

Demand Planning & Inventory Optimisation

Best positioning your inventory management and forecasting techniques to achieve a lean, profitable and sustainable supply chain

Grand Copthorne Waterfront Hotel,
Singapore

11th & 12th July 2011

*"If one does not know to which port one is **sailing**, no **wind** is **favorable**."*

Seneca, Roman philosopher

Reducing operating costs, increasing asset turnover and improving customer service levels through effective demand planning and inventory optimisation



Facilitated by international consultant:

Lindsay Harding Director
Hilf Supply Chain Solutions Ltd, UK

"**Key Learning Points**" will be summarised after each session. The delegate pack will include a number of self-assessment checklists which will be a valuable tool for delegates to complete back at their workplace following the training course. The objective is to position attendees' company processes against a set of best practice criteria.

Upon registration, delegates will be sent a case study to read, as this will be referred to throughout the sessions and interactive exercises in the course. The case study will entail various problems a particular company is facing.

Benefits of attending this informative event will allow attendees, aided by interesting case-studies and practical exercises, to gain practical insights into numerous valuable Demand Planning & Inventory optimisation issues, including how to

- **Determining** which inventory management / replenishment strategy is most appropriate for your organisation in the current market scenario
- **Gathering** valuable information and utilising it to enhance the performance of your forecasting processes
- **Reviewing** slow-moving and dead stock from a whole new perspective which will help accelerate your decision on their disposal
- **Re-visiting** data during the products' life cycle to determine if settings and parameters are still appropriate
- **Working** at the optimum inventory level allowing maximised customer service whilst controlling costs to maximise ROI and competitive advantage

marcus evans training courses are structured to provide intense and practical training. Our format:

- Combinations of educational presentations, productive in-session assignments and participant collaboration to provide actionable learning
- Strictly limited numbers to allow for greater interaction and one-on-one interaction with the trainer
- Detailed pre-course questionnaires to allow you to tailor the programme to address your individual concerns
- Hard and soft copies of presentation materials and tools

***Early Bird & Group Discounts**
Ask about our savings

Testimonials:

"An excellent course and a very good trainer. I'd give it a VSAT! (Very Satisfied). Make that another VSAT! Money well spent as far as I was concerned"
Escalation Engineer
Microsoft Dynamics, UK

"I have really enjoyed the 2 days training. Lindsay gives examples of what happened at different companies for almost all of the topics being discussed"
SCM Analyst
Philip Morris Singapore Pte Ltd

"Very good knowledge and practical experience. Thanks for the useful key learnings, I will share it with my team. I really enjoyed and appreciated the knowledge transferred during this training"
Senior Supply Manager
Boots Retail (Thailand) Ltd

"I gained a lot of knowledge from this session. The trainer's approach of sharing real-life mistakes of inventory key learning points is very effective and interesting"
Supply Chain Executive
Sarawak Shell Berhad (Malaysia)

"It was a great presentation and learning experience, and it made me think a lot to transform and continue to improve China HP service part supply chain operation."
Manager of Field Logistics & Materials (Global Delivery, TSG Services)
Hewlett-Packard, China

"Energetic presentation.... your session was so informative and interesting that I referenced your presentation material to my fellows several times"
Vice President Central Purchasing
Doosan Heavy Industries & Construction, Korea

"I learned a lot from your session especially about VMI and SCM. It was really a good chance for me to go through the basics of the whole logistics mechanism"
Business Planning Team Member
Pantos Logistics, Korea

Endorsers



The Regional Professional Body for Logistics Practitioners

Pre-course questionnaire

To ensure that you gain maximum benefit from this event, a detailed questionnaire will be sent to you to establish exactly what your training needs are. The completed forms will be analysed by the course trainer. As a result, we ensure the course is delivered at an appropriate level and that relevant issues will be addressed. The comprehensive course material will enable you to digest the subject matter in your own time.

Monday 11th July 2011

Session One

Highlighting and managing issues facing the Demand Planning & Inventory Management function

This positioning session will take a look at the evolution of the supply chain planning function (and associated IT systems), and discuss some key concepts necessary for its success. A strong emphasis will be placed on data integrity, accuracy and the implications of constantly changing customer expectations. With today's best practice being tomorrow's average service, the need to become more responsive by closing the lead-time gap (improving the company's P:D Ratio) is a prerequisite for survival and growth

- Efficient supply chain vs Responsive supply chain
- Life cycle considerations
- Decoupling points in Supply Chain, including how they differ within MTO/ATO/MTS environments
- Conflicting measures which possibly drive inappropriate actions
- Failure to capture the voice of the customer – a short case to illustrate how a company's internal Lean team discovered how a particular product line was viewed differently by the end consumer

Session Two

Using the S&OP process to drive our master demand plan

One of the toughest tasks in any business is getting everybody on the same page. It is tough to attain a goal with everyone going in different directions. Multinational companies have implemented S&OP in order to get everyone focused on the key goals of the company

An overview of a series of S&OP best practice steps

Aided by the data supplied in the S&OP grids of the case company being followed, delegates will examine the financial implications of flexing production rates. A group exercise will follow to create a high level monthly demand plan which meets inventory and production criteria whilst improving on the costs originally displayed

Session Three

Prioritising the inevitable need for Demand Forecasting within your supply chains

The session will focus on the bigger picture surrounding the data and communication forecasting process where accuracy improvement gains will more likely result. A number of brief case studies will be presented to highlight specific points including a company which must stock to a worst case demand spike, a company who fell foul of external events which resulted in a huge write off, examples of incorrect interpretation of data appearing to exaggerate true demand, etc

- Leading indicators, demographics, and causal events
- Qualitative methods and Quantitative / Time Series models
- Demand amplification (The Bullwhip Effect) as a consequence of a forecast driven enterprise
- Dangers of choosing an incorrect model
- Changing the models used during the product life cycle
- Accuracy measures including Mean Absolute Deviation

Session Four

Disaggregating the S&OP Production & Inventory Plan into a workable MPS

When the Executive management team have agreed and approved the S&OP plan, the vital bridge of Master Scheduling should be undertaken. Here interactive exercises will include the positioning of MPS receipts to create a build plan which will drive MRP, including the correction of an overload situation identified at the Rough Cut Capacity Planning stage of the process

Session Five

Managing dependent demand inventory to gain maximum advantage from your IT system

Existing MRP users within the manufacturing industry will have some interesting scenarios posed. Participants from non-manufacturing (distribution, retail etc) will gain a sound appreciation of the dilemmas faced by their upstream suppliers

- Dependent demand mechanisms :- MRP (Materials Requirements Planning) – with an example presented to demonstrate how a single incorrect stock figure could trigger off a huge amount of expensive company activity

Session Six

Planning & Replenishing Independent demand & Indirect Inventory to the optimum level

This session will review the various methods of replenishing stock, and trigger points necessary, to maintain the desired pre-established levels. The pre-positioning and replenishment method changes, not only by industry, but even by the parts within the portfolio of the same company (fast moving, slow moving, indirect/MRO supplies), again a 'single approach' is not common. Getting these basic building blocks right is an essential prerequisite before larger scale strategic and collaborative gains become fruitful.

- ROP (Re-Order Point/Re-Order Level)
- Periodic review technique – covering calculating a target holding, top-up quantity and fixed review period. The extra safety stock required to cover demand uncertainty in periodic review systems
- Min-Max (including the pitfalls of this method when Time To Reliably Replenish is not adhered to)
- EOQ (Economic Order Quantity)/least total cost including methodology to perform in Microsoft Excel (with and without Solver add-in)

Group activity will include calculating an EOQ for a case company, with the effects of various alterations being explored – such as ordering a similar more convenient batch size, quantity discount implications, assessing overall inventory when altering the number of stocking locations and revising the EOQ at each

About your course facilitator:

Lindsay Harding is Director of Hilf Supply Chain Solutions Ltd – A UK based training consultancy he formed in 2002 which specialises in Demand Planning, Inventory Management and Order Fulfilment, which is the APICS "AEP" (Authorised Education Provider) for Great Britain. He is a Certified Supply Chain Professional, being APICS certified in CPIM, CIRM and CSCP. He has extensive industrial experience, predominantly within the manufacturing sector, meaning he can bring a presentation to life using relevant examples and interesting anecdotes. He has previously delivered training sessions in China, Bahrain, Ireland, Malaysia, Jordan, Singapore, South Korea and Thailand

Lindsay holds an MSc in Logistics & Supply Chain Management from Cranfield University and is recognised by APICS as a Master Instructor for CPIM. Lindsay specialises in delivering supply chain training courses and draws upon a wealth of industrial and consultancy experience to complement the course content

Lindsay's clients include:

- ABB
- Aristocrat Technologies
- Caterpillar
- Epson
- Howdens Joinery
- L'Oréal
- Microsoft
- Ortho Clinical Diagnostics
- SC Johnson
- Smiths Medical
- Weetabix Food Company
- Unilever
- Abbott Diagnostics
- Bergstrom
- Constellation Wines
- General Dynamics
- LifeScan (Johnson & Johnson)
- Meggitt Aerospace
- Nokia
- RIM Blackberry
- SCA Foam Products
- Weatherford
- Wyeth Pharmaceuticals

Workshop schedule

- 0830 Registration and coffee
- 0900 Workshop commences
- 1030 Morning refreshments and networking break
- 1100 Workshop re-commences
- 1245 Luncheon
- 1345 Workshop commences
- 1500 Afternoon refreshments
- 1520 Workshop re-commences
- 1700 Workshop concludes

In-House Training Solutions

If you have a number of delegates with similar training needs, then you may wish to consider having an In-House Training solution delivered locally on-site. Course can be tailored to specific requirements.

Please contact **Sarah Faradilla** on +603 2723 6600 or email sarahf@marcusevanski.com to discuss further possibilities.

Tuesday 12th July 2011

Session One

Zooming into the big trade-off: Inventory vs Service Level

The concept of increased safety stocks necessary to offer higher service levels is widely understood, and whilst this will be discussed, some non-traditional alternatives will also be posed – including two case studies where the company has positioned itself so successfully with its target market that the following have been winning strategies : (1) a fashion company who deliberately slightly under-plans expected consumer demand to reduce/avoid the possibility of excess inventory, and (2) a retail company who's customer base expect low price but are comfortable with a lower level of product availability (i.e. they will accept occasional stock-outs as part of the ongoing low-price strategy)

- Fixed vs. dynamic safety stocks
- Differing service levels with associated safety stock holding
- Safety Stock calculations using Microsoft Excel

Group activity will include calculating the necessary Safety Stocks necessary to offer a particular service level

Session Two

Inventory Reduction & maximising ROI by capitalising on Consignment and Vendor Managed Inventory (VMI) – Your instant route to profitability

Utilising our suppliers' expertise in the management of our inventory

This session will discuss Vendor managed Inventory (VMI), which is often referred to as a vital stepping stone on the route to CPFR, and, Consignment stocking, with pros and cons, and the criteria for success of each being discussed

Are there steps we can take right now to reduce any excess holding?

This session will include a series of steps to provide valuable pointers when embarking upon an inventory reduction programme. The hard facts will show that ongoing costs being incurred should be halted in the near term through an inventory reduction programme. A selection of possible actions for various types of excess will be presented such as re-visiting safety stock levels which were likely set with caution when the item was introduced, however Lean initiatives and Continuous improvement actions which have subsequently followed likely mean we are now better performers, meaning in many instances such figures can be reduced with immediate effect

Session Three

Assessing the financial impact of our demand planning decisions

Here we will discuss the financial implications of the inventory management function – discussing the profit returns realised with impressively high stock turns, the benefits achieved by companies such as Dell by being able to buy components later in their deflationary industry. After discussing carrying costs, the potential financial implications of holding onto slow moving and obsolete stocks are covered (with some alarming examples presented - an eye-opening demonstration of the effects of retaining inventory 'just in case' or feeling a scrap note is too expensive to sign off.)

- Stock-turns including the effect on margin
- The cash-to-cash cycle measure

Session Four

A view of inventory from the TOC (Theory of Constraints) perspective

The work of E. Goldratt will be familiar to many manufacturers who have been faced with bottlenecks within their processes. The performance measures used within the TOC approach (Inventory, Operational Expenses, & Throughput) are discussed with a particular emphasis on the Inventory portion and its effect on profit

Session Five – Closing Session

A discussion of some current trends and directions, including

- Supply chain risk and vulnerability (including a case study of how two competing companies approached a supply disruption – one with success and the other with disastrous consequences)
- Using transportation and containerisation for competitive advantage
- Reverse Logistics, Co-makership, Factory Gate Pricing

Why you cannot miss this event:

Over the two day session delegates will follow a fictitious case study company, completing exercises aimed at addressing the problems evident within the case company

The training will encompass classical views and non-classical views of the inventory management function, interweaving a selection of modern concepts with an emphasis of getting the basic building blocks right to maximise returns. A selection of case studies will be included which focus on not only companies who got things right, but also some who got things wrong – past attendees have been particularly interested in such 'pitfalls to avoid' to increase their knowledge

The training offers an interesting mix of theory, real-life examples, basic concepts, and modern approaches. The trainer aims to keep it real rather than overdoing formulas and academic theory, but at all times making sure we have the knowledge to back up key inventory decisions

Who Should Attend

VPs, Directors, HODs, GMs, Senior Managers, Division Heads, Managers from:

- Demand Planning
- Inventory planning and management / Inventory control
- Materials Management
- Supply Chain management
- Purchasing/ Procurement
- Logistics
- Manufacturing

From across all industries:

- Petroleum, Gas & Chemicals
- Energy/Power/ Utilities
- Manufacturing
- Shipping
- Steel
- Cement
- Mining
- Automobiles
- Telecommunications
- Healthcare and Pharmaceuticals

About the Endorsers

The **Singapore Institute of Materials Management (SIMM)** was incorporated in 1980 as a non-profit and self-supporting independent educational institution, with quality as its corporate emphasis. SIMM has since grown to be a premier institution offering Certificate, Diploma, Advanced Diploma, Bachelor and Master degree education in Logistics, Supply Chain Management and E-commerce for aspiring professionals in the Asia-Pacific region. Educational partners include Curtin University of Technology, APICS The Association for Operations Management and Institute for Supply Management (ISM). SIMM is the authorised regional testing center for the internationally recognised CPIM, CSCP and CPSM professional certifications.

The **Logistics & Supply Chain Management Society** is the Regional Professional Body for Logistics Practitioners. Practically all areas of the Logistics spectrum are represented in the Society. Shippers, Freight Forwarders, Academics, Carriers, Personal Effects Movers, IT Solution providers and other individuals and organisations form our core. With an emphasis on commercial experience and expertise, we are the lead platform for the development of Logistics & Supply Chain Management in the region. To further augment and ensure international accreditation and recognition of our activities, we partner with other leading organisations and conduct research and training in Supply Chain Management in addition to providing Diploma, Bachelors and Masters Degree courses.

www.lscms.org

marcus evans would like to thank everyone who has helped with the research and organisation of this event, particularly the trainer, who has kindly committed and supported the event.