.0 Million in year 2007 and SLR 19.3 Million in year 2008) throughout our above efforts which are shown in the following diagram and graphic.

<table>
<thead>
<tr>
<th>Month</th>
<th>Jan</th>
<th>Feb</th>
<th>Mar</th>
<th>Apr</th>
<th>May</th>
<th>June</th>
<th>July</th>
<th>Aug</th>
<th>Sep</th>
<th>Oct</th>
<th>Nov</th>
<th>Dec</th>
</tr>
</thead>
<tbody>
<tr>
<td>Target Annual Cost savings</td>
<td>18.0</td>
<td>18.0</td>
<td>18.0</td>
<td>18.0</td>
<td>18.0</td>
<td>18.0</td>
<td>18.0</td>
<td>18.0</td>
<td>18.0</td>
<td>18.0</td>
<td>18.0</td>
<td></td>
</tr>
<tr>
<td>Accumulated Cost savings-2007</td>
<td>0.8</td>
<td>2.3</td>
<td>3.2</td>
<td>4.6</td>
<td>5.9</td>
<td>7.4</td>
<td>8.9</td>
<td>9.2</td>
<td>10.2</td>
<td>11.4</td>
<td>12.8</td>
<td>14.3</td>
</tr>
<tr>
<td>Accumulated Cost savings-2008</td>
<td>1.4</td>
<td>2.1</td>
<td>4.4</td>
<td>5.8</td>
<td>7.3</td>
<td>8.9</td>
<td>10.0</td>
<td>11.7</td>
<td>13.3</td>
<td>15.1</td>
<td>17.0</td>
<td>19.3</td>
</tr>
</tbody>
</table>
The General Consumable Stores (GCS) where MRO & ORM items are stored is a separate entity. This unit receives items take into stock through GRNs and issue the same to the internal customers. Prior to taking into stocks the verification on quality is performed with the respective requestor of the item. If everything is in the same unit also does order certification of invoices for payment.

The GCS functioned in 2006 with 850 SKUs amounting to an average value of USD 50,000 in stocks. This was with 5 employees costing a total of USD 800 per month with a floor area of 1,700 sq ft used to carry out the storage and issuance functions.

Having incorporated the learning stated above by the end of 2008 I managed to reduce the stock value to USD 28,000 with 2 employees costing a total of USD 315 per month. The floor area used was reduced to 400 sq ft. This has been further reduced in 2009 by reducing the stock to a value to USD 21,000 with one employee costing USD 135 with the floor area remaining at 400 sq ft.

Using the six steps of variety reduction (learnt in module 11) 850 SKUs have now been reduced to 400. This helped in the reduction of the required space and the stock holding cost. In addition this reduction forced us to reduce labour allocation, allowing us to now manage the unit with one person.

With this initiative the benefits earned are as follows:

A. Space saving of 1,300 sq ft – the created space saving is utilized now to house another Production Unit which would otherwise been built at an additional cost.

B. Manpower was reduced from 5 to 1 – this allowed the other 4 to be transferred to relevant areas that required personnel who would have otherwise been recruited as additions.

C. Average stock holding value has been reduced from USD 50,000 to USD 21,000 allowing better utilization of working capital. In addition to the above the reduction of SKUs and quantities facilitated minimising waste and easy stock handling.
Success Story: Sri Lanka – ISMM

By Anil Ponweera

Anil Ponweera, Sri Lankan Institute of Supply and Materials Management, August 2004. He is a MLS-SCM® candidate with ISMM.

[Keywords : Professional Services, Public Organisation, Operations]

It’s never too late to become a supply manager in Sri Lanka

A participant in his late fifties – a qualified Mechanical Engineer with an MBA – was asked to take over as Chief Manager of Supplies in the Ports Authority of Sri Lanka, a large Government-owned establishment. He had no previous experience in the field of Supply Chain Management.

Despite his age, he enrolled in the MLS-SCM Certificate programme offered by the Sri Lankan Institute of Supply and Materials Management (ISMM) and was the first to pass its six module exams for the Certificate. He is now enrolled for the Advanced Certificate.

His commitment and desire to learn in an area that was new to him through the MLS-SCM programme has significantly improved his performance and resulted in a special salary increment and career upgrade. His ambition is to complete his MLS-SCM studies, which have opened up new avenues for him with his employer, and to serve them better in the future with the knowledge gained.
Success Story: Thailand – Purchasing and Supply Chain Management Association of Thailand (PSCMT)

By Chatchai Supprapruth

Chatchai Supprapruth is the Supply Manager at Gate Gourmet in Thailand. The success story is written by Anan Pattanathanes, MLS-SCM® Trainer.

[Keywords : Transportation, Local Large Enterprise, Private Enterprise, Operations, Customer Management]

New purchasing strategies cut costs at Thai airline catering company

Chatchai Supprapruth is the first candidate to have achieved the MLS-SCM based Purchasing and Supply Chain Management Diploma, after passing 15 exams since 2002 with training delivered by the Purchasing & Supply Chain Management Association of Thailand (PSCMT). Today, he is the Supply Manager at Gate Gourmet (Thailand) Limited, an airline caterer.

Mr. Supprapruth was handed a formidable task when he took up his position in 2003 to optimise the company’s purchasing and supply of food and non-food related items to increase its competitiveness in a declining market, further dampened by the severe acute respiratory syndrome (SARS) outbreak in March 2003.

Based on the knowledge gained through his MLS-SCM training, he applied the Supply Positioning Model to reduce supply costs, leverage purchases with suppliers and guarantee availability. The model helped him to set strategies specific to the company’s different purchase items depending on their costs, supply risk and impact.

Mr. Supprapruth also applied a standard model to analyse inventory and to prioritise actions aimed at reducing inventory levels and costs while maintaining service to customers. This allowed him to solve the problem of excess stock resulting from a lack of inventory monitoring and the drop in passenger travel in the wake of the SARS outbreak. By May 2003, results were already evident.

“The achievement was a dramatic improvement of performance measured by a reduction in stock,” he says. He expects continuous improvement to optimise inventory levels under changing business conditions.

Finally, he applied the “Make or Buy” strategy, which allowed him to determine whether it was more cost-effective to continue making items in-house or to purchase them externally. Outsourcing carrot-based food products from a new supplier helped Gate Gourmet save 6% on these items alone.

Effective and efficient supply management worked for Gate Gourmet: It achieved total savings of more than 16% on its supply expenditures.
Success Story: U.A.E Dubai – The Tutelage

By Benjamin George

Benjamin George works with Etisalat in Dubai. He is a MLS-SCM® candidate with The Tutelage.

[Keywords : Telecommunication Services, Multinational, Private Enterprise, Operations]

Thanks for the knowledge, skills and expertise I gained through my Certificate and Advance Stages of the MLS-SCM Programme. With the expertise I gained through the Programme helped me to support higher management of Procurement & Supply Chain to conduct an Activity-based Costing on Procurement Services for charging an Etisalat Holding Company and thereby to convert Procurement & SCM from the status of a Cost Centre to Profit Centre.

The various functions /processes of Procurement have been clearly identified based on the knowledge gained through 12 Modules and especially the measuring costs and Activity-based Costing explained under Module-12. The various functions of Procurement have been grouped to 9 Activities, such as Prepare, Float & Evaluate RFQs, Process POs, Process RPOs, Manage Petty Cash/ Credit Card Purchases, Manage & Coordinate Shipment arrangements, Manage Support Services, Evaluation of offers against Tenders, Preparation of Contract, Finalization of Contract and Post Contract Administration. Then the Cost Drivers, Cost Objects and the Charging Units were identified against the 9 Activities.

The total resource has been distributed to various activities and the activity drivers have been calculated with weighted factors and the charging units and the unit charges are under finalization.

Once the charging units and unit charges are finalized, Procurement Section will be able to charge other holding companies & subsidiaries for any Procurement Services rendered, through a service level agreement, which will be implemented soon with one of the holding companies, covering approximately 25% to 30% procurement services (in terms of amount approx. AED. 6 Million) and henceforth, Procurement Section will become a Profit Centre.

I have utilized all the skills and expertise derived from the MLS-SCM Programme for analyzing the complete Procurement Activities and carrying out Activity-based Costing for start charging other entities.
I. Thanks to the training taken in “Developing Supply Strategies” which was of great help in assisting me to determine the number of suppliers to deal with, which suppliers to chose, the nature of relationship and the type of contract to adopt for each item according to its position in the Supply Positioning Model, the following were accomplished:

1. Name of Project: Supply of PCs and Laptops for Etisalat Group of Companies.


   Number of suppliers invited to bid: Many but only reputable brand principals due to quality and product operational reliability being of importance to our operations.

   How the training assisted (i.e. the Outcome): It helped me to adopt the right Supply Strategy as follows. Since PCs and Laptops represent “Leverage Items” to our Group Companies, “Price Variability” is low for such items of pre-identified specifications, the “Switching Costs” are low in all our Group Companies’ markets due to availability of many suppliers and because items are largely Standard and since placing all our business with one supplier gives a volume discount advantage, we decided to adopt the following Supply Strategy:

   b. Nature of Relationship: Arms Length (Buyer Dominant).
   c. Type of Contract: Term Contract (We adopted a Frame Agreement).
   d. Type of Supplier: Lowest Cost over Agreement Term.

   * In our case we decided to have a “Primary” Frame Agreement for a “One Year Term-Renewable to an extra year” with one supplier who was most competitive in the consolidated commercial (i.e. combined financial and technical) evaluation. However, to always maintain this supplier keen on offering best market prices and highest after-sales service levels, we decided to have “Secondary” Frame Agreements with the next two commercially highest ranked suppliers as back-up in case that “Primary” supplier does not fulfil as per Agreement Terms. These latter two suppliers were also happy to be “Secondary” waiting for a chance to become primary at any point of time if the “Primary” supplier does not perform or to simply supply on-need basis in case an urgent unexpected demand arises in any of our operating markets and the “Primary” supplier is accordingly unable to fulfil.

   Impact on our Organization: We have saved a lot of effort, money (due to volume discounts attained) and also other administrative costs compared to our earlier supply strategy for such items, which was based on spot basis purchases. We have also gained better after-sales service terms due to our negotiation power facilitated by the larger volumes at stake and due to the standardization of all our Group Company Requirements enabling the contracting of only one supplier as “Primary”. Savings are accumulating as time goes by and are substantial on the Group level but, due to confidentiality, such data cannot be released.
2. Name of Project: Supply of Scratch Cards for Etisalat Group of Companies.

My Role: Member of the Negotiation Committee.

Number of suppliers invited to bid: Many.

How the training assisted (i.e. the Outcome): It helped our whole team to adopt the right Supply Strategy as follows. Since Scratch Cards again represent “Leverage Items” to our Group Companies, but the “Price Variability” is high, the “Switching Costs” are relatively high due to the long procedure of qualifying a supplier both technically and security-wise and since placing all our business with few suppliers gives a volume discount advantage, we decided to adopt the following Supply Strategy:

a. No. Of Suppliers*: Four (Regular trading style).
c. Type of Contract: Term Contract (We adopted Frame Agreements).
d. Type of Supplier: Lowest Cost over Agreement Term.

In our case we decided to have four Frame Agreements each for a “One Year Term-Renewable to an extra year” with four different suppliers since no one supplier could fulfil our entire big capacity requirement and many needed varieties (two different card materials as well as many sizes/specifications of each) at the same time. Relationships with all these suppliers had to be cooperative since we had to “talk the same language” and have a “high level of trust” due to the artwork and design related collaborative work that would be handled between us and the need that we not be exploited by any one supplier if we require an urgent order of a certain variant to which it has quickest access by virtue of its previous work with us on its relevant design. However, we decided to adopt the “Pareto” rule in assigning volumes to these suppliers whilst ensuring that the capacity capability of each would be sufficient to enable to meet its assigned business volume. Therefore, we assigned 80% of our volume requirement of one of the two different card materials to the lowest-priced supplier for that material while the next higher-priced one got 20%. The same principle was applied in awarding the two lowest-priced suppliers of the other card material. In that way the two suppliers awarded only 20% of our business for each card material respectively were very keen to reduce their prices further at the time of contract renewal to gain a higher share this time. Those who attained the 80% share in each case were also keen on the very same issue even before contract renewal time and as soon as the market prices shifted to our favour so as not to lose any of their respective business shares as well.

Impact on our Organization: We have saved a lot of effort (due to the lengthy pre-work needed to qualify a supplier), money (due to volume discounts attained) and also other administrative costs compared to our earlier supply strategy for such items which was based on a mix of single supplier frame-contracts in some Group Company countries and spot basis purchases in others. In fact those who used a single frame contract were many a times forced to place spot purchase orders with other non-contracted suppliers to accommodate for any unexpected surge in requirement and this definitely cost them more both price and administrative-cost wise. Savings are accumulating as time goes by and are expected to be in tens of millions of US Dollars on the Group level by the lapse of one contract year but, unfortunately, exact figures cannot be released.

II. Thanks to the training taken in “Understanding the Corporate Environment”, I was able to recommend to our Management a most suitable organization structure in setting-up our new “Group Procurement Division” (GPD) located in the UAE. We have precisely adopted the “Hybrid” model as per MLS-SCM terminology whereby we have set-up a team of procurement experts to work on the category level, focusing mainly on finalizing Group-wide specific product-line contracts each, whilst a group of lead-buyers and buyers would work on placing the orders based on such contracts.

In fact, we have gone an extra step in this Hybrid model whereby we also adopted a mix of centralized and decentralized procurement strategy. In this scenario we have placed a threshold “Cost of Acquisition” value in USD above which any purchase by any Group Company would have to be referred to GPD for a decision of whether to “globalize” such purchase. Below that threshold, and provided that such product/service had not been “globalized” earlier, each Group Company would go ahead and handle its procurement locally, all the time easily
availing any guidance or help from the centrally located GPD team as and when required. “Globalizing” as used in this context refers to a decision taken by GPD on whether to float a Group-Wide Requirement Tender based on the presence of a common requirement amongst at least two Group Companies, the requirement of at least one of which exceeds the set threshold. Of course, as time goes by, more and more “Global Master Agreements” (the phrase we use for Group Frame Contracts) are finalized by GPD and copied to each Group Company and hence their need to refer back on individual purchases above the set threshold decreases.

By achieving the above mentioned step we have practically completely detached the GPD to focus only on “Purchasing and Supply Strategy and Goal” setting and “Global Master Agreements” (GMAs) management and finalization whereas regular Purchase Orders based on Requests for Quotations (for purchases beneath the mentioned threshold) and based on GMAs, wherever relevant, are managed and executed on the individual Group Company level including Etisalat-UAE itself even-though it is the Mother Company and even-though it is where the GPD is physically situated.

Impact on our Organization: The impact here is great on the organization as a whole and even though we have not calculated the relevant savings in money terms of the increased efficiency and prevention of duplicate work on Group Level by adopting this set-up, the mere focus on delivery of such GMAs in much shorter time and hence the much quicker attainment of their Group-Wide savings are evident. This is without mentioning the benefits of the now much higher Purchasing and Supply Section’s visibility and accordingly that of the whole of SCM and of their roles and value on the Group Level.

III. Thanks to the trainings taken in all of “Certified Negotiator - Negotiation Skills for Successful Deal Making”, “Developing Supply Strategy” and “Understanding the Corporate Environment” courses I have managed, as Chairman of an Evaluation & Negotiation Committee for the project of “Outsourcing of 3rd Party Logistics Services”, to not only attain competitive prices saving the company at least USD180,000 per annum on direct distribution transport costs but also to cut-down (as part of the negotiation team) process-cycle steps and hence process-cycle time by almost 33% in total thus reducing other operational distribution and administrative costs by an equivalent percentage each year as well.

Negotiation skills and the pre-negotiation work done in “analyzing the market environment” helped me explore other market options available to get at least a segment of the consolidated job (where I felt the recommended provider was overcharging us as a result of monopolizing other parts of the job) done in a different manner. By exploring this alternative methodology with that recommended supplier and going through lengthy discussions on its applicability and proving to them other “best-practice” companies’ adoption of the same, I was able to attain the above- mentioned immediately quantifiable and immediately non-quantifiable cost savings let alone the efficiency increase that would have a direct impact on reduced delivery lead-times to our customers by 33%.

Having members of our organization from other Operational, Sales, Marketing and Audit Departments as members of such Committees and the value they witness being added to such negotiations and analyses by SCM staff trained on such skills and expertise is of great benefit in highlighting to them and hence ultimately the company’s Top Management the resulting positive effect to the company’s bottom-line profitability on both the short and long term.
Success Story: Vietnam – College of Business Administration for Managers (CBAM)

By Pham Hung

Pham Hung is the Operation Manager at the Newland Logistics Company in Vietnam. He is also a MLS-SCM® candidate with CBAM.

[Keywords: Logistics, Private Enterprise Operations]

Thanks to the model “Combining an in-house fleet with a haulage contractor” (MLS-SCM Module 10 – Unit 4 - Page 83), I have started to implement the first step in equipping the company with its own fleet of vehicles to partly replace haulage contractors.

**Combining an in-house fleet with haulage contractors**

A – The situation before using our company owned in-house fleet of vehicles:

- Our logistic company outsourced the delivery service to a haulage contractor and, therefore, was not able to control the delivery service to customers effectively and efficiently.
- We faced difficulties attracting more business because many customers have the perception that a logistic company should have their own fleet of vehicles.
- We faced the biggest problem during peak season when the haulage contractor couldn’t meet our delivery schedule due to shortage of vehicles.

B – The situation after applying the model “Combining an in-house fleet with a haulage contractor”:

- We started to use the 2 company owned vehicles in December 2010, and our delivery service to customers have improved in terms of lead time and condition of goods on arrival.
- We won one new key customer and are expecting more new customers.
• We reduce our costs of transportation.

The results:

1. **Support company in winning more business:**

The new approach partially contributed to us winning a new business in December 2010. Namely, a new supplier (Cheese products) appointed our company as the sole importer and distributor in Vietnam. Now, this new business accounts for over 50% of our total revenue per month. Moreover, we now can approach potential new customers who require us to have our own transportation in order for them to consider using our services.

2. **Improve our service level to customers:**

Beside the function of trading, our company also provides customs clearance, warehousing and delivery services for our customers. With the additional fleet of 2 company-owned delivery vehicles, we have reduced our delivery time (within a radius of 25 to 30 km) from around 2 hours from the time the payment of goods is made to delivery within 1 hour.

3. **Reduce the cost of transportation:**

<table>
<thead>
<tr>
<th>Time frame</th>
<th>Last time</th>
<th>Current</th>
<th>Projection</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Before Dec-2010</td>
<td>From Dec-2010</td>
<td>From Oct-2011</td>
</tr>
<tr>
<td><strong>A-Cost of transportation per month</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>In Vietnamese Dong (VND)</td>
<td>148,200,000</td>
<td>132,855,167</td>
<td>105,052,917</td>
</tr>
<tr>
<td>In US Dollar (USD)</td>
<td>7,639</td>
<td>6,848</td>
<td>5,415</td>
</tr>
<tr>
<td><strong>B-Saving in USD per month</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Amount</td>
<td>791</td>
<td>2,224</td>
<td></td>
</tr>
<tr>
<td>%</td>
<td>10%</td>
<td>29%</td>
<td></td>
</tr>
</tbody>
</table>

**Note:**

*Exchange Rate*  
19,400 VND/USD

**BASED ON 2 COMPANY OWNED VEHICLES**

The average transportation cost paid to the haulage transporter before the purchase of the 2 delivery vehicles was 148 million VND (Vietnamese Dong), about US$ 7,600.

The current average transportation cost for December 2010 and January 2011, consisting of payments to the haulage transporter and operating costs of the 2 company owned vehicles, is 133 million VND, or about US$ 6,800. A saving of about 10%.

Therefore, we can estimate that during 2011 we will save about US$ 9,500.
BASED ON PURCHASE OF 3 ADDITIONAL COMPANY OWNED VEHICLES

Our company is planning to purchase another 3 vehicles in October 2011, and we estimate that this will save us an additional 29% of our transportation costs. If we take this into account, our estimated savings for 2011 will be revised to US$ 13,800.

Should our business expand further, the company will purchase more delivery vehicles.
Success Story: Vietnam – CBAM

By Bui Thi Van Ha

Bui Thi Van Ha works with the Thang Long Joint Operating Company. She is also a MLS-SCM® candidate with CBAM.

[Keywords: Energy, Private Enterprise Operations, Supplier Management]

The following result was achieved from the utilization of cost negotiation concepts and techniques for the provision of Marine Gas Oil (MGO) Services.

Based on the Supply Positioning Model, MGO is one of our high expenditure leverage items and a commodity. Last year when the existing Contract was going to expire, our contracting strategy suggested two (2) options: extension of the existing contract via direct negotiation with the existing vendor or re-tender. We decided to negotiate with the vendor first and if a competitive price was not achieved, then we would tender.

The supply market conditions showed that this is an oligopoly with about ten (10) suppliers in the country. Price is highly variable depending on the World’s Crude Oil price. In the national market, there is no price difference amongst suppliers as it was previously set by the Government and now it is fixed by suppliers but must be approved by the Government thus in fact, price from all suppliers is still the same. Switching cost is low. The level of competitiveness between suppliers is quite low.

However, we realized that suppliers still want to compete with each other to win the contract and despite the fixed MGO price; they can offer a discount rate for buyers. The discount is different from supplier to supplier depending on their perception of our Company business and their willingness to reduce profit margin to pursue additional market share.

Thanks to the clear understanding of the market conditions and our organizational power of high expenditure plus willingness to accept long term contract, we were tough in negotiation and asked the supplier for the best discount they could offer. In order to know the best discount figure, we surveyed other suppliers and buyers before negotiating. During the negotiation, we applied some persuasion tactics such as:

- “Logic”: the discount factor obtained through the survey from other suppliers and buyers was shown;
- “Bargaining”: committed additional extension year for vendor if they offered good discount;
- “Threat”: suggested that we could re-tender to choose the most competitive supplier.

Finally, we got very competitive price from our existing vendor and extended the contract. The discount is seen as a small rate (around 1%) but this small reduction in the purchase price for the high expenditure item results in large cost savings.
Success Story: Zimbabwe – Empretec Zimbabwe

By Cathias Mundandishe

Cathias Mundandishe works with the Nathpahram Pharmaceuticals as a Branch Manager. She is also a MLS-SCM® candidate with Empretec Zimbabwe.

[Keywords: Pharmaceuticals & Life Sciences, Local Large Enterprise, Private Enterprise, Operations]

The Branch Manager serves seven branches in the country i.e. Hospitals and Clinics.

Therefore managing the logistics in the Supply Chain Module assisted my Branch in reducing the number of delivery routes from seven to four only by combining some districts.

This led to the reduction of travelling time, fuel costs, staff allowances and vehicle maintenance cost.

I also managed to learn how to look after and manage my inventory and was therefore well stocked in the branch we therefore were also able to service more health institutions in those districts meaning the number of clients serviced increased with the reduced routes.
The International Trade Centre (ITC) is the joint agency of the World Trade Organization and the United Nations.