

Supply Chain Methodology Training Course

1. Course tutors







1. Introductions

Name

Company

Role

Supply Chain Management & Facilitation Experience

Personal learning objectives and ...





Course Aims

- Give you an overview of CRINE's supply chain methodology and a detailed understanding of the key tools
- Give you the skills to 'champion' the methodology in your own organisation
- Encourage you and your organisations to adopt a more strategic approach to supply chain management



1. Course Overview: Day 1

INTRODUCTIONS

WHAT IS A SUPPLY **CHAIN & SUPPLY CHAIN MANAGEMENT?**

OVERVIEW OF METHODOLOGY

PORTER'S 5 **MARKET FORCES**

5 **SPEND ANALYSIS** **INTRODUCTION TO FACILITATION**

PROCUREMENT TARGETING MATRIX (PTM)

INTRODUCTION TO CASE STUDY





1. Course Overview: Day 1 cont'd

9 **POPULATING THE** PTM

10 **PROVIDER PERSPECTIVE & STRATEGIES**

TYPES OF IMPROVEMENT OPPORTUNITY

IMPLEMENT-**ABILITY OF IMPROVEMENT OPPORTUNITIES**

13 **RANKING THE IMPROVEMENT OPPORTUNITIES**





1. Course Overview: Day 2

14

RECAP OF DAY 1, PREVIEW OF DAY 2

15

INITIATING **THE PROCESS & BUILDING A TEAM**

16

ANALYSE SUPPLIER'S MARKET (I)

17

ANALYSE SUPPLIER'S MARKET (II)

18

ANALYSE THE SUPPLY CHAIN (theory)

19

ANALYSE THE SUPPLY CHAIN (intro to case study)

20

ANALYSE THE SUPPLY CHAIN (case study)

20EVELOP **STRATEGY & MANAGE IMPLEMENT-**

ATION PLAN





1. Course Overview: Day 3

22 **RECAP OF DAYS 1 & 2, PREVIEW** OF DAY 3

23 INTRO TO **EXECUTIVE PRESENTATION**

24 **PREPARATION** FOR EXECUTIVE **PRESENTATION**

EXECUTIVE PRESENTATIONS

25

26 **INTRO TO MANAGEMENT SESSIONS**

27 MANAGEMENT SESSIONS

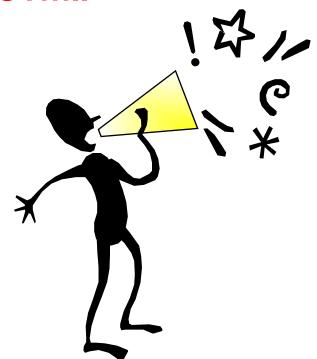
28 **COURSE REVIEW &** CLOSE



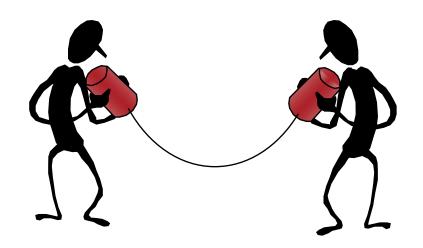


1. Course style

NOT.....



BUT.....







1. Ground Rules ...





2. What is a supply chain? A definition

'A supply chain is a complex, dynamic network or system of interconnected and interdependent individuals, groups, companies, organisations and relationships whose goal is to satisfy and add value to their particular customer.'

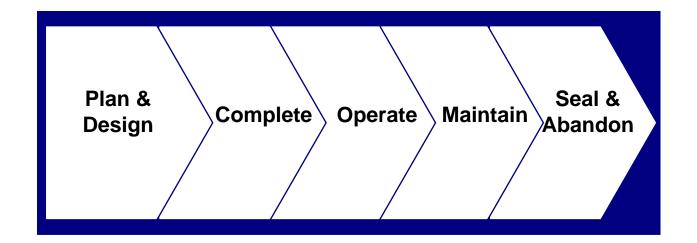






2. What is a Supply Chain?

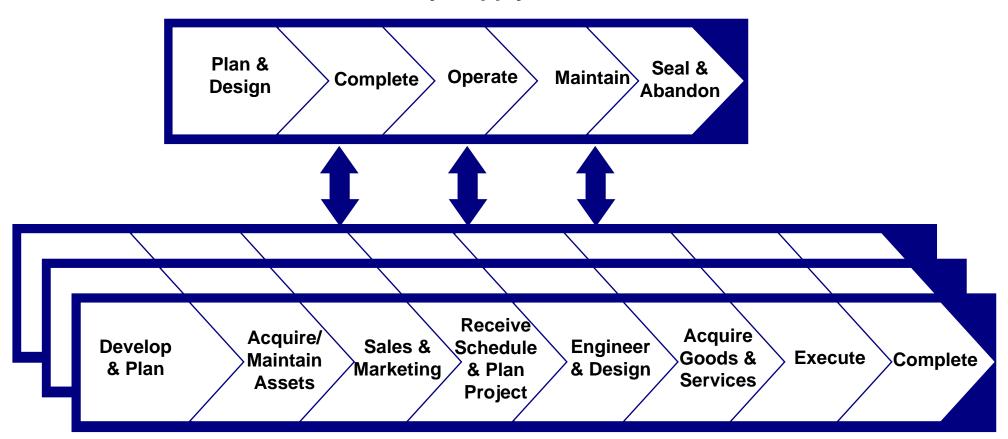
A Primary Supply Chain





2. What is a Supply Chain?

Primary Supply Chain

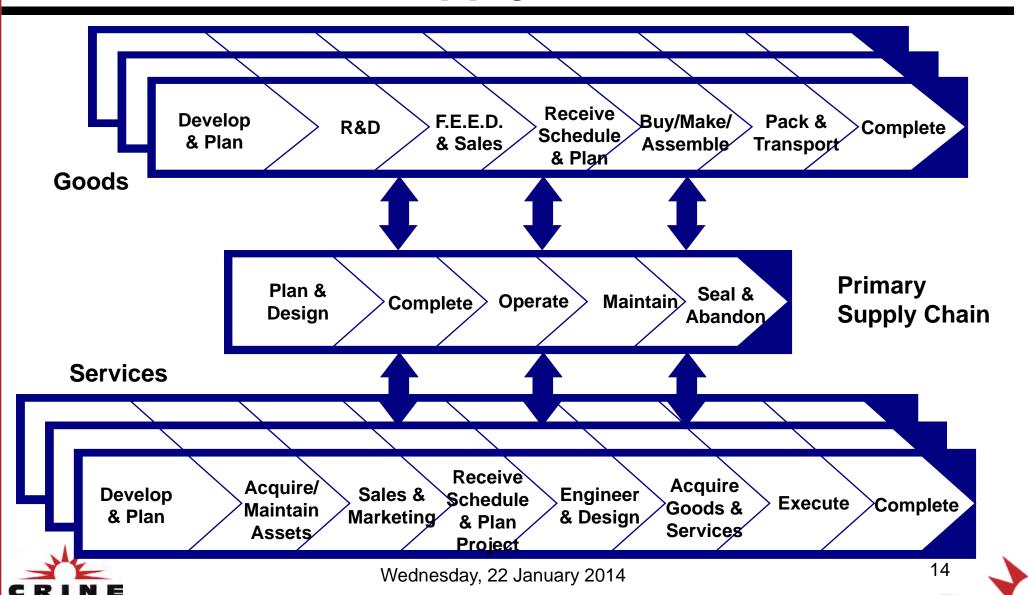


Services

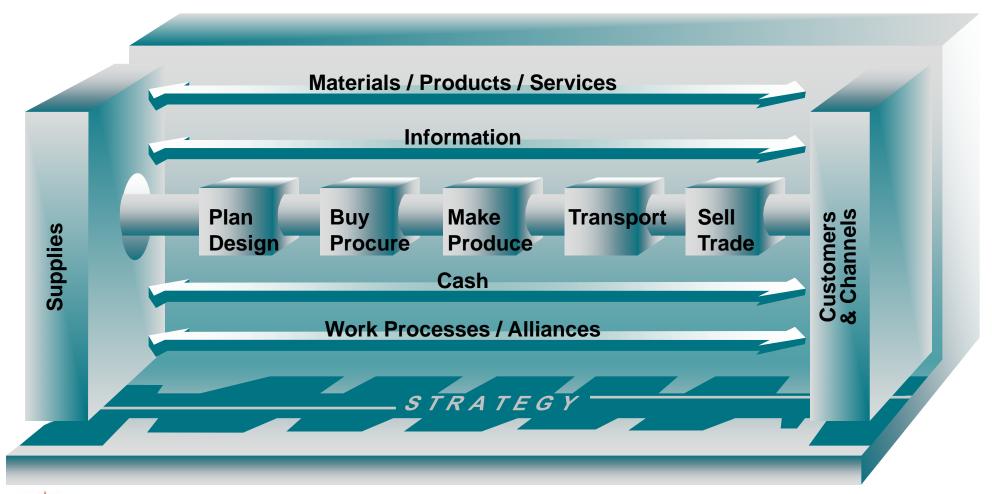




2. What is a Supply Chain?



2. Supply Chain Management







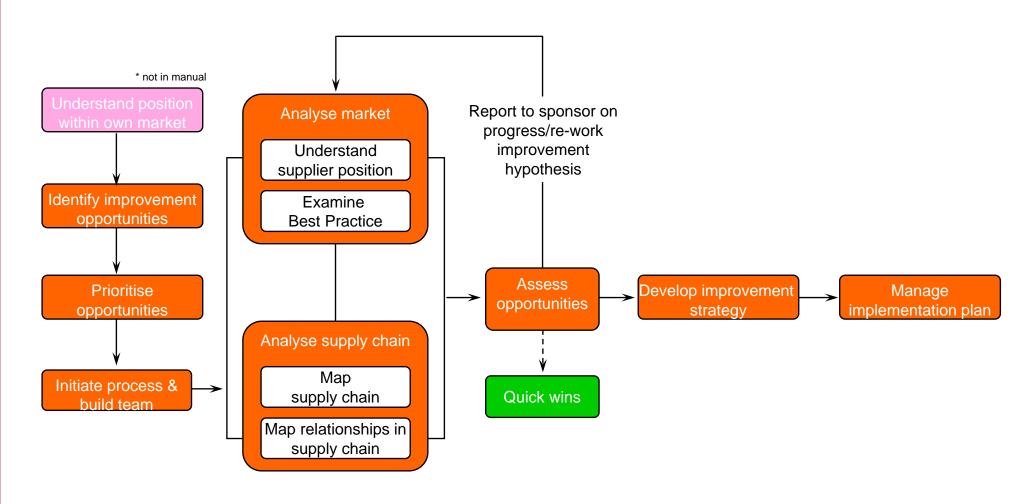
2. Supply Chain Management definition

'Supply Chain Management (SCM) refers to a set of tools and activities that most effectively and efficiently manage the flow of information, materials, services and money along a supply chain, in order to meet customers' needs at each tier of the chain, minimise waste and secure lowest cost.'



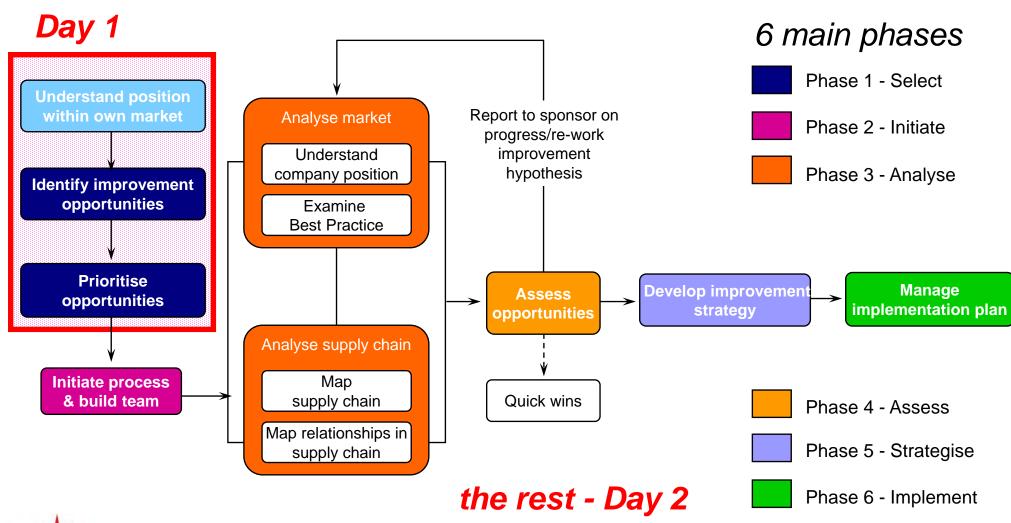


3. Overview of Methodology





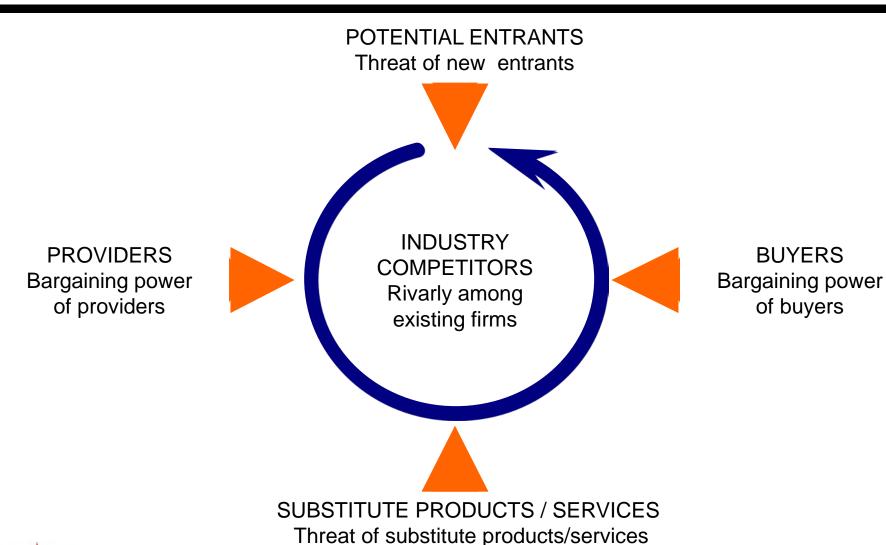
2. Overview of methodology







4. Porter's 5 Market Forces (Own)



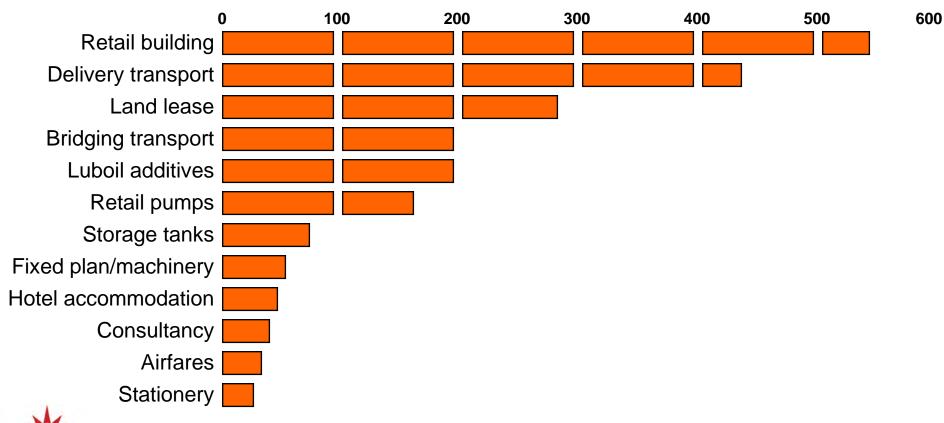


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5. Spend Analysis

Pareto chart on spend of company 'X' (1994 spend)







6. Facilitation - a definition

'A method of enabling people to get the best out of their meetings by creating a safe experimental environment, by involving them, challenging them, providing processes for solving problems and by obtaining their commitment to the output.'







6. The role of the Facilitator

- To act as a catalyst to a group of people
- To help clarify the group's goals and objectives
- To design a group process for achieving those goals and objectives
- To guide/lead the group through that process
- To draw out the experience, expertise and knowledge of the group
- To encourage ownership of the problem and the eventual solution



Help a gathering of individuals become a productive work group





1. Remain neutral at all times

2. Focus on process, not content

3. Remember at all times that the group is expert

4. Never do anything the group can do for itself





6. Key facilitation activities

- Setting up
 - Preparing the agenda
 - Introducing participants
 - Helping the group establish **Ground Rules**

- Managing the group & the environment
 - Creating a supportive climate
 - Being aware of the group's energy levels at all times
 - Being sensitive to the group's and individuals' needs





6. Key facilitation activities

- Managing the discussion
 - Encouraging participation
 - Asking questions that invite a range of responses
 - Asking probing questions
 - Challenging constructively
 - Knowing when to intervene and when to keep quiet
 - Monitoring the time contract
 - Resolving any conflict

- Managing the discussion
 - Re-distributing comments or questions to the whole group
 - Keeping the group on track
 - Stimulating discussion and debate
 - Ensuring that everyone has the opportunity to contribute





6. Key facilitation activities

- Closing/summarising
 - Reviewing progress after each break
 - Using paraphrasing for clarity and understanding
 - Summarising regularly and stating conclusions clearly
 - Summarising conclusions / decisions
 - Summarising issues still not resolved at the end



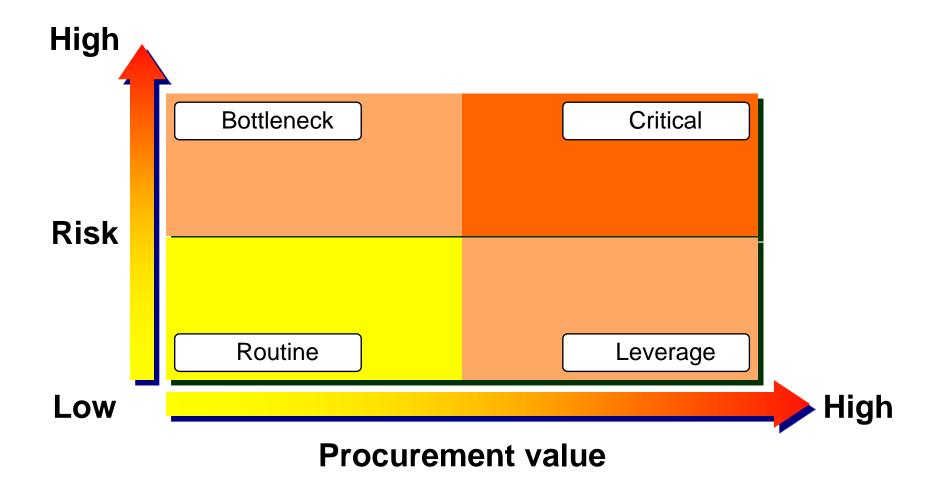


6. Facilitation Quiz

- What is facilitation?
- What are the key skills needed to facilitate?
- When should we facilitate?
- When should we <u>not</u> facilitate?
- Think of a metaphor/image for a facilitator
- What is the difference between a facilitator and a chairperson?
- What is the difference between content and process?



7. Procurement Targeting Matrix







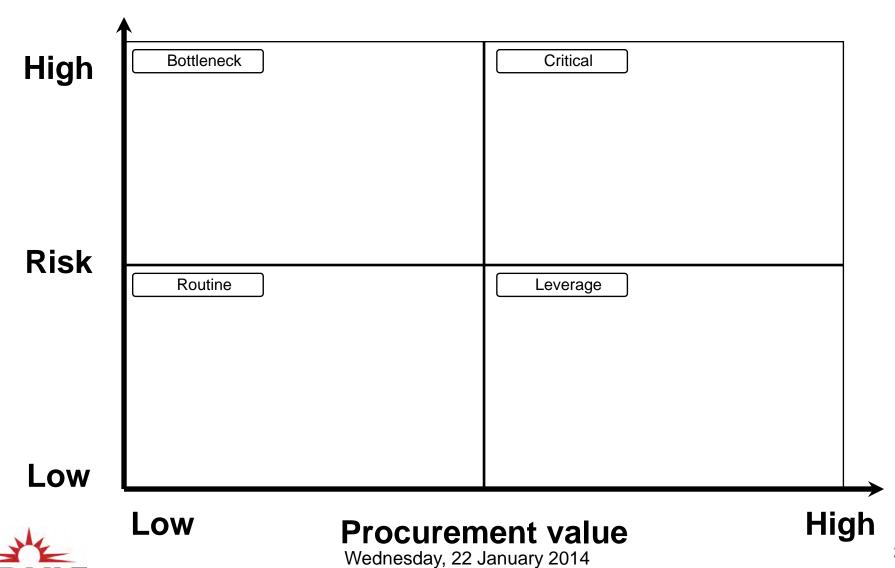
8. Case Study

A local builder does a nice line in specialist, Edwardian / Victorian style conservatories. He gets his work through a local architect but has recently acquired a design capability. He has a tradition of using renovated original fittings to give the feeling of antiquity. His history of rapid growth has come to an abrupt end - a large employer recently closed down its local operations





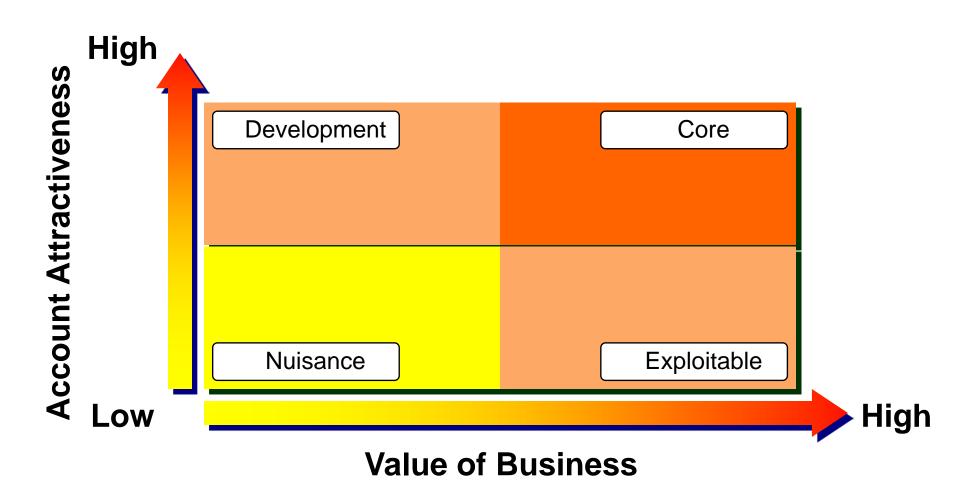
22. 8. Population of the PTM







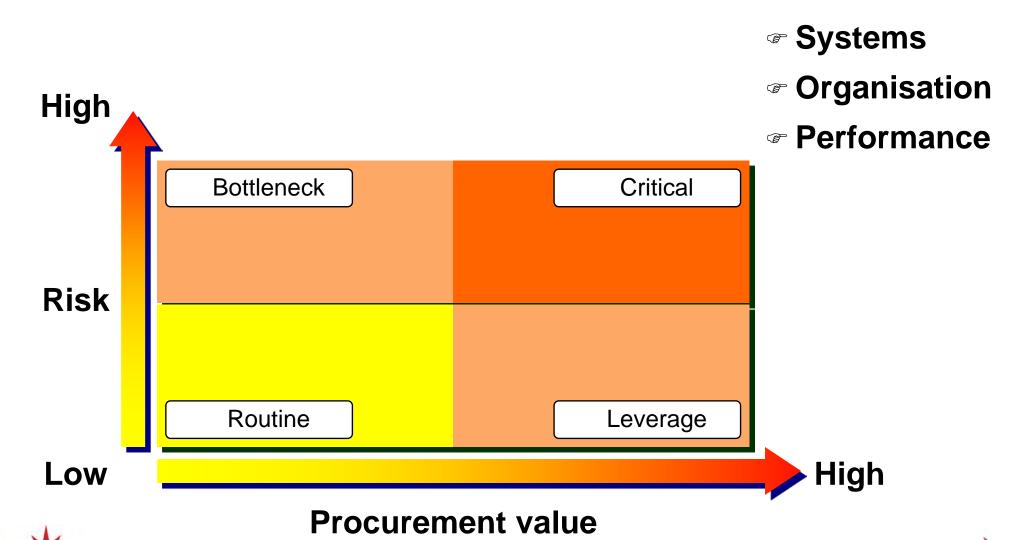
10. PTM - Provider Perspective





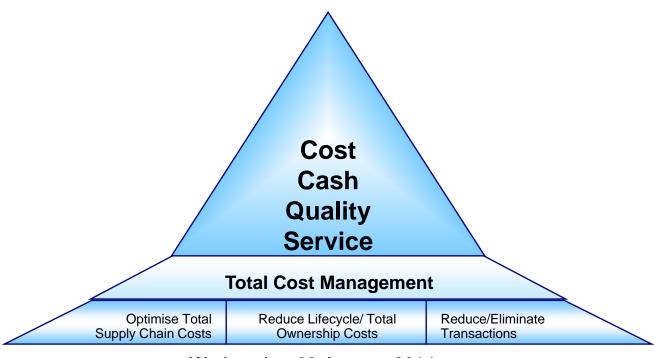


10. PTM - Other Uses



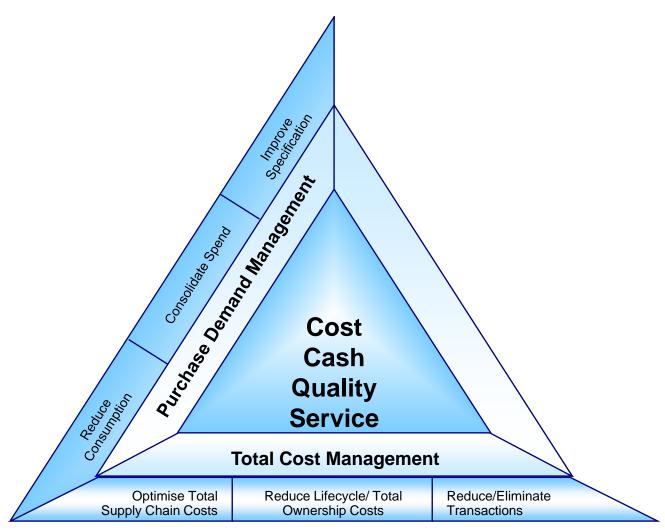


11. Sourcing Opportunity Framework



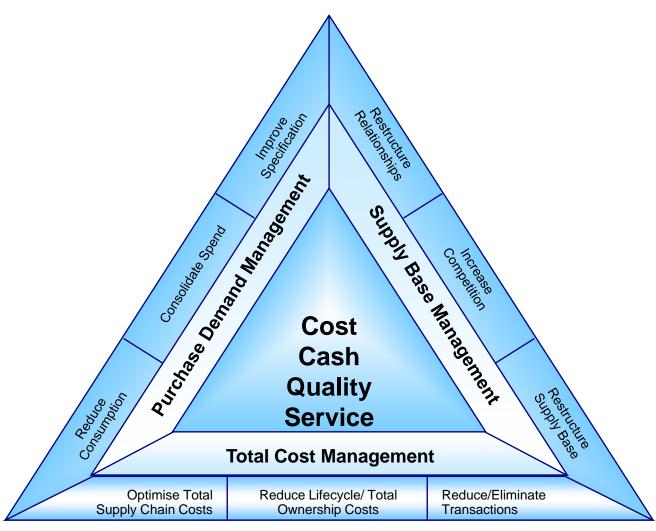


11. Sourcing Opportunity Framework





11. Sourcing Opportunity Framework





12. Force Field Analysis

GOAL: Where you want to get to (ie. Optimum SCM)

Negative Forces:

Forces preventing you from achieving your goal

PRESENT SITUATION: Where you are now

Width of Arrow:

Strength of force

Postive Forces:

Forces enabling you to achieve your goal





13. Cost Lever Potential Assessment

COMMODITY:

Spend (1995/99):

COST LEVER	Ease	Business Impact	Potential (Ease x Impact)
Consolidate spend	2	1	2
Improve supply chain			
Change contract terms			
Standardise specification, limit varieties	2	2	4
(Un) bundle the buy	2	0	0
Make, lease, buy, rent	1	2	2
Optimise supply base			
Change internal/external policies			
Use substitute technology			
Share resources			
Improve work practices, organisation, controls			
Change planning horizons			
Improve competencies	1	1	1
Total Opportunity Potential:			9

Ease of implementation:

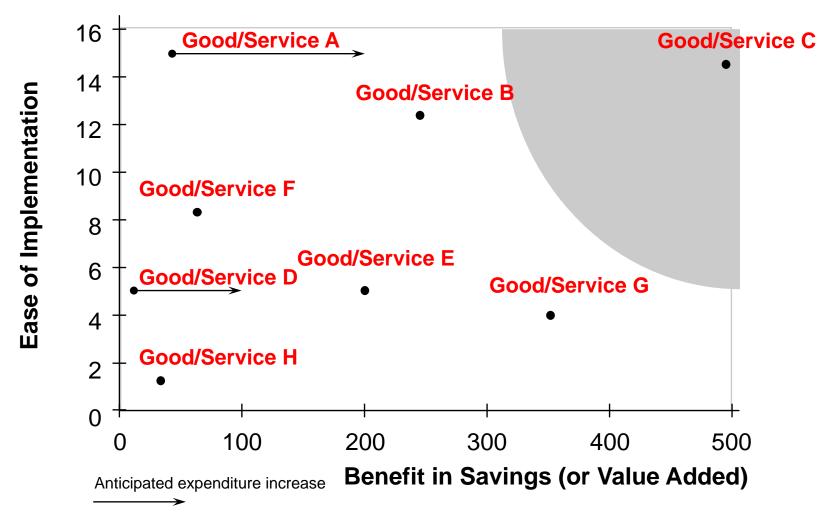
High = 2Medium = 1Low = 0

Impact on business:

High = 2Medium = 1 Low = 0



12. Commodity Prioritisation tool



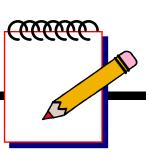








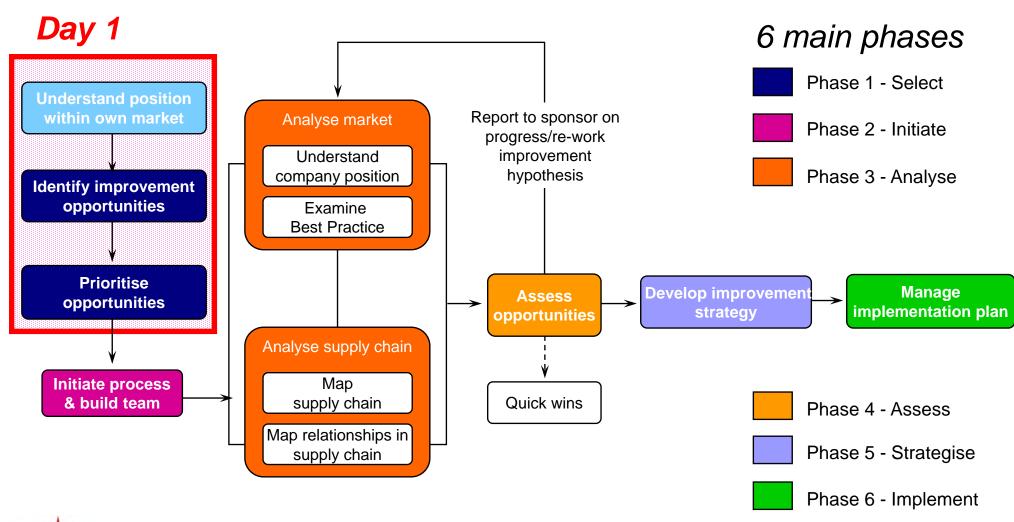
14. Learning review of Day 1



- Note 3 things you learnt yesterday
- How will they be useful in the workplace?
- Note up to 2 things you will do differently back at work as a result of the above
- Any feedback for your trainer?



14. Day 2 - Commodity Strategy







15. What is a team?

A small group of people with complementary skills committed to a common purpose, performance goals and approach, for which they hold themselves mutually accountable



15. Characteristics of effective teams

Clear understanding of goal(s)	Results-driven structure
 Unity of purpose Clearly articulated goal Common and clear understanding of goal 	 Effective communication, internal and external Clear roles and responsibilities Readiness to give and get feedback
Competent team members	Unified commitment
 Skills and abilities to do job Strong or developable interpersonal skills 	Commitment to achieving goalsAll contributions to team recognised equally



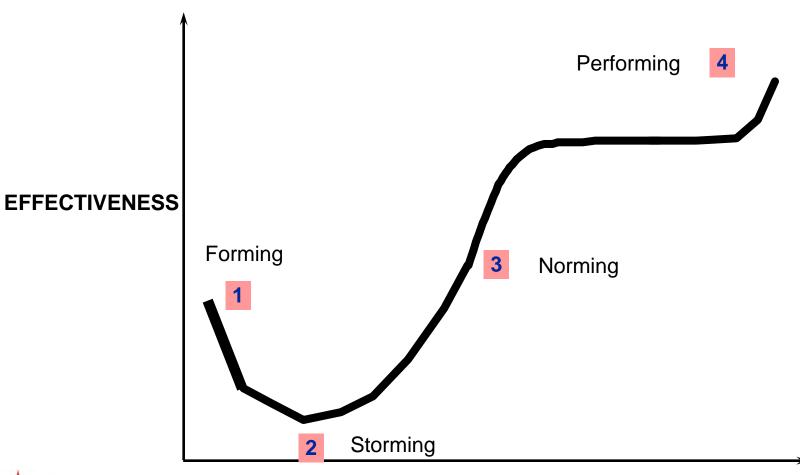
15. Characteristics of effective teams

Collaborative climate	Standards
 Honest Open Consistent Respectful Fun 	 Clear, transparent levels and standards of performance Common work practices and procedures
External support & recognition	Principled leadership
 Appropriate resources External support Overt recognition and reward of team's performance 	Committed team leadersVisible and accessible sponsorship





15. Stages of team development







15. What happens at each stage

Components Stages	Interpersonal Relations	Task Functions
Forming	Exploration Dependency	Orientation, setting direction Learning (about each other)
Storming	Process conflict: Defensiveness Competition Disagreements Questioning	Task conflict: Mission & Goals Roles ('turf') Strategies Activities Procedures
Norming	Group cohesion Common spirit	Task Information & data Flow Understanding/buy-In
Performing	Interdependence Trust/openness	Diagnosis & problem solving Decision-making
Mourning	Reflective Grieving	Close down Process/outputs review



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15. But teams can become insular....



- Too much cohesion, closing of ranks
- Team bonding and pressure to be 'part of the team' can override normal rational considerations
- Examples of Group Think:
 - Bay of Pigs', 1962 CIAsponsored invasion of Cuba
 - wood for the trees
- Mow do you break out of Group Think?



15. Belbin: team roles/types

The Co-ordinator



The Implementer







The Monitor/Evaluator



The Shaper



The Team Worker



Wednesday, 22 January 2014







15. Belbin : Co-ordinator (Chairman)

- Presides over the group and co-ordinates team efforts
- Calm, controlled, self-confident
- Treats and welcomes all potential contributors on their merits and without prejudice
- A strong sense of objectives and purpose

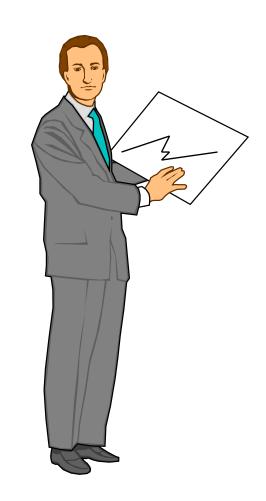






15. Belbin : Shaper

- A would-be chair of the group
- Drives the team on to complete the task successfully
- Often highly strung, outgoing, dynamic
- Readiness to challenge inertia, ineffectiveness, complacency, self-deception







15. Belbin : Plant

- The ideas person
- Sometimes shy but good at creating ideas and new proposals
- Often individualistic, seriousminded, unorthodox, maverick, idealistic
- ! Imagination, intellect, knowledge sometimes even genius!







15. Belbin : Resource Investigator

- Usually an extrovert who mixes well and can bring new business and ideas to the team
- Extrovert, enthusiastic, naturally communicative, curious and ready to explore anything new
- Establishes contact with people quickly
- Responds to a challenge!







15. Belbin: Team Worker

- Very good at encouraging and supporting the team
- Promotes harmony and team spirit
- Responds positively to people and situations
- Socially orientated, rather mild, sensitive







15. Belbin: Monitor/Evaluator

- Offers measured, objective, dispassionate critical analysis
- Stops the team pursuing misguided objectives
- Can lack inspiration or the ability to motivate others
- Judgement, discretion, hard-headedness







15. Belbin : Implementer

- Usually a very hard worker who can turn ideas into manageable tasks
- Better at administrating than leading
- Conservative, dutiful, predictable, methodical
- Strong organising ability, practical common sense, hard-working, disciplined







15. Belbin : Completer/Finisher

- Makes sure that tasks are completed, deadlines met
- Does not tolerate unfinished business, strong capacity for follow-through
- Painstaking, orderly, conscientious, anxious, tenacious
- Tends to worry about small things, detail person, perfectionist

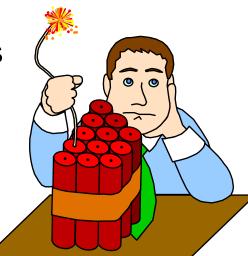




15. Initiating the process

Why do initiatives fail?

- Wrong team, wrong skills
- Lack of business understanding
- Inability to see the wood for the trees
- Unreasonable deadlines
- Not set up properly



- Unclear, ill-defined objectives
- No clear leader
- Too many chiefs, not enough indians
- Lack of commitment
- Lack of resources
- Poor planning
- No buy-in





15. Building a cross-functional team

What are the benefits of a cross-functional team?

- Greater insight into improvement opportunities + obstacles
- Ability to capture + influence total supply chain costs
- More realistic + sustainable improvements throughout chain
- Greater understanding of the knock-on effect on the entire chain of a particular action
- Greater commitment to decisions + implementation
- More chance of win/win decisions
- Better communications leading to enhanced understanding of inter-dependencies + inter-relationships in supply chain





15. Initiating - Objectives

Objectives must be **SMART**:

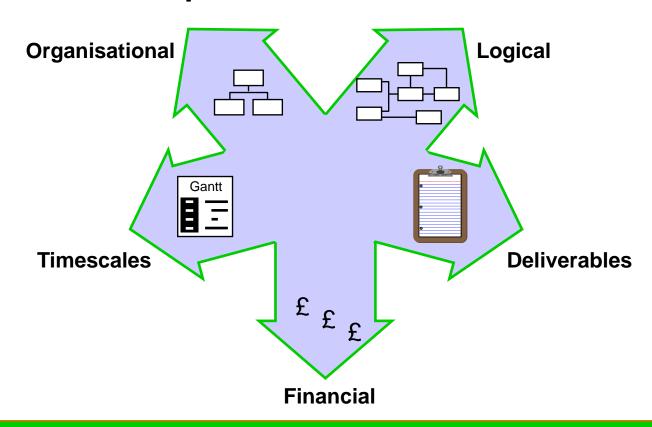
- Specific
- Measurable
- Achievable
- Realistic
- Time-framed





15. Initiating - Scope

Dimensions of scope



All dimensions must be clearly documented and formally agreed to manage scope effectively





15. Initiating - Sponsorship

The initiative sponsor must:

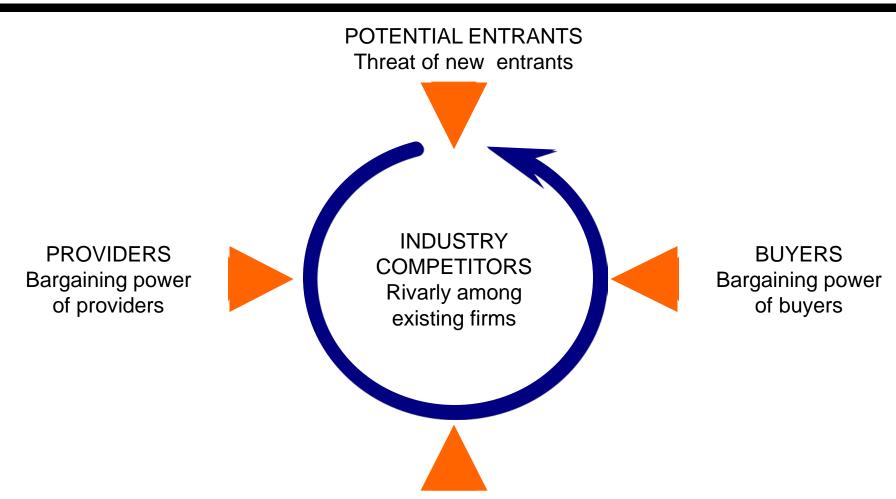
- Be senior enough to be able to remove political or organisational obstacles
- Buy into the initiative + its objective(s)
- Be accessible/available to the team members
- Be flexible to work in a way that best suits the team, not vice versa
- Know when to intervene + when to keep out

Try to avoid having more than one sponsor!





16. Porter's 5 Market Forces (Supplier)



SUBSTITUTE PRODUCTS / SERVICES
Threat of substitute products/services



16. Product / service lifecycle

Maintain Take Encourage Add **Innovation** value cost out service performance Revenue **Advance** Reward Risk and **Performance** life cycle payment / related reward funding quality

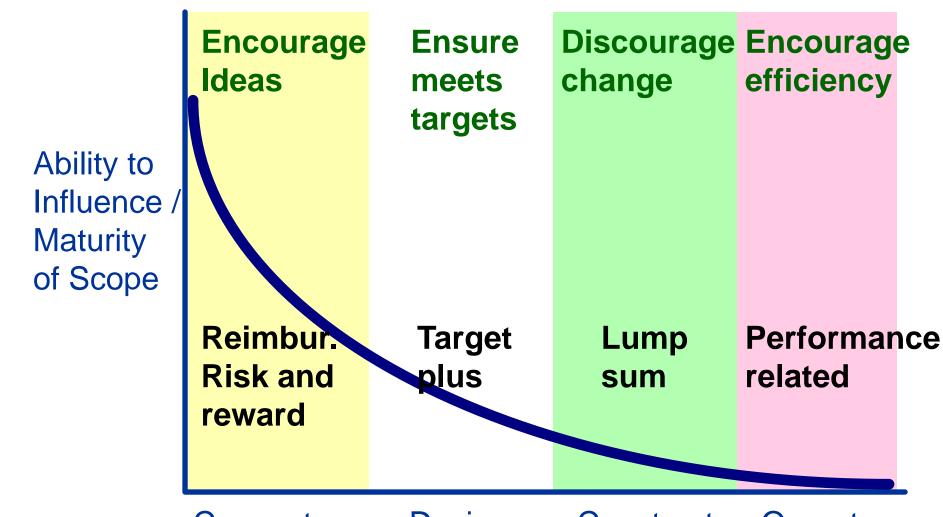


/ Profit

Introduction Growth Wednesday, 22 January 2014 **Maturity**

Decline

16. Maturity of project scope



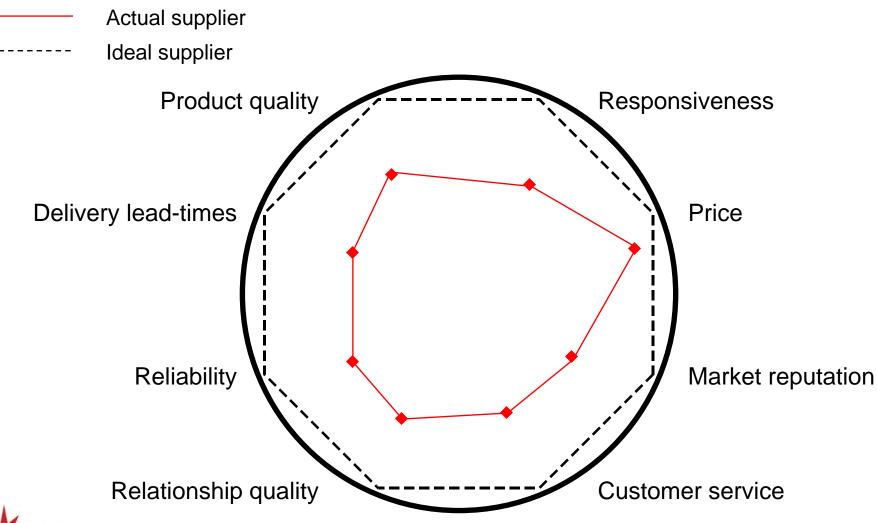


Design Concept Wednesday, 22 January 2014 Construct

Operate

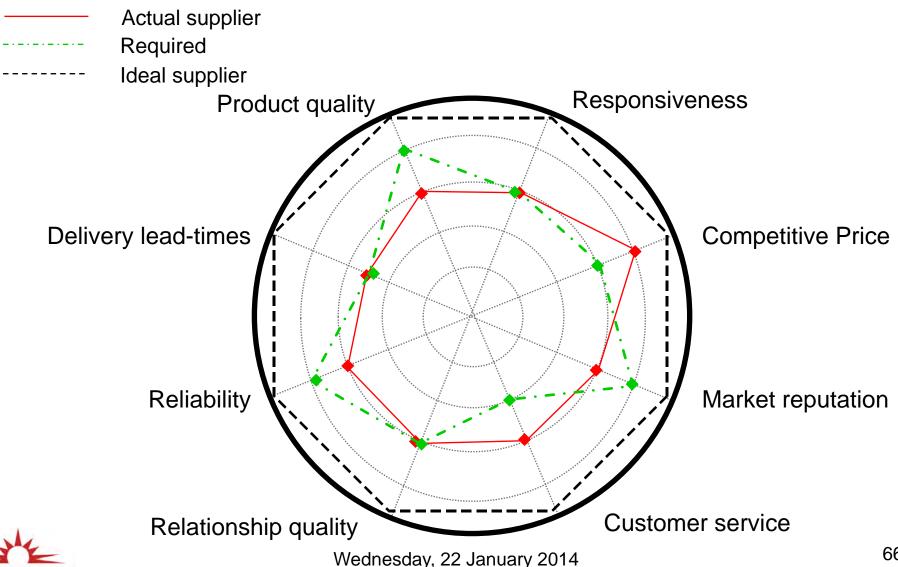


17. Supplier capability mapping



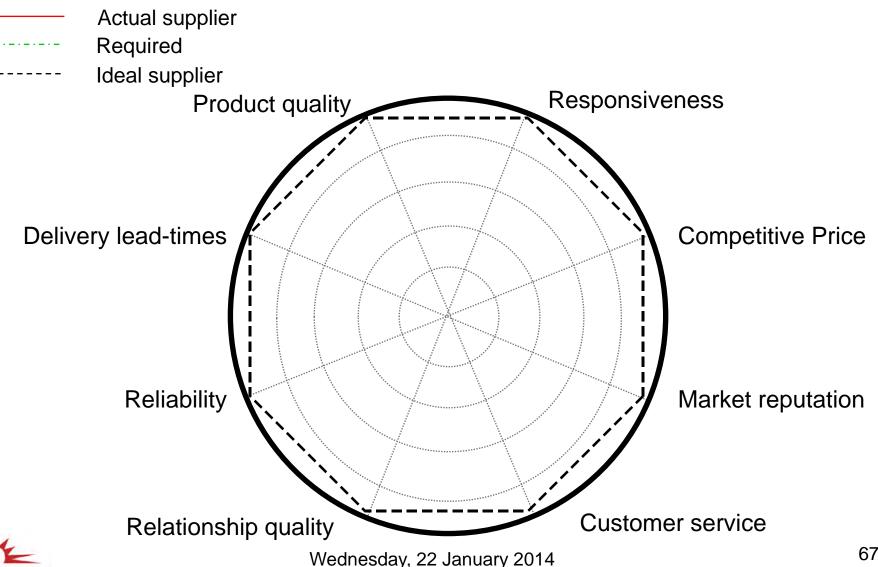


17. Supplier capability mapping





17. Supplier capability mapping







17. Benchmarking

- 'Beauty Parades' versus Benchmarking
- European Code of Benchmarking Practice
- Competition Law





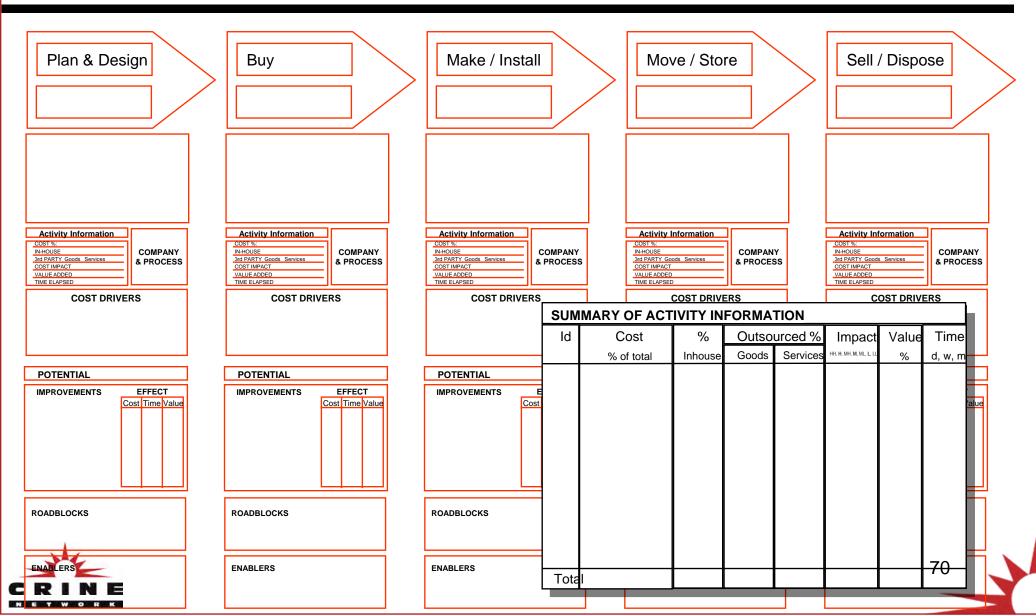
18. Mapping the supply chain

	Plan	Design	Make	Operate	•
Current cost (%): Goods Services In-house	5 0 3 2	10 0 8 2	50 42 5 3	35 n/a n/a n/a	100%
Ability to influence cost (H/M/L):	HH	H	M	H	
Time: Value (%):	12 mths 30% ?	12 mths 35% ?	42 mths 20% ?	52 weeks 15% ?	100%



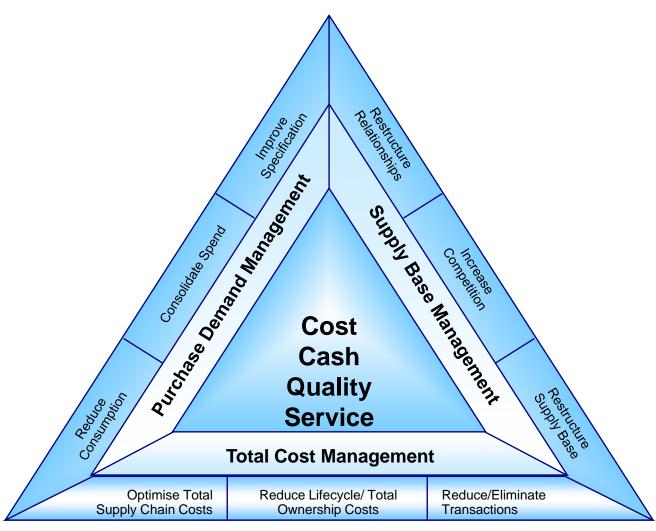


18. TCoO Approach





18. Sourcing Opportunity Framework





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18. Force Field Analysis

GOAL: Where you want to get to (ie. Optimum SCM)

Negative Forces:

Forces preventing you from achieving your goal

PRESENT SITUATION: Where you are now



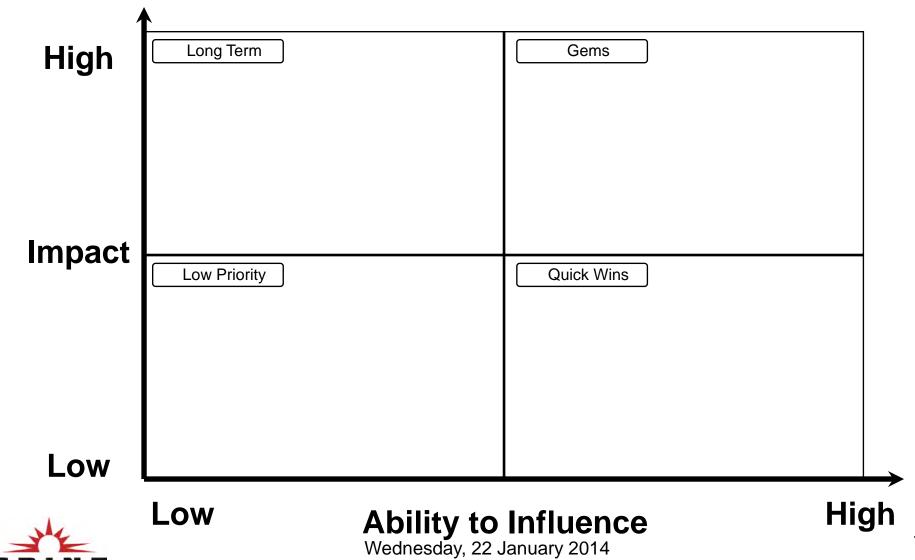
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Forces enabling you to achieve your goal



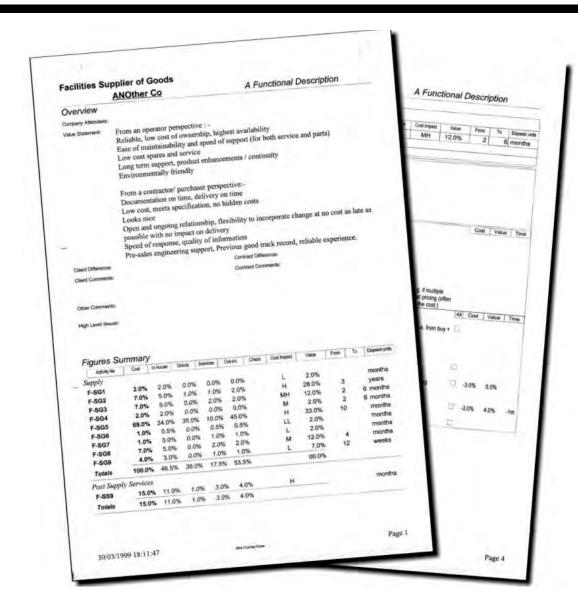


18. Hi-low Matrix





18. TCoO Example







2 18. Mapping the Supply Chain Example

A	ctiv	/ity	No	Title
, ,,	<i>-</i>	, ,		

F-SG1 **Development & Planning**

F-SG2 Research & Development

F-SG3 FEED and Sales

Receive Schedule & Plan Project F-SG4

F-SG5 Buy / Make / Assemble

F-SG6 Pack

F-SG7 Transport

F-SG8 Complete

F-SG9 **Commission & Handover**

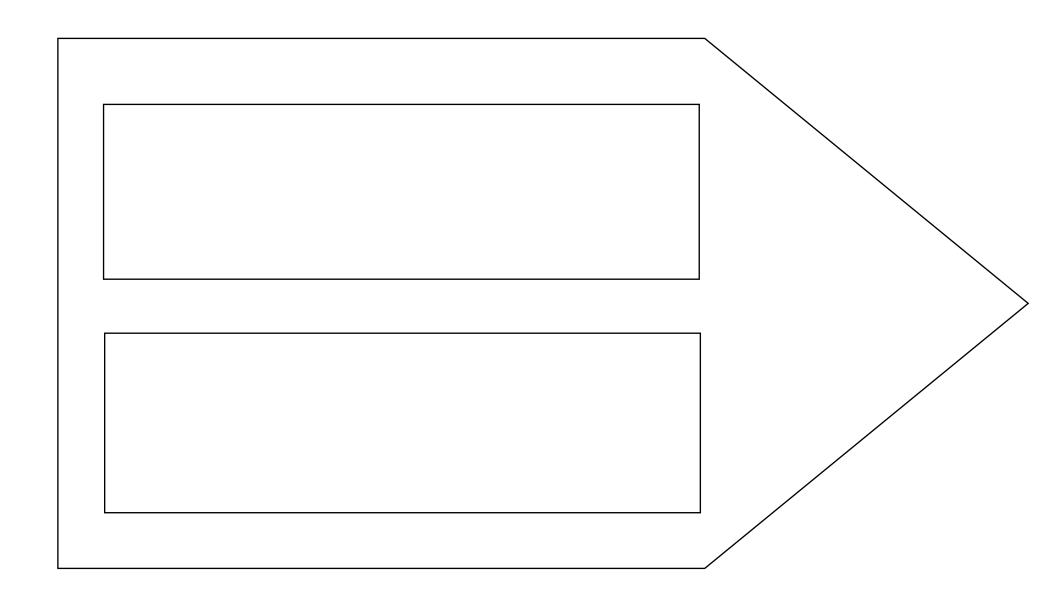
F-SS9 After Sales Service & Support





19 & 20. Case Study ...





Activity Information

COST %: IN-HOUSE			
3rd PARTY Goods	Services		
COST IMPACT			
VALUE ADDED			
TIME ELAPSED			

COMPANY & PROCESS

COST DRIVERS

POTENTIAL

IMPROVEMENTS

EFFECT

Cost	Value	Time

POTENTIAL

ROADBLOCKS

ENABLERS

ACTIVITY INFORMATION							
Id	Cost	%	Outsourced %		Impact	Value	Time
	%	Inhouse	Goods	Services	HH, H , MH, M , ML, L , LL	%	d, w, m
	Total						
	Total						

21. Implementation - A Change Project

Project Set Up

Programme Monitoring & Control

- Scope confirmation and agreement
- Programme/project planning
- Status review mechanism
- Establish cost & budget control
- Risk/Issue mgmt & escalation process

Resource Management

- Resource requirements planning
- Deployment of Programme resources
- Commodity team deployment
- Programme Office/Facilities mgmt

Communications Management

- Communications planning
- "Kick off"/ briefing meetings

Programme Management

Programme Monitoring & Control

- Programme/project planning
- Status review mechanism
- Issue management & resolution
- Risk management

Performance Measurement

- Benefit tracking
- Cost/Budgetary control
- Balanced scorecards

Resource Management

- Resource requirements planning
- Management of external resources
- Performance management approach
- Deployment of programme resources

Change Management

Communications Management

- Internal communications
- External communications
- Stakeholder management

Training & Development

- Training planning/execution
- Knowledge management

Transition Planning Integration

- Sourcing strategies
- Infrastructure transition
- Other change initiatives
- Prioritisation





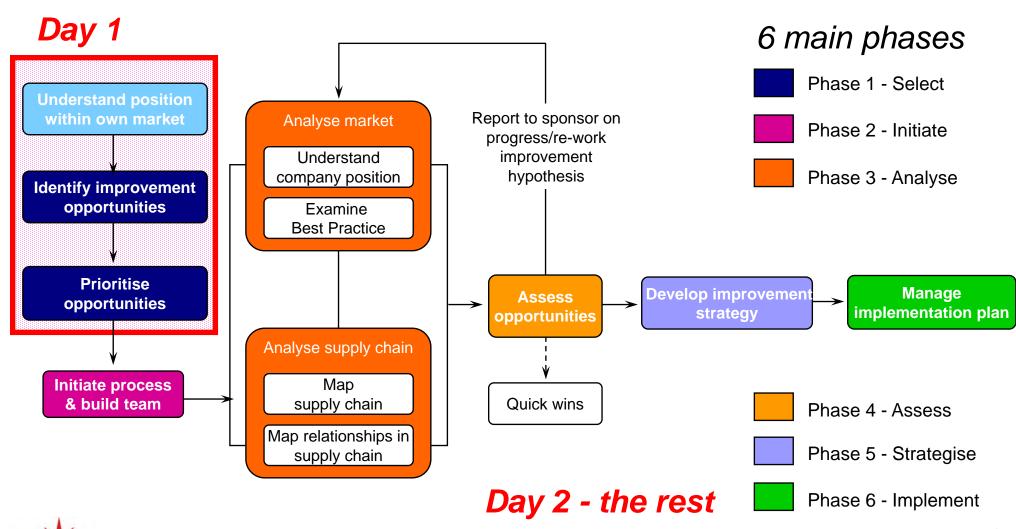
21. Managing the Implementation

Critical Success Factors

- Management buy-in to strategy and implementation plan
- Selecting the right supplier(s)
- Establishing correct contractual arrangements
- Managing contract execution and ongoing relationships



22. Recap







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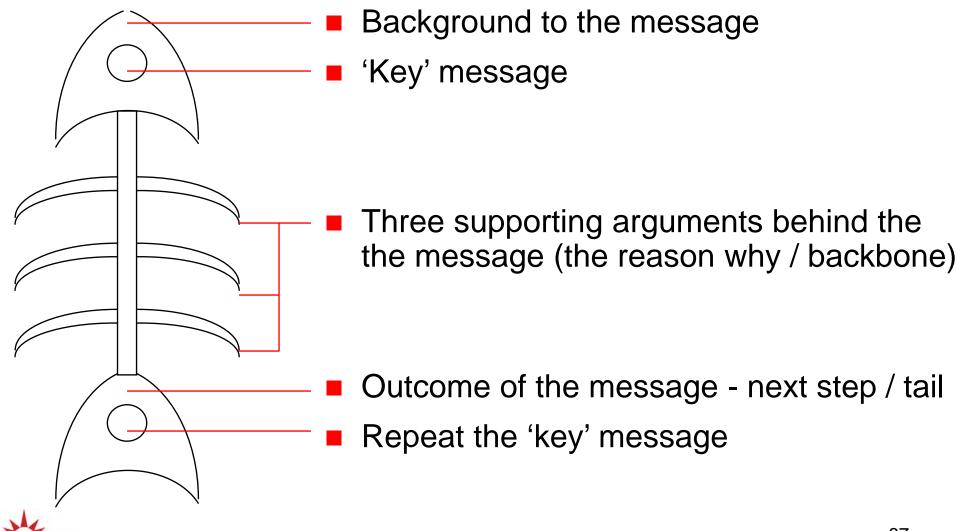
27 MANAGEMENT SESSIONS

28 **COURSE REVIEW &** CLOSE





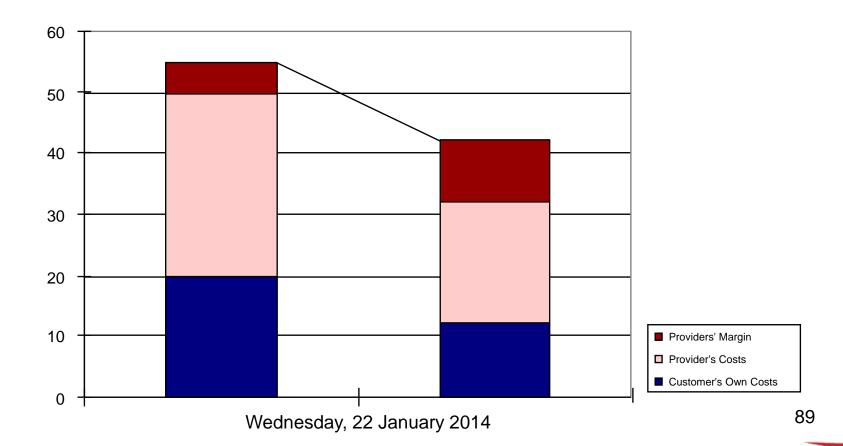
23. 'Kipper Diagram'



CRINE Overview Slides



SCM aims to reduce the costs both of customers and providers, while sustaining or improving value-add and margins. Companies that have effective supply chains tend to be the most successful.





Opportunities identified by the initiative:

Reduce Cost

Opex £400M

Drilling £350M

Capex £250M

- Life-cycle decision making based on readily accessible operational performance feedback
- Better exploitation of long-term relationships by all parties
- Use of differentiated supply chain strategies
- Pan-industry inventory sharing
- Common industry training and qualification
- Pan-industry co-ordinated execution of tie-back work
- •Earlier involvement of key contractors and suppliers in planning and design
- Greater standardisation of materials and processes
- Pan-industry seismic planning and execution
- Readier acceptance of innovative technology
- Appropriate placement of risk
- Greater awareness of total cost of ownership within the supply chain

Add Value

Increased & early production UK is 1st choice for investment

More stable demand

Increased margins

Global competitive-ness





Examples of good practice:

The project found several leading practices among operators, contractors and suppliers, ie SCM-related benefits can be secured both by a company improving its internal supply chain processes and through a collaborative effort involving other parties in the supply chain:

- A long-term alliance for maintenance, underpinned by a reward strategy and incentives, led to a reduction of 50% in maintenance costs, a major improvement in equipment uptime and longer intervals between major shutdowns.
- Joint supplier/customer assessment of supply chain for major materials for well engineering resulted in commodity savings of 20%; simplified maintenance yielded similar savings and supplier margins increased.





Examples of good practice:

- A supplier reduced its 3rd party spend by 12% by introducing longterm agreements with its key suppliers.
- Simplification of a product by a manufacturer reduced manufacturing lead times by 25%.
- A contractor reduced costs by 5% and improved safety by keeping the same team together across multiple assets.





What companies say about sourcing

Sourcing has become a major contributor to competitive advantage, affecting the top and bottom lines:

"Purchasing played a pivotal role in the new V6 development." Honda, about America Manufacturing Inc. (Purchasing 9/95)

"We will need to work with alliance partners to develop new ways of doing things if we are to compete in the future." Barclays Bank (Supply Management 11/96)

"Our destiny is inextricably linked with that of our suppliers." Rover Group (Supply Management 1/97)





Managing the Implementation

Critical Success Factors

- Management buy-in to strategy and implementation plan
- Selecting the right supplier(s)
- Establishing correct contractual arrangements
- Managing contract execution and ongoing relationships





Single Industry Body

The creation of a single crossindustry body, with full time resources, for the promotion of improved SCM across operators, contractors and suppliers throughout the industry supporting activities on the UKCS.

Primary responsibilities would include provision of methodologies, tools and techniques; management of panindustry initiatives to improve SCM and provision of consultancy and training.

Benefits

- Clear long-term strategy for improved SCM across the industry
- Direct support to make it happen
- Drive for implementing the outputs of this project



Tony Collins (Shell Expro)





Seismic Acquisition

To make contractor-led group/speculative seismic surveys the norm in the North Sea, enabled via pre-season publication of operator seismic requirements, industry co-ordination of seismic acquisition, activity, and standards agreed by contractors, operators and regulatory bodies.

Champion: **Martyn Millwood-Hargrave** (IKODA)

- A potential of 20% saving in seismic survey activity in times of high demand
- Earlier availability of processed data (via use of 'fast-track' onboard processing)





Forward Planning Information: Facilities & Drilling

To have available to the wider industry low cost information on probable plus possible developments, major modifications, tie-back plans, decommissioning requirements and critical success factors relating to project viability.

Champion: Charles Miskin (Transocean)

- 2-3% savings through more efficient enterprise resource planning
- An enabler for industry coordinated developments





Pan-Industry Managed Tie-Backs

To have a pan-industry coordinated approach to the implementation of sub-sea tiebacks, optimising the use of associated installation vessels, with the potential for common engineering support.

Champion: To be confirmed

- Greater continuity of demand
- Increased production time
- Lower risk
- Greater standardisation





Industry Extranet

An extranet available across the industry and used to support the procurement processes and provide access to shared documentation.

Examples of the former would include ITTs, requisition orders, expediting status, receipts and invoices.

To be capable of growing to accompany various other panindustry initiatives (eg. Shared Inventory, e-Procurement and access to FPAL).

Champion: Andrew Laird (Shell Expro)

- Simplified and much cheaper communication
- Improved data quality and timeliness
- Rapid extension of e-commerce to SMEs





Project Objectives

The CRINE Network's Supply Chain Management (SCM) Initiative was established to identify SCM improvements that will:

- Help to prolong the life expectancy of the North Sea Oil & Gas industry, and
- Enable the UK Oil & Gas sector to increase its share of the global market





Project Approach

Over 120 companies (operators, contractors and suppliers) participated in various information-gathering, analysis and evaluation workstreams.

Project Timeline

The project ran from October '98 to February '99.





What the initiative involved

- Interviews with a mix of operators, contractors and suppliers
- Brainstorming sessions involving over 30 companies identifying improvement targets
- An industry questionnaire completed by 80 companies (operators, contractors and suppliers, including SMEs)
- 32 half-day Supply Chain Assessment workshops (with the output reported back to each participating company)
- RapidFX Supply Chain Assessment questionnaires completed by 20 companies (with each company receiving company-specific feedback, including benchmarking)
- Validation sessions, attended by 40 companies, to review and develop business cases for various pan-industry collaborative projects





Summary of findings

- Limited strategic perspective within companies on supply chain activities - SCM generally seen as a tactical issue with limited senior management involvement
- Even when the need for change is recognised at senior level,
 often not translated into action further down the organisation
- Limited use of buyer segmentation strategies or proactive product/service tailoring by either contractors or suppliers
- Few long-term strategies in place for collaboration between supply chain participants





Summary of findings cont'd

- Long-term strategies in place are under-exploited by participants in that supply chain - customers feel that the value erodes over time and providers feel under-utilised
- Commercial skills throughout supply chain are underdeveloped
- Good supply chain practices between operators and firsttier contractors/suppliers are typically not cascaded to second-tier providers
- Short-termism, characterised by a focus on acquisition price rather than life-cycle costs





Project Deliverables

- A Strategic Framework for implementation of supply chain management within UKCS
- A document detailing Key Findings
- A methodology for improving SCM
- A flexible training module to support implementation of the methodology
- Identification of, and implementation plans for, selected pan-industry initiatives
- Participant-specific feedback on that company's supply chain management performance





Industry Context

Market Pressures on Industry

- Prospect of sustained low oil price
- Possibility of gas imports via inter-connector
- Smaller fields with lower profitability and hostile operating environment
- Stringent environment demands
- •UK industry only @ 2% of global market

Operator Pressures

- Competing for funds on global basis
- Ageing infrastructure in North Sea
- •Increasing reliance on third parties
- Lower returns/higher risks
- Focus on faster technological improvements



Contractor/Supplier Pressures

- Restructuring to provide comprehensive services
- To extend risk/reward along supply chain
- High-level of mergers and acquisition
- Under-utilisation of SME innovation





Some next steps for managers

- Conduct a quick review of your supply chains and rank them based on their potential for contributing to your company's current business plans
- Identify and implement any 'quick wins', eg simpler ways of buying low value goods/services, making purchasing policies and practices consistent
- Initiate project-based reviews of your key supply chains using cross-functional teams and the approach advocated in the CRINE methodology





Some next steps for managers

- Identify a Board-level executive to 'champion' SCM best practice in the organisation and to drive its implementation
- Appoint account managers at Director or business unit manager level for key customers or suppliers, tasking them with managing the relationship and promoting improvement projects between the organisations
- Identify deficiencies in commercial awareness and acumen and initiate remedial action

