

Procurement and Supply Chain

Prepared by Dr. Tarek Mohamed

MGM 431

Lecture 3



The scope and influence of procurement

Lecture 3

PMG 431

Prepared by
Dr. Tarek Mohamed

Chapter

Course Agenda

- 1-How to define procurement.
- 2-How to define supply chain management.
- 3-Strategic roles of procurement.
- 4-The strategic scope of procurement.
- 5-Integrated supply chain management.
- 6-The status of procurement and supply management.

The Scope of Procurement

- **Procurement** is the business management function that ensures identification, sourcing, access and management of the external resources that an organization 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 organization, 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.

- ❑ **The strategic ability and contribution of procurement.** Boeing, in developing its 787 Dreamliner, expanded the role of procurement from outsourcing parts to outsourcing entire subsections.
- ❑ It has been estimated that nearly all of the jet's design and fabrication, along with some 40 per cent of the estimated \$8 billion in development costs, is being outsourced to subcontractors.

☐ 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 organization. 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 personnel resources
- ☐ Reliance and extent of sub-contracting
- ☐ History of legal disputes and litigious actions
- ☐ Experience of partnering relationships
- ☐ Existence of a robust 5-year business plan
- ☐ History of insurance claims
- ☐ System robustness

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 organization can manage
- 3-Those risks that must be jointly managed by the supplier and the buying organization.

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.

- ❑ The adversarial way of business life is an outdated concept, a fact that some procurement operations need to realize. The skill of managing relationships with key strategic suppliers necessitates attention to,

for example:

- ❑ Conducting regular blame free reviews of contracts
- ❑ a joint commitment to continuous improvement
- ❑ Sharing long-term business goals
- ❑ Active involvement of senior people at both organizations
- ❑ Negotiations based on genuine business objectives
- ❑ The provision of accurate and timely business and contract management data.

Continuous improvement of supplier performance

- ❑ All sectors of the economy have competitive challenges, sometimes from off-shore organizations.
- ❑ The procurement community have a strategic role to motivate suppliers to continually improve their performance. The performance on long-term contracts can be incentivized to reward the supplier's investment and initiatives.
- ❑ The contract can require continuous improvement as an obligation. In some situations, the buying organization 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.

The supplier's investment in 'right first time'

- ❑ An organization's reputation for quality is a prime business consideration.
- ❑ 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 can be 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.

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 a competitive edge.

The relationship between procurement, supplier management and purchasing

☐ **SUPPLIER MANAGEMENT**

Mainly strategic activities including:

- ☐ Strategic bottleneck and leverage items
- ☐ Make/buy/outourcing decisions
- ☐ Sourcing and appraising suppliers including global suppliers
- ☐ Rationalizing the supplier base
- ☐ Developing supplier potential
- ☐ Early supplier involvement
- ☐ Negotiation
- ☐ Supplier relationships including partnerships
- ☐ Capital equipment purchasing
- ☐ Benchmarking & Monitoring supplier performance
- ☐ Ethical and environmental issues

PURCHASING

Mainly transactional and commercial activities including:

- ☐ Non-critical (low-profit impact, low-supply risk) items
- ☐ Ordering or calling o suppliers/services
- ☐ Expediting
- ☐ Maintaining inventory
- ☐ Receipt and storage of supplies
- ☐ Arranging payment

Integrated supply chain management

- ❑ Procurement and supply chain management reflects a growing emphasis concerning the strategic business importance of suppliers.
- ❑ Supplier relationships are gradually shifting from an adversarial approach to a more cooperative approach with selected suppliers.
- ❑ The activities that the modern procurement organization must undertake require a different mindset than that traditionally adopted.
- ❑ Supplier development, partnering, supplier–design involvement, the use of full-service suppliers, lifecycle costing, long-term supplier contracts and relationships, strategic cost management and integrated Internet linkages and shared databases are now seen as ways to create new value within the supply chain.

- ❑ There has been a rapidly growing trend to outsource a wide range of manufacturing and service delivery.
- ❑ This trend has challenged procurement departments to improve their management of tender processes, due diligence, negotiation with different cultures, managing outsourced contracts and applying open book methodologies.
- ❑ Procurement as a function is not immune from outsourcing actions.

The recognition that procurement is a significant contributor to corporate efficiency

- ❑ Enlightened organizations have recognized that procurement can contribute to corporate efficiency.
- ❑ An example is long-range business planning which requires input on long-range costs, availability of strategic materials and supplies, supply chain developments and trends in service delivery; for example, voice recognition technology as an anti-fraud measure.

Procurement:

The responsibility for acquiring the goods and services upon the organization needs:

Purchasing:

Implies the monetary transaction.

- **Goods:**
 - Raw materials
 - Production parts
 - Maintenance, repair and operating supplies (MRO)
- **Services:**
 - Consulting services
 - Utilities
 - Workers health care benefits.

Evolution in Strategies for Purchasing

Focus on price

**Focus on quality,
Reliability, Responsiveness,
and Total cost**

Strategic focus
- Supplier relationships
- Forecasting
- Cycle time

The Procurement Process:

- **Preparation:**
 - Identify needs, such as dependability, long term availability.
 - Evaluate user requirements to ensure suitability of purchase.
 - Forecast when and how purchase will be needed.
 - Identify and select suppliers.
 - Develop an efficient ordering system for control.
- **Negotiation:**
 - Bidding processes.
 - Contracts.

The Procurement Process

- ☐ Order placing via appropriate channels (i.e. authorized purchase order).
- ☐ Receiving including adjustments for damages, short or over-shipping and incorrect costs.
- ☐ Monitoring supplier performance.

Classifications of Goods and Services:

- **Raw Materials** : petroleum, coal, lumber
- **Semi finished Products and Components**: subassemblies, semi finished products
- **Finished Products**: a complete, saleable product
- **MRO**: maintenance, repair and operating items (normally found in manufacturing overhead)

Types of Purchased Items

- **Classifications of Goods and Services:**
 - **Production Support Items**: *packaging materials, tapes, glues, etc.*
 - **Services**: *payroll services, lawn care, snow removal, design, construction*
 - **Capital Equipment**: *production machinery, new manufacturing facilities*
 - **Transportation and Third Party Purchasing**: *logistics services, management of inbound and outbound materials.*

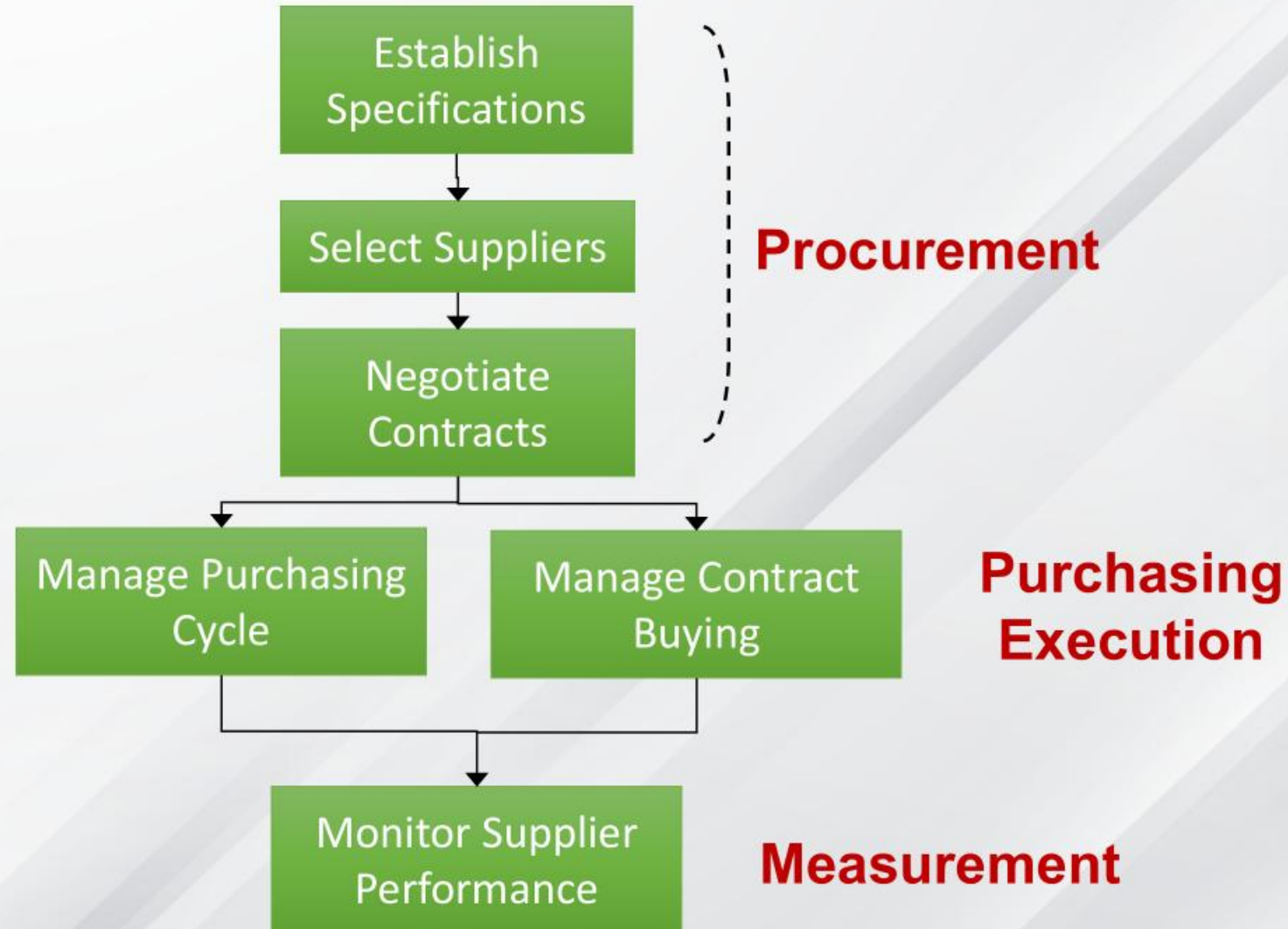
Purchasing Objectives

- **Objective 1: Support Operational Requirements**
 - Uninterrupted flow of high-quality material.
- **Objective 2: Manage the Purchasing Process Efficiently and Effectively**
 - Limited resources necessitate best use of resources.
- **Objective 3: Supply Base Management**
 - Develop reliable, high-quality sources of supply.

Purchasing Objectives

- **Objective 4: Develop Strong Relationships with Other Functional Groups**
 - Strong cross-functional relationships must exist internally.
- **Objective 5: Support Organizational Goals and Objectives.**
 - Purchasing must follow organizational directives.
- **Objective 6: Develop Integrated Purchasing Strategies That Support Organizational Strategies.**
 - Purchasing's goals must be aligned with company's goals

Purchasing Activities



Example of a traditional purchasing process.

1-Requisition Received



2-Source Suppliers.



3-Tender Process.



4-Purchase approved.



5-Purchase order sent to the supplier.



6-Expediting.



7-Suppliers invoice paid.

Elements of supply uncertainty:

- Lead time to supply.
- Quantity supplied.
- Quality of supply.
- Data accuracy on products supplied and prices.

In selecting a supplier, a number of factors must be analyzed:

- Price
- Quality
- Reliability
- Credit terms
- Shipping costs.

Look at the whole transaction cost of dealing with a supplier (not just the cheapest price).

Positive trends in purchasing and procurement include:

- Reduced number of suppliers.
- Long-term relationships with supplier.
- Suppliers located close to customers for improved access.
- Integrated information infrastructure: EDI, electronic catalogs.
- Suppliers considered to be an essential part of the business
- Suppliers involved in future product development programs.

Key considerations in analyzing the purchasing process:

- Annual sales
- Annual purchases
- Number of suppliers
- Number of supplier alliances
- Total number of purchased products or parts
- Short and long-term cost-effective purchasing
- Efficient business management of the purchasing process.

Analyze what the suppliers' requirements are for:

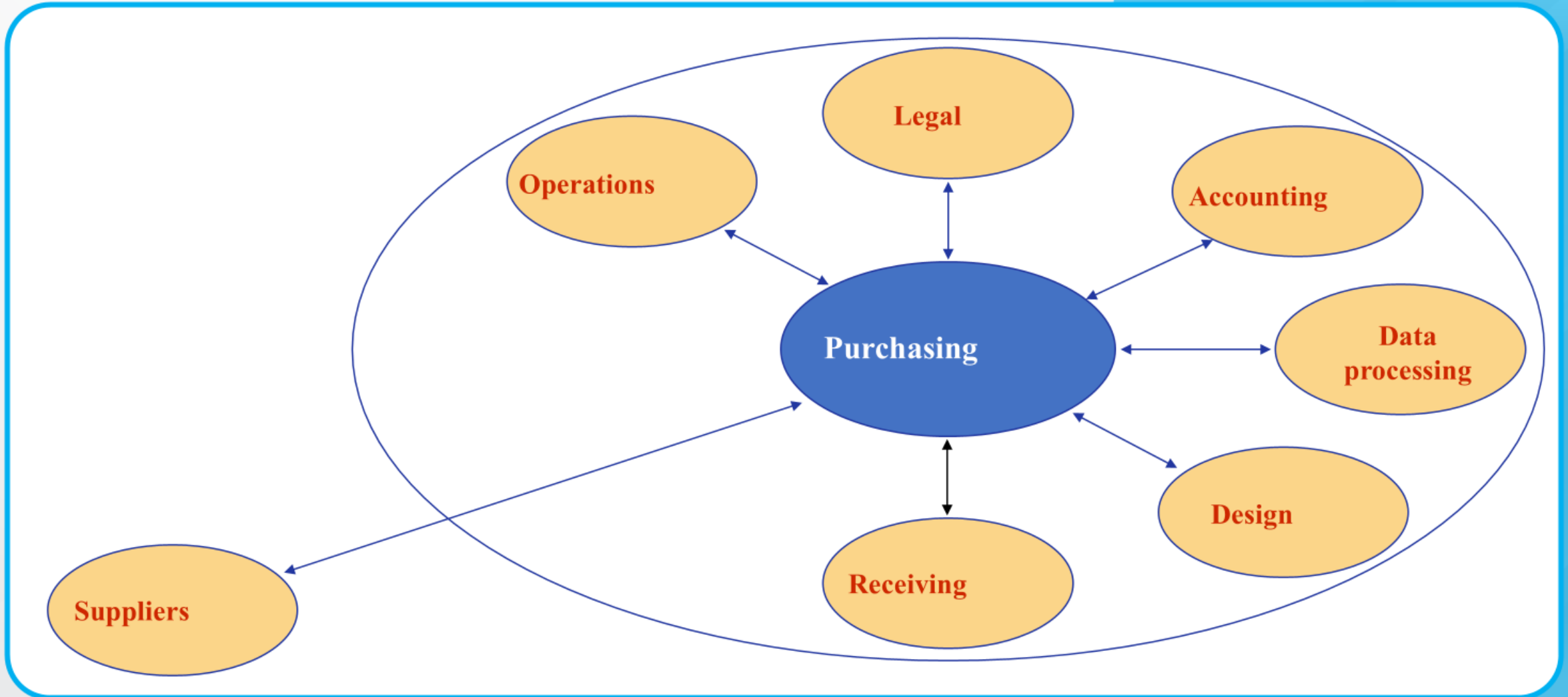
- Goods and services: lot sizes, packaging, delivery frequency, and responsiveness.
- Information: how much and when?
- financing arrangements and costs.

Compare your needs and abilities against these requirements.

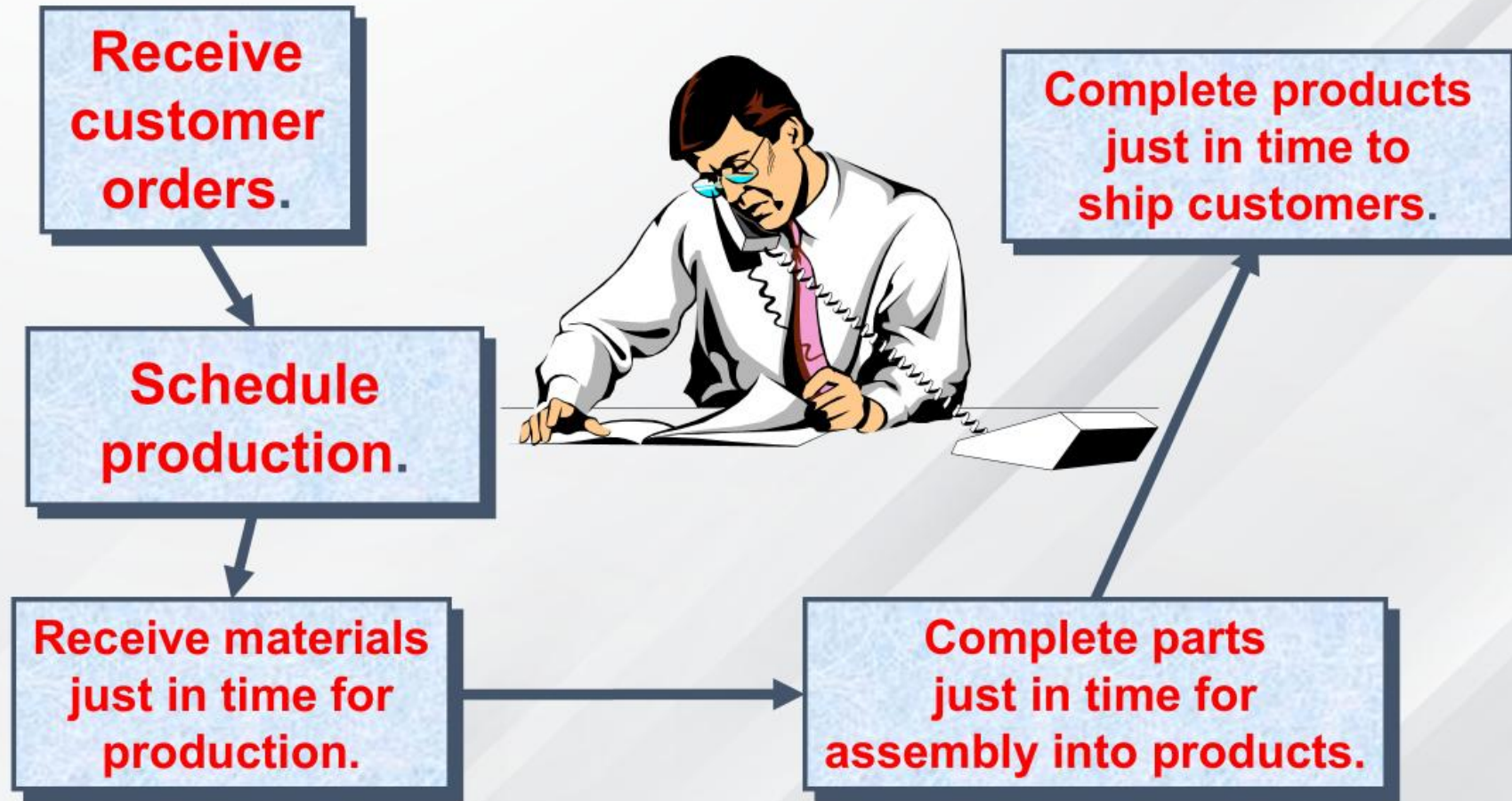
Purchasing Span of Control

- **What decisions does Purchasing have legitimate authority to make?**
 - Evaluate and Select Suppliers
 - Negotiate with Suppliers
 - Review Specifications
 - Act as the Primary Contact with Suppliers
 - Determine the Method of Awarding Purchase Orders and Contracts.
 - Determine the appropriate Type of Contract.

Purchasing Interfaces



Just-in-Time (JIT) Systems



JIT Consequences

Improved
plant layout

Zero production
defects

Reduced
setup time

Flexible
workforce



JIT purchasing

Fewer, but more ultra reliable suppliers.
Frequent JIT deliveries in small lots.
Defect-free supplier deliveries.

Benefits of a JIT System

**Reduced
inventory
costs**

**Higher quality
products**

**Increased
throughput**



Freed-up funds

**Greater
customer
satisfaction**

**More rapid
response to
customer orders**

Summary of Learning Objectives

01

- 1-How to define procurement.
- 2-How to define supply chain management.
- 3-Strategic roles of procurement.
- 4-The strategic scope of procurement.
- 5-Integrated supply chain management.
- 6-The status of procurement and supply management.

- Morris, P. W., & Pinto, J. K. (Eds.). (2007). The Wiley guide to project technology, supply chain, and procurement management (Vol. 4). John Wiley & Sons.
- Schwalbe, K. (2015). Information technology project management. Cengage Learning.
- Supply Chain Council



Thank You