

# Demand Planning & Inventory Optimisation

Positioning your inventory management and forecasting techniques to achieve a lean and profitable supply chain

Kuala Lumpur, Malaysia

14th & 15th March 2011

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

Laurence Sterne

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



## Facilitated by an International Expert:

**Lindsay Harding** Director  
**Hilf Supply Chain Solutions Ltd**

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.

## Testimonials from attendees of Lindsay's courses:

*"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 am writing to give a word of appreciation on helping me in developing some basic and strategic thinking on supply chain management. The course you taught was useful and the pace we kept was aligned to maintain my schedule"*

Technology Portfolio Manager  
**Nokia, UK**

*"Very knowledgeable on Supply Chain"*

Senior Inventory Management Officer  
**PSA Corporation (Singapore)**

*"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**

*"Good knowledge of different industry practices of inventory management"*

Assistant Manager Supply Chain  
**Baxter Healthcare (Asia) PTE Ltd (Singapore)**

*"A very good insight on current inventory tools & management exposures"*

Executive, Materials Operations  
**Malaysia LNG Sdn Bhd (Subsidiary of Petronas)**

*"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)**

*"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**

*"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**

*"It's very informative seminar, good speaker - I got all the information I want to know about inventory management. From the information I got, I can choose which methods will suit my company"*

Director  
**PT Indoporlen (Indonesia)**

## Attend this event and gain valuable insight on:

- **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
- 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

## Pre-course questionnaire

Our priority is to provide for your training needs. To ensure that you gain maximum benefit from this event, a detailed questionnaire will be sent to you to establish exactly where your training needs lie. The completed forms will be analysed by the trainer to ensure that the course is delivered to fit your requirements at an appropriate level and that relevant issue will be addressed.

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

**"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.**

## Monday 14th March 2011

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.

### Session One

#### Positioning session – issues and dilemmas faced by the Demand Planning & Inventory management function

This opening 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.

- Life cycle considerations
- Conflicting measures which possibly drive inappropriate actions
- 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)
- 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

#### Strategic choices aimed at enabling the company to sustain smart inventory management for an effective supply-chain system

As the previous session suggests, innovative approaches soon become the norm, therefore studying how the best supply chains are operated (and discussing potential pitfalls) will arm you with some thought-provoking questions to explore regarding your own future supply chain strategy on returning to your organisation. Assisted by a number of interesting case

studies, various strategies will be discussed with the results you achieved and any trade-offs which are necessary for execution. Whilst there is no one size fits all answer, you will see valuable synergies from specific approaches within these overall strategies which can be applied.

- Efficient supply chain vs Responsive supply chain
- Using transportation and containerisation for competitive advantage
- Reverse Logistics, Co-makership, Factory Gate Pricing

**Case Study:** The 7-Eleven Japan replenishment model studied as an example of excellence. Automotive JIT delivery examples will be cited including the potential vulnerabilities which could result within a Lean pull network – especially when a ‘single sourcing’ strategy is followed.

### Session Three

#### Addressing 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

Standard Deviations and Mean Absolute Deviations will be presented in the forecast accuracy context in readiness for the Session 8 Group activity where various service levels are offered.

### Session Four

#### Sales & Operations Planning (S&OP) – The key to internal collaboration

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. The session will review the best practice 5-Step S&OP process which aims to break down organizational barriers and achieve a realistic Master Schedule resulting in correctly positioned target inventory.

- Breaking down internal barriers by drawing upon effective S&OP
- Integrating ‘top-down’ and ‘bottom-up’ planning that links business plans, financial budgets, operational planning and execution
- Structuring S&OP processes (with S&OP manuals, meeting agendas and action checklists) that are aligned with the business’ requirements and goals

### Session Five

#### 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.

## About your course facilitator

**Lindsay Harding** is Director of Hif 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 compliment the course content.

#### Partial list of clients:

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

## Professional In-House Courses

If you have a number of delegates with similar event needs, then you may wish to consider having a professional in-house course delivered locally on-site. Course can be tailored to specific requirements.

For further details, please use the contact information given on the last page of this brochure.

## Tuesday 15th March 2011

### Session One

#### 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:** Calculating an Economic Order Quantity – a batch size that minimises total costs, after which we will look at the effects of a quantity discount offered

### Session Two

#### Managing demand dependent 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 Three

#### 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:** Calculating the necessary Safety Stocks necessary to offer a particular service level.

### Session Four

#### Maximising ROI & reducing inventory by capitalising on Consignment and Vendor Managed Inventory (VMI) – Your instant route to profitability

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.

- Utilising our suppliers' expertise in the management of our inventory
- Assessing the significance of information sharing in demand planning
- Consigning your inventory to your customers at a profit
- Strengthening ties and fostering partnerships between manufacturers and distributors
- Consignment stocking, with pros and cons, and the criteria for success of each being discussed

### Session Five

#### 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

### Why you cannot miss this event

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.

### 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

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

### Who should attend

**C-Level Executives, MDs, VPs, Directors, HODs, GMs, Senior Managers, Project Managers, Division Heads, Senior Level Executives from:**

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

From across all industries:

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