



The Professionalization of Supply Chain Management

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The Professionalization of Supply Chain Management

- **The Evolution of Supply Management**

- **A look back**

- Transformations due to changes in the way companies operate

- **Where we are now... a typical Supply Chain**

- Ongoing need to meet the ever changing needs of more complex and interdependent business environments, impact of globalization

- **The Professional Evolution and Changing Profile of a Supply Chain Professional**

- **An evolving discipline**

- not just transportation and logistics anymore

- **What do SCM leaders need to be today?**

- **Professional Associations...What is available today?**

- The path to Supply Chain Mgmt Professional Designation (PCMP)

- **Interesting Facts...Survey of 185 SC Professionals**

- **Summary...An Evolving Discipline**



There is NO one career path forward

A Look Back ... The Evolution of Supply Management

1940

Mechanization to improve labour process of material handling

Improve space (Racking & Warehouse design)

“Unit Load” concept

1950

Unit Load concept extended to transportation

Dev. of IM container together with ships, trains, trucks

Warehousing & Materials Handling Concepts Progress

Prerequisite for SC Globalization

All transactions & records keeping done manually

1960 (The Idea)

Trend in shifting time dependent freight transport to truck from rail

Led need for joint consideration of warehousing, material handling & Freight transportation

“Physical Distribution” label emerged

National Council of Physical Distribution Mgmt formed 1963

1970

Paradigm Shift during 60's & 70s" with **Computers**

Matured Logistic Concepts (JIT shipping & Manufacturing / TQM)

Computerization of data opened Opportunities for innovations in **Logistics Planning**

Warehouse Storage, optimizing inventory, & truck routing

1980 (The Name)

Logistics comes of age in early 80's

Incremental change in logistics, still based on Distr. Models / Collaboration began

Personal computers emerged, Computer technology advanced

Logistic trend was recognition in industry as being very expensive, Important, and complex

1982 - Initiation of SCM name / concept

1988 – Continuous replenishment Practice (P&G) / Wal-Mart

1990 (The Definition)

Technology Revolution

Logistics boom fueled further Emergence of **ERP systems**

Led integration of multiple data Bases that existed in almost all CO's

Globalization of manufacturing & growth in Chinese Manufacturing

Wide spread recognition of term “Supply Chain” / SCM Defined

1995 – Microsoft internet explorer 1.0 released

2000

By 2000, most large companies had installed ERP systems

Improved data availability and accuracy

Globalization accented need for Logistics strategies to deal with Complex networks

2005: Council of Log. Mgmt changed Name to **Council of SCM Professionals**

2007, Educational SCM

2010

Globalization of Supply Chains & Dispersion of supplier networks

Proven managerial approaches to Achieving sustainable profits & growth

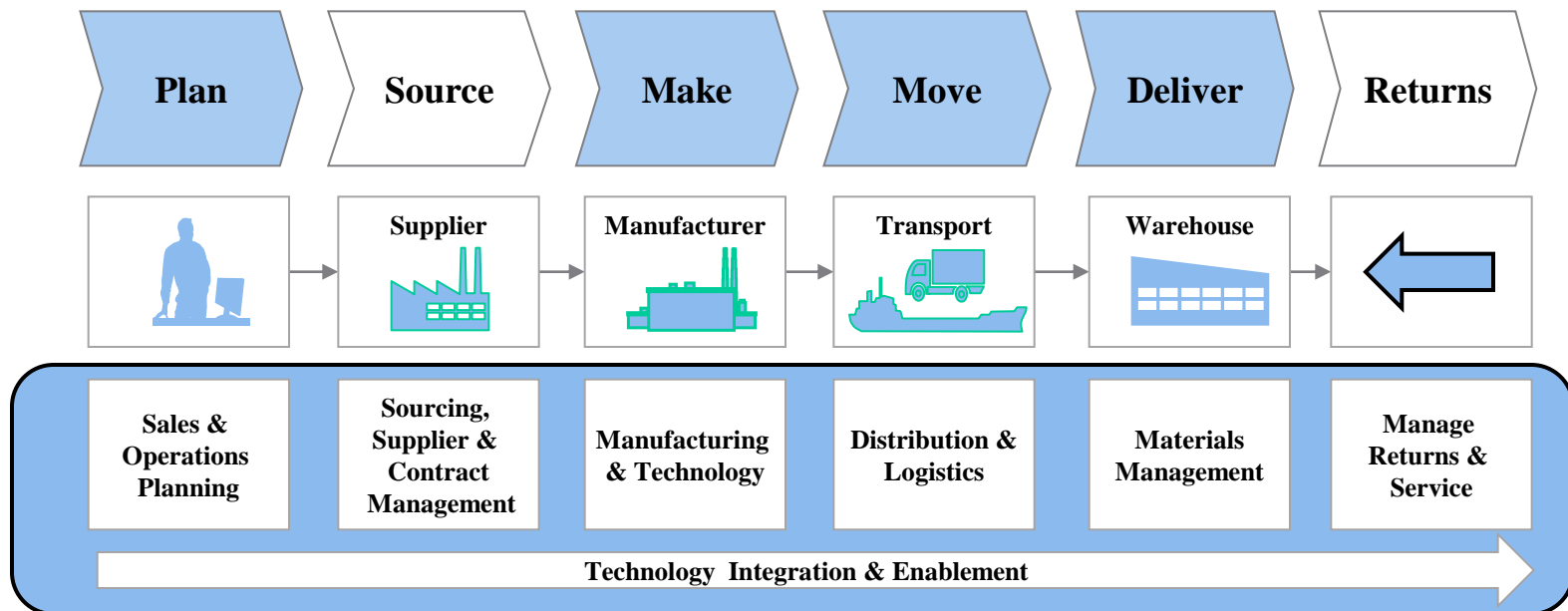
SCM expanded to both suppliers And customers along the chain

Shorter product life cycles (**Proliferation of SKUs**)

Trading partners more complex, Every changing commercial maps

Where we are now...Typical Supply Chain

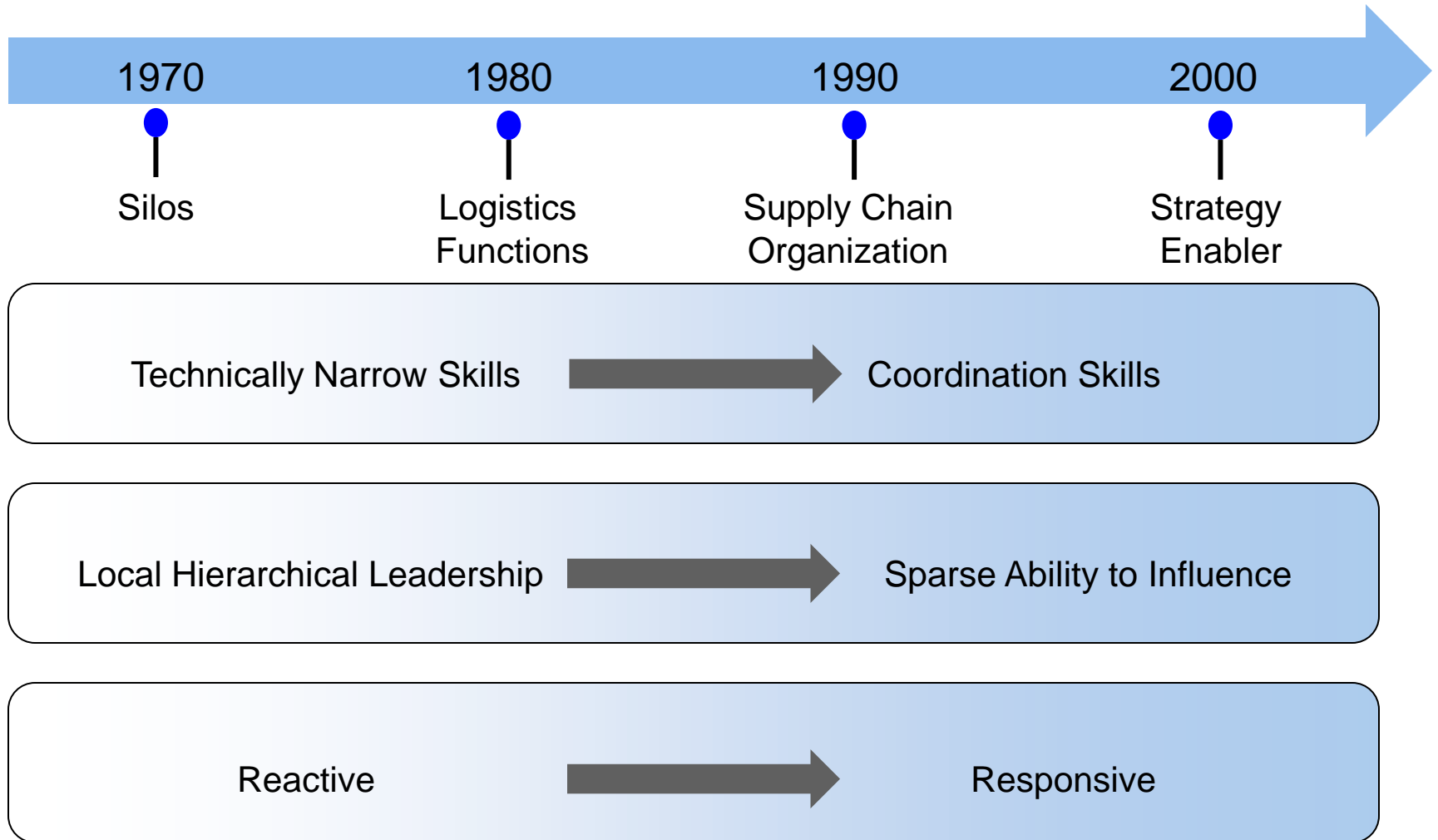
- SCM expanded to include suppliers and customers along the chain
- Ever changing needs of more complex and interdependent business environments, impact of globalization
- Shift from mass production to customized products
- Greater emphasis on integration, organizational and process flexibility
- Move away from functional to strategic enablement
- Metrics greater complexity and span across operations vs. single focus
- Organizations look at their Supply Chains as Value Chains, linking business strategies



The Professional Evolution and Changing Profile of a Supply Chain Professional

- **1980s - Adoption of SCM concepts was slow and incremental**
 - Traditional silo-ed distribution, logistics, and transportation departments started collaborating
- The academic community lagged the industry
- **1990s - many Universities created partnerships to formalize and develop new integrated supply chain management concepts (Consortia at MIT, Stanford, and others)**
 - Academics first describe SCM and differentiate from traditional approaches
- **1996 – the consulting firms of PRTM and AMR Research along with more than 50 manufacturers founded the Supply Chain Council**
 - Developed first set of cross-company metrics and approaches that track information and material flows
 - SCOR framework of PLAN, MAKE, and DELIVER changed the way companies looked at and measured their extended operations
- **2000s – SCM disciplines continued to be widely adopted**
- **2009 – New Professional Designation (SCMP) announced replaces CPP**
- **Today, SCM is considered common practice in North America & Europe and increasing in the rest of the world.**

The Evolving Discipline of SCM



What do SCM Leaders need to be today?

Traditionally: Tactical

- **Communication:**
 - ✓ Functional experts
 - ✓ Technically narrow focus
 - ✓ Low incentive to cross functions
 - ✓ Information Hoarding
- **Technical Competence**
 - ✓ Dominant technology used to be localized & isolated optimization tools
 - ✓ Transportation & warehouse mgmt., production planning, optimization based decisions
 - ✓ Narrow business perspective (SME)
- **Circle of influence**
 - ✓ Local and controlled influence over their function
 - ✓ Hierarchical reporting / direct style management
 - ✓ Leaders = dictatorial
 - ✓ Adversarial

Today: Strategic / People Leader

- **Communication:**
 - ✓ Critical skill = coordination excellence
 - ✓ All decisions impact or are impacted by other aspects of SC
 - ✓ Needs to be open & clear
 - ✓ Multi-lingual / cultural awareness
 - ✓ Information sharing (evolving)
- **Technical Competence**
 - ✓ Focus on visibility and coordination
 - ✓ Connecting Technologies
 - ✓ Flow of data
 - ✓ Experts with specialist knowledge
 - ✓ Broad business perspective
- **Circle of influence**
 - ✓ Reach exceeds SC organization grasp
 - ✓ Internally and within other organizations
 - ✓ Leaders required to influence behavior across the entire SC (Strategy Enabler)
 - ✓ Leaders = influencers
 - ✓ Collaborative (Still a maturing area)

Professional Associations... What is Available Today

- Purchasing Management Association of Canada (PMAC) formally CPP
- Canadian Supply Chain Sector Council (CSCSC)
- Supply Chain and Logistics Association of Canada (SCL Canada)
- Institute for Supply Management (ISM) Certified Professional in Supply Management (CPSM)
- The Association for Operations Management (APICS) Certified Supply Chain Professional (CSCP)
- International Supply Chain Education Alliance (ISCEA) Certified Supply Chain Manager (CSCM)
- American Society of Transportation and Logistics (AST&L) Certification in Transportation and Logistics (CTL)
- The Association for Operations Management (APICS) Certified Production and Inventory Management (CPIM)
- International Supply Chain Education Alliance (ISCEA) Certified Supply Chain Analyst (CSCA)
- Institute of Supply Chain Management (IOSCM)
- Institute for Supply Management (ISM) Certified Purchasing Manager (CPM)
- International Supply Chain Education Alliance (ISCEA) Certified Demand Driven Planner (CDDP)

Institutes, Associations and Competencies



Awarding Body	Institute for Supply Management (ISM) Certified Professional in Supply Management (CPSM)	The Association for Operations Management (APICS) Certified Supply Chain Professional (CSCP)	International Supply Chain Education Alliance (ISCEA) Certified Supply Chain Manager (CSCM)	American Society of Transportation and Logistics (AST&L) Certification in Transportation and Logistics (CTL)	The Association for Operations Management (APICS) Certified Production and Inventory Management (CPIM)	International Supply Chain Education Alliance (ISCEA) Certified Supply Chain Analyst (CSCA)	Institute of Supply Chain Management (IOSCM)	Institute for Supply Management (ISM) Certified Purchasing Manager (CPM)	International Supply Chain Education Alliance (ISCEA) Certified Demand Driven Planner (CDDP)
Procurement	High	High	High	Low	Low	High	High	High	Low
Strategic Sourcing	High	Low	High	Low	Low	Low	Low	Low	Low
New Product Development	High	High	Low	Low	Low	Low	Low	Low	Low
Production, Lot Sizing	Low	Low	Low	High	High	Low	High	Low	High
Quality	High	High	Low	Low	High	Low	High	High	High
Lean Six Sigma	Low	Low	High	Low	Low	High	Low	Low	High
Inventory Management	High	High	High	High	High	High	High	High	High
Warehouse Management	Low	Low	Low	High	Low	High	High	Low	Low
Network Design	Low	Low	High	High	High	High	Low	Low	Low
Transportation	Low	Low	High	High	High	High	High	High	Low
Demand Management, S&OP	High	High	High	High	High	High	High	Low	High
Integrated SCM	Low	High	High	High	Low	High	High	High	High
CRM, Customer Service	Low	High	High	Low	Low	Low	High	Low	High
Pricing	Low	Low	Yes	Low	Low	Yes	Low	Low	Yes
Risk Management	High	Low	Low	Low	High	Low	High	Low	High
Project Management	High	Low	Yes	Low	High	Low	High	Low	High
Leadership, People Management	High	Low	High	Low	High	Low	High	High	High
Technology	Low	High	High	High	Low	High	High	High	High
Theory of Constraints	Low	Low	High	Low	Low	High	Low	Low	High
Operational Accounting	High	Low	High	Low	Low	Low	Low	High	Low

The Path to Supply Chain Management Professional Designation (SCMP)



- 1919 – National Association of Purchasing Agents (NAPA) a US association forms first Canadian Chapter in Montreal
- 1955 – Formal independence from American Association with proclamation of the independent Canadian Association of Purchasing Agents (CAPA)
- **1966** – First Board of Examiners confers 8 **Professional Purchaser (PP)** designations
- **1969** – The Canadian Association of Purchasing Agents name is changed to **PMAC**, in recognition of the fact that the practitioner is now identified as a **Professional Purchasing Manager**
- **1985** – Association embarks on a province by province process to provincially certify the **professional designation of CPP (Certified Professional Purchaser)**
- 1996 – PMAC moves from oral Board of Examiners process to National Uniform Written exam process
- **2005** – PMAC redefines its field of practice from Purchasing to comprehensive strategic supply chain management to recognize broader scope and growing influence of profession
- 2007 – The Strategic Supply Chain Management Leadership Program (SSCMLP) launches path to professional accreditation. (Competency based program with advanced SC Mgmt. knowledge & high level business skills)
- **2009** – **New Professional Designation (SCMP) Supply Chain Management Professional** is announced to replace CPP. New designation represents strategic, global, and integrated thinking (All CPPs in good standing will receive SCMP)

Interesting Facts...

Survey of 185 SC Professionals

- **Education**
 - 90% of SC professionals are university grads
 - Most common degree: Business-related - bachelor's
 - 57% Business Degree; 15% Engineering; 11% Logistics / SC, 10% Liberal Arts
 - ½ respondents additionally hold Master's Degree
- **Classes / courses deemed most helpful in a SC Career**
 - Supply Chain / Logistics Management / Strategies
 - Finance / Accounting
 - International, global supply chain
- **Supply chain related professional associations**
 - 2 out of 3 actively affiliated with SC associations (ISM, APICS, CSCMP)
- **Knowledge / Skillsets valued for entering SC Field**
 - Effective negotiating skills / Business knowledge
 - People skills / communication
 - Supply Chain / Logistics experience
 - Finance /Analytical

Summary...Evolving Discipline

- Profession continues to grow beyond its physical distribution roots
- Supply chain professionals require both broader expertise and deeper technical skills
- Varied experiences and perspectives required
- Understanding businesses are “interconnected networks” of people, processes and technologies
- Skills sets required today are significantly different than 10 years ago...leadership, communication, collaboration is key
- Challenged to predict what leadership capabilities will be needed going forward (Strategic, global & integrated thinking)
- Agility and responsiveness will continue to be valued and rewarded

There is NO one single career path forward

What comes next?



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