Ninth Edition

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# Ninth Edition

# Procurement and Supply Chain Management

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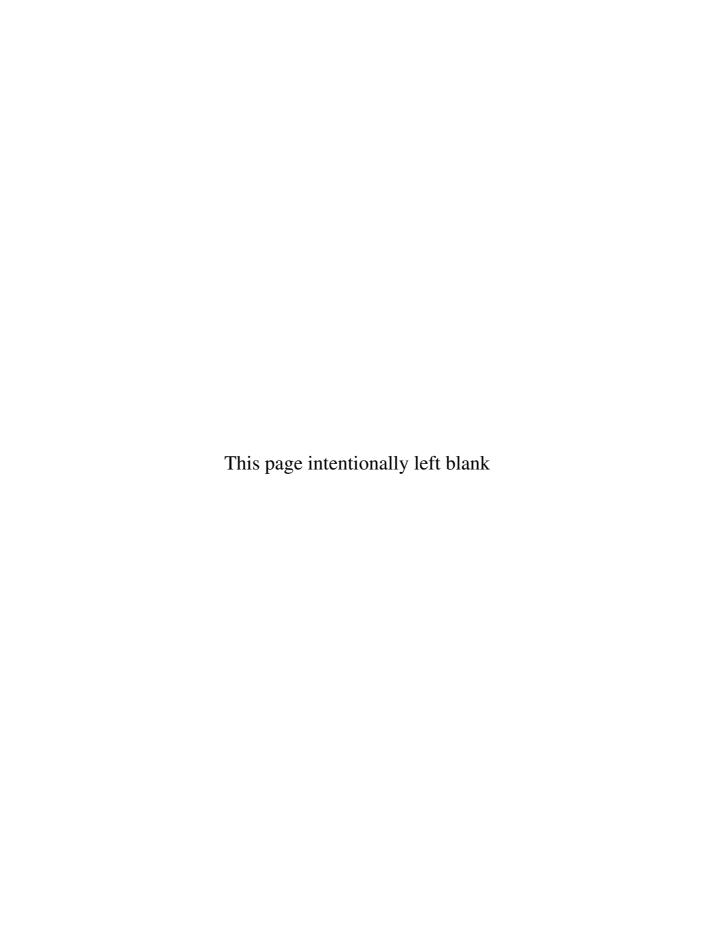
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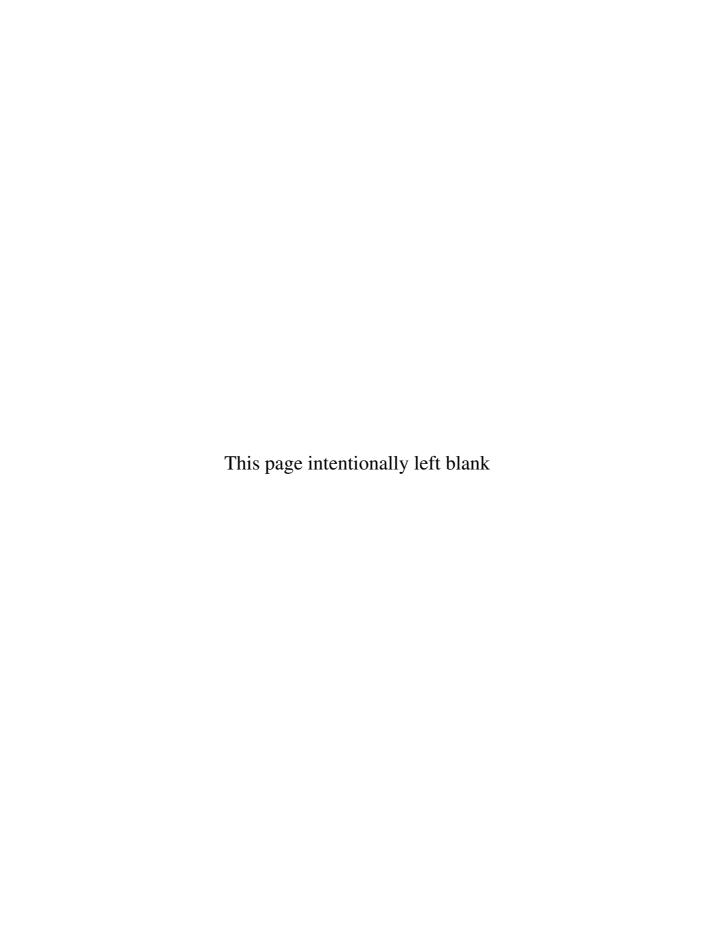
# **Preface**

Dr Brian Farrington is the author of the ninth edition of the acclaimed book, originally created by the late Dr Kenneth Lysons. The procurement profession continues to rise to national and international challenges, whilst at the same time contemplating its role in corporate matters. The global economy remains unstable. The private sector requires a competitive edge to survive. The public sector requires cost effective provision of services. The procurement and supply chain profession is in a unique position to help deliver these ideals.

The ninth edition has been reengineered to make the content of immediate benefit to students and practitioners alike. Accordingly, there are a number of important points to make.

- 1 The content reflects the emphasis of the Chartered Institute of Procurement and Supply (CIPS) education syllabus and modern world-class practice. There are innovative inputs, including contractual issues and hot topics, contract management and category management.
- 2 The content is informed by Dr Farrington's international research and real-life consultancy experiences in the private and public sectors. His experience spans many sectors, including automotive, aerospace, defence, shipbuilding, mining, airlines, financial services and government departments.
- 3 Some of the changes have been influenced by active contact with readers, practitioners and specialists in other functions, particularly legal, financial, audit and operations management.
- 4 The author is an active change agent and is professionally driven to enhance the reputation of procurement and supply chain performance. This new edition aims to be informative, challenging, thought provoking and a stimulus for further learning. The literature is increasing and that is welcome.
- 5 Case studies and CIPS examination questions are now provided at the end of the book. There are the author's discussion questions at the end of each chapter. This will assist tutors and learners to test their learning in a structured manner.

Finally, to procurement and supply chain practitioners, there is a wealth of reference material designed to enable specific research to be undertaken in specialist areas.



# Acknowledgements

Brian Farrington is indebted to many organisations and people who gave their valuable time and support in the preparation of this book. They know who they are and how much it is appreciated.

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Joyce, my wife, continues to provide unstinting support and tolerates my selfish desire to work all hours of the day and night. Without this support there would not be a book!

Caitlin Lisle at Pearson has given me the expert guidance and advice needed for a project of this type. The quality of the book would not have been possible within the timescale without Caitlin's help.

Finally, my thanks go to CIPS for their permission to include their case studies and examinations questions in this ninth edition.

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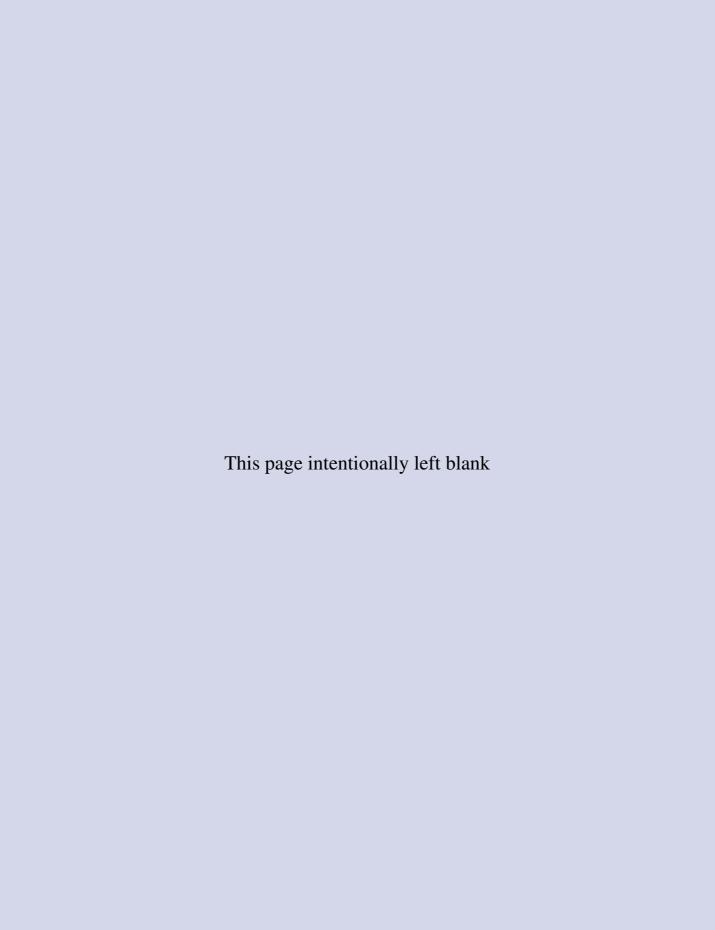
Management, Vol 20(6) (Lamming, R., Johnsen, T., Zheng, J. and Harland, C. 2000); Table 4.3 from A taxonomy of supply networks, *Journal of Supply Chain Management*, Vol 37(4), pp. 21–7 (Harland, C., Lamming, R.C., Zheng, J. and Johnsen, T.E. 2001), Reproduced with permission of Blackwell Scientific via Copyright Clearance Center; Table 4.4 from New organizational forms for competing in highly dynamic environments, *British Journal of Management*, Vol 7, pp. 203–18 (Craven, D.W., Piercy, N.F. and Shipp, S.H. 1996), Reproduced with permission of Blackwell Scientific via Copyright Clearance Center.

# Plan of the book

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Part 2 Supp	plier relationships, supplier select					quality manage rm cost in use	ment, sourcing,
Chapter 6 Supplier relationships and partnering	Chapter 7 Legal and contractual management	Q mana serv pr	apter 8 uality agement, vice and oduct ovation	Chapte Match supply v demai	ing with	Chapter 10 Sourcing, supplier selection and performance management	and long-term
Part 3 Project management and risk management, global sourcing, negotiation skills, contract management, category procurement, world-class procurement to enhance business performance							
Chapter 12 Project procurement and risk management	Chapter 13 Global sourcing	Neg skills, and	pter 14 otiation practice business enefits	Chapte Contra manager	act	Chapter 16 Category and commodity procurement	enhance

# Part 1

Introduction, strategy, logistics, supply chain, policies and procedures



# Chapter 1

# The scope and influence of procurement

## Learning outcomes

This chapter aims to provide an understanding of:

- the scope and influence of procurement
- the stages of procurement development and future trends in procurement development
- factors influencing the internal and external status of procurement
- the strategic dimensions of procurement
- demands for change in the strategic business role of procurement
- characteristics of world-class procurement
- future challenges for procurement.

# Key ideas

- Procurement as a function, process, supply or value chain link, a relationship, discipline and profession.
- Definitions of purchasing and procurement.
- The evolution of procurement and supply management (PSM) from a reactive transactional to a proactive strategic activity.
- Globalisation, information technology, changing production and management philosophies as factors in the evolution of procurement.
- Characteristics of world-class procurement.
- Leverage, focus and professionalism as factors contributing to the status of procurement within an organisation.
- Procurement as a business change agent.
- Procurement as a key influencer on business decisions.

# Introduction

The first edition of this book was published in 1981. The ninth edition is published in 2016. The fact that thirty five years has passed warrants reflection on the scope and influence of procurement. The optimist will assert that:

- procurement is a profession in its own right
- procurement has visibility at a corporate level
- procurement offers an excellent career choice
- procurement directly impacts on corporate performance
- academic standards have dramatically improved
- chartered status of the Institute of Procurement and Supply exerts world-wide influence.

The pessimist will assert that:

- there is little intellectual context to procurement
- there is no requirement for continuous learning
- there is too much emphasis on price
- in many organisations, procurement is not a respected activity
- insufficient attention is given to risk management and mitigation strategies
- procurement is not an active contributor to corporate strategic planning.

The emphasis of this edition is procurement, although other terms for the function are in widespread use throughout the world.

The author believes, passionately, that procurement has achieved high standards but has far to go in the corporate world. A key purpose of this book is to inform and motivate you the reader. We want to make them inquisitive and aspire to the highest standards.

# 1.1 How to define procurement

CIPS Australia<sup>1</sup> motivated a debate on an agreed procurement lexicon. The following statements were proposed:

Procurement is the business management function that ensures identification, sourcing, access and management of the external resources that an organisation needs or may need to fulfil its strategic objectives.

Procurement exists to explore supply market opportunities and to implement resourcing strategies that deliver the best possible supply outcome to the organisation, its stakeholders and customers.

Procurement applies the science and art of external resource and supply management through a body of knowledge interpreted by competent practitioners and professionals.

When CIPSA set out to identify the key issues for Australian procurement professionals they undertook a survey of those active in the profession. In summary they concluded,

The survey responses indicate that there is a wide variation in the intended meaning of the terms we use. Many are used interchangeably, even loosely, by some, but have specific meanings to others. The word 'purchasing' is a good example. It can be an all-encompassing term synonymous with 'supply management' and 'procurement' or it can indicate just one step in a

much-bigger process. Such variation is of concern as it could lead to miscommunication and hinder the development and sharing of our body of knowledge. A concern, at the most fundamental level, is that unless we can describe what we do and demonstrate our success to our stakeholders we cannot win their recognition and support.

The author provides two more definitions of procurement.

Procurement is a pro-active, strategic corporate activity to ensure a continuing supply of goods and services to enable world-class organisational performance.

Procurement manages supply chain risks through the effective negotiation of contracts, cost and price models, quality and other essential supply characteristics.

# 1.2 Strategic roles of procurement

There are unquestionable operational and tactical roles of procurement, such as agreeing the price; placing purchase orders; attending meetings; chasing overdue deliveries; handling stakeholder queries and handling order acknowledgements. These are all necessary roles but they fail to highlight any strategic dimension. The strategic facets are notably absent from some of the literature.

# 1.2.1 Due diligence

Due diligence is a structured methodology to help determine that a supplier has the necessary qualities to become a partner of the buying organisation. The term 'due diligence' is more usually associated with financial reviews in takeover situations. Within a procurement context it includes consideration of the supplier's:

- financial robustness, including working capital
- competence and availability of key resources
- reliance and extent of sub-contracting
- history of legal disputes and litigious actions
- experience of partnering relationships
- existence of a robust five-year business plan
- history of insurance claims
- IT system robustness.

Conducting due diligence is a far more demanding task than reading responses to a Pre-Qualification Questionnaire. It requires probing beyond a superficial scrutiny of written answers to questions.

# 1.2.2 Risk Management of the supply chain

Identifying supply chain risks and developing acceptable risk mitigation strategies is a hallmark of a strategically focused procurement operation. All supply chain risks fall into one of three categories:

- 1 Those risks that only the supplier can manage
- 2 Those risks that only the buying organisation can manage
- 3 Those risks that must be jointly managed by the supplier and the buying organisation.

Examples of risks that fall into category 1 are:

- Having a robust business continuity plan
- Ability to match resource planning to programme deliverables
- Contractual relationships with sub-contractors
- Design, inspection and testing
- Having available sufficient working capital
- Through life product support.

# 1.2.3 Relationship management

The adversarial approach to business life is an outdated concept, a fact that some procurement specialists should realise. The skill of managing relationships with strategic suppliers necessitates attention to, for example:

- conducting regular blame free reviews of contract performance
- a joint commitment to continuous improvement
- sharing long-term business goals
- active involvement of senior people at both organisations
- negotiations based on genuine business objectives
- provision of accurate and timely business and contract management data.

# 1.2.4 Continuous improvement of supplier performance

All sectors of the economy have competitive challenges, sometimes from off shore organisations. The procurement community has a strategic role to motivate suppliers to continually improve their performance. The performance on long-term contracts can be incentivised to reward the supplier's investment and initiatives. The contract can require continuous improvement as an obligation. In some situations the buying organisation may jointly invest in new technology, providing the supplier agrees to appropriate ownership of intellectual property and perhaps licensing upon payment of a royalty on sales.

# 1.2.5 The supplier's investment in 'right first time'

An organisation's reputation for quality is a prime business asset. The law courts regularly try cases where non-compliance with the specification is at issue. Suppliers have expert knowledge, or should have, of the goods or services they provide. The supplier can add value to a procurement by ensuring that the specified quality is satisfied or exceeded. The supplier can also advise on through life costs, maintenance support, inspection and testing and continuous improvement. When the procurement specialist is engaged in pre-qualification processes, there should be a penetrating analysis of the bidder's quality management attributes.

# 1.2.6 The supplier's investment in inventory

The rapid business approach to Just-in-Time has focused attention on who pays for inventory in the supply chain pipeline. Buying organisations are naïve to believe this is a

'free of charge' service, willingly entered into by the supplier. There are costs involved, including strategic warehousing facilities, distribution network costs, danger of product changes, working capital costs and so on. The concept of consignment stock is a proven concept in manufacturing, with some suppliers very adept at completely satisfying the buyer's needs for production line side stock.

# 1.2.7 The supplier's investment in procurement expertise

It is a strange phenomenon that when buyers visit potential suppliers they often fail to probe the supplier's investment in procurement expertise. When the author engages with clients engaged in a tendering exercise and the supplier makes a presentation, it is most unlikely that there will be a procurement specialist on their team. Why? It can only be concluded that their procurement operation is not seen as contributing to their competitive edge.

# 1.3 Procurement as organisational buying

Organisational buyers have been defined by Marrian<sup>2</sup> as:

Those buyers of goods and services for the specific purpose of industrial or agricultural production or for use in the operation or conduct of a plant, business, institution, profession or service.

Organisational buyers are therefore those who buy on behalf of an organisation rather than for individual or family use or consumption. As shown in Table 1.1, organisational buyers can be considered to belong to one of four buying groups, each of which can be further subdivided.

Some of the categories in Table 1.1 may overlap. In the National Health Service, for instance, some supplies may be bought centrally by government agencies, regionally by health authorities and locally by hospitals themselves.

Types of organisation	Characteristics	Examples
Industrial/producer organisations	Purchase of goods and services for some tangible production and commercially significant purpose	Manufacturers: primary (extractive) producers – agriculture, forestry, fishing, horticulture, mining
Intermediate organisations	Purchase of goods and services for resale or for facilitating the resale of other goods in the industrial or ultimate consumer markets	Distributors, dealers, wholesalers, retailers, banks, hotels and service traders
Government and public-sector organisations	Purchase of goods and services for resale or use by organisations providing a service, often tangible, and not always commercially significant at national, regional and local levels	Central and local government, public utilities
Institutions	Purchase of goods and services for institutions that buy independently on their own behalf	Schools, colleges, hospitals, voluntary organisations

# 1.3.1 Procurement as supplier management

Supplier management may be defined as:

That aspect of procurement concerned with rationalising the supplier base and selecting, coordinating, appraising the performance of and developing the potential of suppliers and, where appropriate, building long-term collaborative relationships.

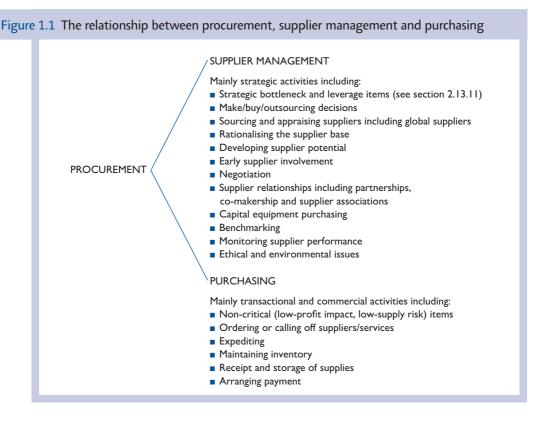
Supplier management is a more strategic and cross-functional activity than 'buying', which is transactionally and commercially biased. The relationship between procurement, purchasing and supplier management is shown in Figure 1.1.

# 1.3.2 Purchasing as external resource management

The following is the view of Lamming:<sup>3</sup>

The new strategic function will probably not be called purchasing – that is much too limited a word. The connotations of purse strings and spending money have no relevance to the setting up and management of strategic interfirm relationships. This task is concerned with ensuring the correct external resources are in place to complement the internal resources. Perhaps 'external resource managers' is a term that future purchasing managers will adopt.

Lamming's view, expressed in 1985, has literally come to pass. The emphasis is now on procurement.



# 1.4 The evolution of purchasing through to procurement

Procurement represents a stage in the evolution of civilised human relationships as it enables a desired object to be obtained by trading rather than conquest, plunder or confiscation. It is a very ancient activity. A cuneiform clay tablet excavated at Ras Shamra, northern Syria, dated about 2800 BC, carries an inscription that, roughly translated, reads:

HST to deliver 50 jars of fragrant smooth oil each 15 days after [a starting date] and during the reign of AS. In return he will be paid 600 small weight in grain. This order will continue indefinitely until the purchaser or his son removes his consent.

The evolution of purchasing and procurement can be analysed in seven periods.

# Period 1: The early years (1850-1900)

Some observers define the early years of procurement history as beginning after 1850. Evidence exists, however, that the procurement function received attention before this date. Charles Babbage's book on the economy of machinery and manufacturers, published in 1832, referred to the importance of the procurement function. Babbage also alluded to a 'materials man' responsible for several different functions. Babbage wrote that a central officer responsible for operating mines was 'a materials man who selects, purchases, receives, and delivers all articles required'.

The greatest interest in and development of procurement during the early years occurred after the 1850s – a period that witnessed the growth of the American railroad. By 1866, the Pennsylvania Railroad had given the procurement function departmental status, under the title of Supplying Department. A few years later, the head procurement agent at the Pennsylvania Railroad reported directly to the president of the railroad. The procurement function was such a major contributor to the performance of the organisation that the chief procurement manager had top managerial status.

The comptroller of the Chicago and North Western Railroad wrote the first book exclusively about the procurement function, *The Handling of Railway Supplies – Their Purchase and Disposition*, in 1887. He discussed procurement issues that are still critical today, including the need for technical expertise in procurement agents along with the need to centralise the procurement department under one individual. The author also commented on the lack of attention given to the selection of personnel to fill the position of procurement agent.

# Period 2: Growth of procurement fundamentals (1900–1939)

The second period of procurement evolution began around the turn of the twentieth century and lasted until the beginning of the Second World War. Articles specifically addressing the industrial procurement function began appearing with increasing regularity outside the railroad trade journals. Engineering magazines in particular focused attention on the need for qualified procurement personnel and the development of material specifications.

Procurement gained importance during the First World War because of its role in obtaining vital war materials. This was due largely to procurement's central focus of raw material procurement during this era (versus buying finished or semi-finished goods). Ironically, the years during the First World War featured no publication of any major procurement books. Harold T. Lewis, a respected procurement professional during the 1930s through the 1950s, noted that there was considerable doubt about the existence of any general recognition of procurement as being important to a company. Lewis noted that from the First World War to 1945, at least a gradual if uneven recognition developed of the importance of sound procurement to company operation.