

# **Logistics & Supply Chain**

Technology Best Practice Handbook





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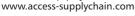


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#### Foreword

"I am delighted to have been given the opportunity of writing the foreword to the BASDA Handbook for Logistics & Supply Chain Software Best Practice.

In an industry where best practice is more often than not, developed through word of mouth and imitation, it is heartening to see a volunteer group of thought leaders come together to produce relevant and practical guidance.

UKWA has in membership 80% of the third party logistics sector. It insists on high entry standards, and encourages companies to undertake regular operational audits and benchmarking exercises. The BASDA handbook will be a welcome addition to the available sources of help to logistics companies, and will be particularly useful to the smaller companies within the sector.

It is published at a time when we are facing economic uncertainties. In such circumstances, the companies most likely to survive unscathed are the ones whose professional credentials are robust. Adopting and maintaining best practice will give you that resilience. I commend the publication to you."

Roger Williams Chief Executive Officer UKWA (United Kingdom Warehousing Association)



## Obtaining the ideal Logistics and Supply Chain Managers' system for 21st century.

"Supply Chain Management spans all movement and storage of raw materials, work-in-process inventory, and finished goods from point-of-origin to point-of-consumption".

At both prosperous and challenging economic times, most Warehouse and Logistics Managers come under relentless pressure to achieve cost savings, whilst improving their supply chain performance. With the ever-increasing demands of customers, suppliers and end users, coupled with the additional pressure of constant legislative changes, businesses can find it daunting to carry out changes to procedures and put in place truly beneficial processes.

With this in mind, BASDA has produced this Best Practice Handbook with the objective of making the process of implementing best practice easier.

Compiled by thought leaders in the Supply Chain Industry, the Best Practice guidelines and recommendations listed in this document are the result of their accumulated knowledge gained through many years experience in the Supply Chain market.

# Why have Best Practice?

Most businesses have some operational issues that they can improve, or in some cases eradicate, if they introduce best practice methods. These include

- Supply Chain Visibility
- Information Management
- Order Management
- Warehouse Management

- Labour Management
- Traffic Management
- Warehouse Layout
- Health & Safety

# **Achieving Supply Chain Visibility**

Today's logisticians must plan to move their goods from A-B in the leanest, most cost effective and informative way, and they now have the speed of changing data to contend with.

The supply chain is made up of a number of disparate entities; warehouses, vehicles and outlets, each one utilising various levels of technology to harness information and make the transition between them effortless.

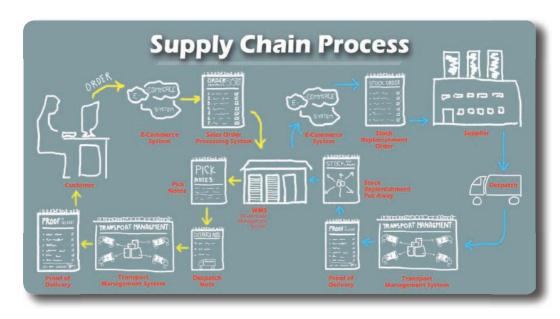
Organisations know they have to continually embrace operational best practices to maintain profitability and competitiveness, and with each new business strategy comes an information hurdle. This new level of much needed information visibility has to be built on B2B collaboration if all concerned parties are to benefit.

## **Data Synchronisation**

Central to every supply chain is the common SKU, and its interaction between the differing systems determines the success of a number of critical business measurements. The key to harmonising data flow across complex suites of software applications in any size organisation is to synchronise all data that relates to the common SKU horizontally or vertically within the enterprise.

This approach to standardising common product data at the system level and having no barriers to data transformation, is fast replacing labour intensive data integration tasks.

The next evolutionary stage in the trade of data between organisations is where data repositories are updated with the very latest SKU information directly from suppliers. This transfer of interoperable data is now at a global and cost effective level, seamlessly upgrading inventory repositories, eliminating re-keying and reducing transcrepancies. It is set to become best practice where continuity of SKU information is essential for WMS, BOS, and POS investments. One source of data makes sense. The result - retailers, suppliers and consumers all become winners. With most companies aiming to eliminate returns and re-deliveries; reduce supply chain fines or chargeback's; provide better invoice matching and stock holding, we might one day be talking about carbon fingerprints rather than carbon footprints.



# e-Commerce Trading

The advent of the Internet and World Wide Web revolutionised the face of business, and is now providing significant opportunities and benefits for those companies who embraced the technology and business processes that it involves. It is generally agreed that e-Commerce solutions are an increasingly important component of the supply chain process, however with the consumer having the ability to order goods without having to leave the comfort of their surroundings, the demands placed upon all commercial organisations involved in supply chain management have increased dramatically.

The challenge of e-Commerce is to take advantage of the significant opportunities that trading over the web affords, whilst maintaining control of the supply chain and providing customers with the high level of service that meets their expectations. An appropriate level of security and management control must also be maintained. Customer expectations are raised by the technology available to them, and an inability to deliver on orders will result in customer alienation. There is also little benefit to be derived from using an Internet presence simply as an email transmission facility for orders that are subsequently re-entered into the order processing system at a later time, and the stock availability is manually confirmed.

In order for Supply Chain Companies to meet these challenges, the eCommerce system selected should provide a fully integrated, secure, and efficient solution with the following primary design criteria:

- Seamless integration with the back office order, inventory and supply chain systems.
- User interfaces must be clear and easy to use.
- Internet responses must be at an acceptable level under normal conditions.
- The system must be cost effective.
- The solution must be scalable so that performance can be maintained as volumes increase.
- A high level of security must be provided.
- High availability must be achieved.

It is recommended that the e-Commerce site enables customers to build an order selection from the on line product catalogue, which should include product descriptions, pictures and pricing. Repeat order information should be readily available for ease of entry. Once the order is complete stock availability should be checked against the main inventory database. Once confirmed the order information should automatically be sent to the Order Processing system held in the main ERP solution.

The ERP system should automatically collate the orders, update the sales and purchase ledgers, notify the Warehouse Management System, which in turn produces an electronic pick note for the warehouse staff. All of the processes should be controlled by the various components of the solution, requiring no human intervention as all of the systems will be interfaced to each other.

It is recommended that when selecting an e-Commerce Solution that you bear in mind

- The solution must easily interface to the Order Processing system.
- The company selected has experience of designing true e-Commerce Solutions.
- The company has the technology and experience of integrating a variety of software systems together to ensure flow of data is maintained.
- Order status information can be transmitted by email at confirmation, payment clearance, despatch and back order.
- Stock is immediately allocated to the customer.
- Order/Stock status reports can be produced at any given time.
- Visibility of stock is achievable.

## **Warehouse Operations Best Practice**

Assuming that the warehouse is built to standards specified by the UKWA (United Kingdom Warehouse Association), BASDA proposes the following recommendations to ensure Warehouse Operations Best Practice and improve performance.

#### Selecting a Warehouse Management System

The efficiency of the warehouse operation is essential to the success of any supply chain



business and its ability to consistently deliver high levels of service. Warehouse Management System providers are dedicated to improving efficiency in warehouse operational performance by using WMS (Warehouse Management System) software to control the processes. WMS also improves staff productivity, stock accuracy and customer service.

A plethora of WMS system providers exists, which makes it essential that you select a system suited to your processes. There is no "one size fits all." To ensure that the system you choose is fit for purpose for your business BASDA recommends these best practice guidelines:

- Define and understand all the operational issues you need to resolve.
- Specify and document essential functionality requirements.
- Incorporate any future growth plans in your specification.
- Thoroughly research the market for suitable suppliers.
- Select a small list of potential suppliers with experience of providing solutions for your market sector.

- Go to reference site visits to look at operational effectiveness and discuss the benefits the WMS system has bought about since implementation.
- Issue a Request for Information (RFI) \*See the BASDA booklet "How to select a Business System."

#### Also check that any potential supplier has

- The ability to advise on type of system required i.e. Paper based, RF Directed, Voice or RFID
- Established partnerships with hardware providers.
- An implementation methodology.
- Experience in your market sector.
- A track record to prove it is an established supplier.

Depending on the size of your operation the type of WMS solution will vary.

#### Small Warehouse Operations

The approach differs for small warehouses with no systematic processes. Often these warehouses have no single individual who is aware of all the activities that actually go on to enable product to transition through the warehouse from goods in to goods out. This means casting the net company-wide to discover all the nuances that occur throughout the order chain.

The first stage of the design process is to collect and collate as much information as possible about the current procedures.

# BASDA recommends that small warehouse operations:

- Select a focus group capable of logically thinking through the various aspects of the operation.
- Use an external facilitator with extensive warehousing expertise who is impartial and not constrained by existing relationships or knowledge.

The focus group must have the influence to call on any member of the organisation to help define the current procedures. In addition, the focus group needs to establish a channel of communication for ad-hoc thoughts, concerns or suggestions that may occur to other members of the organisation.

By correctly defining and minimising the number of different tasks, the organisation opens the door to simplicity of design, successful system selection and implementation, ease of operation and reduced cost of ownership.

To achieve best warehouse practices, any system – be it for large or small warehouse operations – should encompass the following functionality:

- Putaway rules
- Pick sequences
- Warehouse map
- Replenishment tasks
- Use of bar codes and scanning
- Despatch Management
- Monitoring and Reporting

The benefits of having a Warehouse Management System in place include:

- Stock Visibility and Traceability
- Accurate Stock Takes
- Reductions in mis-picks
- Reductions in returns
- Accurate report
- Improved responsiveness
- Remote Data Visibility
- Automatic Replenishments
- Improved customer service
- Minimised paper work



### **Bonded Warehouse Operations**

HMRC Bond Management has, in certain instances, been called the "necessary evil" the inference being that whilst the "evil" is in the actual tax itself, they are and will remain, a very important and necessary part of revenue collection for both Excise and Customs duties.

UK suppliers of computerised bond management systems have, in most cases, many years experience in dealing with an ever changing environment of legislative updates, duty calculations, new reporting processes and, in particular, providing safe, secure software approved in an intricate and disciplined process by HMRC.

## Customs Duty versus Excise Duty

Customs duty is an import charge made on certain goods entering the EU from elsewhere in the world. It is the same rate for all EU member states. Excise Duty is a country specific charge imposed on a select list of goods irrespective of where they come from — in the UK this includes

Alcohol based drinks, Tobacco products and hydrocarbon oils. Import duty is payable at the border but can be suspended, if the goods are consigned to a "Bonded Warehouse", until they are released into "free circulation" within the EU. Excise duty is similarly due on entry to the EU or upon manufacture within the UK but it too can be suspended until the goods are released into "home use" provided the goods are held within a bonded warehouse.

Good bond management software enables the user to maintain all relevant HMRC Customs tariff and Excise duty tables, currency conversion rates, stock statuses and provide deferment management functionality.

#### Identification, location and control of stock

Bond management software must control the receipt, identification and location of all stock and the subsequent despatch and reporting of stock movements within the system, with periodic duty management, fully agreed reporting processes and detailed audit trail and stock / product history facilities.

The initial controls require detailed numbering, accurate stock management and analysis of all receipts either from UK based production sites or as imported goods from European or third party states. The management process will require the software to provide visibility of all stock on demand, inclusive of the stock number, product information, quantity and location within the given premises.

Each movement should be date and time-stamped for audit purposes and stock physically checked against computer records on agreed periods.

Computerised order processing manages the goods being down-dated from stock, assembled into orders, duty calculated and reports compiled accordingly.

The accuracy of the information is imperative and systems are subject to ongoing checks by HMRC audit staff.

- Always involve your local officers.
- Ask for a list of software companies. There are at least a dozen, if not more such companies in the UK and HMRC has a duty to give impartial advice.
- Consult BASDA and UKWA for their suggestions. \* To help identify potential suppliers, visit the National Computing Centre's Evaluation Centre (www.evaluationcentre.com) which features independently audited, detailed vendor reports.
- Approach the software companies and seek out reference sites. Reputable suppliers will
  provide a list but beware, they will obviously include their better sites!
- Select a few potential suppliers (See BASDA's booklet Selecting a Business System at www.basda.org).
- Speak to the users of the software.

# **Warehouse Performance Management**

Most operations managers find themselves at some time or another, under pressure to reduce labour costs or absorb more work with no increase in budget.

In difficult times, demands for improved productivity become the norm and this is when performance management comes into its own.



## Where do you start?

If you want to make an immediate impression on costs then you must target variable costs. Variable costs are predominantly energy costs, fuel costs and labour. In a warehouse the first two will be unlikely to offer much more than marginal savings, however even a cursory glance at the division of warehouse operating costs will show that 50% to 75% of all cost is labour.

# Defining performance management

Performance management (PM) concentrates on labour cost as the principal variable cost and therefore the greatest opportunity for cost saving. PM is a collection of techniques for improving warehouse performance which all have one thing in common:-

#### Work measurement

Knowing how long it should take to do a job enables you to calculate in advance how much labour you need, to set accurate performance targets and in retrospect to measure how well your workforce performed. And because time is money, it is a simple step to convert performance into cost.

# The components of performance management

#### Standard data

This is the database of standard job times all set at a predefined performance level. It is the foundation of all the components of performance management that follow.

# • Time and Attendance System (T&A)

This is a system to record start and finish times of employees and their movements between jobs while they are at work. Along with standard data, an accurate record of attendance time is at the foundation of performance reporting.

#### Workload planning system

A workload planning system takes known or estimated future volumes of work and uses standard data to convert them into time. With reference to past performance, work content can then be converted into labour requirement to ensure accurate matching of labour resource to workload.

#### Performance reporting system

This is a suite of reports for individuals and teams where past performance is calculated and reported. Throughput information by individual and team is gathered principally from the warehouse management system but might include other inputs. The system will also gather data from the time and attendance system and the standard data base.

Proprietary labour management systems are fundamentally performance reporting systems with automated links to the warehouse management system (WMS) and an interface to time and attendance. They carry the standard data at a sub-elemental level and apply it to a very detailed breakdown of individual WMS work assignments. In this way, they can compute very accurate standard times for pick and truck assignments, which will be calculated from precise travel distances and pick handling times by product characteristics, e.g. product weight. Some LMS come with their own T&A system included.



#### Cost to serve system

Cost to serve is based on the principles of activity based costing and as such accounts for the cost of individual products based on handling times and space costs, among other factors. In this way, the standard cost can be derived for processing a product or a group of products. The principal can be confined to warehouse costs alone but is often extended to include all supply chain costs. It can be used to evaluate individual product profitability or client profitability in a multi user warehouse.



### **Process improvement**

Although not strictly speaking 'a system', process improvement is much more effectively carried out if it is based on the objectivity of standard data and performance reporting. PM's most valuable contribution is the ability it brings to compare alternative processes or equipment options and to then ensure that benefits are delivered in full

# What to look out for in performance management

Before installing PM, always start with a high level evaluation of the potential for improvement in the warehouse. This should incorporate a high level measure of present performance and a model for projecting improvement potential, which includes growth and other planned changes. In this way, you will know the savings potential, which can be considerable. You can then go on to calculate implementation costs and develop a project plan with timetable.

Decide early on if you need a proprietary labour management system as part of your PM system. This decision will hinge on cost and the

undoubted additional benefit that a good LMS can deliver.

Plan at the outset to automate as much as possible of the routine data gathering and reporting, so that running costs are minimised.

If you have a T&A system, check that it is compatible with your chosen LMS. If you don't have one yet, now is the time to put that right.

Be prepared to find weaknesses and black holes in your present data on attendance and throughput. Treat this as positive because putting it right will deliver some quick wins.

Invest time in selling the principles of PM to your management team and in training them to use it; your savings depend on it. Be clear in your objectives for PM and build them into your plans and budgets.



#### TRAFFIC MANAGEMENT SYSTEMS

# Simple Operation

Today's busy traffic office needs a fast and easy operation, jobs listed by status, unwanted information filtered out of the system and further filters to apply on a wide range of criteria.

For hauliers to provide customers with a quick and efficient service relating to any queries, the job screen should contain all the details, including access to scanned POD's. This in turn provides the haulier's staff with quick access to the jobs, enabling easy tracking and monitoring of jobs right through to the invoice and financial accounts.

A good system requires numerous reports to monitor profitability on individual jobs or ranges of jobs. Similarly, details of revenue and costs should pass automatically to the vehicle database within the system, to monitor performance by individual vehicles and trailers. In this way, fleet operators can review individual vehicles and gauge when replacement is going to be more beneficial than repair.

#### Job Entry

The heart of the system is the job, and it is important to enter the job details rapidly into the system. Account, Pickup and Delivery Addresses must be retrieved from pre-stored details. With Tables of Loads, Rate Tables, Continuous & Fixed Length Contracts, Zone Codes, Subcontractor details and many other tables of information users can create a job with little manual entry.

Standard defaults must be set to aid this operation and ensure that the expense and revenue figures update the correct vehicle, nominal code, VAT account and customer account.

#### Job Status

Users need to progress jobs easily through their various stages. The first stage should be "Open" when a job is in progress so that each company can define the mandatory information for a job. Once all those details are complete and the POD (if required) has been received, then the job moves to the "Complete" stage.

An intermediate stage allows completed jobs to show if they have any items missing. This is shown as "complete Jobs with Errors". From these stages the jobs must be finalised and billed to the customer. Next they enter the "Invoiced" stage. At any point prior to invoicing a Job, users should be able to cancel a job, subject to security settings. In this case, a job would need to remain on the system with a "Cancelled" status.

It should be possible to copy any job to become a new job. There should be no limit to the number of copies allowed, which would be another simple and rapid way to enter a new job of a similar nature that could be edited and fine-tuned.

# **POD Matching**

Many hauliers require delivered jobs to be supported by a "Proof of Delivery". Some jobs will have more than one POD. Users will want to scan and store these documents against the job. There should be routines to record details against each document, such as the name of the person signing and other relevant remarks. With this feature users can archive original paper documents and retrieve them easily through the Job Screen.

#### WTD Module

With the implementation of the European Working Time Directive, employers must keep track of their employees' working hours and check that they are not breaking the law.

A Working Time Directive module removes the drudgery and unreliability of manual data entry, and makes time record keeping simple. This should be a web based system to enable collection of time sheet information using WAP enabled mobile phone technology.



### Haulier Gateway

Web access to haulage information enables customers and drivers to access the information through a secure connection and to track the progress of jobs.

Industry standard EDI protocols allow customers to automatically request creation of new jobs and acknowledge receipt of deliveries. The web interface should be able to be configured to restrict access to jobs on a per customer basis

Using the latest GPRS technology and a PDA or mobile phone connection, drivers can view a manifest of all jobs assigned to them on a specific day.

The Web Gateway updates the status of jobs when loads are collected or delivered, giving instant feedback to both customers and the traffic office on the progress of each load.

The web access gives the full history of jobs, including POD's and invoices.

The web interface generates an e-mail notification to the end user, allowing them to track the status of their deliveries.

#### Must have Features

- Traffic Sheet.
- On screen time sheet.
- Instant access to job details and loads.
- View jobs by customer, vehicle, date, diary reference and many other ways.
- Instant view of job status.
- Job history held and instantly available for all time.
- Existing and historic jobs can be instantly copied.
- Comprehensive search facility.

### Job Entry

- Automatic link to Sales Ledger.
- Credit check with stop facility.
- Automatic link to Purchase Ledger for subcontractor.
- Automatic link to vehicles, trailers and drivers.
- Performance dates for collection and delivery.
- Automatic collection and delivery addresses.
- Automatic load descriptions.



- Jobs linked to contracts.
- Hazardous materials flag with link to UN ID codes.

# Line Entry

- As many lines as required.
- Entries automatically completed from job entry.
- Automatic pricing from extensive rate tables.
- Load details accessed from unlimited stored list.
- Unlimited narrative for load details.
- Multi-currency and multi VAT/Tax rates.
- Each line costed to vehicle/trailer.
- Each line linked to Nominal Ledger.
- References with container ID check.
- UN ID code for hazardous materials.

#### Vehicles

- Database of vehicles.
- Event codes give full history of vehicles loads, servicing, cleaning etc.
- Detailed costing system.
  - o Revenue per vehicle or range of vehicles.
  - o Costs by unlimited number of cost heads.
  - o Profitability of vehicle or range of vehicles.
  - o Statistics shown by figures and graphs.
  - o Drill down to individual transactions.
- Revenue linked from jobs.
- Cost posting either direct or via purchase ledger.
- Reminders for servicing, MOT's etc.

#### General

- Comprehensive and simple to use rate tables.
  - o General rates and individual customer rates.
  - o Rates by quantity with quantity breaks.
  - o Rates by load, by pallet, by weight, by unit.
  - o Rates by zones i.e. post codes.
- Subcontractors.
- Self-billing.
- Job note and POD matching.
- Scanned POD stored on the job.
- Automatic invoice production.

- All documents are printed, faxed or e-mailed.
- EDI link if required.
- Graphical directions from the depot to the delivery point.

# **Systems Integration**

In today's fast moving, modern society, and with the "I want it now" mentality of the consumer, it is vital for suppliers to have a fully integrated solution to have a degree of process control. Visibility of stock movements and traceability of goods is of paramount importance in any supply chain operation. Having a number of disparate systems in place that operate in a stand alone environment really is not best practice.

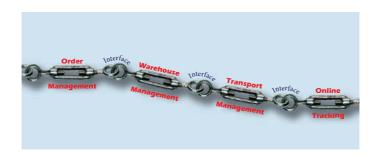
The ideal solution is to integrate all the systems together so that the flow of information and data is highly visible to each component of the supply chain and logistics operation.

Data is only valuable if it can be readily used. Locking it up in separate data stores that can be accessed by a limited number of applications is not the way forward.

This is about taking stock of what is currently in place and exploiting your previous investment where possible. If existing operational systems are providing business value then it is important that they form part of the future Information Sharing architecture.

In many cases what is required is the integration capability to 'glue' these systems together in order to provide seamlessly the required information to the authorised user based on role-based rules. The respectful engagement and co-operation of the existing system suppliers will be essential to enabling integration.

Companies that require transactions from legacy systems to be transferred to their new system should look for strong import features. The range of options for the import of static data, simple and complex transactions should be adaptable for complex organisational requirements.



#### Working with What You Have

- By integrating host systems and legacy applications, customers can capitalise on existing IT investments, maintain complex and highly-customised business processes, and reduce total cost of ownership.
- Windows includes a subsystem for UNIX-based applications (SUA) that resides on top of the Windows kernel. SUA provides the basic infrastructure required to run UNIX-based applications and scripts on a computer running Windows.
- Microsoft supports asynchronous message queuing, which allows Microsoft Message
  Queuing to interoperate with other message queuing systems such as IBM WebSphere
  MQ (formerly MQSeries).

#### **Reporting and Analysis**

## Reporting

Reporting is fundamental to all companies. Most companies strive to standardise on a single reporting and analysis platform to deliver analytic, business, and enterprise reporting, but it is a reality for very few.

There is no one single reporting and analysis platform that can deliver every feature and function needed. The direction that companies should take is to adopt a standard that can support at least two of the three different reporting types and fill in gaps with emerging XML and Web services capabilities, advanced visualisation, and process definition whenever possible.

The new generation of reporting tools using Web services to dynamically link Microsoft Excel to the data held within the financial program is the answer to management reporting and information gathering. This method transforms tedious and time consuming exercises into straightforward processes.

Producing standard and special reports needs to be simple, to allow the production of management reports and financial statements to analyse company and group performance. Reporting filters and parameters should be included where appropriate to allow focus on the relevant information.

Report layouts should be user-definable with templates that can be modified to include or exclude data as required. The ability to extract report data to Microsoft Excel is ideal for ad hoc listings or enhancing the final results.

For organisations that run multi-company accounting the ability to define consolidation "groups" means that any mix of companies within the group can be combined. All reports and analysis can

be produced in a consolidated format by simply changing run-time parameters.

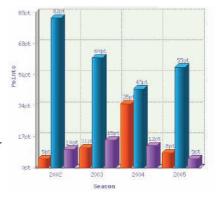
The latest sets of reporting tools are equipped to send reports to Managers in the form of SMS messages at the date, time and frequency set by the end user. Some reporting systems will alert Managers to any exceptions or discrepancies that have occurred, allowing the Management team to make on the spot decisions, regardless of where the team is located.

#### **Business Intelligence**

The huge amounts of data and information that the modern organisation holds on its software systems increase by the hour. This has triggered the need for an effective storage tool capable of analysing and presenting the data in a single repository form. Many organisations increasingly need to improve their management information flow. There are immediate benefits to every department within an organisation from a centralised Business Intelligence facility.

Business Intelligence software allows data from several different software systems to reside in a single repository, enabling all company data to be analysed, graphed and reported in a user-friendly way. Essential business functions such as Sales, Production, Payroll, Manufacturing, Inventory and Custom applications can all be analysed.

BI (Business Intelligence) software packages allow the user to view the same data via multi-dimensional analysis. This means that customers can be viewed by product sales in the same way that products can be viewed by customer sales. Graphing and powerful reporting features are at the



heart of BI systems and provide comprehensive analysis of the financial and stock movement activity within an organisation.

To utilise a Business Intelligence software suite it is prudent to check that the system encompasses:

- Dynamic Queries providing the ability to construct individual data views.
- Filtering filtering out specific data from the report.
- Viewing and reporting on the web remote users can access personal sets of reports via a secure login via the web.
- Security The package determines a remote-users identity and displays the reports issued for that user.
- Scheduling Bespoke scheduling of views and reports.
- Data Extract Libraries from General Ledger, Sales Ledger, Purchase Ledger, Inventory,
   Transport Management and Warehouse Management systems.
- External Data Extracts allowing extracts from third party databases to be imported.

#### In conclusion

The commercial world is shrinking as modern communication channels give everyone the ability to share information. Companies are beginning to think in terms of their Global Logistics operations rather than individual hub operations. They want technology providers to deliver an integrated Logistics & Supply Chain system that is capable of seamlessly delivering goods from one end of the Globe to the other.

The underlying theme of this document is how systems and technology providers can achieve the flow of data between applications, in order to optimise supply chain execution, and give greater supply chain visibility. There is a consensus of opinion that a suite of fully integrated applications leads to a highly valuable cost effective logistics system, and is highly desirable. So how do you obtain this?

Achieving an integrated Supply Chain & Logistics system begins with communication and is vital part of Best Practice methodologies.

Communication and collaboration is key, not only between software providers, and their clients but also their clients' clients and suppliers.

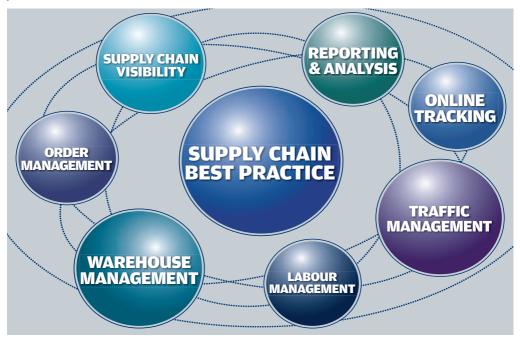


This has never been more important than at the point of systems implementation, where a partnership approach is the key to success. A detailed implementation plan should be prepared following the initial project meeting and it should encompass the following five steps to ensure effective systems operations:

- Business Study The application provider works with the client to identify exactly how the system will operate within the environment.
- *Training and Set-Up* The application provider and client work together to set up the system as defined in the business study. The application consultant provides formal training in the use of the system.
- System Proving During the system-proving period, sample transactions should be processed through the system to ensure results are as expected.
- Live Operation The application provider should be on hand to guide the project team during the first few days of live operation.

 Review After a period of live running has elapsed the application provider should carry out a review and recommend any changes to be made to improve the effectiveness of the system.

A project champion should be appointed that can communicate between application provider and client to ensure that all concerns and nuances are ironed out before the go live date. This effective methodology will lead you to get the right systems in place for your supply chain processes, giving you ultimate control.



# **Technology and the Green Agenda**

As technology users become more aware of the role systems play in contributing to the social, environmental and sustainable agenda, it becomes mandatory to implement best practices.

BASDA's initiatives to drive the sustainable agenda forward, has implemented programs like the Green Charter to encourage application software providers to not only engage in the sustainable debate, but most important of all, strive to produce the necessary tools and advise to help users and their customers become more conscious by providing the tools to help account and manage sustainable indicators like CO2 consumption.

#### Glossary

**WMS** Warehouse Management Systems **Labour Management Systems** IMS BOS

POS Point of Sale SKU Stock Keeping Unit B2B **Business to Business** 

**FRP** Enterprise Resource Planning

Bill of Sale

Pick Note List of items stored in the warehouse to be picked to fulfill an order

Request for information

**HMRC** Her Majesty's Revenue & Customs

A&T Time & Attendance

IMS **Labour Management Systems** 

POD Proof of Delivery

SUA Subsystem for UNIX based applications

Radio Frequency RF

RFID Radio Frequency Identification PM Performance Management

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Director General - BASDA

