



***Conceptualising, Defining and
Remodelling Supply Chain Management:
An Objective-Oriented Approach***

Col. Hussain K. Alkebaisi



Outline

- Preface
- Research Idea and Objective
- Barriers & Opportunities (The Fundamental Issues of SCM)
- Research Gap
- Research Outcomes:
 - SCM conceptual Model
 - SCM Definition
 - SCM Framework



Preface

- Historically, Supply Chain Management (SCM) was firstly presented in the early 1980's by Oliver and Webber.
- The concept has become one of the planning and management tool of supply operations to achieve a competitive market advantage
- The knowledge of SCM has evolved, and many frameworks have been introduced.
- Now SCM is very popular and globally practised due to the rapid and quality-based competitive global market which enforced the business enterprises to invest and focus on their supply chains.



Research Idea and Objective

Idea: *To develop a Continuous Improvement Framework in Supply Chain Management (SCM).*

Objective: *Enhance SCM Practice and Research*

Motive: *Continuous Improvement toward better Sustainable Economic Development (Bahrain Vision 2030, United Nation Sustainable Development Program)*



The Fundamental Issues of SCM (The Barriers/Opportunities)

- SCM Definition: A call for consensus on a unified definition and meaning.
- SCM Concept: confusion, different perspectives.
- SCM Conceptual/Theoretical Model: a call for developing a Conceptual Model (SCM Theory).
- SCM Frameworks: many shortcomings, a call for Remodelling.
- SCM Discipline: unclear boundaries and overlapping with other disciplines.
- SCM Research methods: a call for implementing Grounded theory Research Method to theorise/ conceptualise SCM.



SCM Definition Issue (a Call for Consensus)

“There is a confusion in the meaning of supply chain management despite its popularity academically and in practice.”

“Research and practice would be improved if a single definition were adopted”

(Mentzer et al., 2001)

“A consensus definition of SCM should provide clarity regarding what SCM is and what it is not.”

“A clear definition of SCM is imperative for understanding the concept and applying SCM in practice and research.”

“SCM definition research efforts must continue.”

(Gibson, Mentzer and Cook, 2005)



SCM Definition Issue...

“A more fundamental concern is the failure to develop clear and consistent definitions and terminology for SCM.”

“Many practitioners and academics define supply chain terms differently, and they are still trying to sort out how SCM differs from logistics”

(Moberg et al., 2008)

“Every new book about logistics, it seems, contains another definition of SCM.”

(Enarsson, 2009)



SCM Definition Issue...

173 unique definitions of SCM were published in the period between 1994 and 2008.

“Without the adoption of a uniform definition accepted by researchers, confusion will continue to hinder the study and further development of SCM; and research will extend in various directions, rather than build upon itself.”

“A consensus definition of SCM is of significant importance in the advancement of SCM theory and practice.”

(Stock and Boyer, 2009)



SCM Definition...Examples

“Supply Chain Management encompasses the planning and management of all activities involved in sourcing and procurement, conversion, and all logistics management activities.

Importantly, it also includes coordination and collaboration with channel partners, which can be suppliers, intermediaries, third party service providers, and customers.

In essence, supply chain management integrates supply and demand management within and across companies.”

(Council of Supply Chain Management Professionals (CSCMP),2018)



SCM Definition...Examples

“Supply Chain Management is the management of relationships in the network of organizations, from end customers through original suppliers, using key cross-functional business processes to create value for customers and other stakeholders.”

Global Supply Chain Forum (GSCF), 2014



SCM Definition...Examples

“The definition of supply chain management that is adopted in this book is:

“The management of upstream and downstream relationships with suppliers and customers in order to deliver superior customer value at less cost to the supply chain as a whole”

(Christopher, 2016)



SCM Definition...Examples

“The systemic, strategic coordination of the traditional business functions and the tactics across these business functions within a particular company and across businesses within the supply chain, for the purposes of improving the long-term performance of the individual companies and the supply chain as a whole”

(Mentzer et al., 2001)



SCM Concept Issue

“There is confusion between SCM and logistics; SCM and logistics are occasionally seen as synonyms.”

(Simchi-Levi, Simchi-Levi and Kaminsky, 2007)

SCM concept is frequently seen as “a synonym for logistics”, “operations management, procurement, or a combination of the three.”

(Lambert et al., 2001)

“Practitioners and educators have variously addressed the concept of supply chain management (SCM) as an extension of logistics”

(Cooper et al., 1997)



SCM Concept Issue...

“It must be recognised that the concept of the supply chain management, whilst relatively new, is, in fact, no more than an extension of the logic of logistics.”

(Christopher, 2016)

“Many practitioners and academics define supply chain terms differently, and they are still trying to sort out how SCM differs from logistics.”

(Moberg et al., 2008)

“Sixteen years have gone by since the 2000 SCM article (Issues in SCM) there is still not a consensus view of what SCM involves or how it should be implemented.”

(Lambert and Enz, 2017, *Issues in SCM: Progress and Potential*)



SCM Concept Issue...

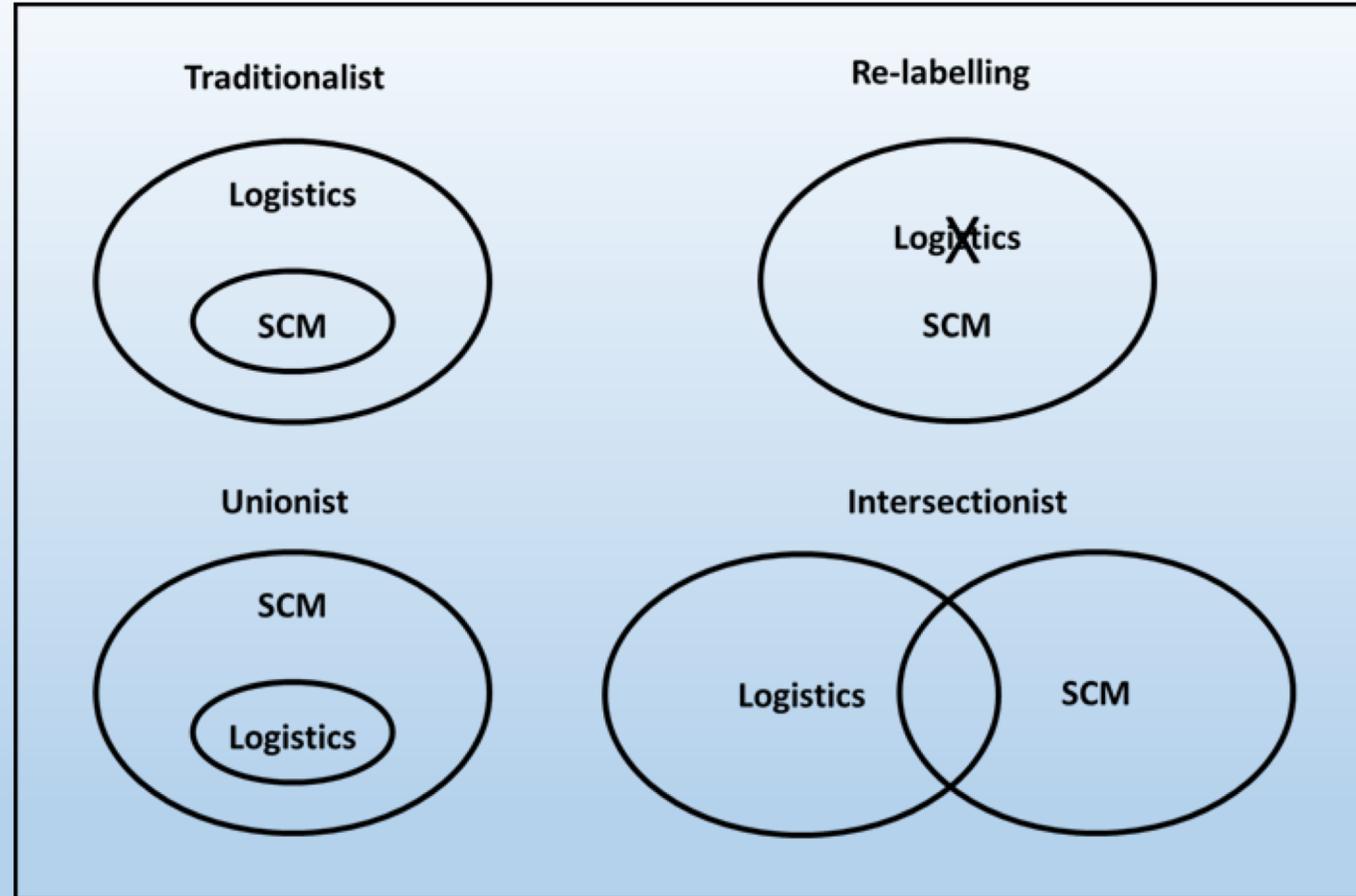
(The 4 Perspectives of the Relationship between Logistics and SCM)

Traditionalist

SCM is one small part of logistics

Unionist

SCM subsumes logistics as well as marketing, purchasing and Operations management



Re-labelling

what was logistics is now SCM

Intersectionist

SCM includes strategic, integrative elements from all disciplines (multidisciplinary Concept)

Perspectives on Logistics versus Supply Chain Management

Source: (Larson and Halldorsson, 2004)

International Survey Study

200 Academics, Practitioners and Consultants



SCM Conceptual Model Issue

“A top priority should be research to develop a normative model that can guide managers in their efforts to develop and manage their supply chains.”

(Lambert and Cooper, 2000)

“The research centre members continue to be focused on the original goal “to develop a normative model that””

(Lambert and Enz, 2017)

Note: Douglas M. Lambert is the current Director of the Global Supply Chain Forum (GSCF)



SCM Theory Issue

“Theory defines a scientific discipline, yet the supply chain management discipline has largely failed to develop its own theoretical bases.”

(Carter, 2011)

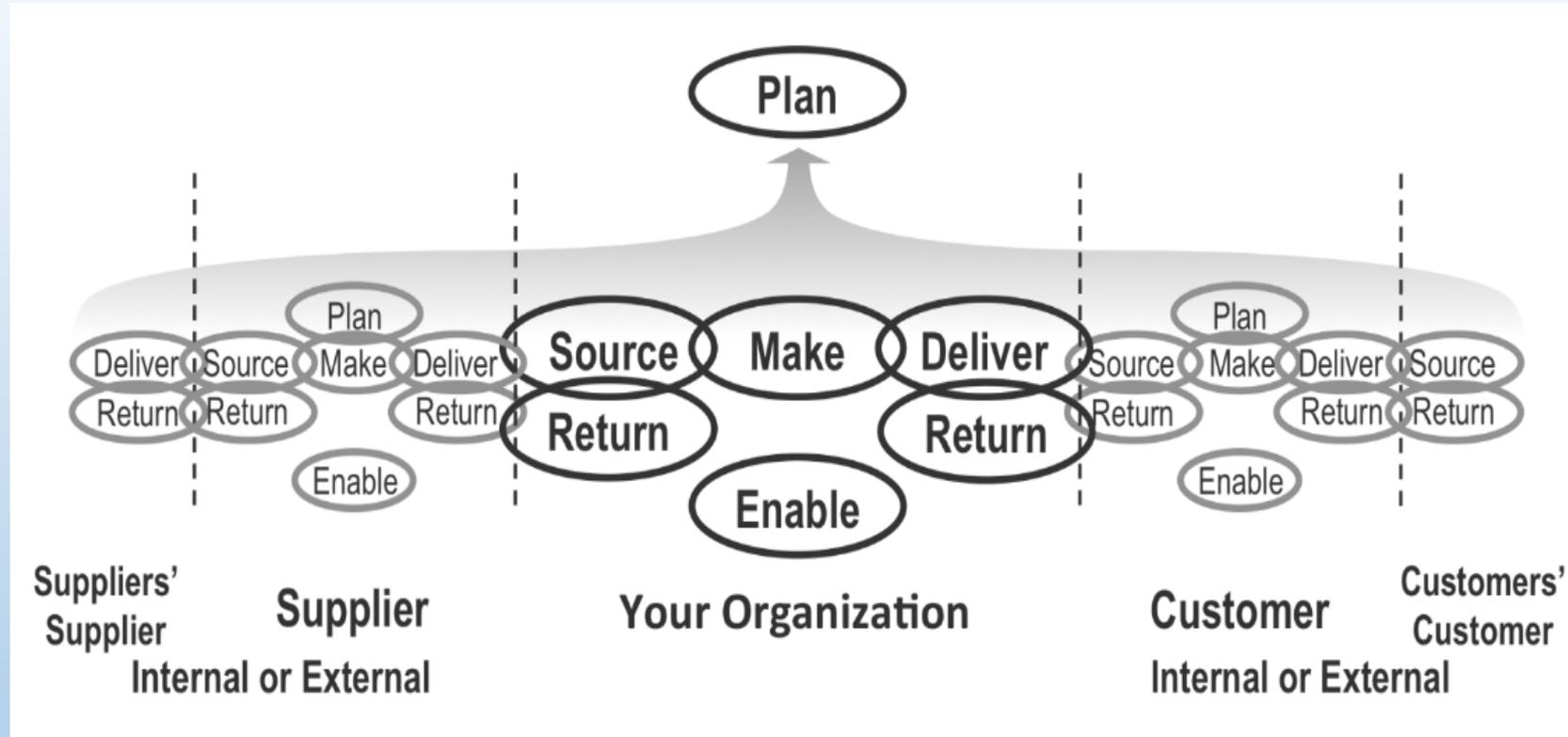
“How does one develop a definition without implying something about an underlying theory?”

(LeMay et al., 2017)

SCM Frameworks

Supply Chain Operations Reference (SCOR) (Process-Oriented)

“Supply chain management encompasses the planning and management of all activities involved in sourcing and procurement, conversion, and all logistics management activities.”
(CSCMP)

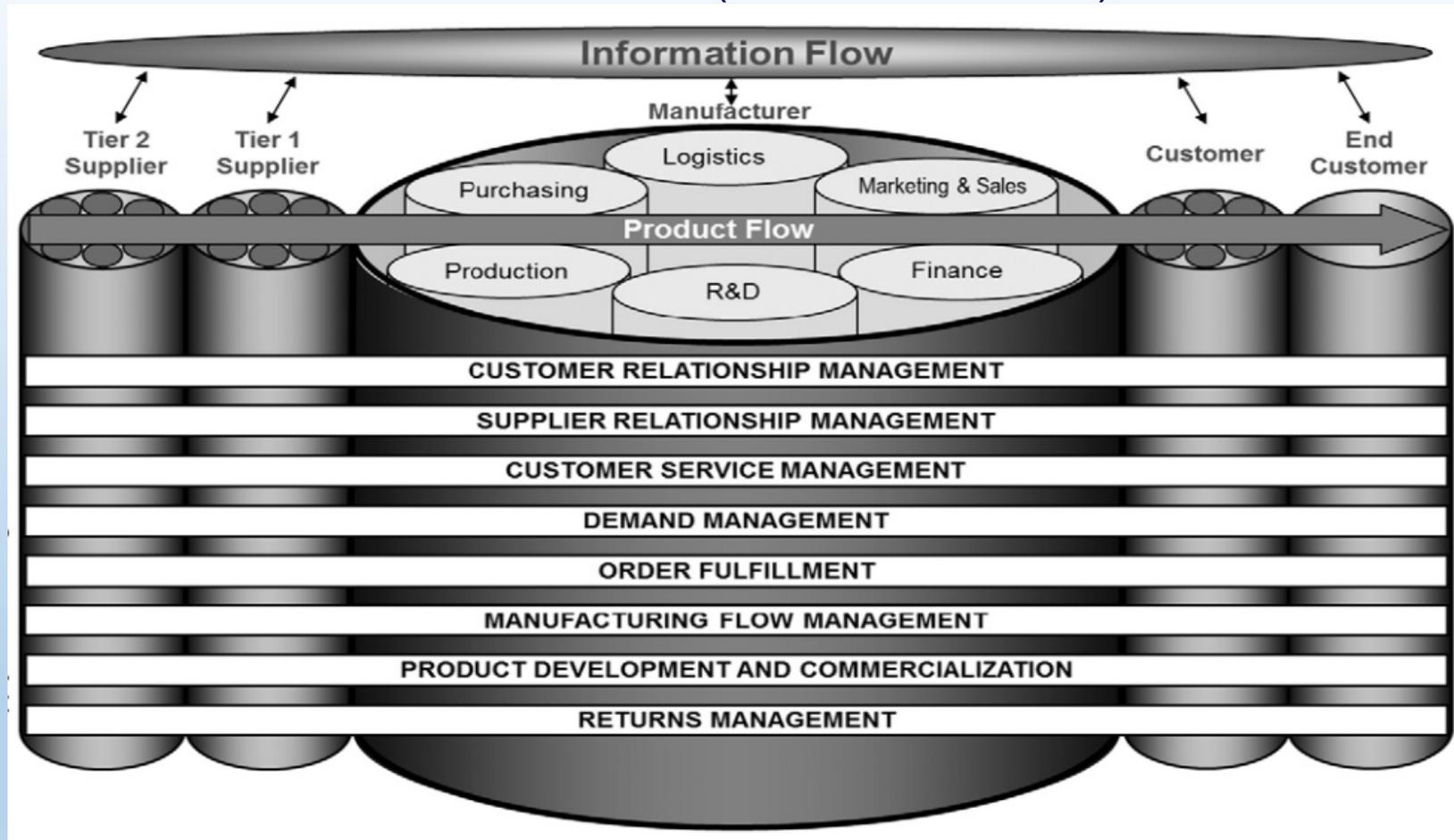


Source: (Supply Chain Council, 2012)

The framework aim to Standardise Supply chain operations:
Processes – Job Description – Training – Performance Metrics

SCM Frameworks...

The GSCF Framework (Process-Oriented)



Source: (Lambert and Enz, 2017)

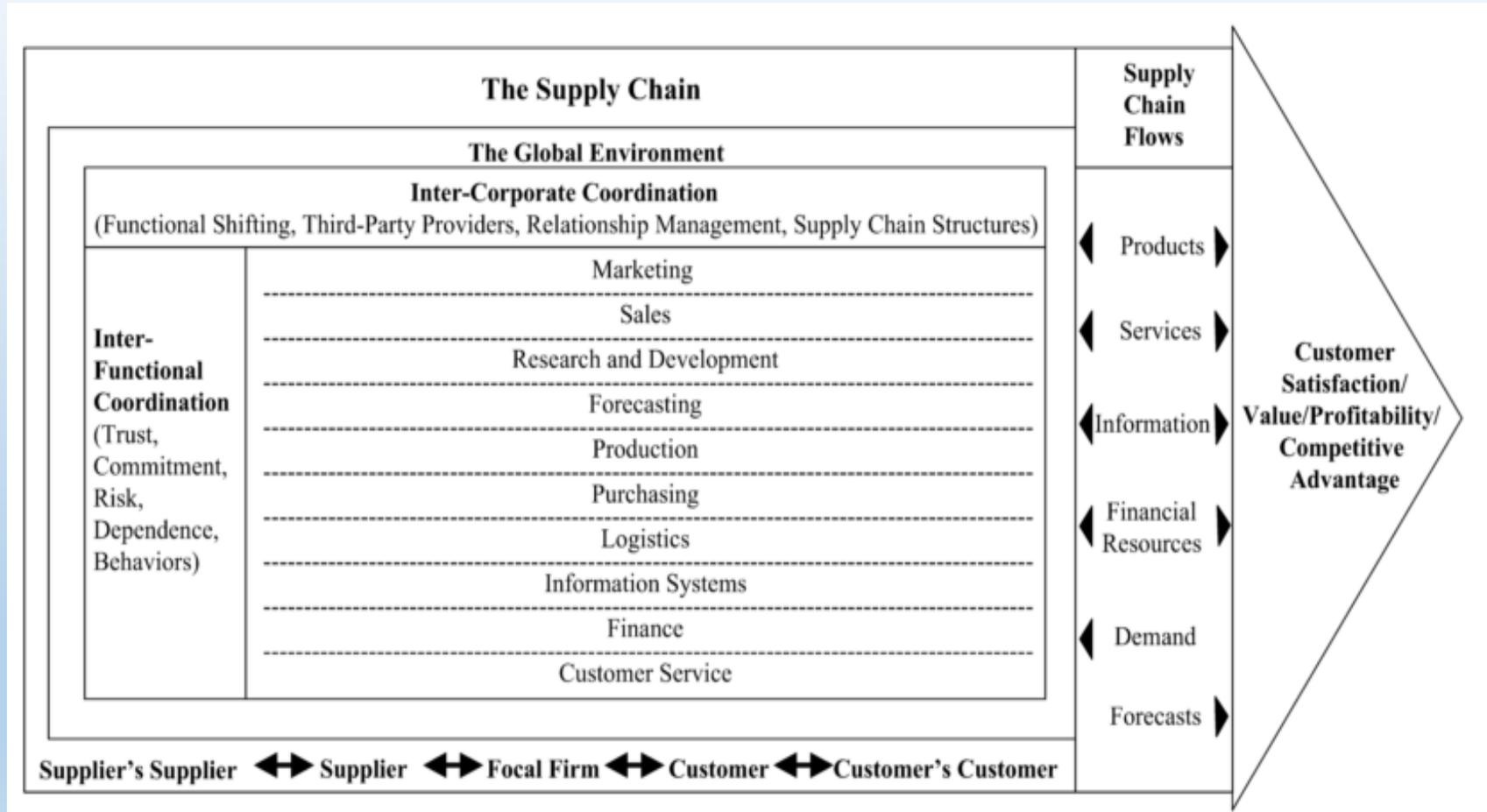
“Supply Chain Management is the management of relationships in the network of organizations, from end customers through original suppliers, using key cross-functional business processes to create value for customers and other stakeholders.”



SCM Frameworks...

Mentzer et al., 2001 Framework (Business Function-Oriented)

“The systemic, strategic coordination of the traditional business functions and the tactics across these business functions within a particular company and across businesses within the supply chain, for the purposes of improving the long-term performance of the individual companies and the supply chain as a whole”





SCM Frameworks Issue

“It is startling there are only two cross-functional, cross-firm, process-based frameworks that can be, and have been, implemented in major corporations.”

(Lambert and Enz, 2017)

There is a *“gap between SCM theory and actual practice”* which calls for the need to develop an effective, *“single, unifying SCM framework that both incorporates the best aspects of the existing, widely used frameworks and addresses their current limitations.”*

The *“frameworks are not broad enough in scope to capture the systematic, process-oriented, boundary-spanning, and strategic nature of SCM”*

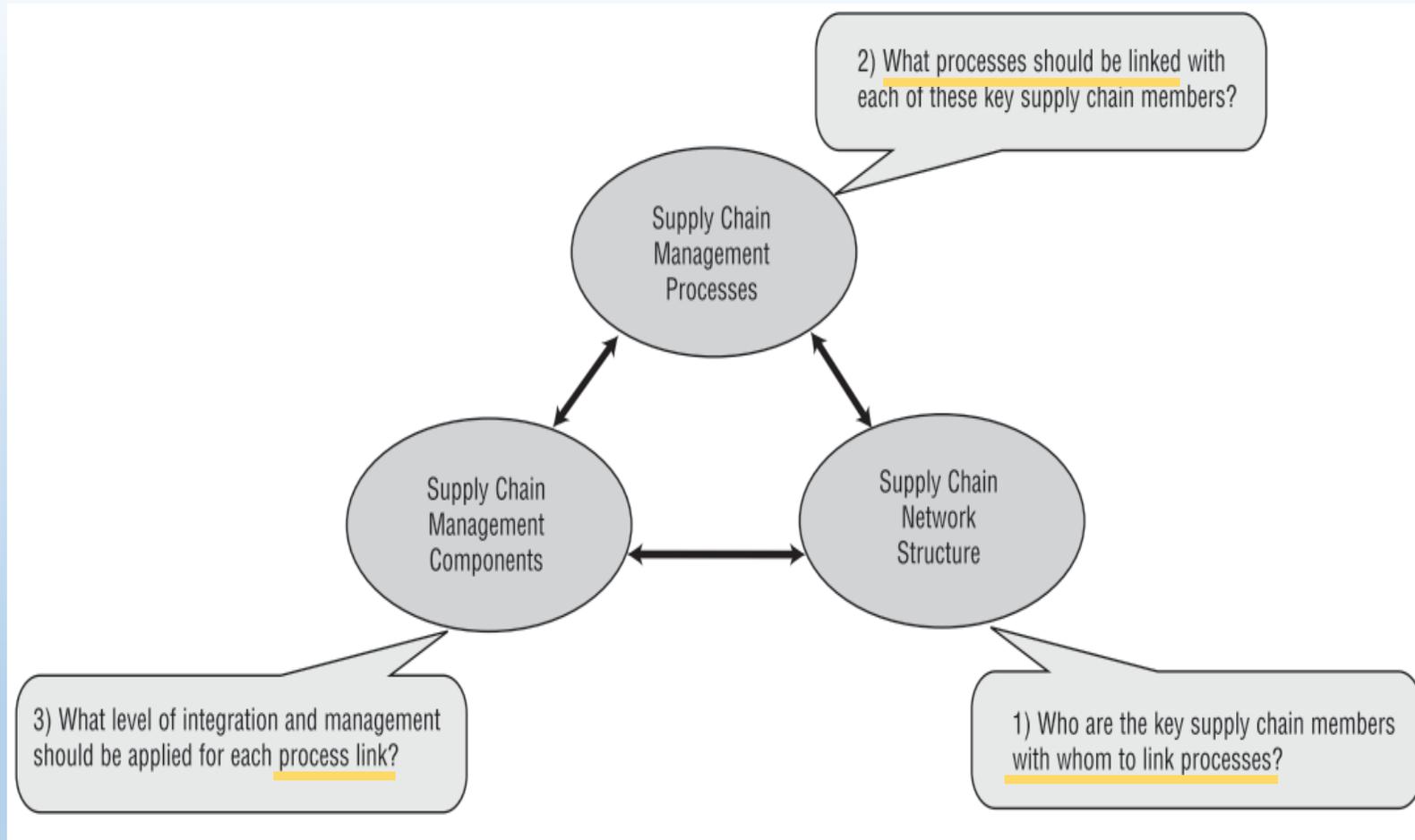
(Moberg et al., 2008)



Researcher's Findings (the Gap)

- There is no evidence in the literature that an Objective-Oriented approach has been investigated in Conceptualising, Defining, or Modelling SCM.
- SCM objectives where not adequately and profoundly discussed.
- Using Grounded theory has been recommended in SCM theory research.

Researcher's Findings...



Lambert and Cooper, 1998



Researcher's Findings...

- The understanding of SCM “*is still limited, largely due to inadequate attention being placed to theory building.*”
- There is “*Weaknesses in the conceptualization, operationalization , and modelling of SCM”*
- “A greater advance in theory development is possible if researchers adopt a process-based view of SCM.”

(Ho, Au and Newton, 2002)



Researcher's Findings...

“Process management is, in many ways, mentioned as a prerequisite for supply chain management.”

It is not a surprise that SCM lacks “*performance measurement system*” due to the difficulty faced by *organisations to develop process-based performance measurement systems*

(Naslund and Williamson, 2010)

With “*such process-oriented businesses*”, “*there is a stronger emphasis on teams and on process improvement..*”

(Christopher, 2011)



Pivoting the Research Project

- A call for SCM Conceptual Model, a unified definition (a unified understanding and perspective) and a framework (remodelling).
- No Objective-Oriented approach was conceived to this end.
- Implementing Grounded Theory research Method.



SCM Objectives

Objectives of SCM

Houlihan and Jones and Riley [34] stated that the objective of SCM is to “lower the total amount of resources required to provide the necessary level of customer service to a specific segment”. Other writers have indicated objectives supportive of this overall goal [35], including synchronizing the requirements of the customer with the flow of materials from suppliers [36], reducing inventory investment in the chain, increasing customer service, building competitive advantage for the supply chain [37], and value [38].

Toward an Integrated Supply Chain

After examining the motives and reasons for forming or joining an integrated supply chain, the company must address how to establish and manage the supply chain. A four-stage model was presented by

Cooper and Lambert, 1997

Consequences of SCM

- *“Increase supply chain competitive advantage.”*
- *“Establish a profitable and sustainable position.”*
- *“A key objective of SCM is to lower the costs.”*
- *“SCM is concerned with improving both efficiency and effectiveness in a strategic context (creating customer value and satisfaction through integrated supply chain management) to obtain competitive advantage that ultimately brings profitability.”*
- *Consequences of SCM are lower costs and improved customer value and satisfaction to achieve competitive advantage*

Mentzer et al., 2001



SCM Objectives...

- “A central theme of this book is that effective logistics and supply chain management can provide a major source of competitive advantage.” p.4
- “ ..deliver superior customer value at less cost to the supply chain as a whole.” p.3
- “The attainment of service excellence ... can only be achieved through a closely integrated logistics strategy.” p.22
- “Managing the 4Rs principles: Responsiveness, Reliability, Resilience & Relationships.” p.23
- The challenge is to find a way to break .. to re-shape the organisation around the key value-creating and value-delivery processes” p.164

(Christopher, 2011)



SCM Objectives...

The primary objectives of SCM are:

“To meet or exceed the required or demanded customer service levels in targeted markets/segments.”

“To optimise total supply chain cost and investment.”

(Sweeney, Grant and Mangan, 2015)

The SCOR model is established around five performance attributes:

Reliability, Responsiveness, Agility, Cost, and Assets management Efficiency.

(Supply Chain Council, 2012)



SCM Objectives...

Supply Chain Management encompasses the planning and management of all activities involved in sourcing and procurement, conversion, and all logistics management activities.

Importantly, it also includes coordination and collaboration with channel partners, which can be suppliers, intermediaries, third party service providers, and customers.

In essence, supply chain management integrates supply and demand management within and across companies.

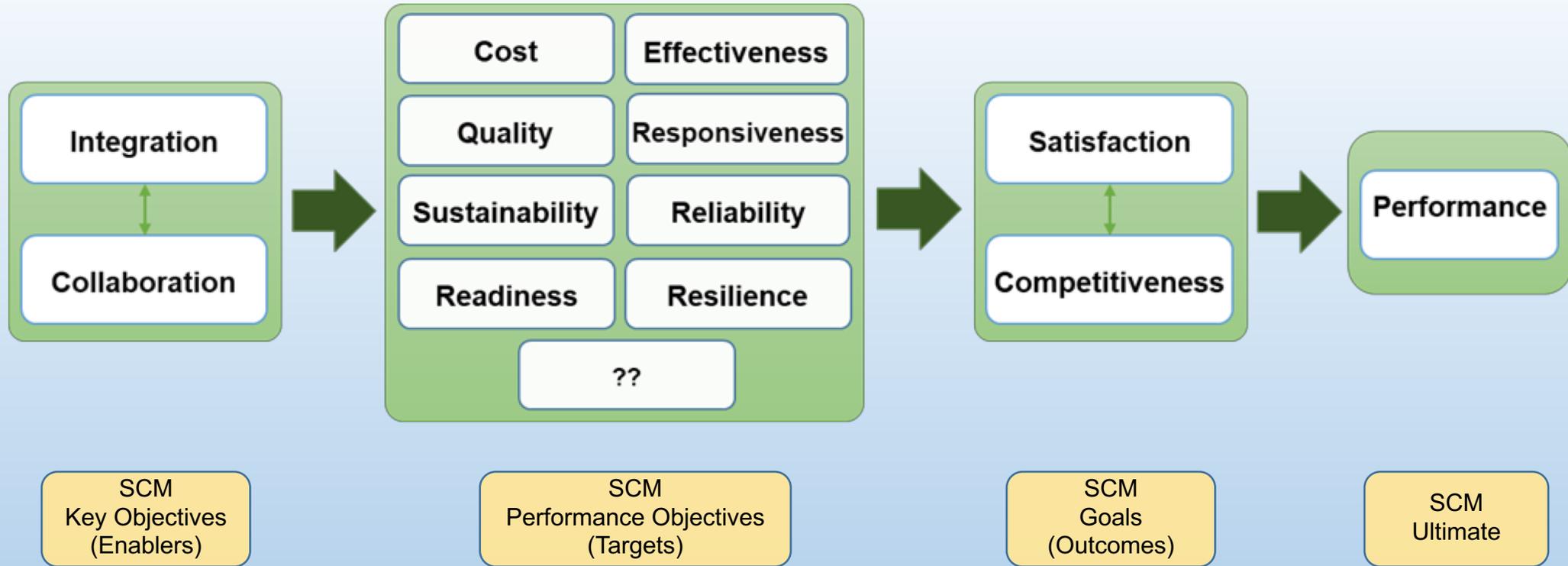
(CSCMP, 2012)



SCM Objectives...

Competitiveness	Integration	Agility	Responsiveness	Quality
Efficiency	Resilience	Reliability	Collaboration	Performance
Cost	Flexibility	Readiness	Speed	Profitability
Effectiveness	Sustainability	Dependability	Velocity	Value Creation
Satisfaction	Coordination	Variability	Visibility	Variety
Commitment	Trust	Relationships	Synchronisation	???

The Conceptual Model of SCM (Unified Theory)



‘Organisations Achieve Better Performance Through Collaborative and Integrative Business Relationships.’



The Proposed definition of SCM (Draft)

'Supply Chain Management is the Knowledge/ Planning of Providing Products or Services through Integrative and Collaborative Business Relationships to Satisfy the Customers and all Stakeholders and Achieving Competitive Advantages.'



The definition of SCM (Comparison)

ISCEE

'Supply Chain Management is the Knowledge/ Planning of Providing Product or Service through Integrative and Collaborative Business Relationships to Satisfy the Customers and all Stakeholders and Achieving Competitive Advantages.

CSCMP

Supply chain management encompasses the planning and management of all activities involved in sourcing and procurement, conversion, and all logistics management activities. Importantly, it also includes coordination and collaboration with channel partners, which can be suppliers, intermediaries, third party service providers, and customers. In essence, supply chain management integrates supply and demand management within and across companies



The definition of SCM (Comparison)

ISCEE

‘Supply Chain Management is the Knowledge/ Planning of Providing Product or Service through Integrative and Collaborative Business Relationships to Satisfy the Customers and all Stakeholders and Achieving Competitive Advantages.

GSCF

“Supply Chain Management is the management of relationships in the network of organizations, from end customers through original suppliers, using key cross-functional business processes to create value for customers and other stakeholders.”



The definition of SCM (Comparison)

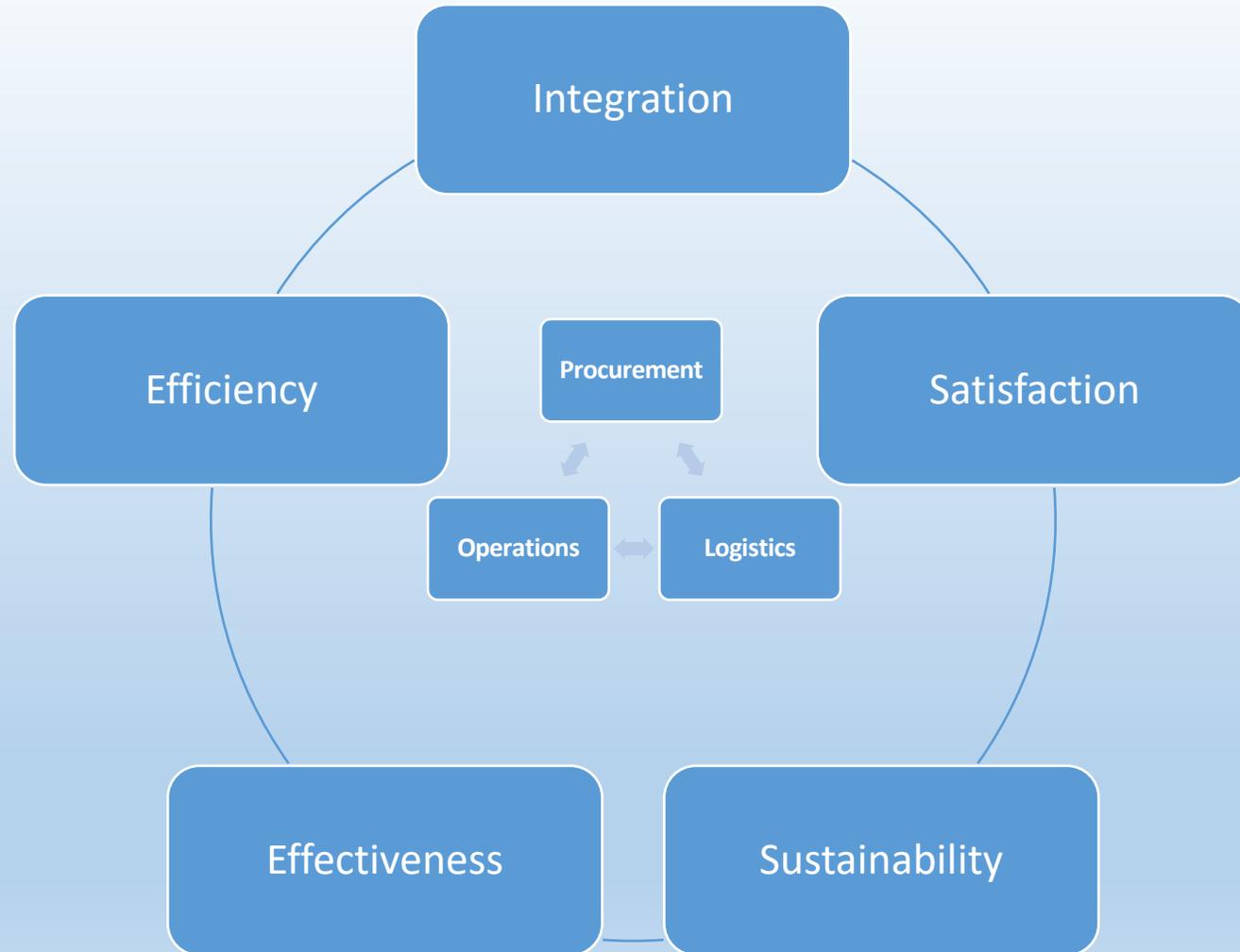
ISCEE

‘Supply Chain Management is the Knowledge/ Planning of Providing Product or Service through Integrative and Collaborative Business Relationships to Satisfy the Customers and all Stakeholders and Achieving Competitive Advantages.

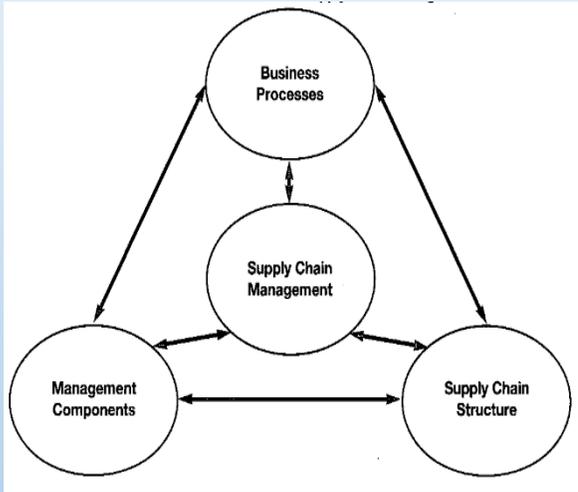
Christopher, 2016

“The management of upstream and downstream relationships with suppliers and customers in order to deliver superior customer value at less cost to the supply chain as a whole.”

The Initial Proposed SCM Framework (ISSEE)

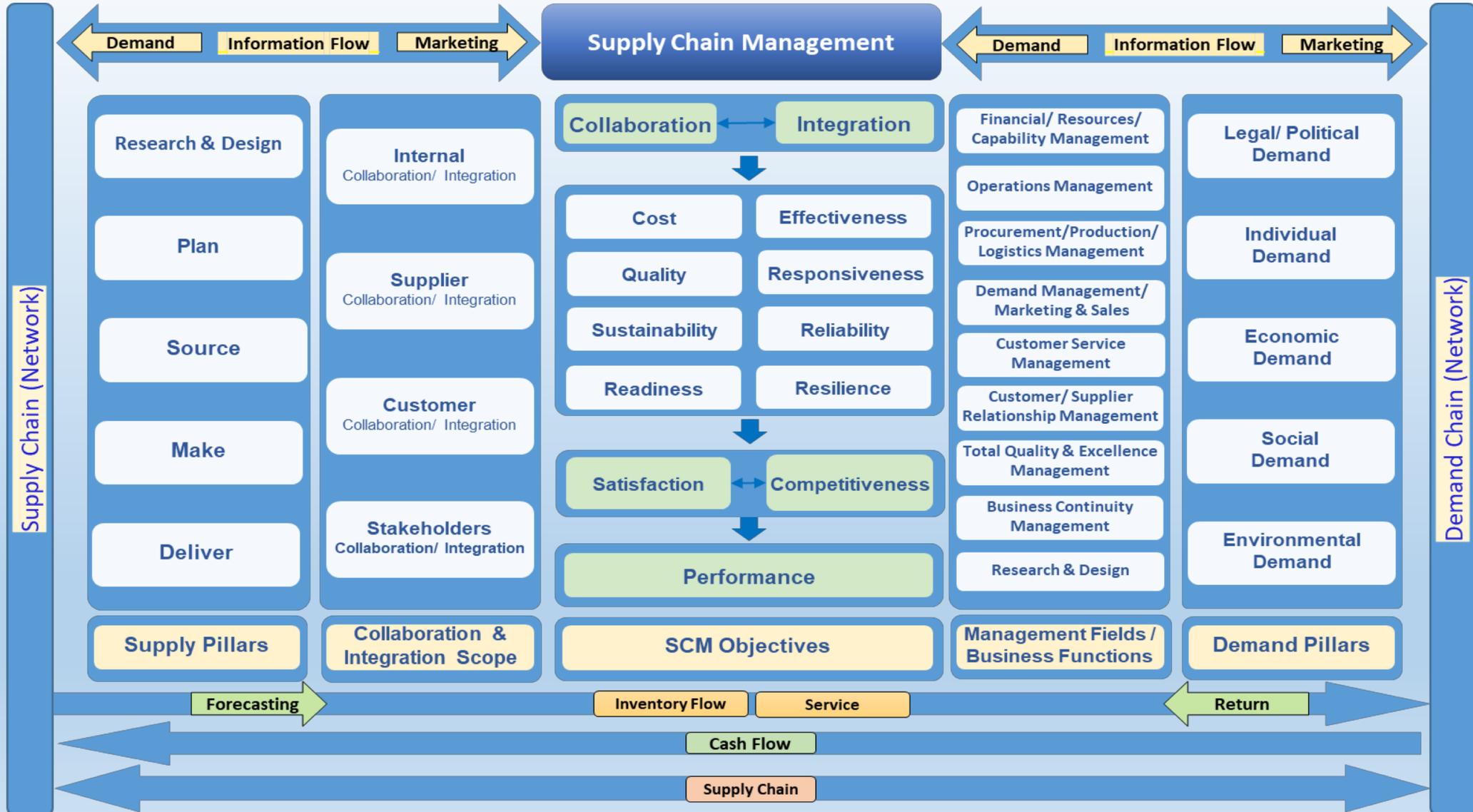


The Proposed SCM Framework Structure





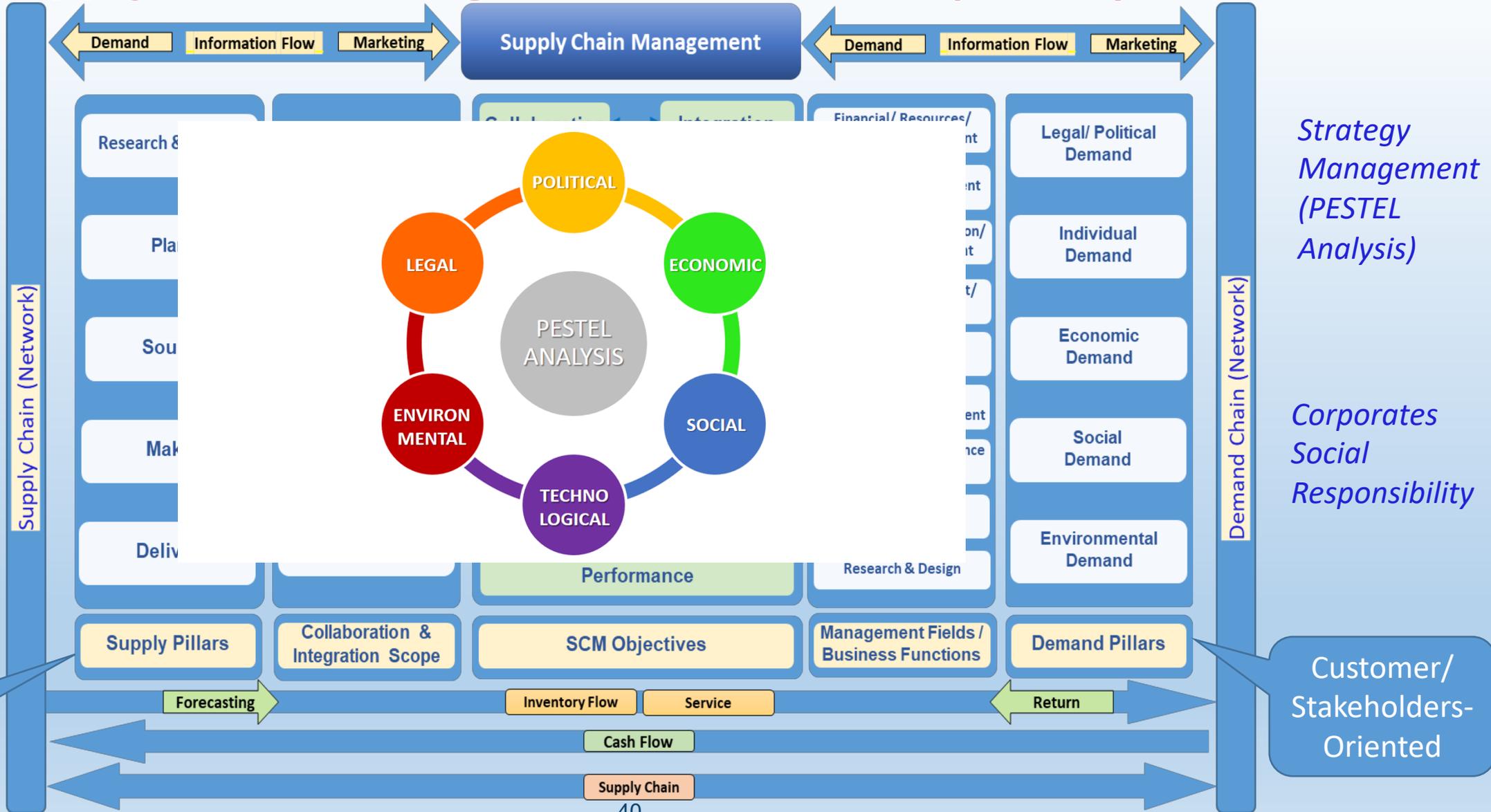
Supply Chain Management Framework (ISCEE)





Supply Chain Management Framework (ISCEE)

In essence, SCM integrates supply and demand management within and across companies."





Criteria of an Effective SCM Framework

- “Support a standard definition of SCM”;
- “Establish a common language that allows supply chain professionals to communicate.”
- “Support continuous improvement by providing benchmarking data that is aligned to the framework, for the comparison of measured performance with best-practice performance targets.”
- “Provide an end-to-end supply chain model that can be applied to multiple industries.”
- “Allow the development of education programs to further supply chain knowledge.”
- “Allow the supply chain profession to expand the awareness of the significance of supply chains to businesses and to the economy.”

(Moberg et al., 2008)



Finally

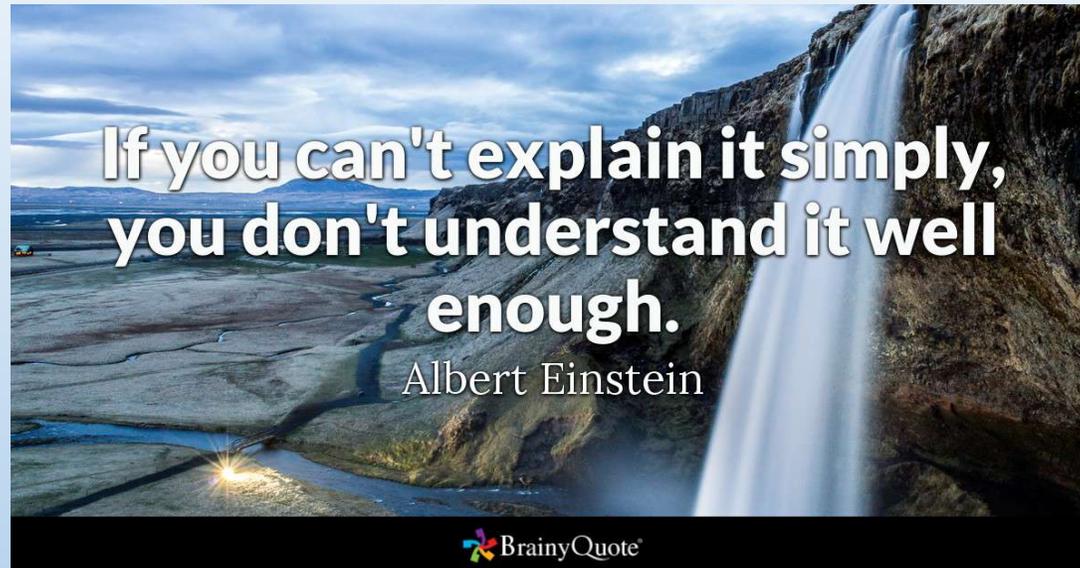
“There will come general recognition of the advantage enjoyed by the pioneering management who have been the first to improve their understanding of the interrelationships between separate company functions and between the company and its markets, its industry, and the national economy.”

(Forrester, 1958)

Though his article is more than forty years old, it appears that Forrester identified key management issues and illustrated the dynamics of factors associated with the phenomenon referred to in contemporary business literature as Supply Chain Management (SCM).

(Mentzer et al., 2001)

So, was the Objective-Oriented Approach viable?



Thank You