



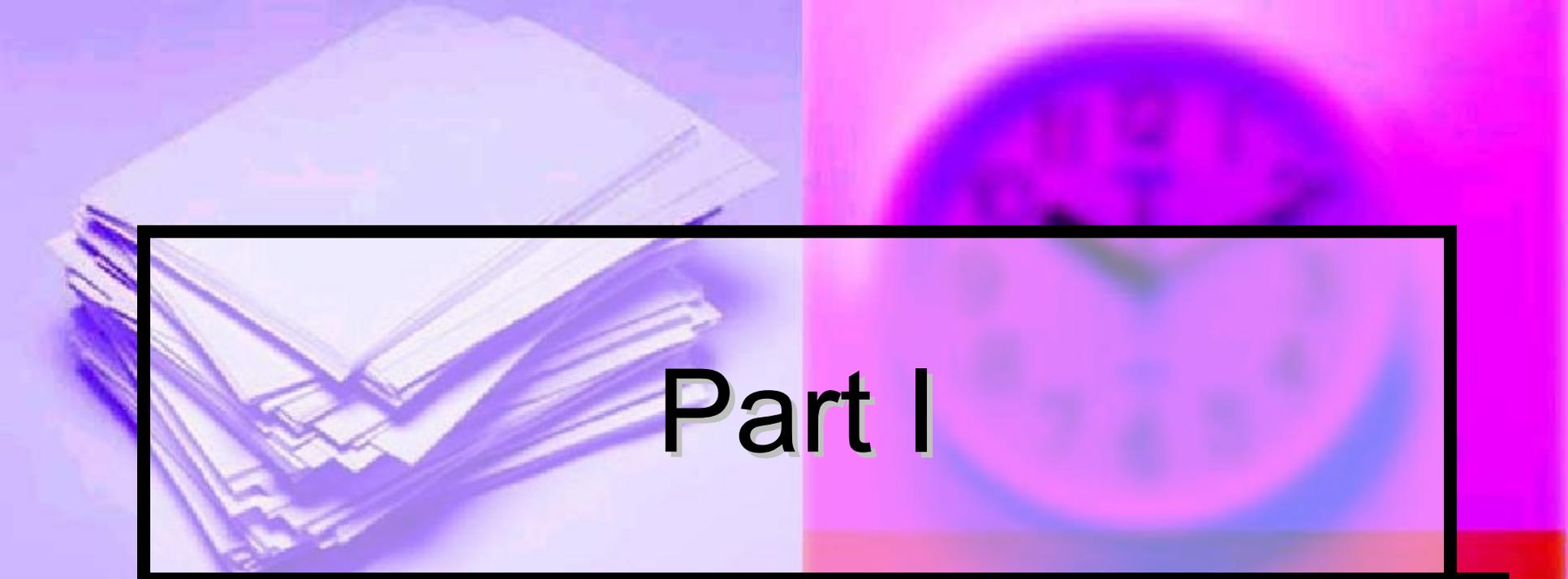
# **Business Process Management in Logistics and Supply Chains**



**Dr Bill Karakostas  
City University, London**

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- Supply Chain Management
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A composite image for the top half of the slide. On the left, a stack of papers is shown in a blue-tinted, slightly blurred view. On the right, a clock face is shown in a purple-tinted, blurred view. A black-bordered white box is overlaid on the center of this image.

# Part I

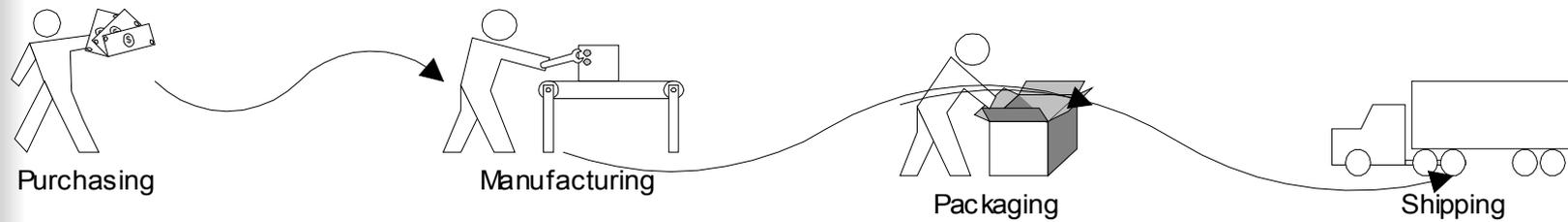
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# Supply Chain Management

# What is Supply Chain?

- The interconnected set of business procedures and business partners that manage the flow of goods and information from the point of design to the delivery of the product or service to the end consumer
- A supply chain is like a well balanced and practised relay team in which the entire team is coordinated to run the race

# A Picture of a simple Supply Chain



# A more rigorous definition of 'Supply Chain'

- Supply Chain (SC) is a system that provides a channel through which companies and organizations deliver their products and services to their final customers.
- The structure of the SC is linear and consists of the following entities: *suppliers, manufacturer, distributors, retail outlets and consumers.*
- The suppliers provide the sources for raw materials and services that the manufacturer will use in order to produce the final product or service.
- The distributor transports the product from the manufacturer to the retailer quite often through a wholesaler.
- Stock warehouses are used depending on the location, the type of product, distribution centres and so on.
- Finally the consumers purchase the product or service from the retailers.

# Supply chains and Value Chains

- Every firm can be understood as a collection of activities that range from the design, marketing, delivery and support of a product
- Value chain activities fall under two generic categories: *primary* and *support* activities
- Primary activities constitute the physical production of the product, the sale and transfer to the buyer and post sales help assistance and so on.
- Support activities are all other activities involved in supporting the primary ones such as marketing, information systems etc

# Principles of Supply Chain Integration

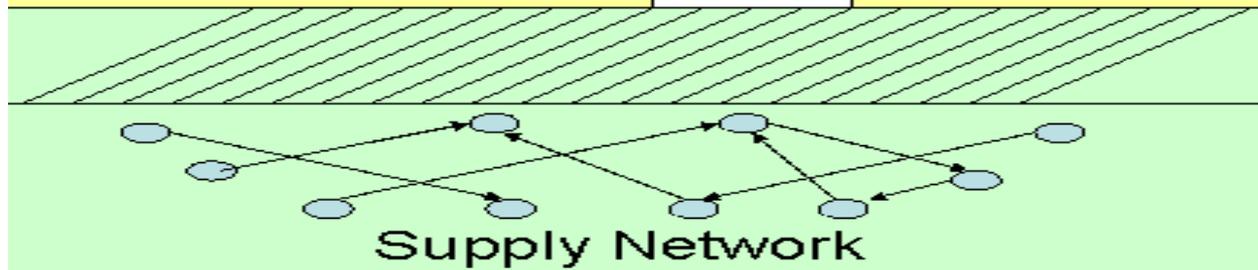
- Extending the enterprise to embrace all aspects of a product or service
- Integrate business systems of customers suppliers and partners to create a common information basis
- Provide real time support to increase responsiveness
- Strive for execution excellence by fully automating and optimising business practices

# The 'old style' Supply Chain

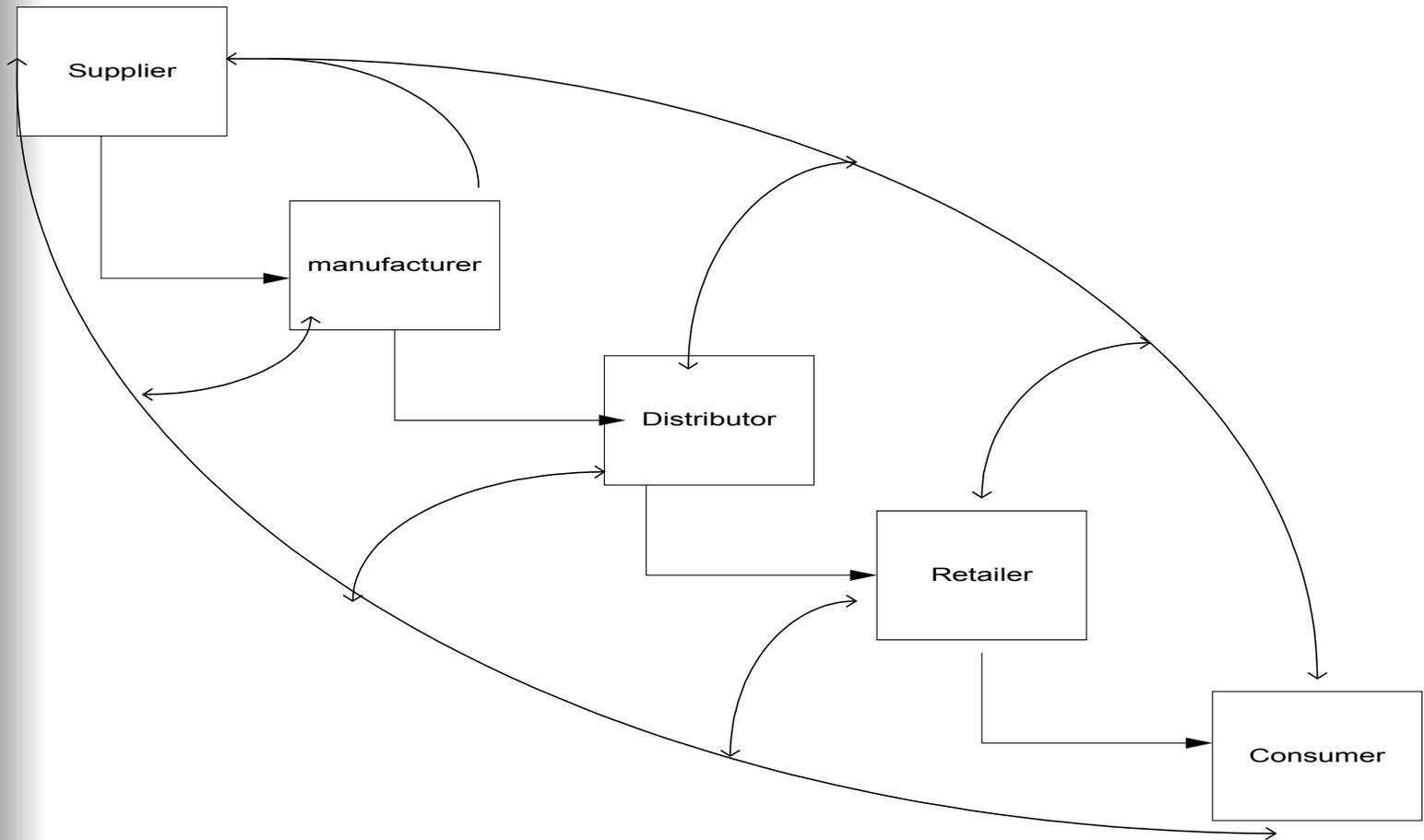
- At the beginning of the Century, supply chains were paper chains, linearly connecting manufacturers, warehouses, wholesalers, retailers and consumers.
- The chain ranged from one or two to dozens of tiers and logistics were a nightmare.
- People and paper physically connected all of the tiers [of the chain] together.
- Furthermore, the linear nature of the chain made communication between the front-end and back-end of the chain messy and time consuming.

# Modern Supply chains are in fact networks

- The term 'Chain' suggests that only one player is involved at each stage of the flow of materials/products
- In reality a manufacturer may receive materials from several suppliers and then serve many customers through a complex distribution systems
- Most supply chains are in fact 'networks'



# Supply Chain flows



# Supply chain concepts

- Supply chains are concerned with the flow of information, materials and money downstream (from the supplier to the customer) and upstream (from the customer to the supplier)
- Information flows: demand forecasts, specifications, purchase orders, performance reports
- Material flows: products sent to customers and returned by customers for servicing, recycling, disposal etc
- Money/financial flows: credit card information payment schedule
- Customers can be both internal and external

# Supply chain is about processes

- Supply chains are concerned with the flow of information, materials and money through trading partners
- Supply chains emphasise the **process approach** concerned with how a product or service is delivered to the customer

# Main Premise of IT enabling the Supply Chain

- True breakthrough in SC performance are achieved when **new ways are identified to substitute information for inventory and work content.**
- Such information relates to *demand, supply, inventory and shipment* and needs to be available at **real time**

# Supply Chain Management (SCM)

- Supply Chain Management is concerned with the coordination of information, material and financial flows through improved relationships at all stages of the supply chain to obtain a sustainable competitive advantage.
- The aim of SCM is to use the information provided by IT to integrate a number of discrete and fragmented processes into a cohesive system capable of delivering value to the customer
- SCM these days is focusing on *inter-enterprise* integration involving **collaborative partnership** oriented models with external suppliers and customers.

# The objectives of supply chain management

- ✂ Reduced Supply Costs
- ✂ Improved Product Margins (Profit per additional unit produced)
- ✂ Increased Manufacturing Throughput (production at all levels)
- ✂ Better Return on Assets (net income after expenses/interest)

# Why SCM is Important

Competition has shifted from the company level to the supply chain level. To facilitate being competitive and profitable a company has to rely on its supply chain partners: this requires enhanced trust and real time communication between companies.

In order to obtain competitive advantage a company has to achieve effective collaboration with its supply chain partners: This requires all members of the supply chain to be convinced to change their processes and adopt new compatible technologies.

With the advent of Internet technologies the traditional supply chain has adopted the electronic implications and moves towards the e-supply *chain*.

E-business and e-commerce have created the need for substituting product flow with information flow and integrating processes inside the company and within the supply chain.

# A Holistic view of SCM

- SCM should be examined from three different perspectives: *tactical*, *strategic* and *Web enabled*.
- Tactical SCM draws on value-enhancing activities such as supplier/customer, management, product/service processing and support activities aiming to integrate and synchronise these operations at the most cost efficient way.
- Strategic SCM is reflected on the connectivity level of the value-enhancing activities aiming to develop a network between the SC partners that will operate smoothly illustrating innovation capabilities, increased reliability and reduced cycle time
- IT addresses operational inefficiencies in order to gain a competitive edge. The Web enabled SCM expands the IT level to Web based applications. Web enabled SCM refers to the use of the Web to connect partners, increase efficiency and reduce cost.

# Globalisation effect on SCM

- Modern businesses attempt to deploy global resources to maximise the potential opportunities of the global economy. Globalisation strategies include
  - Global sourcing of suppliers
    - Problems: currency, tariff, legal, change in overseas government regulations
  - Global trading
    - Problems: Relative long lead times, high buffer stocks, complex logistics

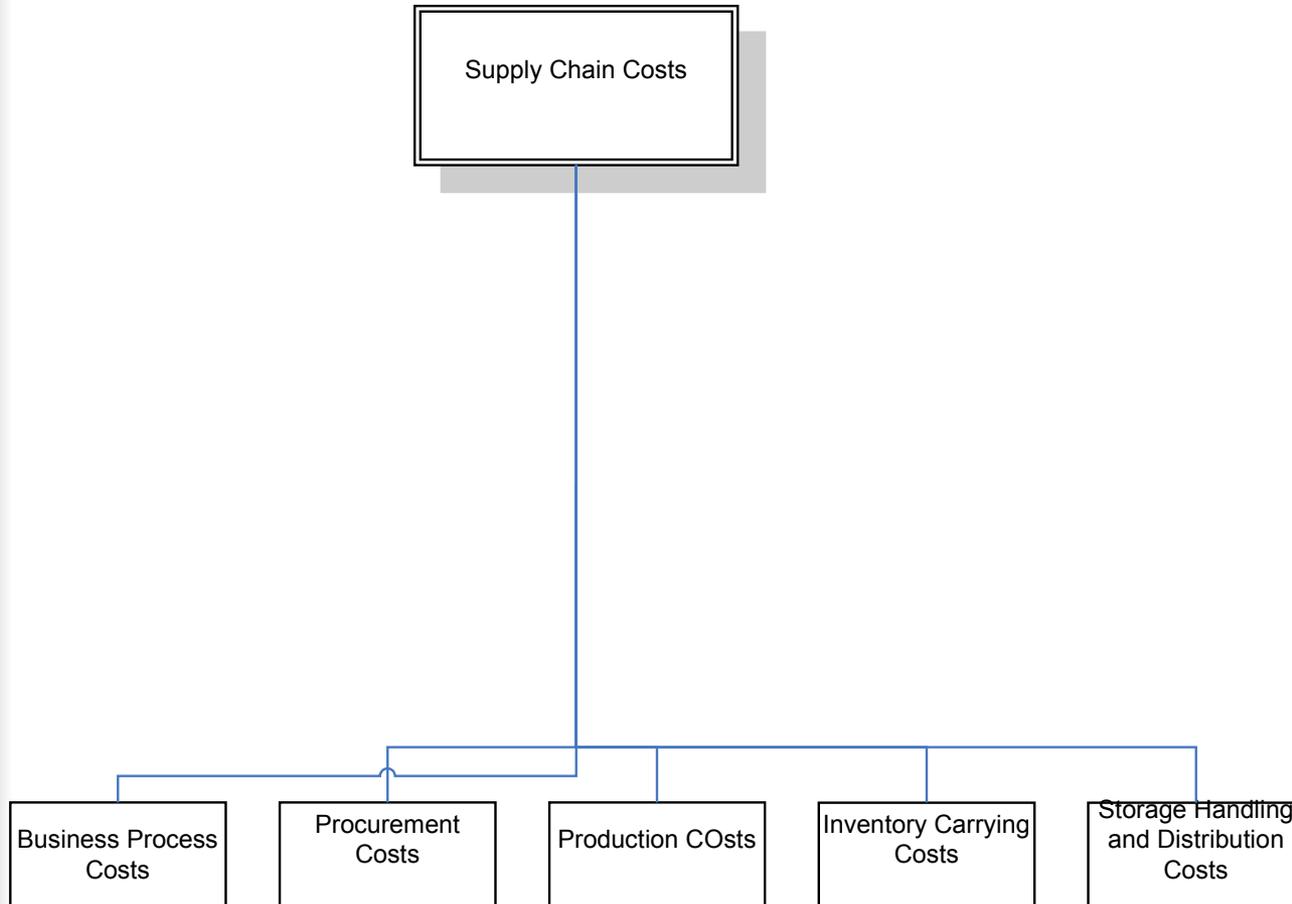
# Supply chain responsiveness and efficiency

- *Responsiveness* means the ability to:
  - Respond to wide ranges of quantities on demand
  - Meet short lead times
  - Handle a large variety of products
  - Build highly innovative products
  - Meet a very high service level
- *Efficiency* is a measure of the cost of making and delivering a product to the customer

# Responsiveness vs. Efficiency

- Responsiveness tends to increase costs which in turn lowers efficiency
- To respond to the demand for short lead times it may be necessary to keep relatively high inventory levels
- Efficient SCM includes determining the highest level of responsiveness that can be provided at a given cost
- Exchange of information between customer and supplier can enhance both responsiveness and efficiency
- Such information exchanges include sharing of inventory information, continuous replenishment programmes (CRP) or vendor managed inventory (VMI)
- CRP/VMI are practiced by two neighbouring partners in a supply chain, e.g Proctor and Gamble (manufacturer) and Wal Mart(retailer)

# Where costs occur in the supply chain



# Limitations and concerns with current SCM systems

**cost competitive operations:** inability to plan effectively the supply chain operations which results in increased cost during their function

**matching resources to requirements** assigning human, financial and material resources to requirements affects both cost and efficiency of the supply chain. These requirements are a requisite for the operation of the supply chain and determine the cost and effectiveness of an organization.

**tied up capital in the inventory:** The need to decrease the tied up capital in the inventory derives from the traditional Build to Forecast production planning where finished products are placed in the warehouse until they are dispatched. This results in the increased cost of stock maintenance and reduces the financial flexibility of an organization.

**increased lead time in procurement.** The increased lead time in procurement is a result of the lack of real time communication between the supply chain partners and visibility through the supply chain results in delays in procurement. Critical decisions such as validating new customers are time consuming operations which increase the total time required for supply chain functions.

# What is SCOR?

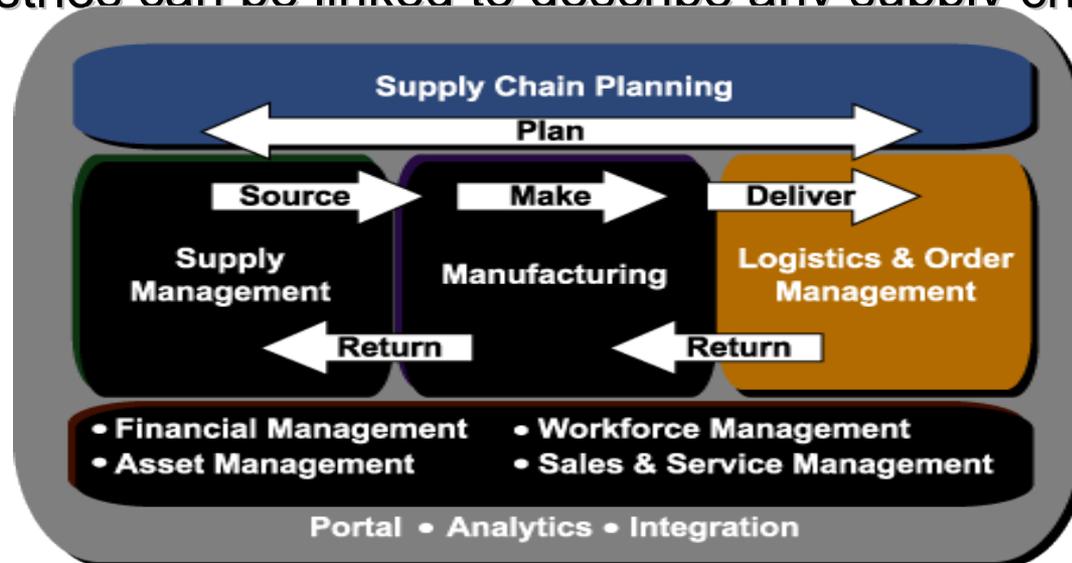
The *Supply-Chain Operations Reference-model* (SCOR) is a process reference model that has been developed and endorsed by the Supply-Chain Council as the cross-industry standard diagnostic tool for supply-chain management.

([www.supply-chain.org](http://www.supply-chain.org))

# SCOR Model

([www.supply-chain.org](http://www.supply-chain.org))

SCOR describes five primary management processes of *Plan*, *Source*, *Make*, *Deliver*, and *Return*. By describing supply chains using these process building blocks, the Model can be used to describe supply chains that are very simple or very complex using a common set of definitions. Disparate industries can be linked to describe any supply chain.



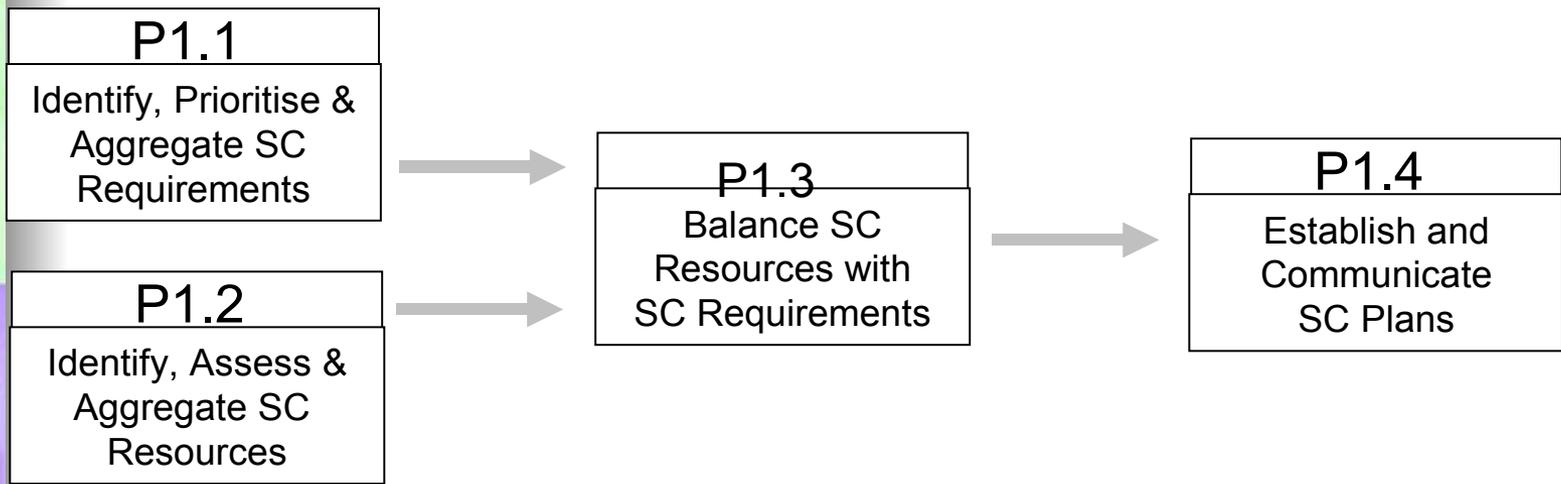
# Plan the Supply Chain

## Planning the Supply Chain involves:

- Balancing resources with requirements and establish/communicate plans for the whole supply chain, and the execution processes of **Source, Make, and Deliver**
- Managing business rules for supply chain *performance*, data collection, *inventory*, *capital assets*, *transportation* planning configuration, and *regulatory* requirements and *compliance*
- Aligning the supply chain unit plan with the financial plan

# SCOR Process: Plan The Supply Chain

Involves the development and establishment of courses of action over specified time periods that represent a projected appropriation of supply chain resources to meet supply chain requirements



# SCOR Plan: Identify and measure

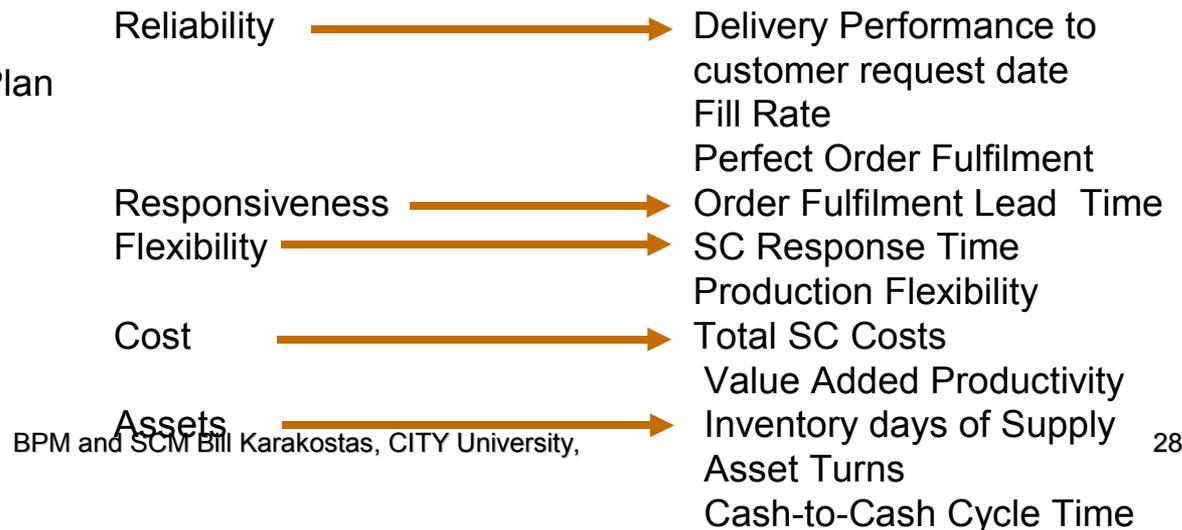
Identify and measure the gaps and imbalances between demand and resources in order to determine how to best resolve the variances through marketing, pricing, packaging, warehousing, outsource plans or some other action that will optimize service, flexibility, costs, assets, (or other supply chain inconsistencies) in an iterative and collaborative environment



Planning Decision Policies  
 SC Performance Improvement Plan  
 Inventory Strategy

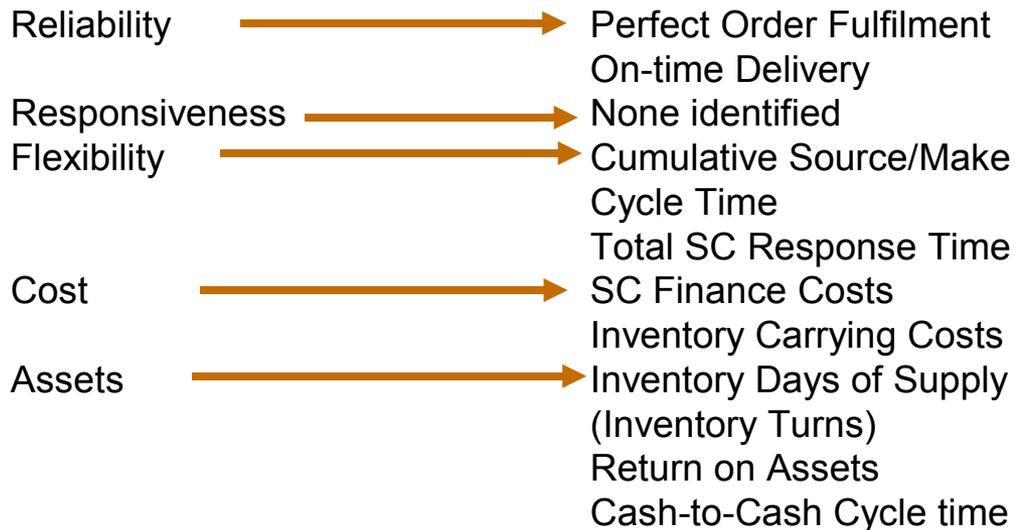
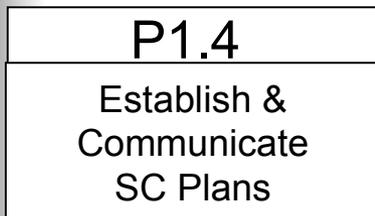
**P1.3**  
 Balance SC Resources with SC Requirements

04/11/09



# SCOR Plan: establish and communicate

Establish and communicate of courses of action over the appropriate time-defined (long-term, annual, monthly, weekly) planning horizon and interval, representing a projected appropriation of supply-chain resources to meet supply-chain requirements



# SCOR Plan: Identify, assess and aggregate SC resources

The process of identifying, prioritizing, and aggregating, as a whole with constituent parts, all sources of supply that are required and add value in the supply chain of a product or service at the appropriate level, horizon and interval

- (Customer Inventory
- Sourcing Plans
- Product MAKE Plans
- Delivery Plans
- Planning Data
- Projected Internal and External Production
- Capacity
- Revised Capital Plan
- Outsource Plan
- Regulatory Requirements

**P1.2**

Identify, Assess & Aggregate SC Resources

- Reliability - Responsiveness → None Identified
- Flexibility → Cumulative Source/Make Cycle Times
- Intra- Manufacturing Replan Cycle Time
- Cost → Planning Costs, SC Finance Costs, Product Data (MIS) Mngm Costs
- Assets → Inventory Days of Supply
- Inventory Turns
- Return On Assets
- Cash-to-Cash Cycle Time

# IT requirements for Supply Chain Planning

- Ability to obtain a centralized overview of the entire supply network to identify areas of potential improvement.
- Ability to Forecast and plan demand, taking historical buying and selling behavior and sales objectives into account.
- Ability to Match demand to supply to maximize return on assets (ROA), taking operational constraints into account.
- Ability to take actual and historical production data into account.
- Ability to test various scenarios to determine the optimal location in the network to produce products, and determine how changes in customer demand will affect the network.
- Ability to see exploded bills of material (BOM) for critical items in demand planning.

# IT Requirements for Supply Chain Execution

- Ability to create production schedules and share accurate inventory and procurement-order information to ensure that production materials are available in the right place at the right time.
- Collaborative fulfillment capabilities to enable a company and its partners to manage transportation, track individual shipments, and intelligently commit to delivery dates in real time.
- Support process manufacturing with optimized production schedules that take material and capacity into account.
- Campaign-planning tools to reduce set-up costs in complex manufacturing environments.
- Ensuring that you use the materials that have the optimal 'best before' date, to reduce scrap and storage needs and help you
- avoid product recalls.
- Ability to use Internet-based collaborative procurement to streamline vendor selection and manage sourcing agreements.
- Ability to Integrate batch management, campaign handling, and
- Co-product and by-product information.



# IT Requirements for Supply Chain Collaboration

Ability to replace the traditional linear supply chain with an adaptive supply chain network that gives all participants simultaneous access to information about demand and supply.

Use an exchange platform to manage replenishment and let partners to work together.

Use Enterprise portal technology that enables employees to collaborate with coworkers, business partners, and customers. And with the solution's mobile SCM capabilities, decision makers can gather information and act wherever they are.

These supply chain collaboration capabilities make possible to:

- Let suppliers see the status of their parts at all their plants, receive automatic alerts when inventory levels get low, and respond quickly via the Web.
- Collaborate with partners to plan strategy and determine where to produce what products so you can optimize the cost of production and transportation.
- React quickly to changing market conditions and successfully launch new products to enter new segments of the market.

# IT Requirements for Supply Chain Coordination

Involves the ability to involve working with partners to manage activities across the supply chain to take advantage of collaborative planning, forecasting, and replenishment (CPFR) and vendor-managed inventory (VMI) processes.

Provide an event-management capability that monitors the execution of supply chain events and flags any problems that come up.

It also lets you track key performance indicators (KPIs) – such as costs and assets – across the supply chain, and program the automatic generation of alerts that signal deviations from plan.

With such supply chain coordination capabilities it is possible to:

- Monitor the complete range of supply chain activities, from price quotation and procurement to product delivery.
- Use advanced tracking and tracing capabilities, including alert management.
- React quickly to planned and unexpected events.

# Evolution of supply chain management technologies



E-supply chain  
collaboration

The Internet

Early information systems  
for supply chain  
management

1960s-1970s

1980s-1990s

21<sup>st</sup> century

# Web & Supply Chain

- The web is having a significant impact on how firms interact with each other and their customers.
- Past stumbling blocks for supply chain integration such as
  - high transaction costs between partners
  - poor information availability , and
  - the challenges of managing complex interfaces between functional silos (applications)
- are eliminated thanks to open web standards (IP and XML based)

# Web based Supply Chains

B2B commerce makes easier for a buyer to access price information and procurement auctions

- Wide availability of price information in vendor Web sites makes it increasingly easier to 'point and click' to the web site of an alternative supplier
- The margin for error in SCM in particular in inventory availability has decreased by an order of magnitude
- Online marketplaces make the shopping for materials from alternative sources easier than before
- Online product catalogues make product selection less time consuming.
- Online RFPs and electronic bidding make the bid process many times faster and less costly.
- All the above have permitted a 300%-500% reduction in procurement costs.

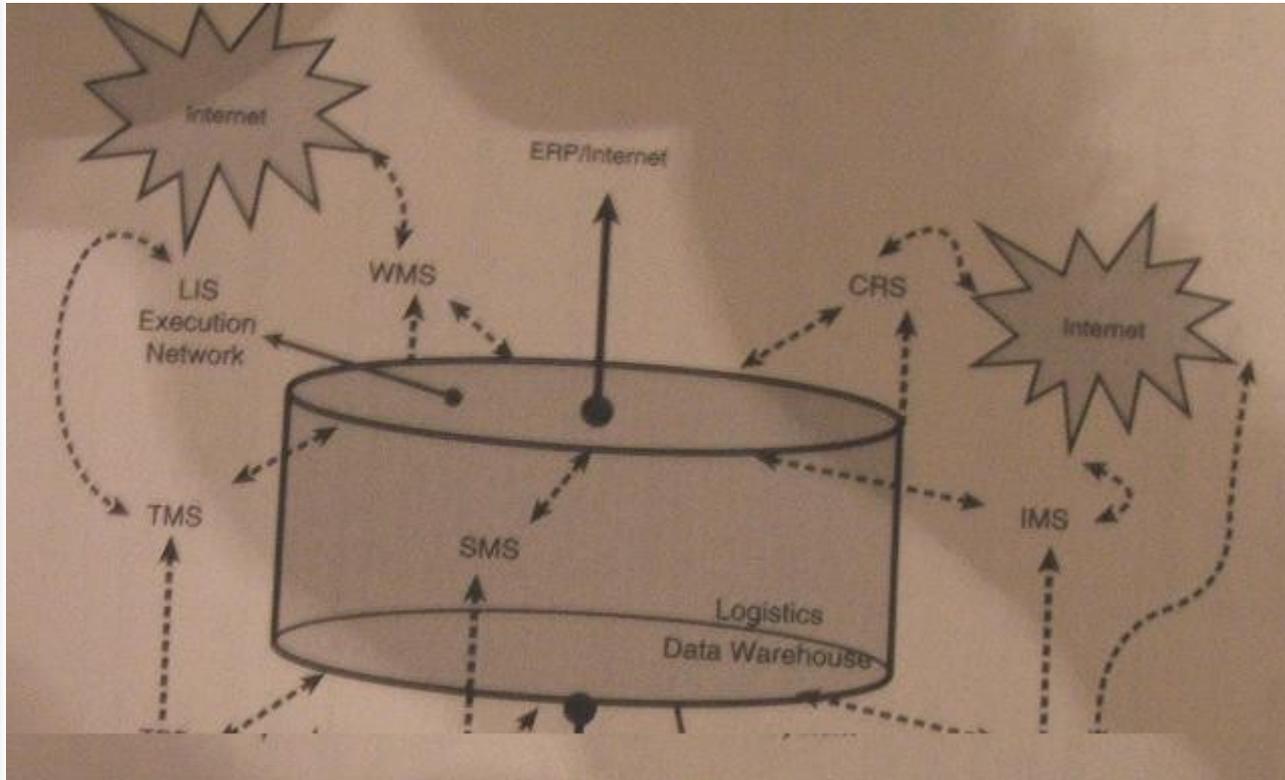
# Market for Web based Logistics

- Internet allows exponentially greater access to logistics information than previous information architectures
- In 2001 150,000 organisations trading more than \$1.8 trillion per year participated in web based supply chain exchanges
- Transportation bookings over the Internet are expected to increase by 80% per year for the next few years.
- WWW connects stationary and mobile computers in a 7x24x365 network permitting global visibility of real time logistics transactions

# Integrating Order, Warehouse, Transportation, and Installation Management

- Covers all *order management* steps from processing customer inquiries and quotes to routing shipments and selecting carriers
- Includes *Warehouse management* from receiving and picking product to load and ship product
- Includes receive and verify product at customer site and installation
- Includes Invoicing the customer
- Manages business rules for delivery, performance, information, finished product inventories, capital assets, transportation, product life cycle, and import/export requirements

# An Integrated SCM Information Systems Architecture



# An Integrated SCM Architecture should integrate the following SCM execution systems:

- Customer Response Management System (CRS)
- Inventory Management System (IMS)
- Supply Management System (SMS)
- Transportation Management System (TMS)
- Warehouse Management System (WMS)



An Integrated SCM Architecture should integrate the following SCM planning systems:

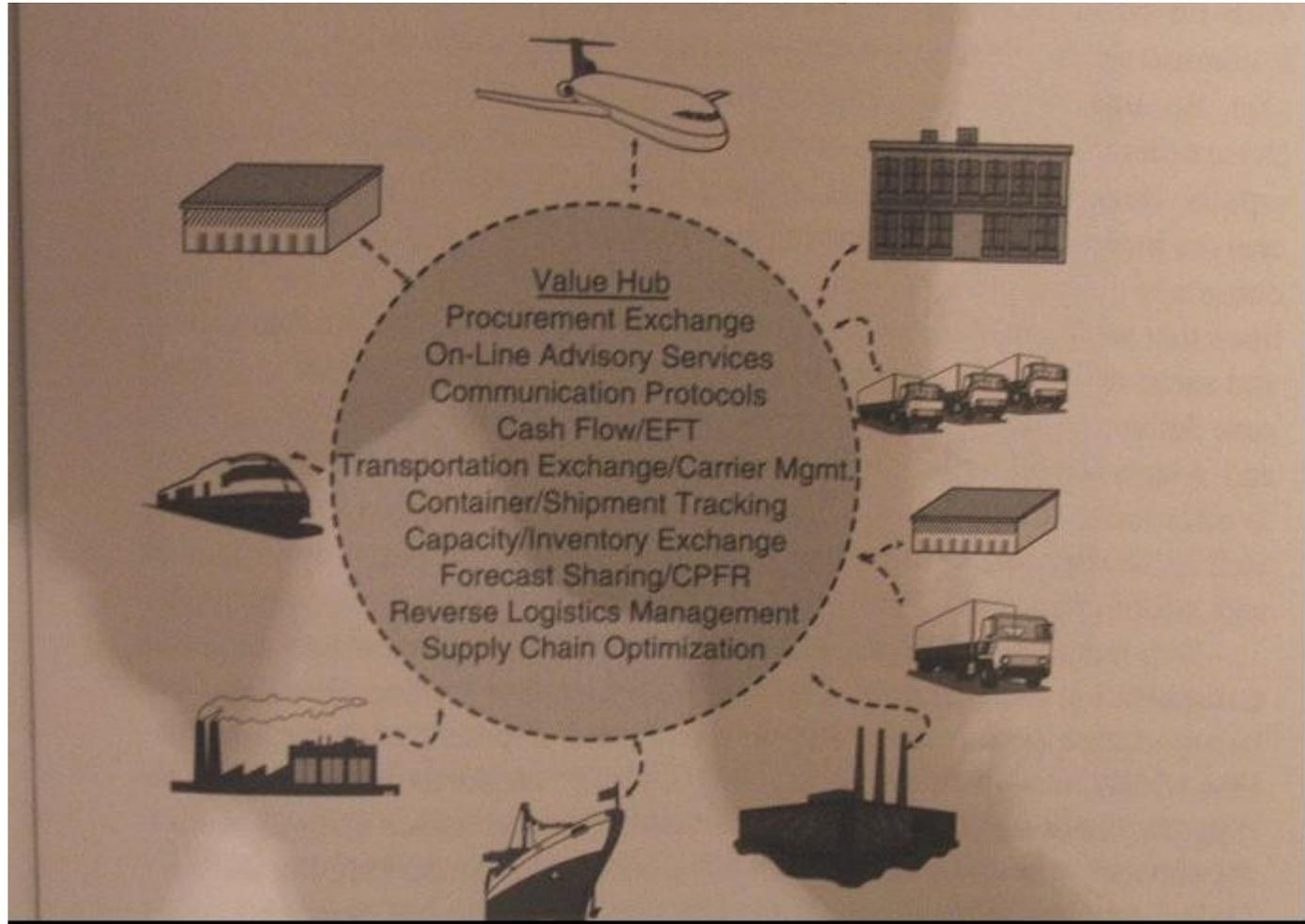
- Customer Response Planning Systems
- Inventory Planning System
- Supply Planning System
- Transportation Planning System
- Warehouse Planning System



# An Integrated SCM Architecture should integrate the following **SCM collaboration systems**:

- Supply Chain Scheduling and Optimisation
- Supply chain conflict resolution
- Online customer service
- Inventory Auctions
- Forecast Sharing
- Procurement Marketplaces, Global Sourcing, Online Catalogue Management

# Total Logistics Exchange Concept



# Total Logistics Exchange

Manufacturers, wholesalers, retailers, consumers and third party logistics companies are connected to a Web exchange that provides the following services on a per transaction basis:

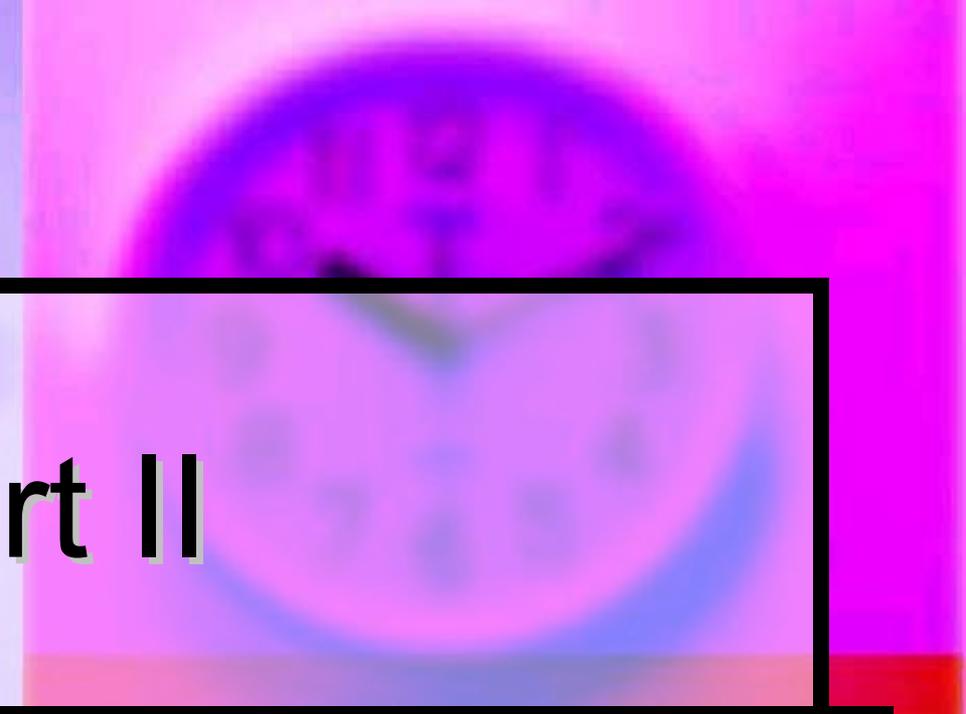
- E-procurement
- Electronic RFPs and product bidding
- Electronic funds transfer
- Transportation services bidding
- Reverse logistics management
- Freight payment and audit
- Online carrier management
- Container and shipping tracking
- Capacity and inventory exchange
- Forecast sharing and CPFR
- Supply chain optimisation
- Online logistics decision support tools
- Online advisory services

# Web based transportation management

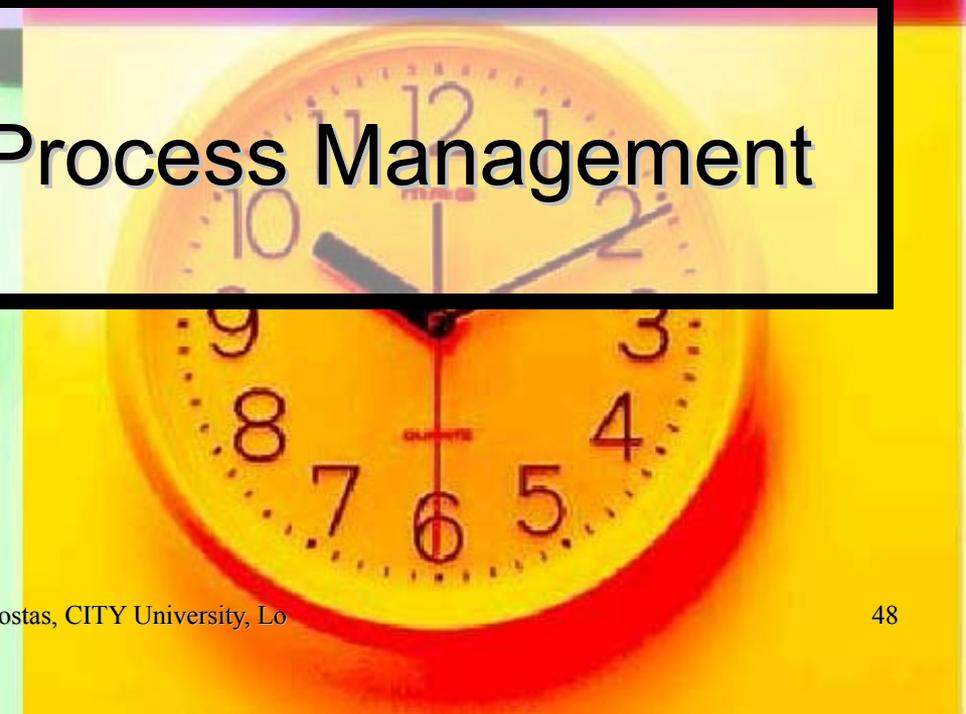
- Due to ecommerce expansion, shipping sizes are declining and shipping frequencies are increasing dramatically
- Web technologies permit a multiplicity of breakthroughs in transportation management
- Carriers, transportation service providers and portals make shipping rates and shipping tracking information widely available
- Online transportation service providers provide online bill payment auditing analysis and claims collection
- GPS and RFID systems permit transportation assets to be physically tracked with accuracy of a few feet and monitor their status ie loading, unloading, travelling empty, travelling full, idling etc.

# RFID applied to DELIVER processes

<b>D1.6</b>	<i>Route Shipments</i>	RFID assisted by GPS satellite signal for tracking location.
<b>D1.8</b>	<i>Receive Product at Warehouse</i>	
<b>D1.9</b>	<i>Pick Product</i>	
<b>D1.10</b>	<i>Load Vehicle, Generate Ship Documents, Verify Credit and Ship Product</i>	<ul style="list-style-type: none"> <li>-Carrier/Route optimization</li> <li>-Product tracking</li> <li>-Installed sensors for determining shipping conditions (e.g. heat, humidity, etc).</li> </ul>
<b>D1.11</b>	<i>Receive and Verify Product at Customer Site</i>	
<b>D1.12</b>	<i>Install Product</i>	
<b>D1.13</b>	<i>Invoice (Payment)</i>	



# Part II



# Business Process Management

# What is BPM

- **Business Process Management**—  
The practice of developing, running, performance measuring, and simulating Business Processes to effect the continued improvement of those processes. Business Process Management is concerned with the lifecycle of the Process Definition. “
- (from WfMC [www.wfmc.org](http://www.wfmc.org))

# Driving Force for BPM

Managing complex interactions, unstructured activities, and coordinating that in the context of business processes, is a real shift and one that is becoming more and more critical to the way that organizations can further impact their performance.

# Intra and inter-organisational BPM

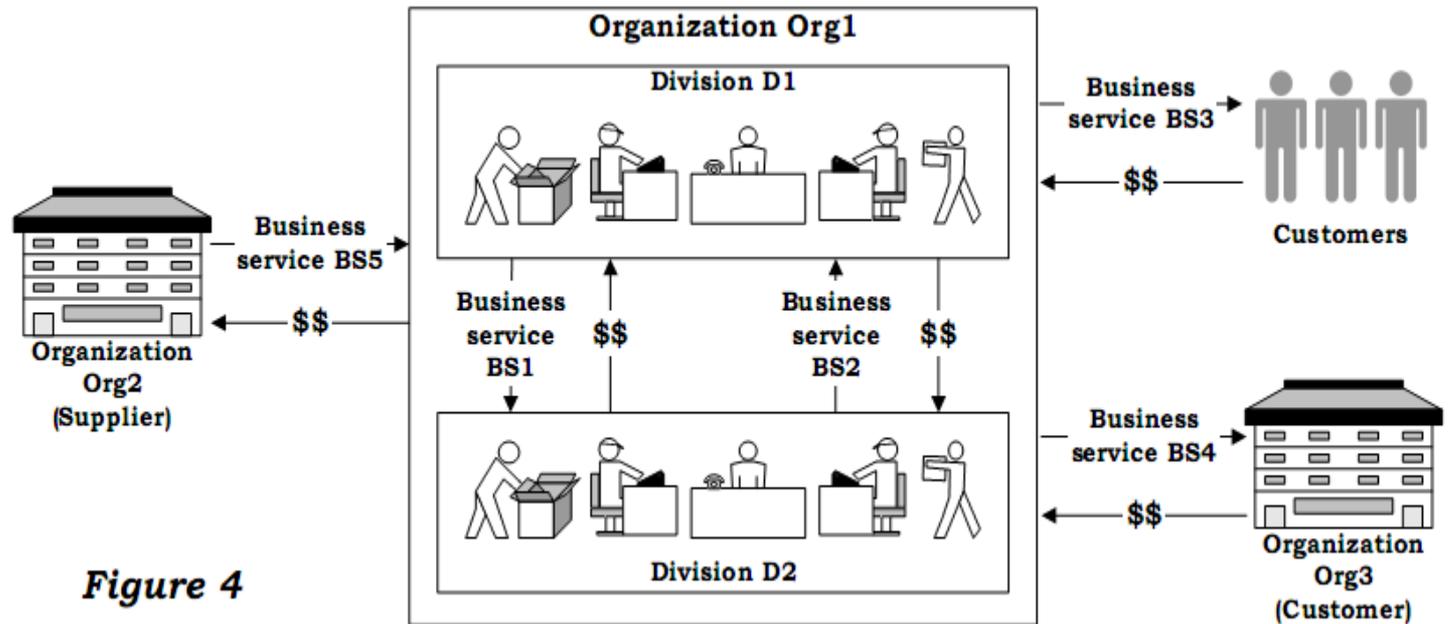


Figure 4

# What is a Business Process

- A coordinated use of activities and resources in a single organisation or across organisations with the goal of providing something of value to a customer.
- Processes are repetitive and the dependencies between activities (e.g. sequencing) must therefore be defined
- A 'customer' can be internal or external to the organisations performing the processes
- The outcome(s) of a process can be tangible (a product) or intangible (e.g. a service)

# Why business processes are important

In a recent survey of 1,400 CIOs by Gartner Executive Programs, the top business priority identified by CIOs was *business process improvement*

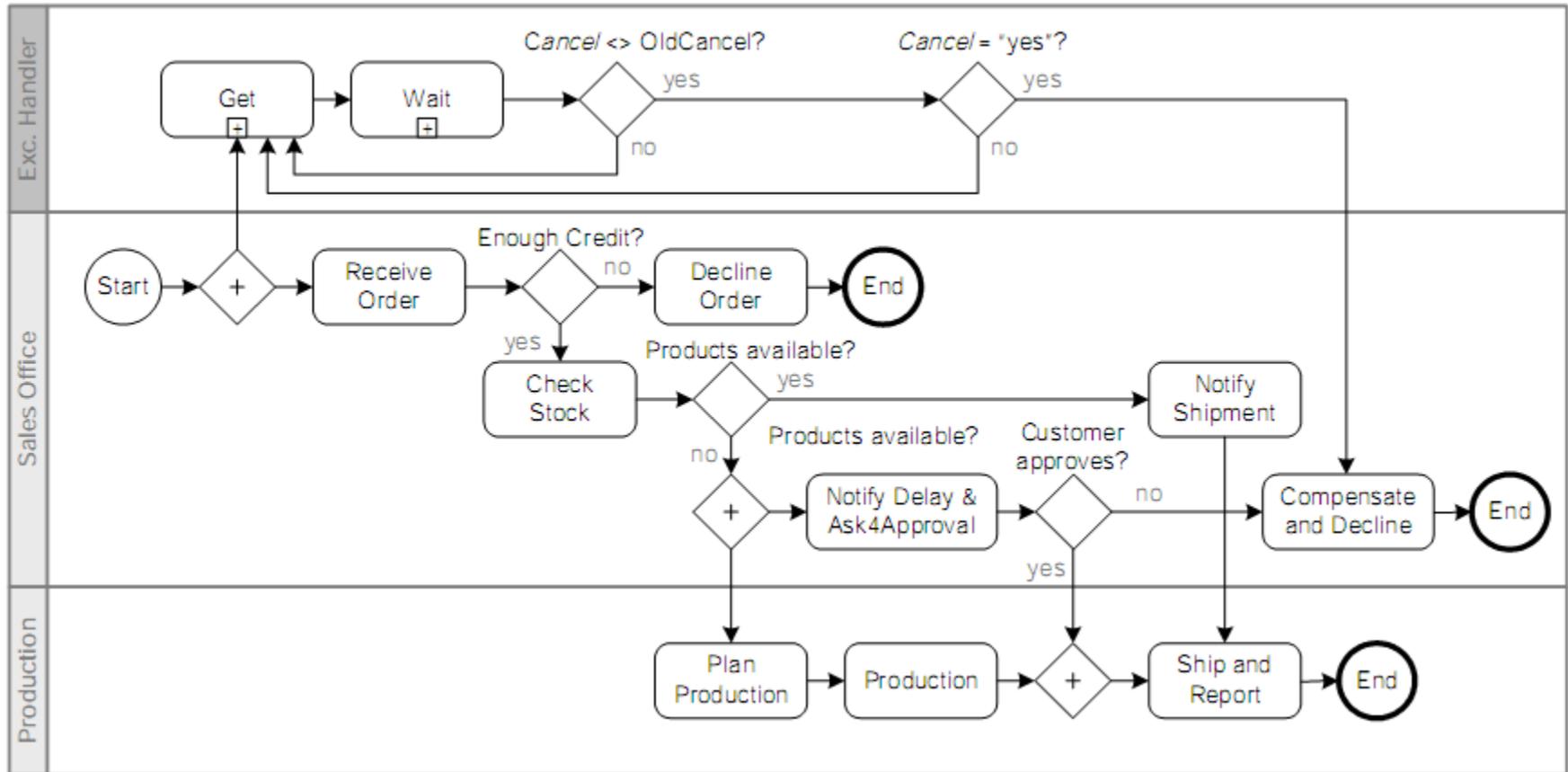


# What is BPMN

- Business Process Modeling Notation (BPMN) is a graphical representation for specifying business processes in a workflow.
- BPMN was developed by Business Process Management Initiative (BPMI), and is currently maintained by the Object Management Group

(source: Wikipedia)

# A Process Model in BPMN



# BPM is not just about drawing models...

BPM provides the ability to capture users and system requirements to optimize how people should work. It's more than just workflow or a diagram in Visio or Smartdraw. In BPM, the same process model that's defined, iterated, and optimized becomes the application specification to deploy in an enterprise environment.

The model becomes the common language to meet user requirements for automating and improving processes and the IT specification for system connections, business rules, and data architecture.

([www.thectoforum.com](http://www.thectoforum.com))

# Business Process Fundamentals: Inputs & Outputs

- A business process must have specific *input(s)* (the *request*) and *output(s)*
- The request comes typically from a customer and the outcome is typically aimed for the customer.
- The request and outcome are linked: the request is for the outcome; the outcome is typically the thing requested.

# Business Process fundamentals: Rules

- A **process** is a sequence of status changes from request to outcome, and the status changes are governed by **rules**. The rules applicable to all request entities of the relevant type (eg all orders, for a purchase order process) split the process into **subprocesses**

# Business Process Fundamentals: Subprocesses

- Subprocesses are typically sequential, but could be in parallel if that is what the rules specify. For example subprocess **Check credit rating** could run parallel to subprocess **Match against stock**.
  - First take the order.
  - Then check the order.
  - Then check the customer's credit rating.  
...etc.

# Business Process Fundamentals: Tasks

- The third and final level in a process model is the **task**. A subprocess consists of one or more tasks plus the routing between them.
- Where subprocess-level routing applies to all request entities for the process, task-level routing differs for different request entities— because the attributes of the request instances will have different values.
- The task structure of the process must accommodate every possible request instance. A request instance will typically pass through every subprocess, but only through the tasks it needs to pass through.
- A task is either automatic (all data available; the next status change achieved by applying rules mechanistically); or manual (human interaction needed, for example because data is missing, authorization is required, or a decision must be made).

# Subprocesses and Tasks in BPMN notation

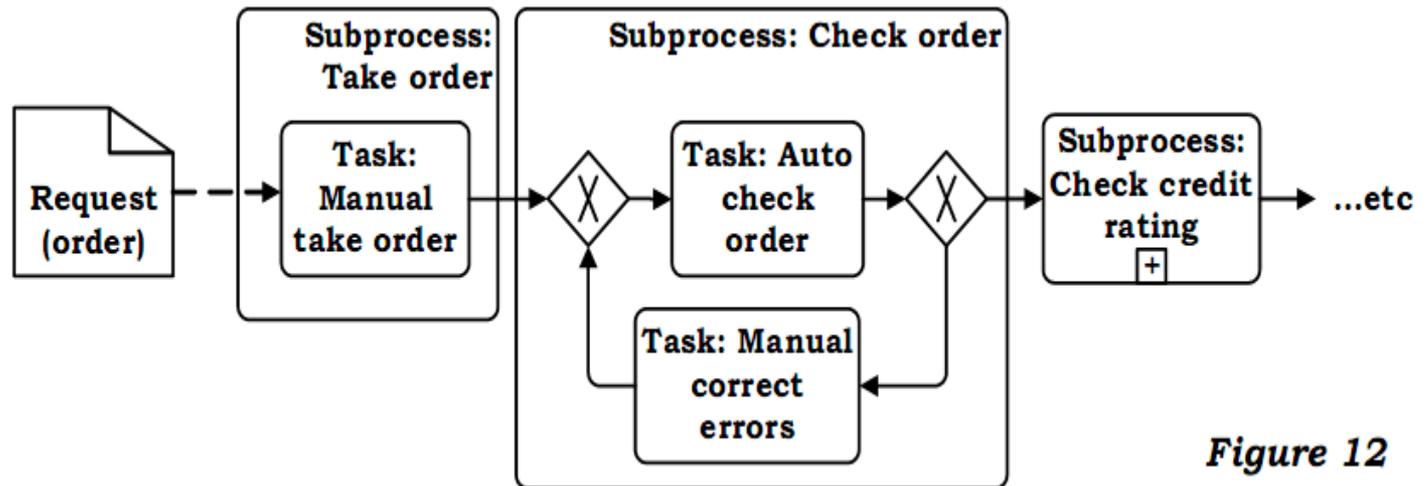


Figure 12

# What is the new focus for BPM?

The transactional process where workflow and BPM was first applied has largely been resolved.

The really opportunities for organizations to build value is not in the lower tier where those processes are found, but by exposing those system capabilities as services, and connecting these to human-facing processes.

# Why BPM is needed in SCM processes

Organizations quickly realized that even with systems that move documents or data to the right people in the chain the process does not always get completed quickly or with high quality.

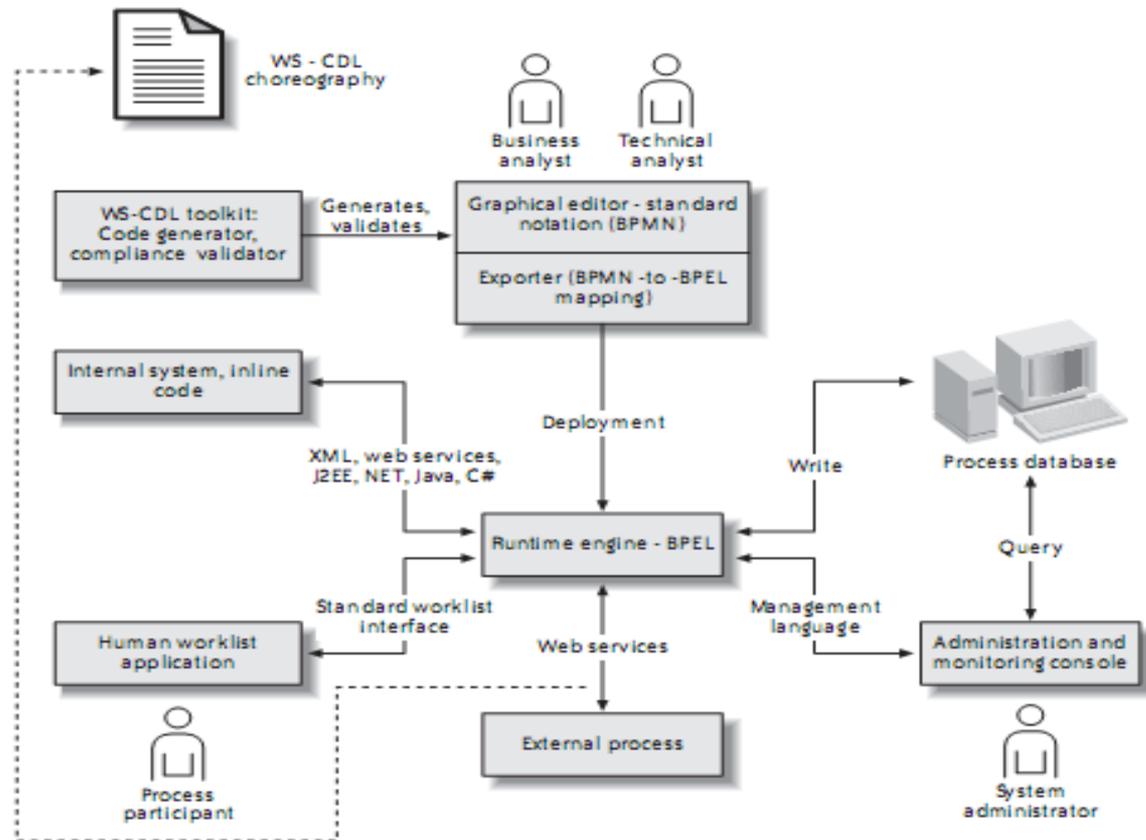
People will abandon or bypass IT systems the process if they cannot easily interact with them, or if they do not bring them all the contextual information they need to make a decision.

*The key to success is how to **engage and connect** all participants across company and system boundaries, and automate the capture and processing of information across diverse groups and disparate systems.*

# What does BPM can offer to Supply Chain Management :

- Ability to delegate rules to the business Rules are in languages/formats that business users can work with
- Ability to constantly monitor the state of the business system, identify bottlenecks and take remedial action in real-time
- Comprehensive recording and reporting of Management Information
- Ability for the end users (process owners) to change and improve the process dynamically, 'on the fly'

# BPM Architecture (source O'Reilly)



# Event Driven Business Process Management

Either through a subscription process or automated integration points, events flowing within the service fabric are typically processed individually and propagated through robust messaging infrastructures. The recognition of patterns within independent and varying event streams is known as Complex Event Processing (CEP). BPM can incorporate or interact with CEP Engines

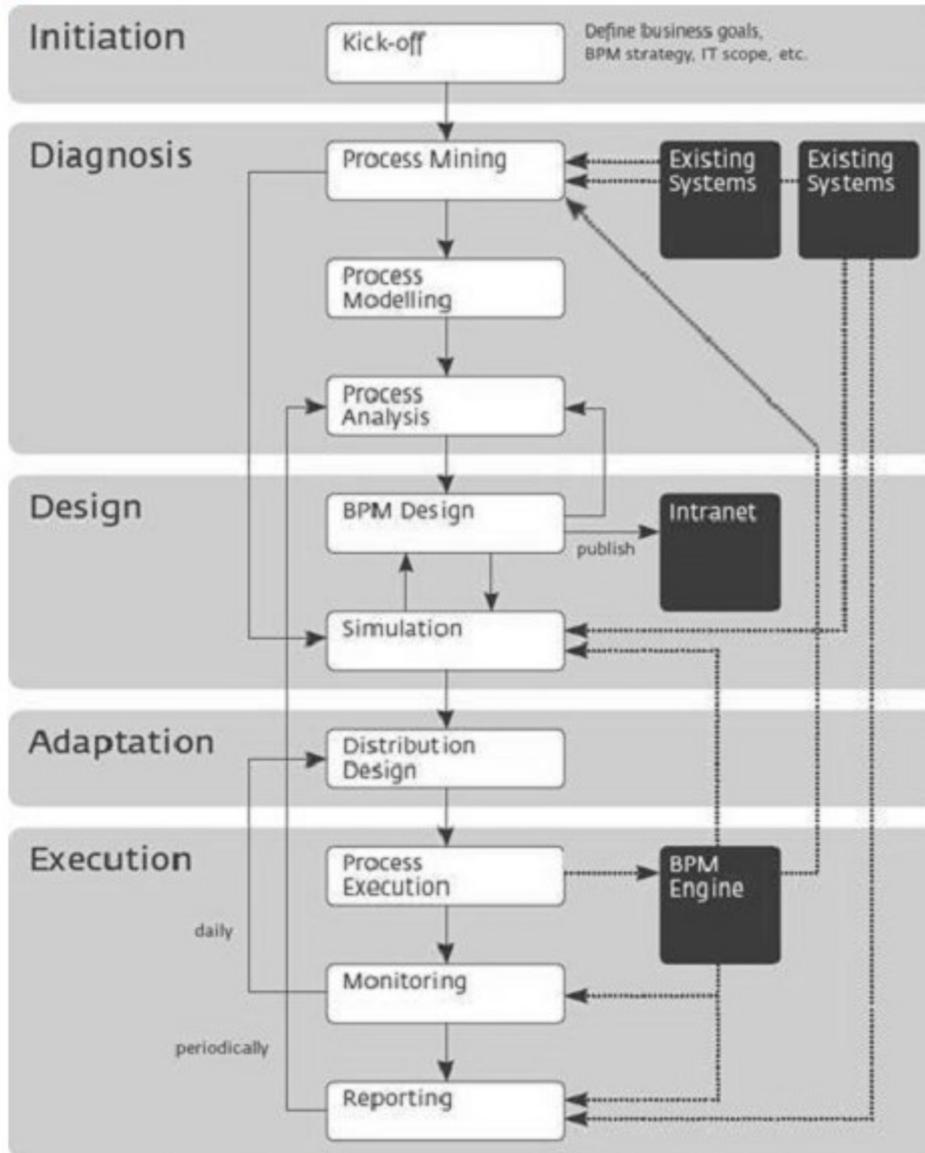
# Modelling and Execution Languages for BPM

- XPDL is not an executable programming language like BPEL below, but specifically a process design format that literally represents the "drawing" of the process definition. This allows an XPDL to store a one-to-one representation of a BPMN process diagram. For this reason, XPDL is effectively the file format or "serialization" of BPMN.
- BPEL is an executable language, specifically for the execution of processes modelled as orchestrations of **Web services**

# BPM Steps

1. **Automate** Manual Steps in the Process
2. **Iterate** through the Automated process, adding more processes, enhancing the UI, adding more reporting/MI or adding additional business rules with each iteration.
3. **Integrate**—Build in the integration with external systems, which is they key to achieving Straight Through Processing (no human intervention is required).
4. **Delegate**—The final step entails passing on control of the business process and its execution to the business. Identifying key business rules and process control points, and then building them in such a way that they can be easily maintained by the business users. In this way *Continuous Process Improvement* is achieved.

# Steps in a BPM Project (source: O'Reilly)





# BPM step 1: Validate the starting point

## ASSESS WHERE YOU ARE BEFORE DECIDING WHERE YOU ARE GOING

- The first step in building a business case for BPM is to establish a “current state” benchmark of the process or processes targeted for improvement.
- This is not intended to be a comprehensive re-engineering exercise, but rather an opportunity to better understand the process in question.
- Every process has its “cow paths” where practice has outlived the original design, and may or may not reflect how it should be performed in current context.
- Often this offers great opportunity for improvement. Yet overly scrutinizing this at the beginning can lead to a political battle or cause stakeholders to become defensive.
- So rather than getting entangled in politics, begin by simply documenting how things are done *today*, including specific steps and activities, the frequency with which they are performed, and the duration of individual activities—and be sure to note obvious bottlenecks, issues, or areas of improvement.

(Source: [transformationandinnovation.com](http://transformationandinnovation.com))

# BPM Step 2: Benchmark the current process

- Next, start to identify the interdependencies and links between activities in terms of individual roles. Examine each individual's role in the process, asking “when do you...?” and “why do you...?” questions about process “steps.”
- The goal is to build the context around process steps, so that a process can be defined and modeled as a set of interrelated but discrete activities, rather than simply a loosely defined sequence of actions.
- In addition, start to identify system dependencies in the process—what data is accessed when and by whom and in what system does it reside.
- Next focus on the “white space” between activities, specifically the precedents (what happens before) and dependents (what happens after) as well as the flow of information and how it changes from one activity to another. This is also an opportunity to identify bottlenecks, without directly implicating any specific roles or individuals.

(Source: [transformationandinnovation.com](http://transformationandinnovation.com))

# BPM Step 3: Define Performance Metrics and Success Criteria

- The calculation and determination of a project's success should be based on milestones and measurable goals, not an arbitrary notion of completion. While the business case requires structure, it should also be fluid and adaptable. Business performance is dynamic and so should be the ruler used to measure it, particularly during the formative stages of the business case. This means that metrics should be both quantitative, such as time and cost variables, as well as qualitative, such as being easier to do business with, increasing visibility, or improving employee productivity. A business case should contain measurements that are tactical and quantitative as well as factors that are strategic and qualitative such as enabling 'round-trip BPM' so that business processes can be adapted in realtime by process owners.

(Source: [transformationandinnovation.com](http://transformationandinnovation.com))



# So, is BPM the new IT weapon for logistics and Supply Chain Management?

- Yes, however, BPM is not just another IT tool; it is the bridge between business processes and IT system
- BPM speaks the language of the business user
- It integrates teams and people not just systems across the whole logistics chain
- Helps with compliance to regulatory and other requirements
- Allows organisations to leverage their investment in IT for SCM