

# Supply Chain Strategy in the Board Room



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# Foreword

Supply Chain Professionals are responsible for the operational execution of the business mission. The supply chain is therefore critical to the success of an individual organisation but increasingly it is recognised that in most industries it is supply chains that compete and not just individual organisations. The link between Supply chain management, profitability and shareholder value is well represented in the academic literature and its link to shareholder value clearly demonstrated. Therefore the development and implementation of supply chain strategy has become an increasingly critical process for the future success and competitiveness of all organisations that play a part in the end-to-end supply chain process.

In some organisations there has been a tendency to exclude supply chain management from the strategic debate, and this can cause firms to miss exploitable opportunities to increase competitive advantage. Moreover, if corporate level strategy does not reflect the dynamic market environment well, or the functional strategies do not support corporate level strategy, supply chain strategy is less likely to be appropriate and successful.

Supply chain strategy must be indeed strategic, but it also has to be implementable. It has become clear that businesses have struggled to close what has been termed 'the implementation gap', with the timescales for implementing strategic change in supply chain activities stretching to an extent that in many instances undermines the business case for change, with many strategic plans being abandoned altogether. These problems seem to have become ever more acute as supply chains have become longer and more complex.

The importance of effective supply chain strategy is therefore recognised but questions remain as to how the concept of supply chain strategy is embedded within the Board Room/Executive Committee agenda, and how strategic vision can in practice be converted into reality.

Our work supporting companies in developing and implementing best practice supply chain management revealed a disconnect between theory and practice that motivated us to undertake this exploratory research project.

This research report is the result of both a survey, and interviews, looking at exploring how supply chain strategy is integrated within the board room. The research team consisted of both academics and industrialists, and this enabled a practical balance that fully supports Cranfield's mission of "Knowledge into Action", and Solving Efeso's mission of 'Strategy into Action'. The findings have very practical implications for both individuals and organisations and it is hoped that this report will provoke a debate on Supply Chain Strategy in the Boardroom within both academic and industrial communities.

**Prof. Richard Wilding**  
Cranfield School of Management

**Prof. Alan Waller**  
Solving Efeso

This report was produced by Cranfield University jointly with Solving Efeso and we thank all the survey respondents and those who participated to the one-on-one interviews.

## **Supply Chain on the boardroom agenda**

Supply chain thinking is more important today than ever before. The impact of supply chain on company performance is increasingly prominent, not only in terms of cost, but also in terms of value creation - this is shown to be especially true in recessionary times, where supply chain thinking has gained prominence in many businesses in response to the economic pressures and concern for good cash management. Research has shown that poor management of the supply chain can significantly impact on an organisation's shareholder value and that for businesses to succeed, supply chain strategy should, therefore, be coming under far greater scrutiny in the boardroom and needs to be better understood. For these reasons, Cranfield embarked on this piece of research with the support of Solving Efeso.

## **The 10 Key Findings**

The 10 key findings from initial analysis are:

1. Supply chain is recognised as an important part of the business;
2. Service and corporate strategy are key drivers;
3. The most important of supply chain performance drivers are cost focus, customer lead-time and customer quality but these vary by sector;
4. Review of supply chain strategy is highly cross-functional and in many cases, a continuous process with regular monitoring and continuous adaptation according to circumstances;

5. Customer service issues and cost issues are the main triggers for strategy review
6. Supply chain strategy implementations are not straightforward
7. Successful supply chain strategy implementations have top level support
8. Cross-functional accountability and a balanced combination of several key approaches and techniques also improve the likelihood of success
9. Development of the supply chain strategy is largely internalised
10. Of the many barriers to success, the major ones are company culture, lack of leadership and poor supply chain visibility. Barriers are predominantly people-related, rather than technical"

## **Four emerging behavioural models**

Our results also show that there are four emerging behavioural models, namely Developer/Maintainer, Review/Reactor, Anticipator/Evolver, Innovator/Adapter. These four models arise when considering the degree of the Supply Chain Strategy Execution and Development.



The Supply Chain Strategy in the Boardroom Survey 2009/2010 was undertaken by a joint team from Cranfield School of Management and Solving Efeso.

The channels to market were via Cranfield and Solving Efeso's contacts in ELUPEG, Leaders in Supply Chain in the UK and Benelux, the Supply Chain Council globally and SAPICS in South Africa.



## Objectives

Approach

Responses

Results and Findings

Overall Conclusions

Implications

Acknowledgements

Bibliography

Further Information



**PLEASE NOTE THAT THESE ARE SELECTED OUTPUTS  
FROM A VERY COMPREHENSIVE SET OF FINDINGS**

If you would like more detailed information, please contact the Research Team

- ✓ The analyses are finalised
- ✓ There are hundreds of outputs and these are some selected charts
- ✓ Workshops around Europe to discuss the findings and understand the implications for businesses and supply chain are being set up by Cranfield and Solving Efeso



1. Understanding the perception of supply chain strategy in the boardroom and its building blocks / elements
2. Identifying and quantifying the key issues driving the boardroom agenda for supply chain strategy development
3. Identifying the key enablers and obstacles to supply chain strategy implementation



Objectives

**Approach**

Responses

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1. Structured questionnaire sent to circa 2000 senior logistics and supply chain executives in various parts of the world using multiple channels. Received 181 complete responses between July-November 2009.
2. Analysed responses and identified key themes to probe further in 24 structured follow-up one-to-one interviews in December 2009-January 2010. This helped in understanding the meanings behind some of the questionnaire responses.
3. Consolidated findings from the questionnaires and follow-up interviews and produced this report.
4. Emerging results are being discussed in workshops to capture participants' reactions



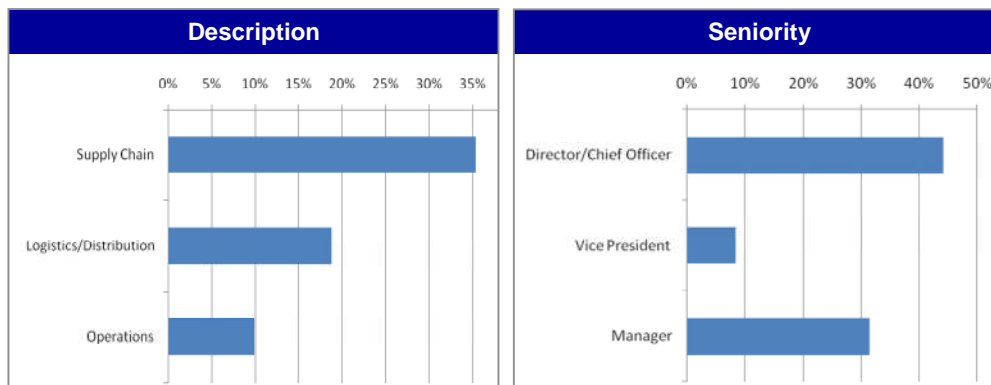
## Agenda

- Objectives
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## Profile of respondents

Over 50% of respondents have Supply Chain, Logistics or Distribution in their job title



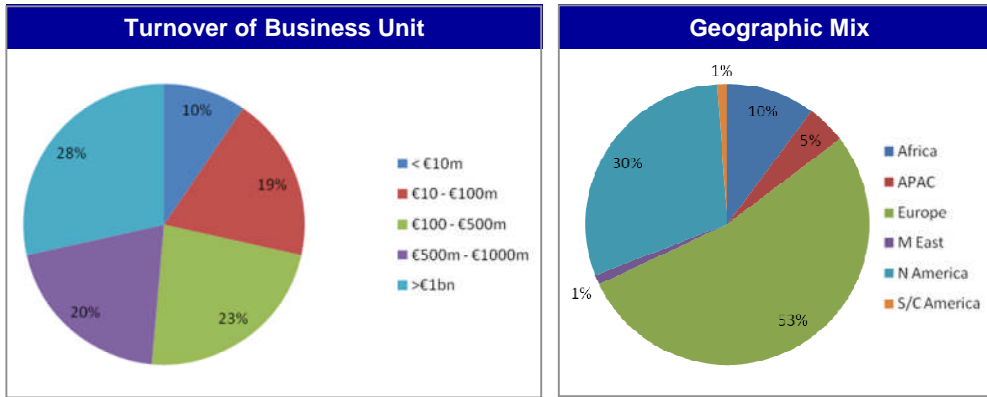
N= 181

... and over 50% are at Chief/Director/VP level (right hand chart)





## Survey response - Size and company head office locations



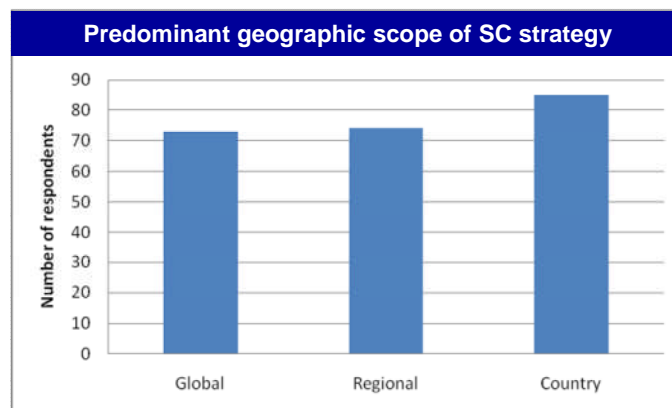
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*Pie charts represent numbers of respondents, not weighted by turnover, as we are looking for variations by size of company, etc.*



## Survey response - Geographic scope

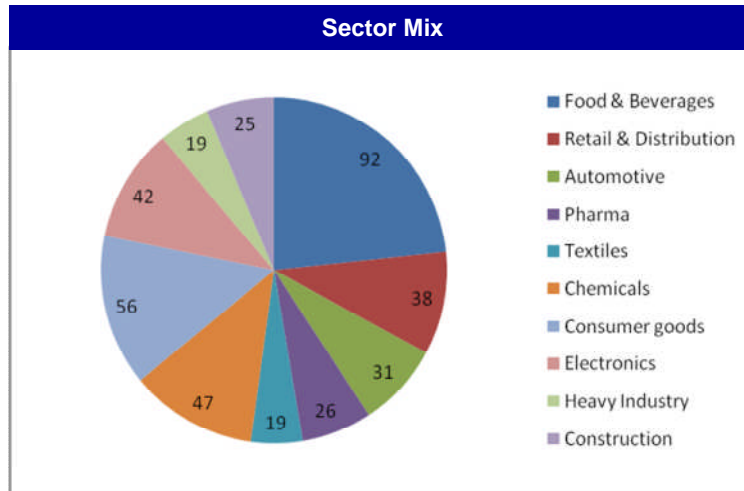
There was an almost equal mix of global, regional and national supply chain strategy



*N= 181 but some respondents have shown more than one of these as predominant*



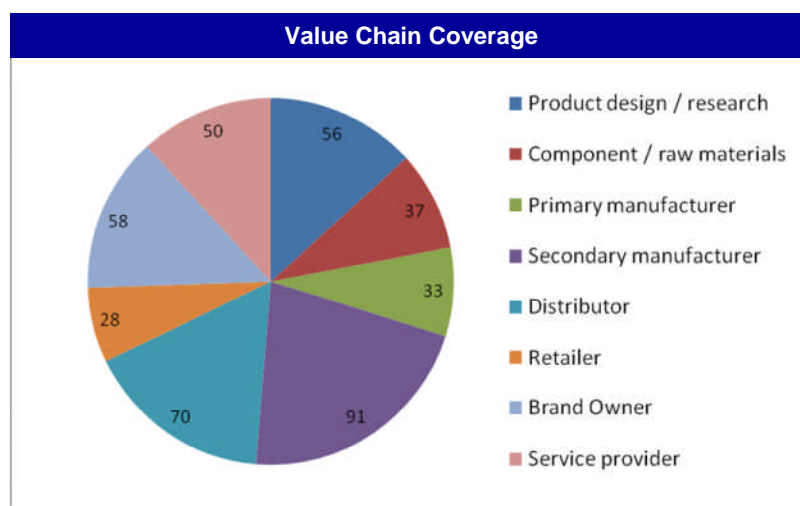
## Survey response – Sector coverage



Total respondents = 181 (but some cover >1 sector)



## Survey response – Value Chain Coverage



Total respondents = 181 (but some cover >1 element of the Value Chain hence total = 423)



- Objectives
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1. Supply chain in the business
2. Functional drivers of SC Strategy
3. Performance drivers
4. Supply Chain Strategy review process
5. Triggers for SC Strategy review

6. Strategy implementation
7. Implications of top management support
8. Other ingredients of success
9. Who is involved in the process?
10. Barriers to success



## 1. Supply chain in the business

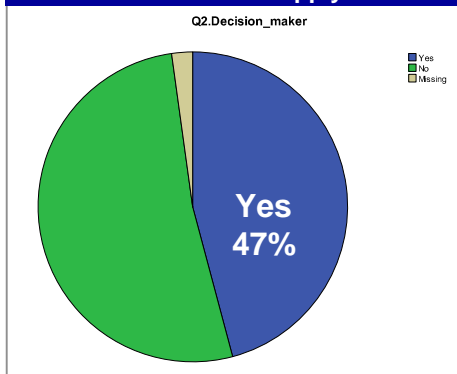
- The SC function has senior representation in most companies, and growing presence at Board level
- The SC function is responsible for Plan, Source, Make and Deliver in a significant minority of organisations

**Key Finding: "Supply chain is recognised as an important part of the business"**

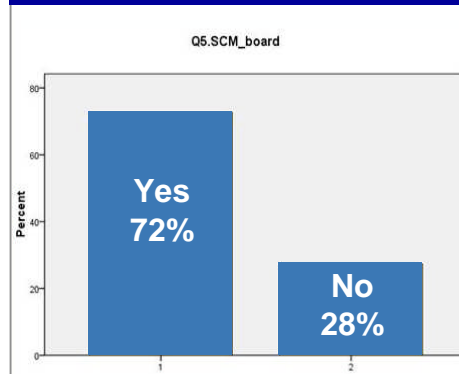


## Seniority

**Q2: Is the respondent the highest decision maker for supply chain?**



**Q5: Is the senior supply chain person on the Board?**



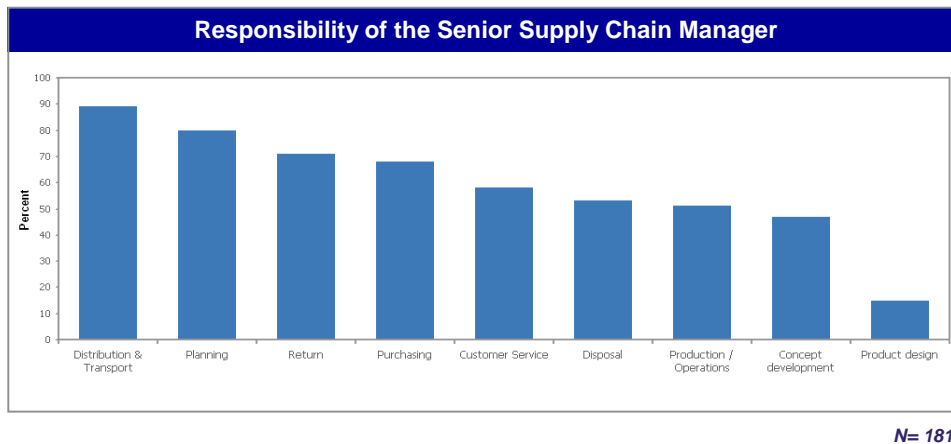
N= 181

1. Consistent with VLG survey 2007/8
2. No comparable older data - anecdotally there is agreement that this has increased in last 5-10 yrs



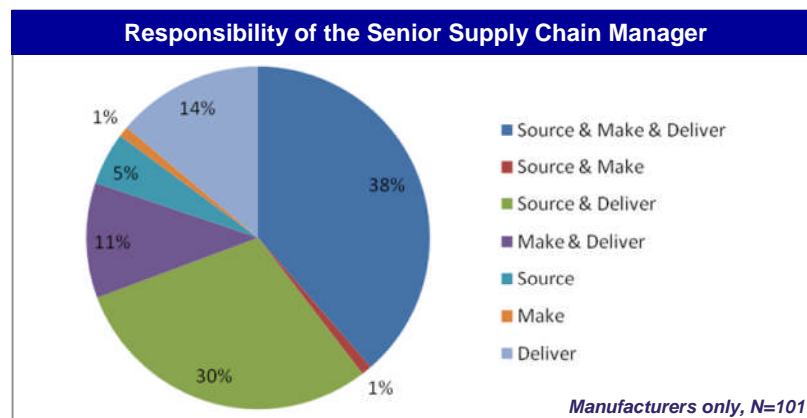
## Responsibilities of the most Senior Supply Chain Manager

Responsibilities appear to be quite broad...



## Responsibilities of the most Senior Supply Chain Manager - Manufacturers only

For manufacturers, 38% of respondents were responsible for Source, Make and Deliver – only 20% were only responsible for 1 of these

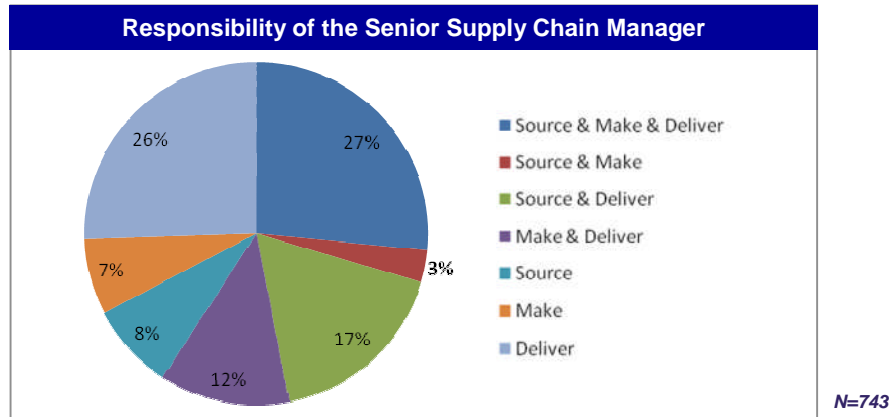


... and 90% of respondents have responsibility for Plan



There is overall consistency with previous Vlerick Leuven Gent Management School study...

In the VLG study 85% had responsibility for Planning vs 90% in this survey, and the Top 3 are the same in both cases (SMD, SD and D)



Source - 2008 Survey: Vlerick Leuven Gent Management School, Supply Chain Council, VIB, S&V, ELUPEG, LDF



## 2. Functional drivers of SC Strategy

- Many Functional drivers, but most significant is Customer Service followed by Corporate Strategy
- Corporate Strategy becomes top when the senior SC executive is on the Board

**Key Finding: "Customer service and corporate strategy are key drivers"**



Customer service and corporate strategy are overall the 2 main functional drivers of SC strategy

Rank	Functional Driver
1	Customer Service
2	Corporate Strategy
3	Distribution
4	Customer Proposition
5	Production
6	Planning
7	Purchasing
8	Product Design
9	Returns
10	Disposal

N= 181

... Corporate Strategy is more dominant and comes above Customer Service when the senior SC executive is on the Board



- **Many performance drivers, but main ones are cost focus, customer lead-time and customer quality**
- **Relative importance varies by sector**
  - Customer Lead Time most important in Automotive closely followed by Electronics, least in Heavy
  - Asset utilisation most in F&B, least in Textiles
  - Cash to cash most in Construction, least in Textiles
  - LT top for all except Textiles, Consumer Goods, Heavy and Construction

**Key Finding: “The most important of supply chain performance drivers are cost focus, customer lead-time and customer quality but these vary by sector”**



The top 3 overall performance drivers of supply chain strategy are cost, lead-time and quality

Rank	Functional Driver
1	Cost focus
2	Customer Lead-time
3	Customer Quality
4	Customer Considerations
5	Working Capital
6	Cash to Cash
7	Asset Utilisation

N= 181



- The SC process in many businesses is still immature and fragmented
- Process is becoming continuous and, in many cases, genuinely strategic and cross-functional
- Planning horizon typically 3 years plus, review frequency typically annual (varies by industry sector)
- Regular monitoring and adaptation is typical

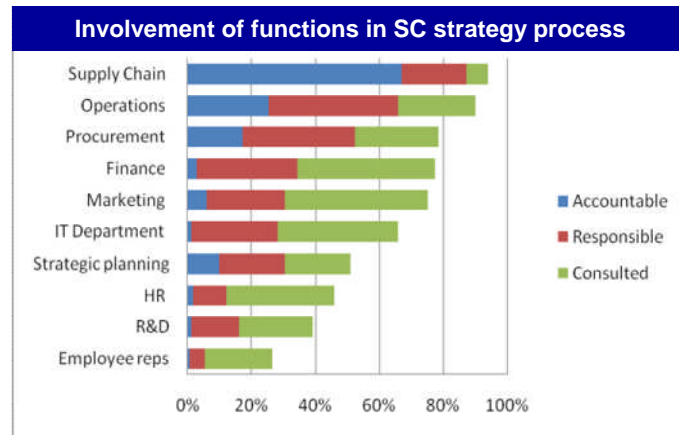
**Key Finding: "Review of supply chain strategy is highly cross-functional and in many cases, a continuous process with regular monitoring and continuous adaptation according to circumstances"**





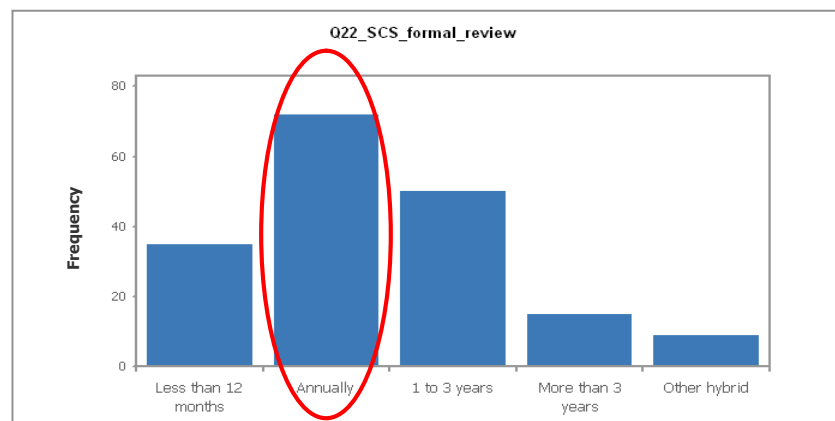
## Cross-functional involvement in SC strategy

The SC strategy process is highly cross-functional with several functions at least consulted



## Frequency of SC strategy review

The frequency of review is high, annual being typical?



... does this imply a more tactical review (e.g. as part of the annual budget process) or a more continuous strategy process?

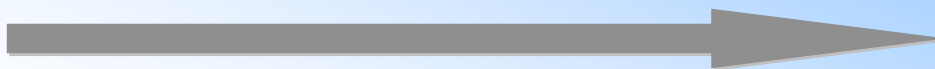


## The Supply Chain Review process

Quotes from the interviews demonstrate that the Supply Chain Review process is becoming continuous and, in many cases, a genuinely strategic and cross functional process

'Supply chain strategy is really Supply chain tactical planning in practice, being narrow in scope, not cross-functional, and not long term enough'

'Supply chain strategy is truly strategic and becoming a continuous process, with regular monitoring and continuous adaptation according to circumstances'

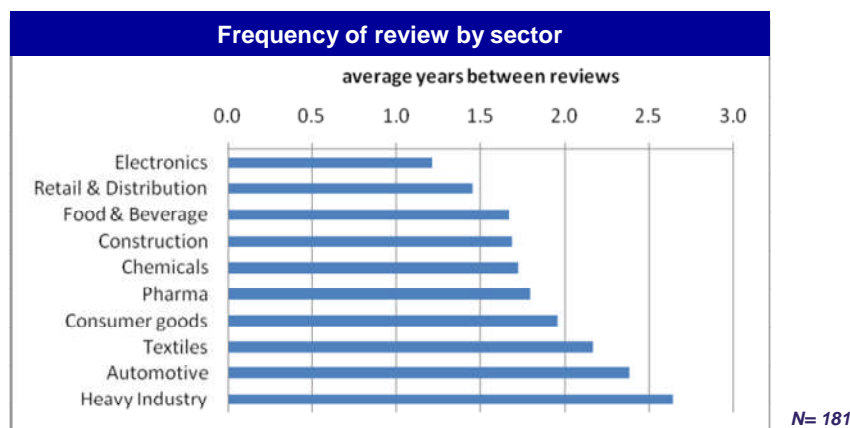


**'We are moving from nothing to truly strategic'  
'5 years ago it was tactical, now definitely strategic!'**



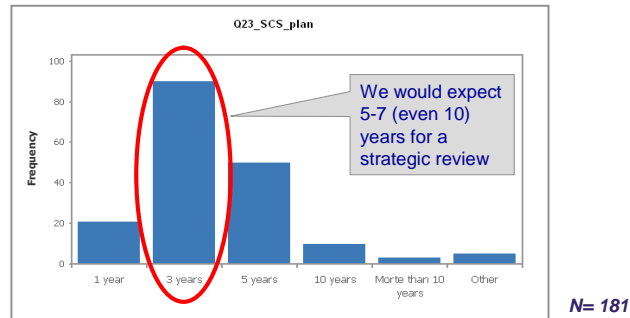
## Frequency of SC strategy review

Electronics reviews the most frequently, Automotive and Heavy Industry the least frequently





## Planning horizon is much shorter than previously experienced



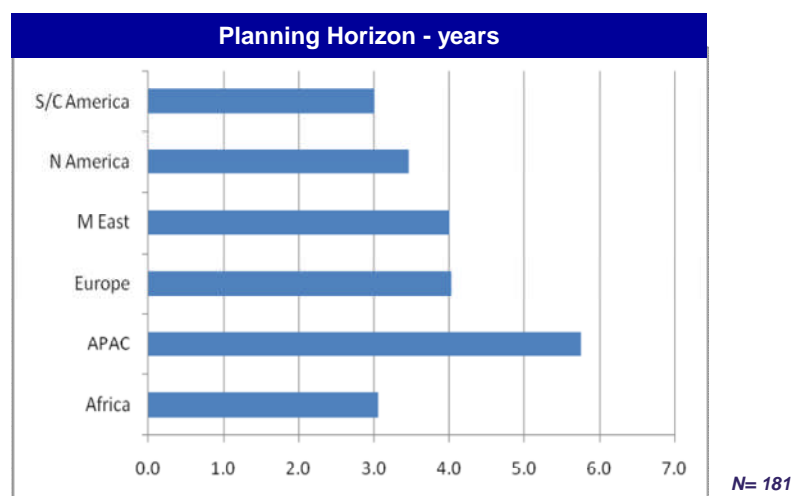
... is this because

- speed of change is greater?
- the economic situation makes it harder to forecast far ahead?

... so strategy is reviewed more frequently on a shorter planning horizon

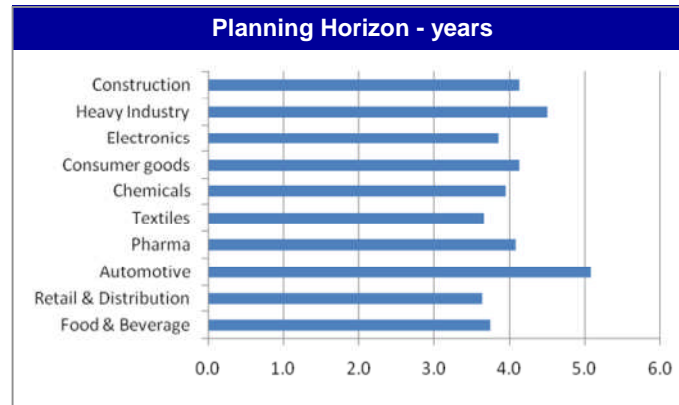


## Planning horizon longest in APAC, and shortest in the Americas and Africa





Planning horizon typically 4 years, highest in Automotive at 5 years



N= 181



The insights from the interviewees are very diverse

*Annual review with horizon of **2-3 years**: flexibility and responsiveness is key to the process*

*The planning horizon is **3 years** and the SC strategic plan is formalised into a document useful to decide investments*

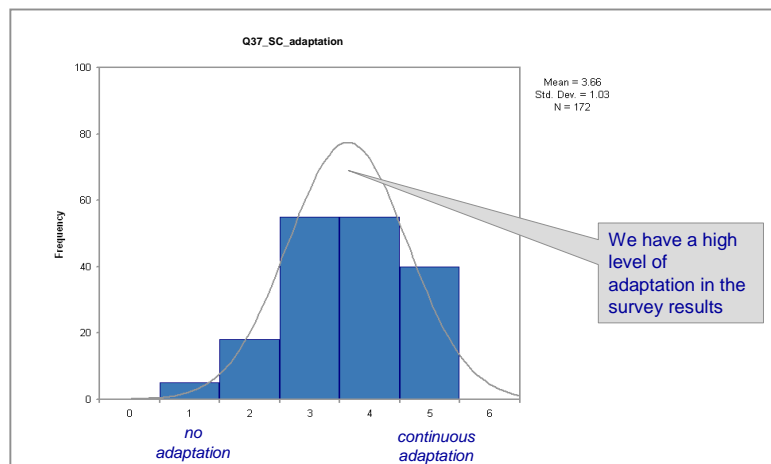
*'Planning **3 to 5 years**'*

*The horizon covers **5 years**, **10 years** by exception to assure an appropriate technical infrastructure*

*The review is continuous but the planning horizon is **7 years** because the results couldn't be reached in a shorter period*



Supply chain strategy is truly strategic and becoming a continuous process, with regular monitoring and continuous adaptation according to circumstances

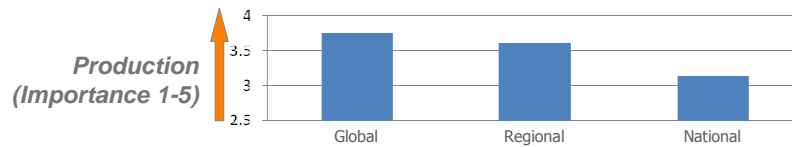


### Businesses with a broad geographic scope seek to co-ordinate supply chain strategies at different levels

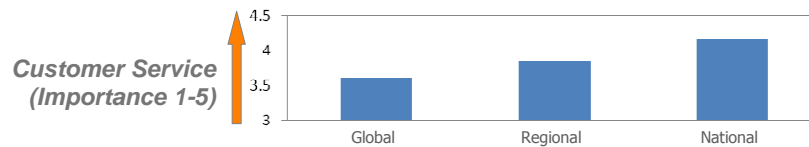
- Where the SC strategy scope is predominantly Global, this is often combined with a high Regional focus but not National
- When the SC strategy is focused nationally, then low emphasis on Regional and Global issues is typical
- Geographic focus varies significantly by sector, for example:
  - Food & Beverage is mainly National
  - Automotive is mainly Regional or Global



The importance of production as a driver is greater when the geographic focus is global than when it is national...



... whereas the reverse is the case for customer service



Note - Global, regional and country columns collate the respondents that gave that geographic scope a high score (4 or 5)



- Many organisations do have a continuous Supply Chain strategy review process.
- For all businesses, the main triggers for reviews are:

**Customer service issues**  
**Cost issues**

**Key Finding: "Customer service issues and cost issues are the main triggers for strategy review"**



Rank	Trigger / catalyst
1	Customer Service Issue
2	Cost Issues
3	ROI
4	SC Innovation Opportunity
5	Regular Review
6	Collaborative Opportunity
7	Environment
8	CSR
9	Multi Channel Options
10	M&A
11	Parent Co Intervention

N= 181

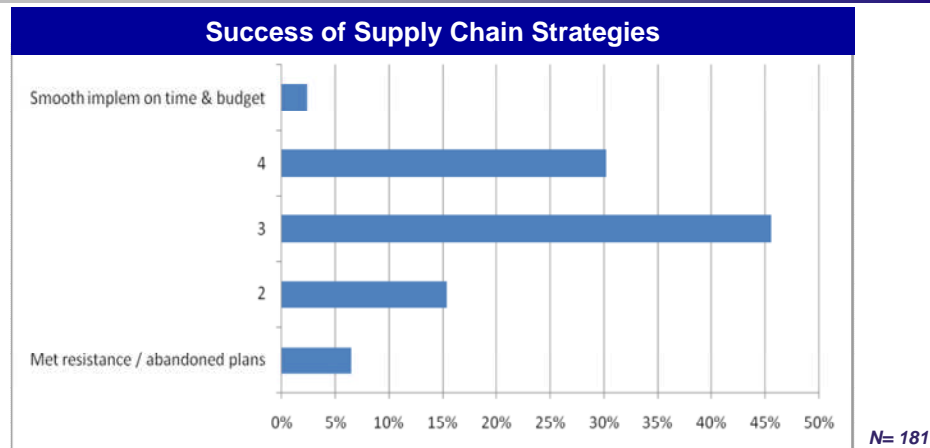


- **Very few supply chain strategy implementations run smoothly and to time and budget**
- **Only a minority are implemented with very few problems**
- **A substantial number of SC strategies get abandoned completely or incur significant implementation difficulties**

**Key Finding: "Supply chain strategy implementations are not straightforward"**



## Success of SC strategies (Q41)



- ❑ Only 2% were smoothly implemented on time and budget
- ❑ 32% were implemented with relatively minor problems
- ❑ 7% were abandoned completely
- ❑ 23% were abandoned or had severe implementation difficulties



## 7. Implications of top management support

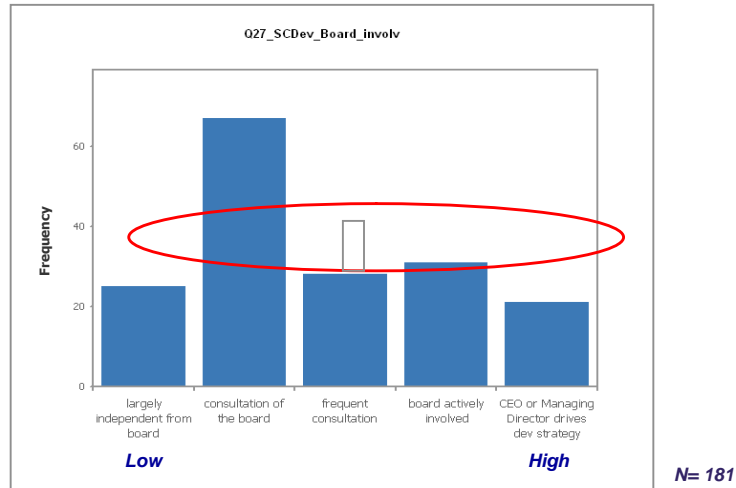
- **When the process has the active support of the Board, senior executive buy-in and sponsorship, there is much greater likelihood of success**
- **Where the strategy is driven primarily by the CEO, there is evidence that the probability of success reduces. This appears to happen more frequently at national level and may be due to the strategy being imposed from regional or global levels**

**Key Finding: “Successful supply chain strategy implementations have top level support”**





In over 85% of responses, the Board is at least consulted



## Board involvement in development of Supply Chain Strategy

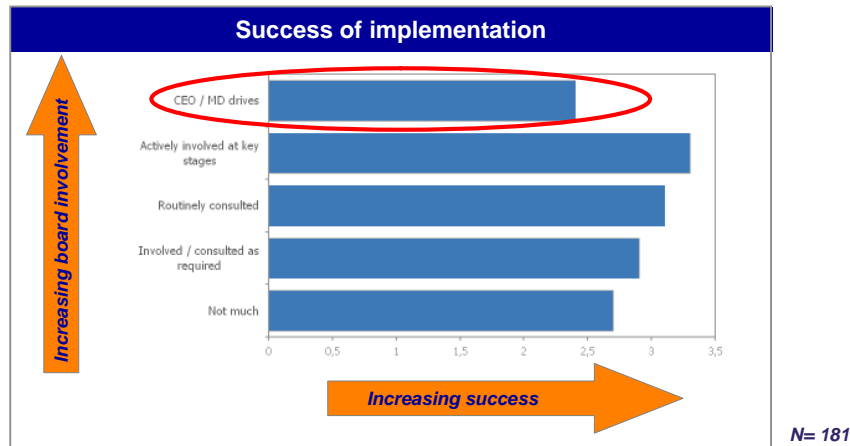
The CEO is **intimately** involved - lays out focal points for Supply Chain Strategy - adapts and improves - full involvement

Board level SC Director is involved **actively** in the process... full board involved in final sign-off of SC strategy initiatives and plans'

The draft strategy is developed and the alignment is assured through ongoing meetings, workshops and communication. The role of the CEO is to **understand** the functional positions, resolve conflicting functional plans and assure alignment with the Board directives

The CEO is **interested** if I ask him to be - ensure you properly understand what individuals want and need and then engage them in conversation

Neither CEO nor other Board Room members are involved and the different functions are involved in the exchange of information in the ERP system



- There is evidence that increasing board involvement improves likelihood of success
- There is some evidence that where strategy is solely driven by the CEO, it may be less successful (for example, where the strategy has been imposed from a higher level i.e. Group)



- **Success is higher when**
  - Sales & Marketing, Finance and IT functions are held accountable
  - The process is vision led
  - SC strategy review happens frequently
  - Quantitative modelling techniques are used
  - A high level of adaptation takes place
  - Risk management is an integrated part of the strategy and implementation process
  - There is a focus on benefit tracking

**Key Finding: “Cross-functional accountability and a balanced combination of several key approaches and techniques also improve the likelihood of success”**



Supply chain strategies are more successful when Finance, IT and Sales & Marketing are also held accountable in the strategy development process

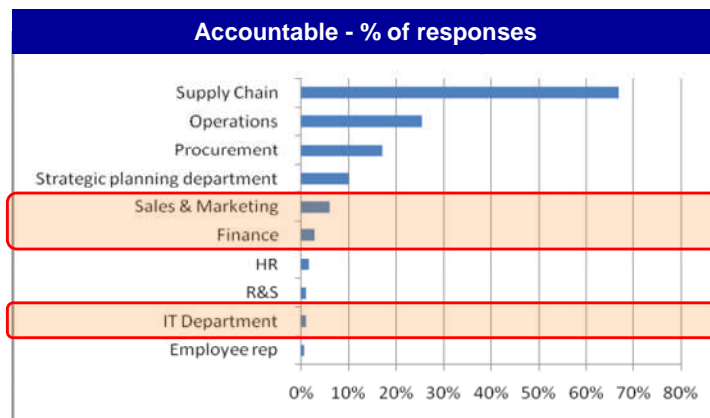
Functional Area	Involvement indicated by the analysis
Supply Chain/Logistics	Must be at least consulted
Operations	Must be at least consulted
Sales & Marketing	Accountability key to success
Finance	Accountability key to success
IT	Accountability key to success
R&D	No significant impact
Procurement	Should be at least consulted
HR	No significant impact
Employee representatives	No significant impact
Strategy Planning department	Should be informed

N= 181

... Finance, Sales & Marketing and IT need to be actively involved in the core project work, not just consulted.



... but this does not appear to happen very often, these functions are mostly consulted rather than responsible or accountable





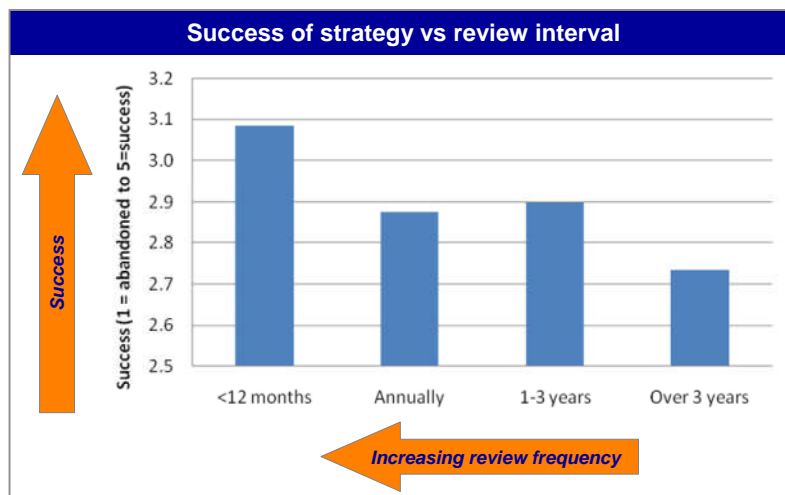
A balanced input of vision led has a strong correlation to greater success



N= 181



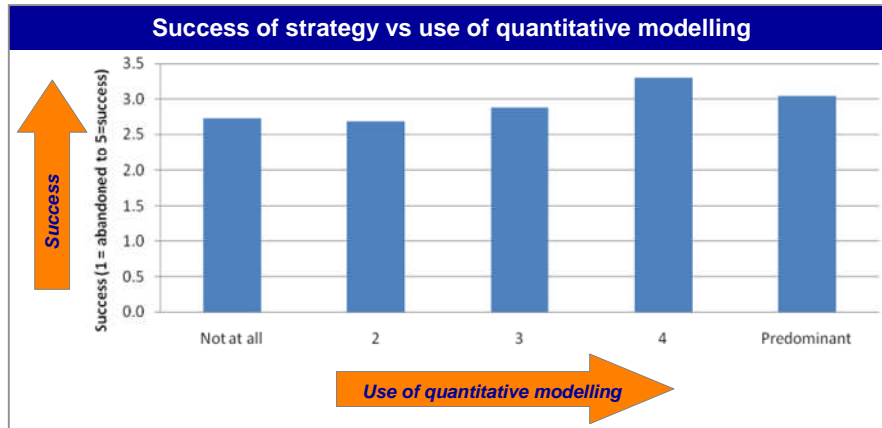
More frequent review correlates to greater success



N= 181



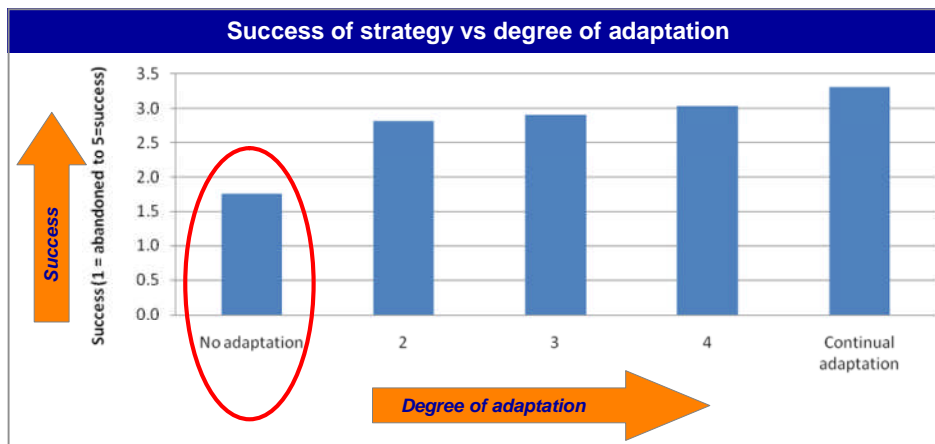
A balanced input of quantitative modelling has some correlations to greater success



N= 181



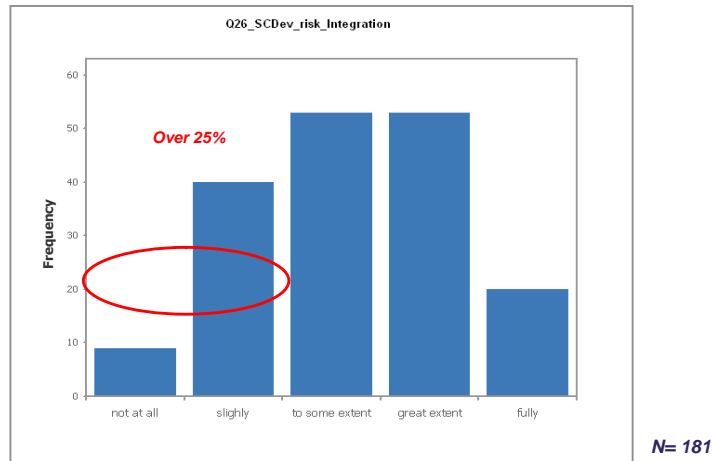
Adaptation has a huge correlation to successful outcomes and when strategies are not adapted dramatically reduces the probability of success



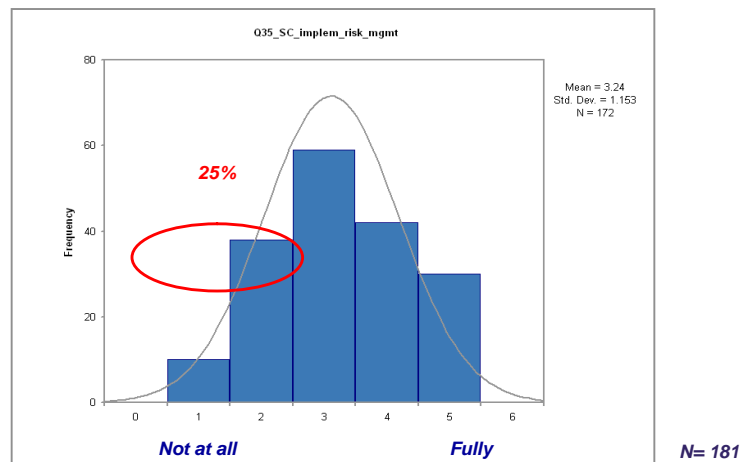
N= 181



The degree of risk management employed during the supply chain strategy development process varies greatly



The degree of risk management employed during the supply chain strategy implementation varies greatly





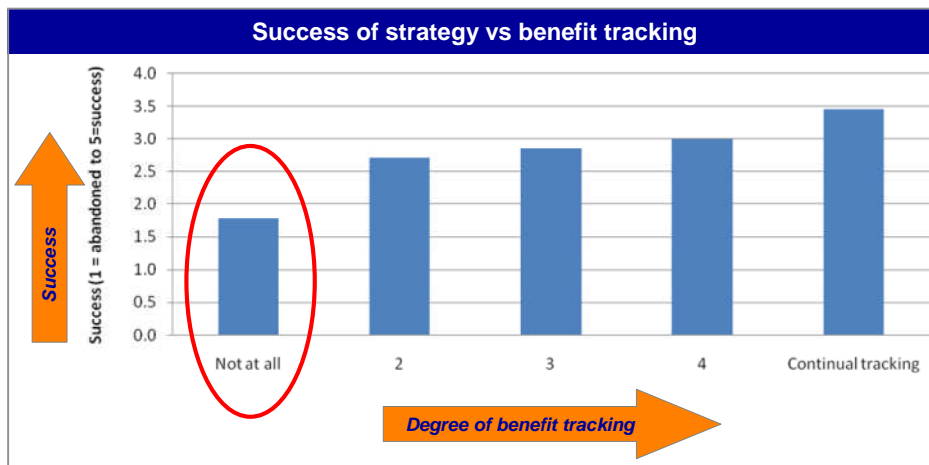
Integrated risk management in the strategy process and in the implementation are strong drivers of success



N= 181



Benefit tracking has a huge correlation to successful outcomes



N= 181



## 9. Who is involved in the process?

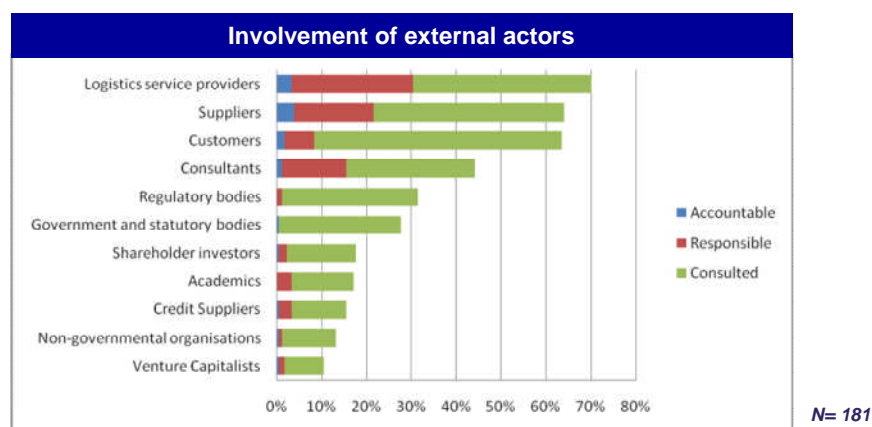
- SC strategy development is generally undertaken internally
- Most frequently consulted are customers and suppliers

**Key Finding: "Development of the supply chain strategy is largely internalised"**



## External involvement in SC strategy

The SC strategy process is mainly run internally. External actors are consulted to varying degrees, but only responsible for action in a minority of cases







**Interview Quotes**

*No external players are involved*

*External players involved are just some **local consultants***

*Largely an **internally driven process**. May involve key suppliers*

*At the top level the SC strategy development is **predominantly internal** (90%+)*

*Essentially an **internal process**, with **external partners consulted as required***

*External players are involved in the **implementation (customers, suppliers LSPs)** and to a limited extent consultants) but not in the strategy development*

*We targeted our top 20 strategic suppliers and we are trying to engage them in the strategy to see if they can add value*

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**There are many barriers to successful implementation. The 3 main ones are:**

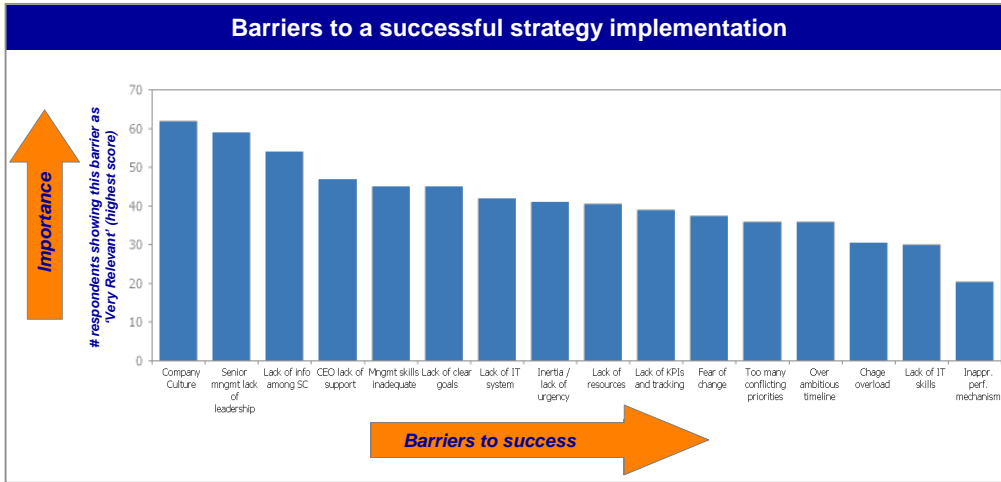
- **Company culture**
- **Lack of leadership by senior management**
- **Poor visibility along the supply chain**

**80% of barriers are people related and 20% technical**

**Key Finding: "Of the many barriers to success, the major ones are company culture, lack of leadership and poor supply chain visibility. Barriers are predominantly people-related, rather than technical"**



There are many significant barriers to success



N= 181



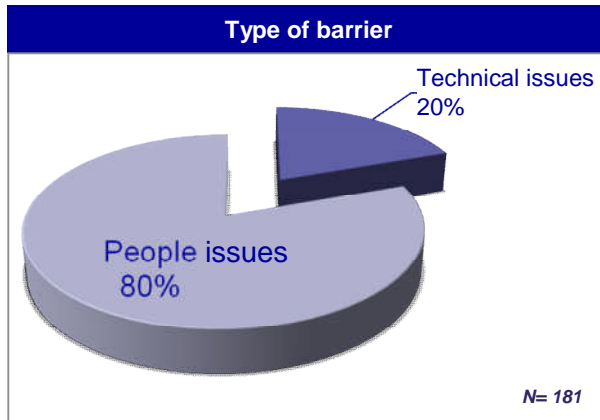
Company culture, lack of senior management leadership and lack of information are the top 3 barriers to overcome

Rank	Barrier to success
1	Company culture
2	Senior management lack of leadership
3	Lack of information along the Supply Chain
4	CEO lack of support
5	Management skills inadequate
6	Lack of clear goals
7	Lack of IT systems
8	Inertia/Lack of urgency
9	Lack of resources
10	Lack of KPIs and tracking
11	Fear of change
12	Too many conflicting priorities
13	Over ambitious timeline
14	Change overload
15	Lack of IT skills
16	Inappropriate performance mechanisms

N= 181



People barriers are much higher than technical barriers



*'No technical barriers or restraints, the issues are around **change management**. The situation is improving with implementation successes which feed to accelerate the implementation process.'*

*'The main constraint is the **speed of change**. We reckon that we are not very good at change management - the culture doesn't let us be fast enough.'*

Sum of scores for people related vs technical related barriers

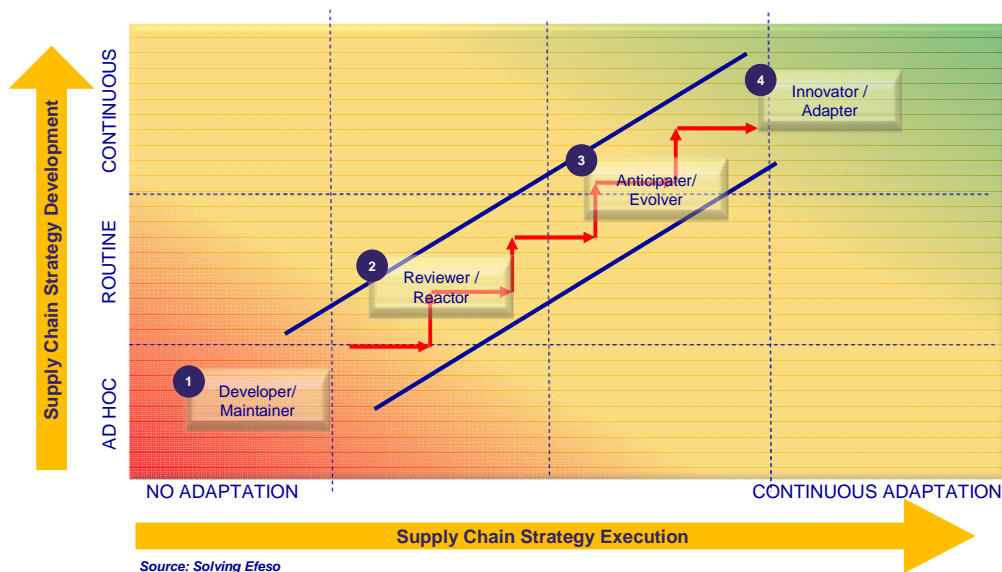


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Key Finding

- 1. Supply chain is recognised as an important part of the business
- 2. Customer service and corporate strategy are key functional drivers
- 3. The most important of supply chain performance drivers are cost focus, customer lead-time and customer quality but these vary by sector
- 4. Review of supply chain strategy is highly cross-functional, and in many cases a continuous process with regular monitoring and continuous adaptation according to circumstances
- 5. Customer service issues and cost issues are the main triggers for supply chain strategy review
- 6. Supply chain strategy implementations are not straightforward
- 7. Successful supply chain strategy implementations have top level management support
- 8. Cross-functional accountability and a balanced combination of several key approaches and techniques also improve the likelihood of success
- 9. Development of the supply chain strategy is largely internalised
- 10. Of the many barriers to success, the major ones are company culture, lack of leadership and poor supply chain visibility. Barriers are predominantly people-related, rather than technical



Source: Solving Efeso

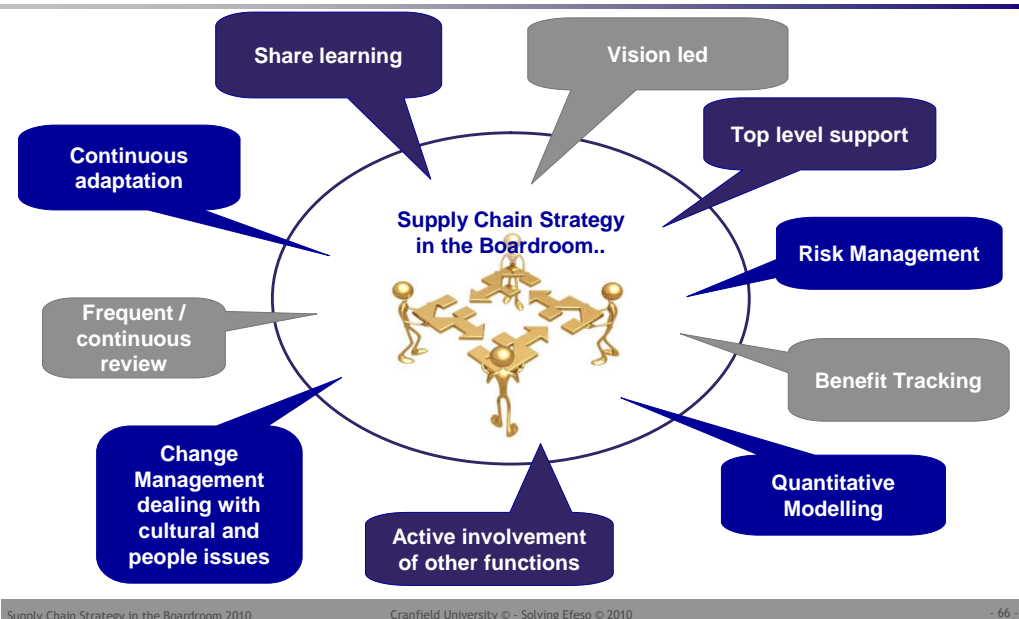


## Supply Chain Strategy: 4 emerging behavioural models - some likely characteristics (source = interviews)

<p><b>2 Reviewer Reactor</b></p> <ul style="list-style-type: none"> <li>□ Routine but infrequent strategic review process</li> <li>□ Largely reactive – updates often triggered by internal or external significant events or challenges</li> <li>□ Cross-functional involvement - may or may not follow a structured &amp; formal process</li> <li>□ External resources maybe used to support the development process</li> </ul>	<p><b>4 Innovator Adapter</b></p> <ul style="list-style-type: none"> <li>□ Innovation driven – often fast paced</li> <li>□ Continuous strategy process part of the business planning cycle</li> <li>□ External sensing – collaborating with external parties as required</li> <li>□ Often dedicated strategy &amp; Continuous improvement resources/ capabilities within the organisation</li> </ul>
<p><b>1 Developer Maintainer</b></p> <ul style="list-style-type: none"> <li>□ Strategy update process is very infrequent – if at all</li> <li>□ “When it’s done, it’s done once” rigid and inflexible to change</li> <li>□ Maybe functionally orientated around specific business case investments (e.g. assets, infrastructure/ IT)</li> <li>□ Can get out of alignment with other business plans &amp; market requirements</li> </ul>	<p><b>3 Anticipater Evolver</b></p> <ul style="list-style-type: none"> <li>□ Vision led – evolution approach to execution</li> <li>□ Cross functional accountability for delivery</li> <li>□ Internal &amp; External focus with updates at least annually</li> <li>□ Often use Scenario Modelling to anticipate “what ifs” – flexibility to deal with internal &amp; external disruptions</li> <li>□ Risk management part of the process</li> </ul>



## Supply Chain Strategy in the Boardroom: the key "get rights"





## Agenda

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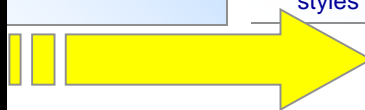
## What it all means for Supply Chain Leaders of the future ?

### Past Profile

- ✓ Technical, analytical background
- ✓ Single discipline, functional focus
- ✓ Works within function, not outside
- ✓ Fact based - not trained to challenge commercial plans
- ✓ Limited involvement in business and commercial strategies
- ✓ More focused on mastering the planning IT system than on cross functional communication

### Future Profile

- ✓ Strong communicator – gravitas within Leadership team *Slides 17, 18, 19, 41*
- ✓ Multi disciplinary – able to understand corporate & customer service strategy *Slides 19, 22*
- ✓ Collaborative - works as a team player, does "external sensing" *Slides 34, 36, 44, 58*
- ✓ Vision led – but practical and pragmatic *Slides 48, 50, 51, 56*
- ✓ Fact based - but able to deal with "ambiguity and ambition" *Slides 25, 30, 34*
- ✓ Able to deal with mix of global, regional & local culture/ leadership styles *Slides 11,61*





- ❑ How well is Supply Chain represented in the Leadership team, and how does this reflect the correct scope of responsibility? *Slides 9, 17, 18, 19*
- ❑ How well is Supply Chain supporting the Corporate and Customer service strategies? Ensure SC is not solely a cost issue *Slide 21*
- ❑ Encourage cross-functional participation in the development of the SC strategy – it helps success *Slides 26, 41*
- ❑ Accept that SC strategy implementation is not straightforward – so build risk management into the process *Slides 39, 52, 53*
- ❑ Two main barriers to successful implementation of SC strategy are internal issues – Culture and Leadership *Slide 60*



- Disseminate survey results to highlight key findings and promote discussion of emerging best practice
- Explore key themes in business workshops
- Capture workshop feedback from the workshops to further disseminate amongst all supply chain leaders
- Consolidate all findings into a second stage report for wider dissemination
- Support businesses to adopt best practice appropriate to sector and market positioning



### Further research and workshops to investigate the following:

1. What are the reasons for SC strategies going wrong?
2. How are and how should global, regional and national supply chain strategies be coordinated? How does this vary for production, sourcing/purchasing, planning, warehousing, primary transport, secondary transport and by sector?
3. Why and how does the supply chain strategy get adapted during the implementation?
4. How do (and how should) different functions participate in the process? e.g. Sales & Marketing, IT, Finance, Purchasing, Production
5. Why are planning horizons getting shorter? Is this temporary or a longer term trend?
6. What drives the need for quantitative modelling, and when is it most beneficial?
7. How is risk management carried out in practice? (during the SC strategy process and in implementation)
8. How are (and how should) benefits be tracked?
9. How should supply chain strategy be organised and what does the process look like?
10. How are (and how should) the main barriers to success be tackled?



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This research was sponsored by Solving Efeso



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Objectives

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## Case No. 1

### *Background*

The organisation is a global automotive manufacturer. Supply Chain strategy is all-embracing, from structure through to inventory deployment, across the internal and external supply chain. It includes trade offs between inventory carrying costs and transport frequency, including choice of mode of transport.

The recent emphasis on cash to cash cycle is driving new strategies.

### *Development Process*

The main Board are proactive in setting targets, but not in how to achieve these. Functional strategies are evaluated by the other functions in a powerful iterative process. National strategic supply chain proposals would be referred to the Regional Board, and advised to the Global Board for investment decisions. There is strong iteration of strategic development between the functions and levels. It is a genuine strategic process which is continuous. Regional decisions tend to be more tactical but for major strategic issues this matrix works well and is very robust. This is ensured by having proper metrics in place, driven by the main Board. The business planning horizon is 5 years, updated annually.

### *Drivers*

The key driver of supply chain strategy is customer needs and to achieve this, the supply chain needs to support the operations plan. The order-to-delivery cycle is critical.

The 'build anywhere' concept drives changes that need iteration with marketing. Special projects are handled by a dedicated team and any agreed output incorporated into the business plan.

### *Enablers to implementation*

The business units and functions are co-ordinated through the matrix previously described, with powerful iterations, driven by relevant metrics. The overall strategic planning process is continuous, but internal and external key changes will be fed in as needed.

The Director comments:

"The company style is to put in simple metrics that are all rolled upwards. The mutual support this generates is truly amazing."

### *Barriers to implementation*

The main barrier to strategy implementation is the shortage of funds for investment. The internal culture and attitude to change is very positive and is not a constraint.

The Director comments:

"We used to operate within chimneys, but no more: A good idea is a good idea."

There is more resistance to change in the external supply chain.

## Case No. 2

### *Background*

The organisation is a global supplier of High-Tech Electronics to B2C and B2B channels world-wide. The company is facing significant opportunities for growth in the major BRIC emerging markets. The business is led by an entrepreneurial and highly-ambitious CEO and has been widely recognised previously for its innovations in supply chain management. The company has since faced intense competition in its core markets and as Media and Technology products have become more main-stream, the business failed to adapt to changes in end-user buying behaviours and capitalise in the opening up of new channels to market. Many of the earlier innovations in supply chain had now become inappropriate to satisfy the new challenges and trends in the marketplace.

### *Development Process*

Previously the company had an ad hoc and rather reactive approach to Supply Chain Strategy. There was a small team that worked on strategy and the process tended to be driven by external consultants. It was largely centred on the Executive team (CEO direct reports). Now the Senior VP for Supply Chain has a split role and an organisation that is balanced between Strategy evolution and Operational execution. There is a significant internal team that is dedicated to strategy development that also owns a 2-year rolling development roadmap.

### *Drivers*

The key drivers for the supply chain strategy process are the dynamic competitive environment and the need to improve how the supply chain design aligned to the corporate strategy. The company aims to create a 'sensing approach' to supply chain strategy development that is agile and adaptable to new trends and requirements. The business is forming relationships with external bodies that routinely provide new insights to the process.

### *Enablers to implementation*

The new approach has involved a significant change to the organisation and there are still some challenges getting business priorities and Executive alignment around a single global operating plan. The business is now working on building new organisation capabilities and supply chain metrics that includes transparency of total delivered cost.

### *Barriers to implementation*

Previously initiatives were reactive and not well planned for execution. Big goals could be set that were not always reasonable or well thought through and this created problems during implementation. Also, despite many initiatives, IT Systems, both ERP and bespoke SC systems, are still considered a barrier.

## Case No. 3

### *Background*

The organisation is one of the largest confectionary groups in the world. Its turnover accounts for more than €6 billion, with around 40 operating companies, 20 factories and more than 20,000 employees. However, besides the brand, the balance sheets and a multinational company, the group is deeply rooted in the values of the founder family.

SC strategy is a relatively new area and it is the exercise of balancing service level and OWC, by keeping the overall inventories and delivery cost under control, and by protecting the production system from unexpected demand variance, even in a very short time span. This represents a significant step ahead: a few years ago the SC strategy was made only locally and it was broken down in the 'commercial' layer focused on finished products (from central warehouses to distribution centres) and in the 'industrial' layer (from raw materials to manufacturing plants).

### *Development process*

A SC central team (in the headquarters) is focused on SC strategy and improvement projects on a worldwide basis and on the most important and critical operational guidelines. Most important international providers are also managed by central HQ. The strategy is then deployed in each area (Europe, USA, Latin America etc), while there is no nationwide strategy. The national level deploys the strategy, manages the SC and adapts the strategy to the local context: airplane (central) and helicopter (local) views meet.

SC strategy is initiated and guided by the mid-term strategic plan of the group based on product categories and distribution channels.

The CEOs are personally involved and informed monthly through reports and specific meetings.

Once a week, Marketing & Sales departments, co-ordinated by SC people, review a 12-month plan to agree and define future weekly sales. SC Central Planning will convert them in production plans by factory and by product line according to plants and inventories constraints. All the physical and administrative processes will be involved in order to plan all activities. All the BU worldwide, the ICT department and factories are directly involved, through appropriate KPIs that refer to supplier & customer service levels, product freshness, inventory level and all others needed to better manage.

### *Drivers*

Each activity, either planning or shipping, is a challenge, from raw materials purchasing to after-sale services including all physical and administrative flows and related information with suppliers & customers. The level and integration of this relation is the key for a successful supply chain. The SC Director comments:

"SC strategy means providing a sustainable competitive advantage to the Company by achieving customer satisfaction through fresh products always on the shelf, and by creating a real VA for the Group through a good relation with customers and suppliers"

### *Enablers to implementation*

The main enabler is the dashboard of KPIs measured on a weekly basis for each Country (market, BU). KPIs trigger also the improvement process. Main KPIs refer to: service level; days on the shelf (freshness); quantities requested vs. quantities actually delivered (by product); forecast accuracy (4-month horizon); the inventory level by SKU

### *Barriers to implementation*

The unique barrier is the constraint set by mid-term strategic plan of the group which depends on the decisions of both CEOs who belong to the owner family.

## Case No. 4

### *Background*

The organisation is one of the leading companies primarily involved in the food and beverage industry. The company is strongly committed to increasing the nutritional value of our products while improving the taste, and its turnover accounts for more than €70 billion.

### *Development process*

SC strategy is the exercise of aligning the value chain to the customers, by helping all the BU to avoid wastes: SC integrates everything about Purchasing, Planning (Master Production Schedule), Distribution, Transports and Product Innovation. Only Operations (in terms of the management of plants) are excluded, in that they are centralised worldwide. So SC strategy lies in implementing, in a co-ordinated way, all the strategic plans of each BU.

SC strategic plan covers a 10-year horizon, with a more detailed focus on the first 3 years. Time bucket is 1 year long, rolling and synchronised with the sales business plan. Co-ordination is achieved through worldwide guidelines and every 2 years a world-wide meeting takes place. At regional level (e.g. Europe) the SC strategic plan is reviewed annually in depth and every 2 months through operative meetings.

At Country level, SC teams work jointly with Operations-focused teams. Here the execution of the strategic plan takes place: local differences (e.g. various seasonality between Greece and Sweden) require attention, but they do not affect the strategy.

### *Drivers*

The key driver in our business is the freshness (of the products), which means providing customers with products with shelf lives as long as possible. SC is driven by the market, i.e. by the service level, in terms of availability over-the-counter (at supermarket shelf level), while a prerequisite is in the good Operations management of the plants.

Implementing SC strategy requires to manage the trade-off between service level (the customers) and productivity (the plants), considered that Operations belong to a different head (worldwide) and the formal link is through KPIs.

### *Enablers to implementation*

SC strategy is initiated by the objective of waste reduction, which means eliminating all the activities that do not add value to our end customer, e.g. excess stocks, delays, stock-outs, waiting times generated by plants, etc. To do so, people are the actual enabler.

The SC Director said:

“A relevant part of the SC strategy is in the empowerment of people: SC strategy success remarkably depends on people and on their ability to trigger the improvement. Mitigating top-down approach to promote rising bottom-up ideas is a relevant portion of my job”.

### *Barriers to implementation*

The main barriers and constraints to strategy implementation over the last years were due to (i) the changes that took place in the logistics and materials handling (i.e. the growth of transportation costs) and (ii) the concentration of the Distribution branch of industry, both factors at European level.

## Case No. 5

### *Background*

The organisation is one of the world's leading producers of aluminium and alumina. Since the end of the 19th Century, it has been involved in some of the most relevant advances in the aerospace, automotive, packaging, construction, electronics and industrial markets. Average sales over 2007-2009 accounted for around €20 billion, with an average number of employees greater than 80,000.

### *Development process*

SC strategy is part of the manufacturing strategy and its scope is in linking the procurement to the logistics, i.e. in bringing together suppliers and customers: SC department is an ancillary function, which helps to promote the continuous improvement approach, by allowing to detect and to eliminate wastes outside the plants, particularly in the outbound logistics (transportation).

Raw materials are bought worldwide (centrally) for scale-economy reasons and for speculative purposes, while outbound logistics is countrywide, due to the short logistic radius of company's products, and no regional co-ordination is allowed. Inbound logistics must be co-ordinated to properly feed the plants and local SC managers issue their requirements in fair advance to the Purchasing department: procurement and inbound logistics are driven by the Purchasing department worldwide, while local SC managers manage the physical flows.

SC strategy brings together raw materials and finished products in a MRP-like approach. A 1-year horizon is broken down into 2-month buckets, which are, in turn, divided into monthly buckets and then into fortnights, weeks and days. Neither the CEO nor other board room members are involved and the different functions are involved in the exchange of information in the ERP system. Co-ordination with Sales is based on forecasts that trigger the shipping plans and the allocation of production capacity shares (of the plants).

### *Drivers*

Stock-holding costs are very relevant in the business. The main driver of all the local SC managers is the inventory level, which should be kept as low as possible, by having to resort to the smallest possible lots and kanban-based approaches

The Operations and Lean Manufacturing Director said:

“Our SC guys are really important to make the cultural changes happen and to spread the lean thinking approach outside the factories: in doing so, SC guys play the role of facilitators”.

### *Enablers to implementation*

Set-up times and costs, as well as the utilisation of production capacity are so important that the SC must follow the plants rather than co-ordinate them (as in other industries).

### *Barriers to implementation*

The main barriers and constraints to strategy implementation are represented by the plants' production capacity and their flexibility (in terms of set-up costs and times) and by the product specifications in terms of required quality.



## Case No. 6

### *Background*

The organisation is a global supplier of office equipment. The majority of its market is in Europe. The CEO recognises the importance of the supply chain in gaining the business competitive advantage and has appointed a new supply chain director with responsibility for both supply chain and information technology. The supply chain strategy covers all areas from 'source to consumption'. Supply chain is seen as a new area to address and therefore the organisation is currently building the strategy from 'scratch'.

### *Development Process*

The European management team is actively involved in the development of the strategy and external stakeholders including customers and suppliers also been consulted through vendor and customer feedback panels. A consultancy was also used to do quantitative analysis of the various strategic scenarios.

### *Drivers*

The key drivers for the supply chain strategy process were the "vision" of the CEO. (S)he recognised that in order to fulfil the business strategy effectively Supply Chain and Information Technology needed to be co-ordinated together and aligned.

The Supply Chain Director states:

"Lots of people blame their tools having responsibility for IT and Supply Chain stops this misdirection".

### *Enablers to implementation*

A critical enabler was seen as having a stable 3-year plan with careful monitoring of progress. Cost, inventory and order fulfilment is monitored and carefully linked to the financial reports of the organisation. It was recognised that supply chain concepts and initiatives had to be communicated through using the 'Language of Profit', i.e. demonstrating the financial impact of all decisions.

The Director emphasises this by saying:

"Need to be more commercial with supply chain thinking".

### *Barriers to implementation*

A barrier identified was the fact that individuals within the organisation did not believe that the Supply Chain Strategy would receive the financial investment required. This resulted in a lack of 'buy-in' during the early stages of the project.

## Case No. 7

### *Background*

The company produces consumer goods made and distributed globally. Until 5 years ago the focus was on manufacturing costs and their rationalisation, the supply chain has now been changed to minimise the supply chain costs. An organisational change, the creation of an independent function called Supply Network Operations (SNO), followed this drastic change. SNO's responsibilities cover the goods leaving the production line to them reaching the shelves.

Up to that point the logistics strategy was developed by other functions and by the GBU. The SNO is now responsible from the outset of strategy development, moving from a top-down to a bottom-up approach. The function is centralised to share knowledge and competencies across the Regions.

### *Development Process*

GBU understands customer needs and they define the product in order to fill these needs, providing they are aligned to the corporate strategy. The GBU starts the strategy by involving the 'initiative team', made up of the directors of Manufacturing, Supply Network Operations, Marketing, Sales, R&D and Legal department. They define the characteristics of the project and all operational decisions are validated by SNO to ensure the economic sustainability. The SNO has a dedicated Finance Department in order to have updated analysis data of ongoing costs and transition costs.

The company can guarantee to live up to their motto, to deliver the highest service at the lower cost.

### *Drivers*

The drivers for the supply chain strategy process are corporate and GBU strategy.

There is also a centre for logistics innovation that refers directly to SNO, enabling extremely quick reactions to changes in the market: innovation is seen as a relevant driver to competitiveness.

The SNO and the GBU Board carry out a quarterly review on the results in order to be reactive. The strategy called 'Logistics ...' has been validated throughout a series of consultations and interviews with academics, suppliers and clients.

### *Enablers to implementation*

In order to push the change according to the market needs, the review is continuous, based on quarterly validation and adaptation. This attitude to change is framed in a 7-year planning horizon, long enough to control the fluctuations and to achieve the results planned.

Three years ago the company introduced the 'on-time defect' metrics which is updated daily and shared across the organisation: it allows reducing reworks through visibility.

### *Barriers to implementation*

The company finds it very difficult to predict the costs for transport and the effects of new legislations; this is not necessarily co-ordinated among the different countries they operate in.

They did not experience any change management barriers and they gained a good legitimacy by providing significant cuts in costs.

## Case No. 8

### *Background*

The business is a sub-regional division of a global Fast Moving Consumer Goods (FMCG) manufacturer. The supply chain is represented at Board level, with a report to the Supply Chain Director for distribution, purchasing, customer service, planning and facilities, with additional reports for manufacturing and technical. Supply chain is described as 'from farm to fork'.

### *Development Process*

Supply chain strategy, together with manufacturing, technical and people strategy, is part of the master business strategy which is derived sub-regionally for each product category, with the matrix coming together annually at one of three Regional Boards, with Global Board representation. They have a 3-year plan which is updated annually.

### *Drivers*

The key drivers of supply chain strategy are service, followed by costs and then sustainability (defined as 'having a business in good shape to hand over to their grandchildren').

Major M&A activity will trigger additional analysis, as will major changes in trade patterns and changes in input costs such as fuel.

They can respond quickly to change – the annual review is good enough.

The Director emphasised that:

"A review more often than annual is not strategic".

### *Enablers to implementation*

Everything is driven by KPIs, which are very well developed. There are still country and cross-functional issues and there are still cost versus benefit issues, but the matrix is now working much better following business integration across countries within the Regions.

### *Barriers to implementation*

The main barriers are capital, change management capability, people and resources, together with the challenge of prioritising all the initiatives. Everything is do-able, but takes time and resource. Handling strategic opportunities across all geographies and businesses is a challenge.

Volatility of currency is a big issue: "Strategy is not robust to exchange rates".

If there are tactical or strategic collaborative opportunities, these would follow the same process as above and would not hit corporate barriers.

## Case No. 9

### *Background*

The organisation is a confectionery manufacturer. National manufacturing is supported increasingly by regional sourcing. The business has recently moved from country-based sales to integrated regional supply chain and commercial operations.

The business was manufacturing driven, but is increasingly focusing on customer needs.

### *Development Process*

This is described as a 'vision into action' process, developed at global board level and passed down to regions and countries. The emphasis is on growth, efficiency and capability to be the 'best confectioner in the world'.

The business recognises that they still think quite functionally but are moving to cross-functional integration.

They have moved from a 2-3 year plan to a 4-year plan, revisited every 2 years, which is cascaded to business unit level where it is reviewed annually.

They are of necessity moving from an ad hoc approach to supply chain strategic planning to a more continuous approach.

### *Drivers*

The main drivers globally are growth, efficiency and capability and the drivers at business unit level are margin, growth and working capital.

The supply chain strategy has traditionally been driven primarily by cost considerations and need for big volumes to give high asset utilisation.

They want to move to a customer-driven supply chain with customer-led strategy and are currently tackling manufacturing lead times as a route to this.

### *Enablers to implementation*

The key requirement is to 'join-up' the functional silos. This is their big initiative within supply chain and with commercial. The measures of success have been cost and other KPIs driven globally. Service is now the major KPI but this was not true 3 years ago.

### *Barriers to implementation*

They had major service problems in recent years caused by severe technical and systems problems, floods and fire but these were all due to their own lack of capability. This is why service is now the emerging priority.

At business unit level, they have few implementation issues and project management runs okay.

Changing commercial assumptions can get in the way of implementation. One key example was currency fluctuations that undermined the benefits from a move to low-cost sourcing. The currency risk was not fully embraced in the strategic planning process. Also people and cultural issues as barriers have been challenging at a regional level.

## Case No. 10

### *Background*

The organisation is the dot.com division of a major food retailer.

The supply chain is from suppliers through to store DCs, including inventory call-off (inventory shared with the main business), the customer ordering processing (pick, pack and deliver) and also embraces customer contact centre desks in the stores which act as pick-up points. Supply chain also embraces returns.

### *Development Process*

Supply chain strategy is total operations strategy and is integrated into the design and development of the future business proposition for multi-channel.

This is developed by senior directors working together on a common plan in the Boardroom. All Board level reports are involved and are driven by customer research. The Group Board will challenge and tweak the strategy, driving and monitoring it by KPIs. If they don't hit the numbers they don't get the money.

There is strong integration between business functions, with co-ordination achieved by iterations with other parts of the business 3 times per annum.

Supply chain strategy is truly strategic and is becoming a continuous process with regular monitoring and continuous adaptation according to circumstances.

They have a 5-year planning horizon linked to a business vision with a formal annual review.

### *Drivers*

The key drivers are the customer and the market. Customer research drives short-term changes. If something happens in the market the process will handle it. Strategy is shaped by competitor activity – they will tweak and adjust. Market conditions will not change the strategy, just the pace.

### *Enablers to implementation*

Their key to success is 'the one team approach'.

They are in evolution and moving through a phase of renewal. Evolution is creating a journey to this one team approach. The silos are breaking down.

The Director says:

"We have a lot of very bright people and a lot of very experienced people and the key is to ensure that every employee understands that 'this is my business'."

### *Barriers to implementation*

The main constraint is the speed of change. The business recognises the need for continual change but this aspiration is not always matched in practice as their culture doesn't let them be fast enough. They describe themselves as tending to be too ambitious and talking themselves into taking on too much.

# About Centre for Logistics and Supply Chain

The Cranfield Centre for Logistics and Supply Chain Management (CLSCM) based in the Cranfield School of Management, provides an international focal point for advanced teaching and research in the field of logistics, supply chain management and transportation management.

CLSCM has grown up with twin beliefs:

- that logistics has increasingly become a dominant activity in the development of the modern world and in our twentieth century way of life
- that effective management of the total supply chain is an essential ingredient for business success as the global market place becomes a reality.

A key feature of CLSCM's work is its increasingly global scope. Much of its work has an international dimension and this is reflected in its established links with leading centres in North America, Europe and Asia-Pacific.

For over twenty years Cranfield University has had a major involvement in the development of knowledge in logistics and transportation. It has come to be recognised as Europe's leading centre for advanced research and teaching in these important fields. Many thousands of managers have attended the programmes and workshops led by Cranfield faculty.

CLSCM is Europe's largest grouping of faculty specialising in the management of logistics and transportation. As a major centre of excellence, CLSCM provides a resource which encompasses taught programmes for graduates and executives, research and development capabilities and a continuing commitment to the dissemination of ideas and knowledge through publications and symposia.

The Supply Chain Research Centre is one of Europe's largest resources dedicated to research into logistics and supply chain management. Our practical, 'hands on' approach to research is executed by means of projects in many of the areas that are of concern in managing supply chains today - sponsored by our industrial partners, government and Research Councils. Current research themes include:

- design of customer responsive supply chains
- supply chain strategy development
- supply networks for product-service systems
- supply chain costing and relationship modelling
- risk and resilience
- interdependency between supply chain partners
- global sourcing
- Outsourcing
- reverse logistics
- sustainability in supply chains.

# About Solving Efeso

Solving Efeso is at the forefront of international supply chain development and actively promotes thought leadership through work with leading academic institutions and industry bodies.

The 10 key service lines of the Solving Efeso supply chain practice:

- Extended supply chain – deals with management of the extended supply chain, collaboration, outsourcing a better way and benefits from suppliers/ customer integration
- Supply chain strategy – deals with 5 to 7 year vision for investment and development of the supply chain
- Network optimisation – deals with the strategic configuration of physical network including best location and role of facilities (plants, distribution centres etc.)
- Lean flow – deals with eliminating wastes from value stream
- Agile response – deals with supply chain capabilities to quickly respond to short-term changes in demand or supply and handle external disruptions smoothly
- Supply chain balance – deals with decisions to ensure profitable balance between costs, capacity, working capital (inventory) and service level
- WCOM™ supply chain – deals with tangible and sustainable performance improvement towards a vision of excellence in operations
- Route to Market and Channel management – deals with selection and performance of distribution channels based on a comprehensive appreciation of customer value and cost to serve Availability and Demand management – deals with the enablers of high on-shelf availability and perfect order fulfilment achieved through efficient sales, operations and planning processes.
- Implementation & programme management – deals with the delivery and control of major change initiatives

Solving Efeso brings strategic, operations and change management capabilities in one integrated team. The company offers proven methods and proprietary techniques to deliver a truly world class performance in strategy execution and operations. Our Group of nearly 400 experienced consultants representing more than 40 different nationalities operates from 20 offices around the world with a strong presence in Europe, USA, South America and Asia. An international scope and local delivery capability ensure that clients have access to the specialist skills they require whether at national, regional or global levels.

Solving Efeso provides the capabilities to identify, evaluate and manage change necessary to gain competitive advantage from the supply chain. We do this at the appropriate level required be it strategic, tactical or operational.

Solving Efeso programmes for supply chain are not simply focused on cost optimisation. They place equal emphasis on value-profit creation and growth. We understand that companies need to build new capabilities to run ever more complex supply chains, influence and shape customer demand and better respond to changes in the market. We truly believe that the supply chain remains largely under exploited as a means to boost growth, efficiency and profit. Solving Efeso know-how helps clients to unlock the opportunities and latent potential.

Besides bringing the management and specialist technical skills for supply chain, we offer the change management capabilities required to engage staff, raise performance, accelerate change and sustain results. In short, we help our clients improve the performance of their supply chains, achieved by combining what we know about supply chains with what we know about people.

# Appendix 1

## The questionnaire



### **SUPPLY CHAIN STRATEGY IN THE BOARD ROOM**

This research aims to disclose how Supply Chain Strategy is approached, developed, implemented and taken into consideration by the Board Room/Management Board/Executive Committee.

#### **Aims and Scope of this Survey**

This research aims to discover how Supply Chain Strategy is approached, developed and implemented by the Board Room/Management Board/Executive Committee.

#### **Organisations Approached**

The survey has been distributed to a random selection of organizations: responses are completely confidential and are analysed together. Hence COMPLETE CONFIDENTIALITY is assured.

#### **Report Offered**

A report from the survey will be sent to all the respondents and a workshop will be organised in order to share the findings with those who attend.

#### **To Complete the Questionnaire**

Part A of this questionnaire consists of 48 questions many of which can be answered with a Mouse Click. It will take a maximum of 20 minutes to complete.

Part B will require you to answer a further 17 questions and will take a maximum of 10 minutes to complete.

Part A is essential, however if part B is also completed you will be put into a prize draw for a €100 (or equivalent) Amazon Voucher.

#### **To Return the Survey**

Please complete the survey using the link below or if you would prefer to complete a paper copy feel free to print off the attached file and input it via one of your staff.

The online survey can be completed only once but the session can be stopped and resumed without losing the answers already given.

The questionnaire can be completed without having to refer to, or collect, any particular data.

We thank you for supporting this important research project.

#### **All correspondence to:**

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**PART A****Your profile**

1. **Your position (title on your business card)**

2. **Who is the highest decision maker for supply chain management? (Title on his/her business card)**

Yourself

Someone else, please specify the name and title on his/her business card

3. **Is the highest supply chain manager in your business unit responsible for decision and outcome of actions regarding (tick all the appropriate alternatives)?**

Concept development (Customer proposition development)

Product design

Planning (Plan)

Purchasing (Source)

Production/Operations

Distribution & Transport (Deliver)

Return (Return)

Disposal

Customer service

Other, please specify

4. **To whom the senior supply chain person reports directly to (e.g. CEO, CFO, Business unit general manager)?**

5. **Is the senior supply chain person a member of the Executive committee or Board Directors of your business unit?**

Yes

No

### Description of the business unit

6. The questionnaire is to be filled out from the perspective of the business unit in which you operate. Please specify how your business unit fits within your company:

- My business unit is the entire company
- My business unit is a division of the company
- My business unit is a plant
- My business unit is a shared service and corporate/staff function with strategic responsibilities unit
- My business unit is (please specify)

7. What is the approximate size of your BUSINESS UNIT in terms of annual sales?

- Under €10 Million
- €10M - €100M
- €100M - €500M
- €500M - €1000M
- €1000M - €1 Billion
- Over €1 Billion

8. What is the nationality of your parent company?

9. What industry sectors best represent your business unit activities?

- Food & Beverages
- Retail & Distribution
- Automotive
- Pharmaceutical
- Textile and clothing
- Chemicals
- Consumer goods
- Electronics
- Heavy industry (paper, steel..)
- Construction

Other, please specify

10. Which best describes your products at sales level?

Primarily standard products

Primarily customized to customer specification

Both standard and custom products

11. Where are you positioned in the end to end value chain (i.e. raw materials through to point of consumption)? Tick as appropriate.

Product design/research

Component/raw materials

Primary manufacturer (e.g. collection/conversion of natural resources -oil, mining, farming and fishing)

Secondary manufacturer (e.g. finished goods)

Distributor

Retailer

Brand owner

Service providers with own supply chain infrastructure

12. Please indicate the approximate number of outbound products Stock keeping units in your business unit.

13. Please indicate geographic territory of your supply chain, including both suppliers and customers, by rating your answer from 0 to 3. (0=nil; 1=low presence; 2=medium presence; 3=high presence)

	Suppliers	Internal supply chain	Customers
National	<input type="text"/>	<input type="text"/>	<input type="text"/>
International	<input type="text"/>	<input type="text"/>	<input type="text"/>
Global	<input type="text"/>	<input type="text"/>	<input type="text"/>

14. Which of the following best describes your sales?

Primarily Business to Business

Primarily Business to Consumer

Mixture

### Supply Chain Strategy in your business

In this section the Respondent is asked to define the Supply Chain Strategy in the business unit.

15. Which is the geographic scope of your company's Supply Chain Strategy? Select one for each statement.

	1 Not at all	2	3	4	5 Predominant
Supply Chain Strategy is defined at a Global level	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Supply Chain Strategy is defined at a Regional level(e.g. pan-European, NA, Asia)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Supply Chain Strategy is defined at Country level	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Supply Chain Strategy is defined according to a dimension other than geographic(Please specify in question n.16)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

16. If you selected "Other" in question n.15, please specify.

17. Is your Supply Chain Strategy driven by considerations on (select one for each statement):

	1 Not at all	2	3	4	5 Predominant
Corporate strategy	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Concept development (Customer proposition development)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Product design	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Planning (Plan)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Purchasing (Source)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Production/Operations (Make)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Distribution and transport (Deliver)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Return (Return)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Disposal	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Customer service	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

18. Is your Supply Chain Strategy driven by (select one for each statement):

	1 Not at all	2	3	4	5 Fully
Customer lead time	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Customer quality	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Other customer considerations	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Cost focusing	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Asset utilisation	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Working capital	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Cash to cash cycle	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

### Supply Chain Development Process

19. In your opinion which are the main triggers and catalysts that would be considered in strategy development? Select one for each statement.

	1 Not at all	2	3	4	5 Totally
Customer service issue	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Cost issues	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Parent company intervention	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Environmental issues	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Corporate social responsibility	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Return on investment	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Regular review process	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Merger & Acquisition	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Opportunity for collaborative solutions	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Opportunity for other innovative supply chain solutions	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Multiple channel to market options (e.g. internet, direct, channel, etc.)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Other 1 (Please specify in question n. 20)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Other 2 (Please specify in question n. 21)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

20. If you selected "Other 1" in question n.19, please specify.

21. If you selected "Other 2" in question n.19, please specify.

22. How frequently does your organisation formally review its Supply Chain Strategy?

- < 12 months
- Annually

- 1-3 years
- Over 3 years
- Other hybrid, please comment

23. How far ahead do you plan in your Supply Chain Strategy?

- 1 year
- 3 years
- 5 years
- 10 years
- More than 10 years
- Other, please comment

24. To what extent are formal Quantitative analysis and modelling techniques deployed?

- 1=not at all
- 2
- 3
- 4
- 5=detailed modelling of alternative supply chain solutions

25. To what extent is your Supply Chain Strategy development process vision led (e.g. what it should look like in 5 years time)?

- 1 Not at all
- 2
- 3
- 4
- 5 Totally vision led

26. In developing Supply Chain Strategy is risk management integrated into its development?

- 1 Not at all
- 2



3

4

5 Fully

**Who is involved**

**Who is involved in Supply Chain Strategy Development Process**

27. What level of involvement does the Board have in Supply Chain Strategy development process?

- SC Strategy development is largely an independent exercise from the Board
- SC Strategy development is on the Board agenda with involvement/ consultation as required
- Board is routinely consulted during the SC strategy development process
- Board is actively involved in the SC strategy development process at key stages
- Chief Executive/ Managing Director is actively steering and driving the SC strategy development process

28. What internal functions are involved in the Supply Chain Strategy development process? Select one for each statement.

	Ultimately accountable (individual or in team)	Responsible for action in the process	Consulted (prior to decision/actions)	Informed (after decision, during actions)	No role	Not applicable
Supply chain or logistics department	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Operations	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Marketing & sales	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Finance	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
IT Department	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Research & Development	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Procurement	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Human Resources	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Employee representatives	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Strategic planning department	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Other 1 (please specify in question n. 29)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Other 2 (please specify in question n. 30)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

29. If you selected "Other 1" in question n.28, please specify.

30. If you selected "Other 2" in question n.28, please specify.

31. What external actors are involved in the Supply Chain Strategy development process? Select one for each statement.

	Ultimately accountable (individual or in team)	Responsible for action	Consulted (prior to decision/actions)	Informed (after decision, during actions)	No role	Not applicable
Suppliers	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Customers	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Logistics service providers	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Consultants	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Academics	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Non governmental organisations - NGO (e.g. Fairtrade, Greenpeace)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Governmental and statutory bodies	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Regulatory bodies	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Venture capitalists	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Shareholder investors	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Credit suppliers (e.g. financial institutions)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Other 1 (please specify in question n. 32)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Other 2 (please specify in question n. 33)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

32. If you selected "Other 1" in question n.31, please specify.

33. If you selected "Other 2" in question n.31, please specify.

34. Who is the responsible for signing off the Strategy approval?

Business unit board

Parent company board

Other, please specify

## Supply Chain Strategy Implementation

In this section the Respondent is asked to describe how the implementation of the Supply Chain Strategy is approached.

35. To what extent is risk management an integral part of the implementation process?

- 1 Not at all
- 2
- 3
- 4
- 5 Fully

36. To what extent are results and strategic benefits managed and tracked?

- 1 Nothing beyond the business case approval
- 2
- 3
- 4
- 5 Continual tracking of cost and benefits

37. To what extent is your strategy adapted during the implementation?

- 1 Implemented as the initial plan
- 2
- 3
- 4
- 5 Continual review and adjustment of strategy

38. In your experience, to what extent are the following enablers to successful Supply Chain Strategy implementation? Select one for each statement.

	Very Irrelevant	Irrelevant	Neutral	Relevant	Very Relevant
CEO support	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Board support	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
IT Solution	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Other 1 (please specify in question n. 39)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Other 2 (please specify in question n. 40)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

39. If you selected "Other 1" in question n.38, please specify.

40. If you selected "Other 2" in question n.38, please specify.

41. What is your typical experience of implementing a major strategic change in Supply Chain in your business unit?

- 1 Met resistance and abandoned change/plans
- 2
- 3
- 4
- 5 Smooth implementation on time and budget

42. In your experience what are the major barriers to a successful strategy implementation? Select one for each statement.

	Very Irrelevant	Irrelevant	Neutral	Relevant	Very Relevant
Lack of appropriate IT Systems	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Lack of IT skills	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Lack of information along the supply chain	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Company culture	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Inertia and lack of urgency	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Management skills not adequate	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Inappropriate performance and reward mechanisms	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Fear of change	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
CEO lack of support	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Senior management lack of leadership and support	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Change overload	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Lack of clear goals	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Lack of KPIs and tracking	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Lack of resources (people, skills, investment)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Over-ambitious timelines	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

**Too many conflicting priorities/persistence**

**Other 1 (Please specify in question n.43)**

**43. If you choose "Other 1" in question n.42, please specify.**

**44. How is the success of your Supply Chain Strategy implementation measured?**

## Appendix 2 The semi-structured interview



## **SUPPLY CHAIN STRATEGY IN THE BOARDROOM – SELECTIVE INTERVIEWS**

Interviewer name \_\_\_\_\_

Interviewee

- Name \_\_\_\_\_
- Job title \_\_\_\_\_
- Company \_\_\_\_\_

Date \_\_\_\_\_ Location \_\_\_\_\_

Telephone / Face to face (delete as applicable)

We have had an excellent and comprehensive response to the detailed questionnaire, and thank you if you personally contributed to the project. We are undertaking a number of concise interviews in order to further explore some of the early issues emerging from these results.

### ***Opening questions***

1. Please give a brief overview of:
  - a. your Supply Chain responsibilities and reporting line
  - b. the scope of the Supply Chain in your company
  - c. to what extent Operations, Purchasing and Supply Chain are independent

### ***General questions***

2. What do you mean in your organisation by Supply Chain strategy? How is it developed (who does what)? How is the Board Room involved?
3. Which do you think fits closer to reality in your business or in other businesses that you have experience of:-
  - a. "Supply chain strategy is really Supply Chain Tactical Planning in practice, being narrow in scope, not cross-functional, and not long term enough."
  - b. "Supply chain strategy is truly strategic and becoming a continuous process, with regular monitoring and continuous adaptation according to circumstances"

### ***Drivers and geographic extent of the Supply Chain Strategy***

4. How do you coordinate Supply Chain strategy at Global, Regional and National levels? (if applicable)
5. What coordination is there between Business Unit strategy, sales strategy, production strategy and Supply Chain strategy? How is this coordination achieved in practice?
6. The survey investigated the main drivers of Supply Chain strategy. What in reality are the **key** drivers for your business?

### ***Supply Chain Development Process***

7. What instigates a Supply Chain Strategy exercise in your business? (triggers, catalysts)
8. How frequently does your Supply Chain strategy get reviewed and what is the planning horizon?
9. What is the Supply Chain strategy development process in your business and is there scope for improvement?

### ***Board Room, internal and external functions involvement in developing Supply Chain strategy***

10. Can you explain how you get the CEO and other functions within the business involved in Supply Chain Strategy development?
11. To what extent are external players involved in SC Strategy development?
12. If the supply chain strategy was adapted during the implementation, was this because:
  - a) There were problems with the engagement and agreement of stakeholders?
  - b) There were problems with the analysis?
  - c) The situation changed significantly? (e.g. recession, M&A, business profile)
  - d) The strategy is under constant review to adapt to changing circumstances?
  - e) Any other reasons (please describe)

### ***Supply Chain Strategy Implementation***

13. Can you describe the main barriers and constraints to strategy implementation in your business?
14. How do you determine whether your Supply Chain Strategy review and implementation has been successful?
15. Are there any other significant issues that we should consider?
16. Are there any valuable quotations or sound-bites relating to this discussion? Are any of these attributable?

# Appendix 3 - Detailed Methodology

Exploratory quantitative surveys as well as qualitative interviews with senior level supply chain management professionals were used as the primary methods of data collection.

The existing academic literature on supply chain strategy is based on wide-ranging perspectives, that cover the traditional aspects of supply chain and logistics separately and often lacks on a holistic and comprehensive approach to supply chain. This research gap can be seen in the published literature. It can be seen that the majority of the research has focussed on individuals who it could be argued are not ultimately responsible for strategy development and implementation. The research was carried out in two main steps.

- *Survey*

The web based questionnaire design was informed by the existing literature and the extensive experience of the research team, made up of two academics and four senior practitioners. Since the development and implementation of supply chain strategy has not been covered in any depth within the existing literature, the practitioners' experience was needed to shape the questionnaire to the target population. The first draft of the questionnaire was submitted to 5 senior practitioner experts for review and through reiterative approach the pilot questionnaire were further refined. The final questionnaire covered the areas of:

- Company profile;
- Supply chain strategy drivers and geographical extent;
- Supply chain development process and the actors involved;
- Supply chain strategy implementation.

The survey was promoted through a number of Supply chain related organisation, which forwarded the web link to their members, and also through individual mailing lists from the research team's professional networks. A total of 181 completed questionnaires were received, while 543 people in total clicked the link without completing the questionnaire. The web link was sent the first time in July, and a recall has been launched in August. The low number of responses can be related to several factors: the time of the launch and the opening of the questionnaire (summer time); the length of the questionnaire – it was declared in the overall description that the time needed was around 30 minutes; then, the seniority of the affiliated is very high, as the result will show. The response rate is not calculated for the nature of the method chosen, which is exploratory by definition.

# Appendix 3 - Detailed Methodology

The 181 respondents represented senior executives in the supply chain – 47% were the highest decision makers for supply chain in their organisations. Respondents provided good coverage of global geography, company size, industry sectors and players along the value chain.

The data collected have been analysed using SPSS.17 (SPSS Inc.) to compute the descriptive statistics and the correlation using the Spearman's Rho test, which is non-parametrical and allow showing monotonic associations to be further investigated. The results were discussed among the research team and the key practitioners involved in the pilot-testing phase. Starting from the results defined, the interview protocol for the following phase was developed.

- *Interviews*

The survey results offer a broad overview of major dimensions describing how Supply Chain strategy is developed and implemented, and how the Board Room is involved in these processes. The authors expected to have an overall representation of how the things are done, but they wanted to give the research more understanding and depth through a series of 24 one-on-one interviews with high senior managers in the Supply Chain function or division of their companies. As mentioned, the topic is at its infancy in the literature and it needed a diverse approach in order to capture insights able to enrich and enlighten the results obtained by the survey responses. Some of the interviewees are working in multinational leading companies in the fast moving consumer goods, toys, electronic and automotive sectors, while others gave more national insights in the Food & Beverage, chemicals and retail and distribution sectors, among the others.

The interviews notes were all transcribed and anonymised, and the research team held a workshop to analyse the key themes. The interim findings were circulated to a number of senior practitioners to identify themes for the classification of results.

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