

# **Project Risk & Supply Chain Risk Management**





مجموعة جامعة  
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# Project Risk & Supply Chain Risk Management

Lecture 4

PMG 663

Project Risk & Supply Chain Risk

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Chapter

04

# Monitor and Control Risks

- Plan Risk Management
- Identify Risks
- Perform Qualitative Risk Analysis
- Perform Quantitative Risk Analysis
- Plan Risk Responses
- Monitor and Control Risks



Risk register  
Project management plan  
Work performance  
information  
Performance reports

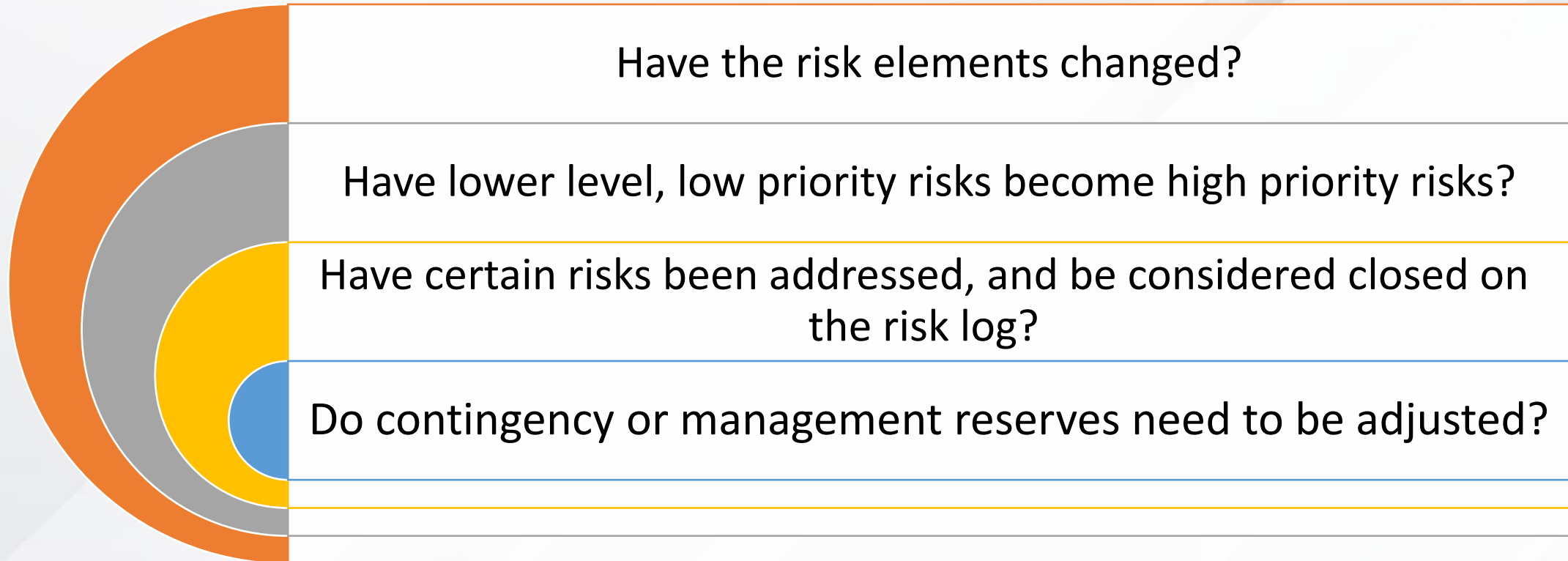
Risk reassessment  
Risk audits  
Variance and trend  
analysis  
Technical performance  
measurement  
Reserve analysis  
Status meetings

Risk register updates  
Organizational process  
assets updates  
Change requests  
Project management plan  
updates  
Project document updates

**Goal: Change requests, updates**

**As in other monitor and controlling activities, it is assumed you have performed all the necessary elements to identify and quantify project risk, and have created the necessary strategies to respond to risk on the project.**

Part of the process of monitoring and controlling risks is to perform risk reassessments of the project on a regular basis:



- ❑ In most large organizations, there are individuals who specialize in risk auditing and conducting risk reviews.
- ❑ You would do well to learn as much as you can from these individuals about project risk - it will help you do a better job of identifying risks and planning risk responses.
- ❑ Usually, risk audits are periodically scheduled throughout the project.
- ❑ They are typically conducted by people outside of your immediate organization.

**Why do you think that is so?**

There are several reasons why auditors are not part of the project team:

**Provides for an objective  
review of risks**

**Provides a fresh pair of eyes  
to review risk elements from  
a different perspective**

**Can help identify risks not  
considered by the team**

- ☐ Periodic and scheduled
- ☐ Should occur to determine if any risk priorities or ratings have Changed

## **Risk audits**

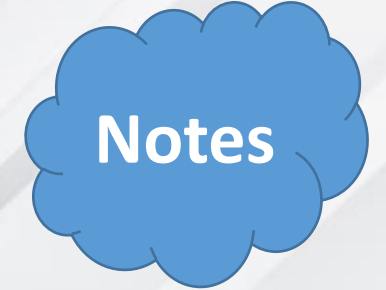
- ☐ Carried out throughout project life
- ☐ Typically performed by experts outside project team

## Additional Risk Tools

**Variance and Trend** analysis compares planned results to the actual results. Variance tools such as earned value analysis can be used for monitoring overall project performance. As a result, potential forecasts of deviation at the project's completion from cost and schedule targets are possible.

Technical Performance Measurement compares technical accomplishments during project execution to the project management plan schedule of technical achievement. Quantifiable measurements are taken and compared against actual results.

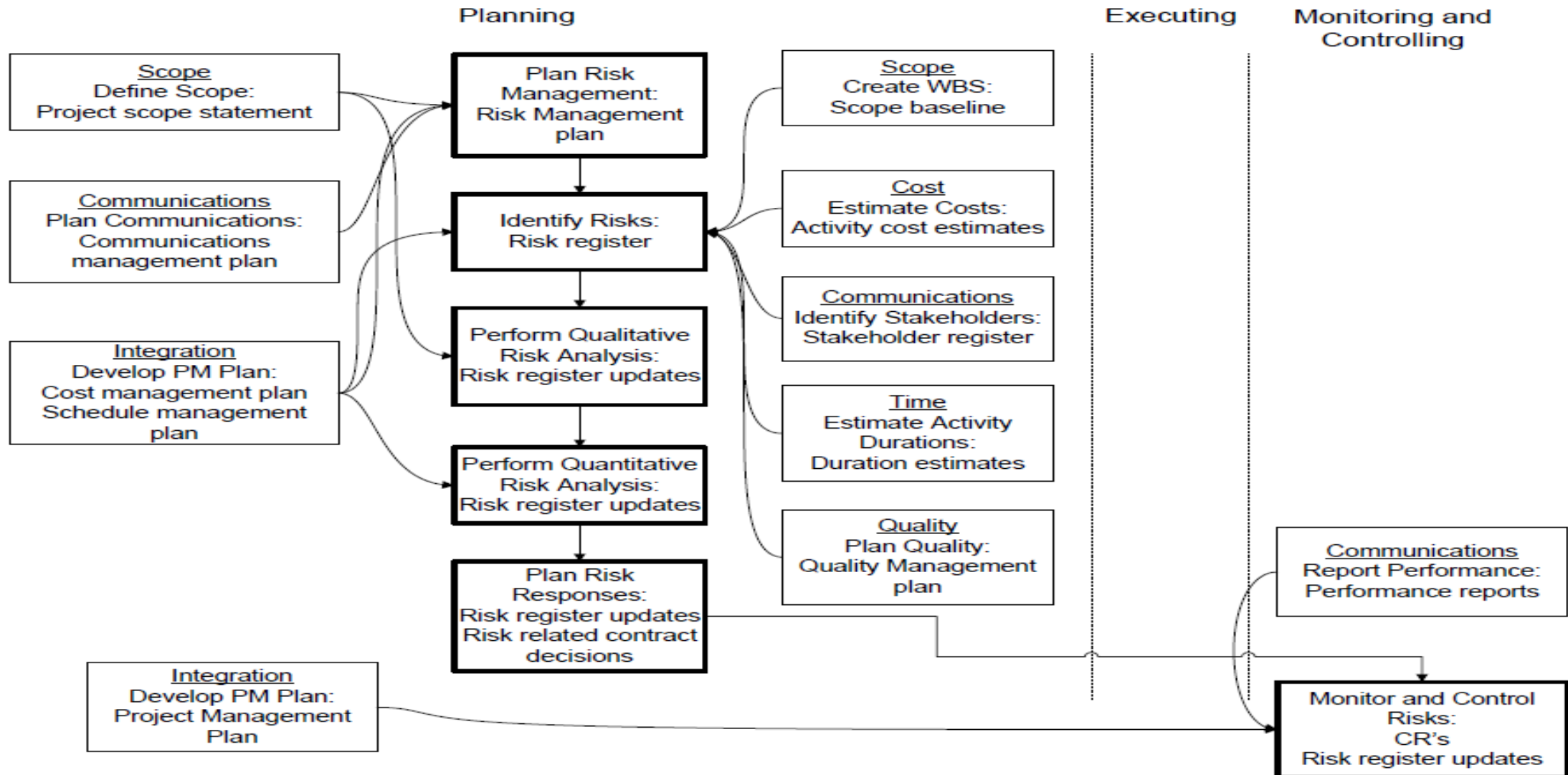
Reserve Analysis compares the amount of contingency reserves remaining to the amount of risk remaining at any time in the project.



reserve analysis and the funds set aside for contingencies apply only to the specific risks on the project for which they were set aside

## Workarounds

- ❑ Workarounds are usually employed when no contingency plan exists, and are generally executed 'on the-fly' to address some unplanned event.
- ❑ The result of implementing a workaround can be the identification of an undiscovered risk for which the contingency and fallback planning can now be addressed.

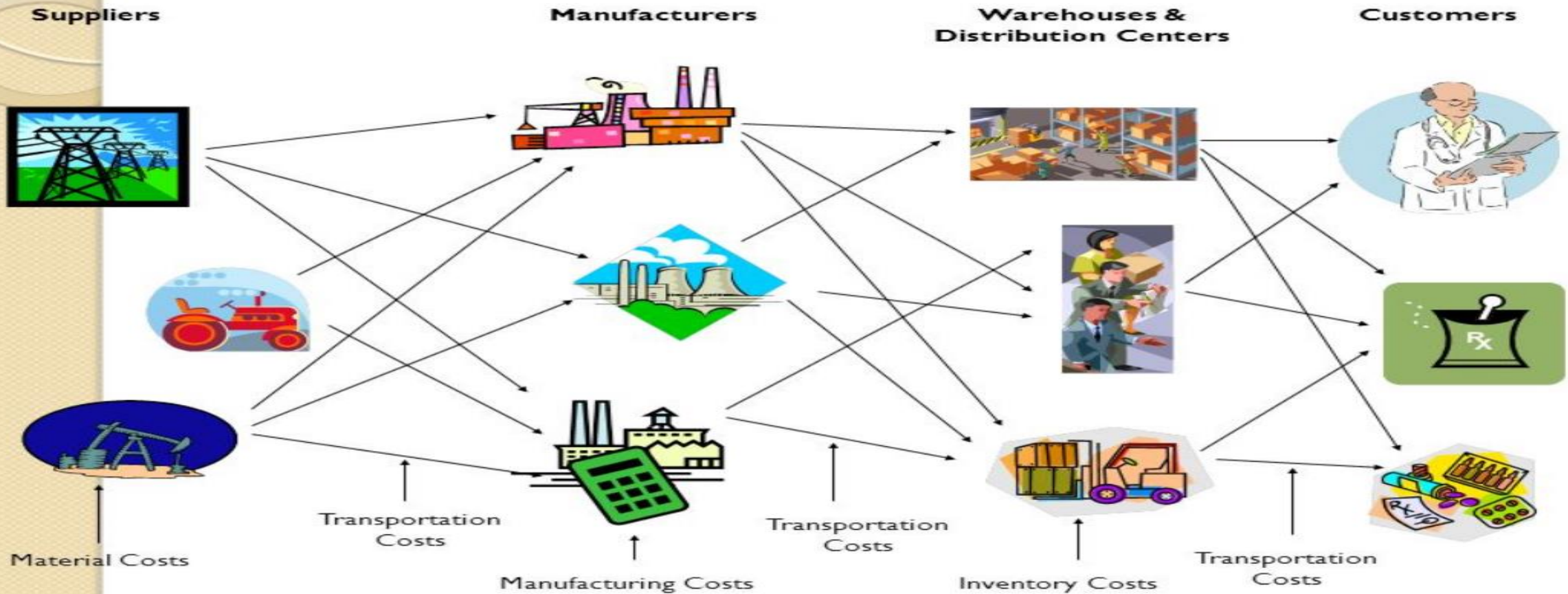


- ❑ The benefit of using a risk breakdown structure
- ❑ Information gathering techniques: brainstorming, Delphi technique, interviewing, root cause identification, and SWOT analysis
- ❑ Importance and components of the risk register
- ❑ Deciding on the best risk response strategy: avoid, transfer, mitigate, exploit, share, enhance, or accept risk events

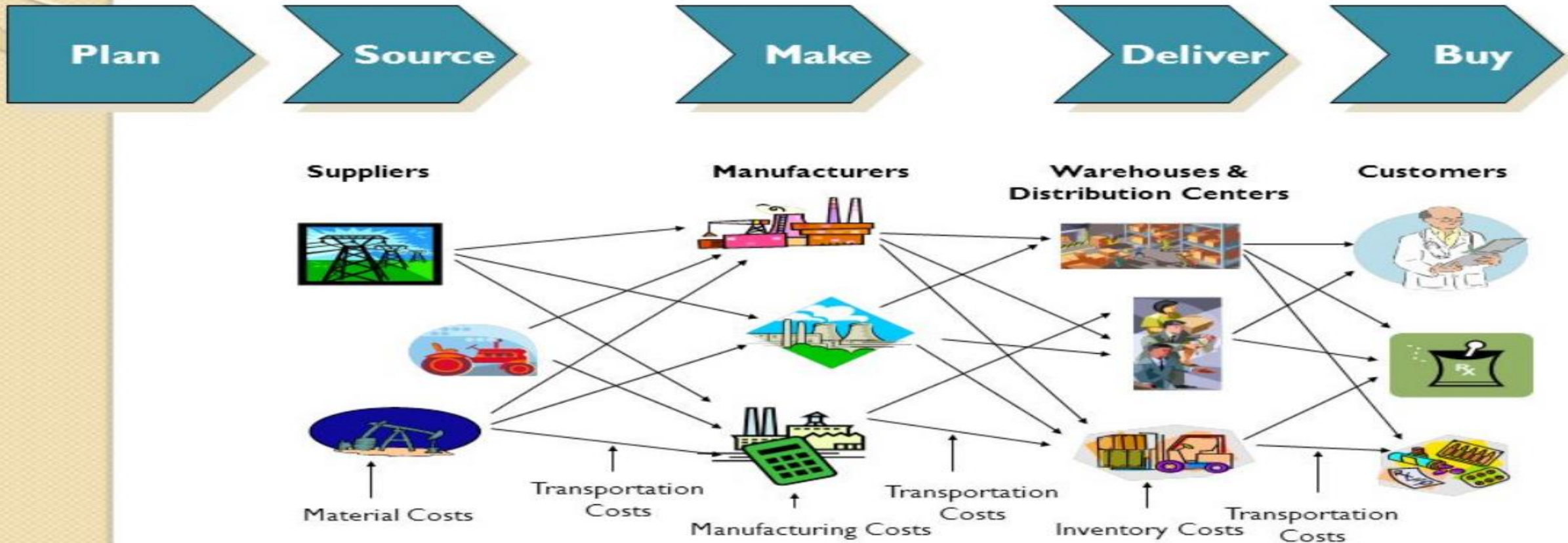
- ❖ A supply chain is a set of organizations directly linked by one or more of the upstream and downstream flows of products, services, finances, and information from a source to a customer.
- ❖ Managing a supply chain is 'supply chain management 'Supply chain management (SCM) is the management of a network of interconnected businesses involved in the ultimate provision of product and service packages required by end customers.

- ❖ Supply chain management spans all movement and storage of raw materials, work- in-process inventory, and finished goods from point of origin to point of consumption (supply chain).

## The Supply Chain



## The Supply Chain – Another View



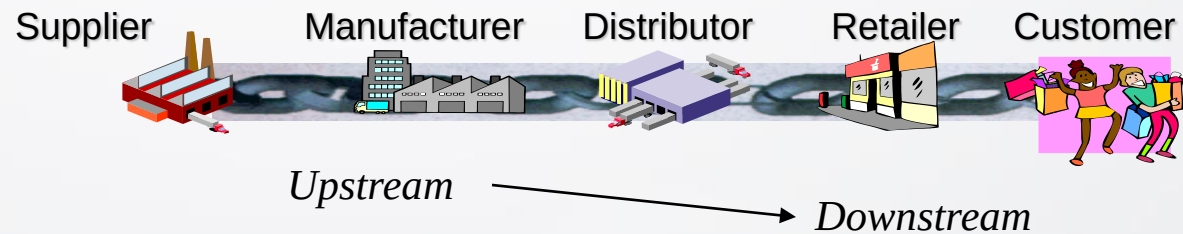
More difficult than manufacturing

Focuses on human resources and support services

More compact and less extended

Does not focus on the flow of physical goods

- A supply chain consists of

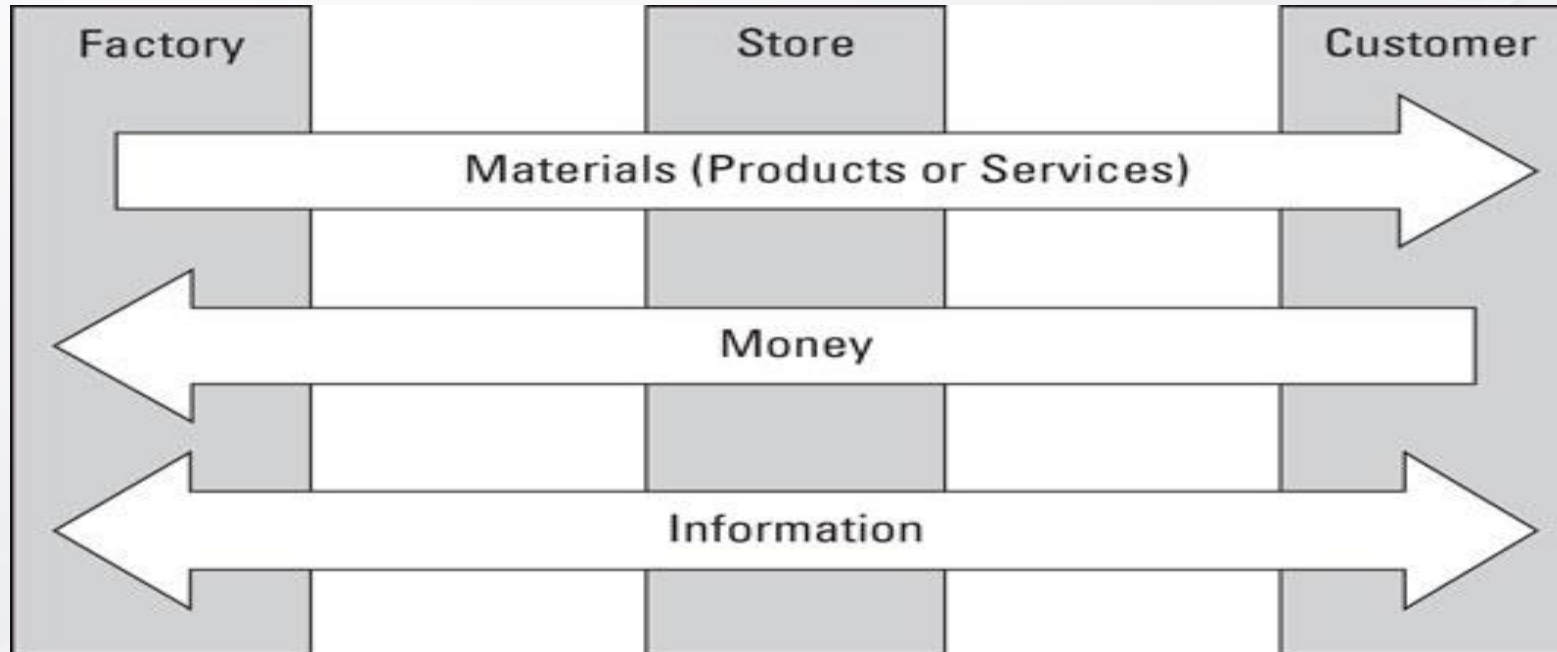


- aims to Match Supply and Demand,  
profitably for products and services

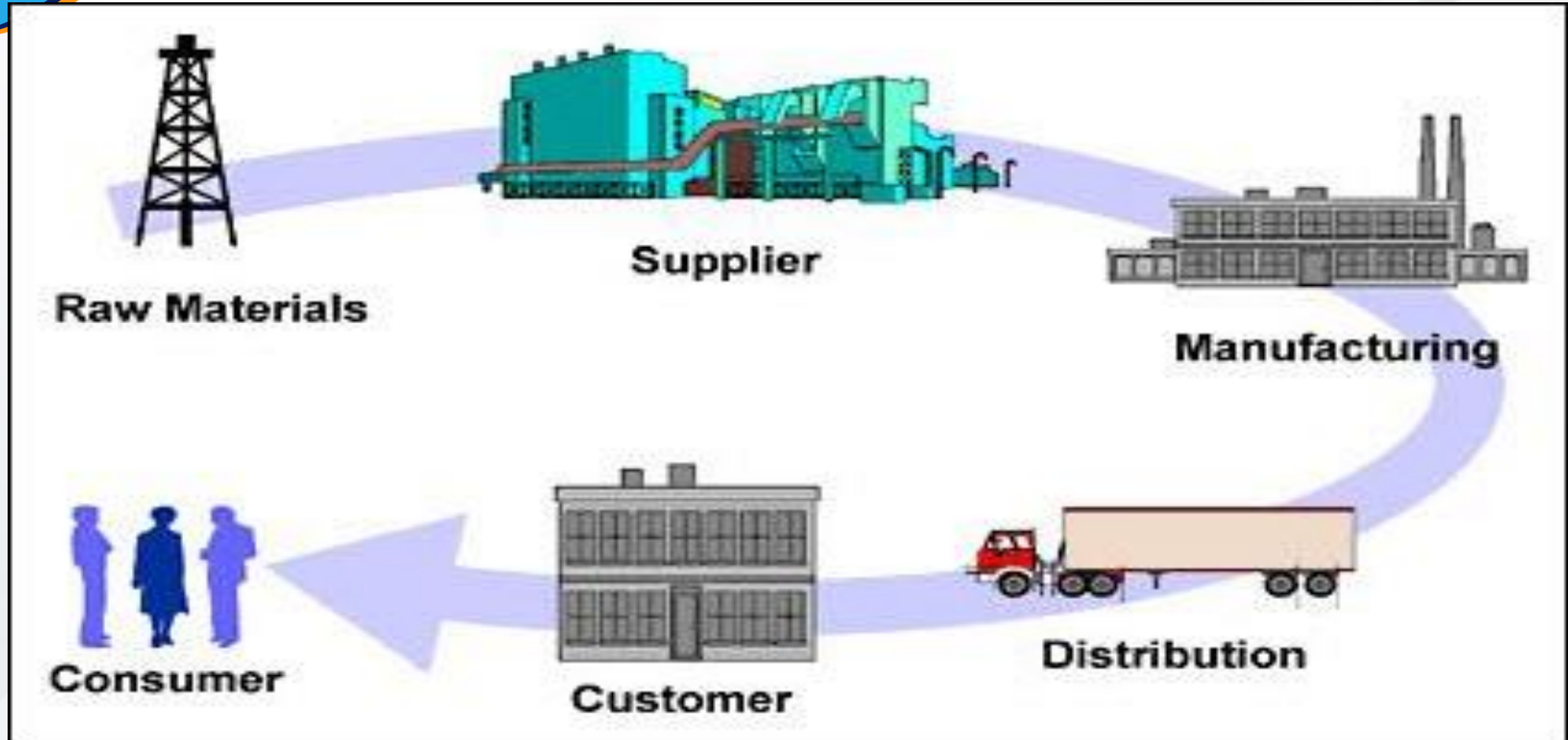


- achieves



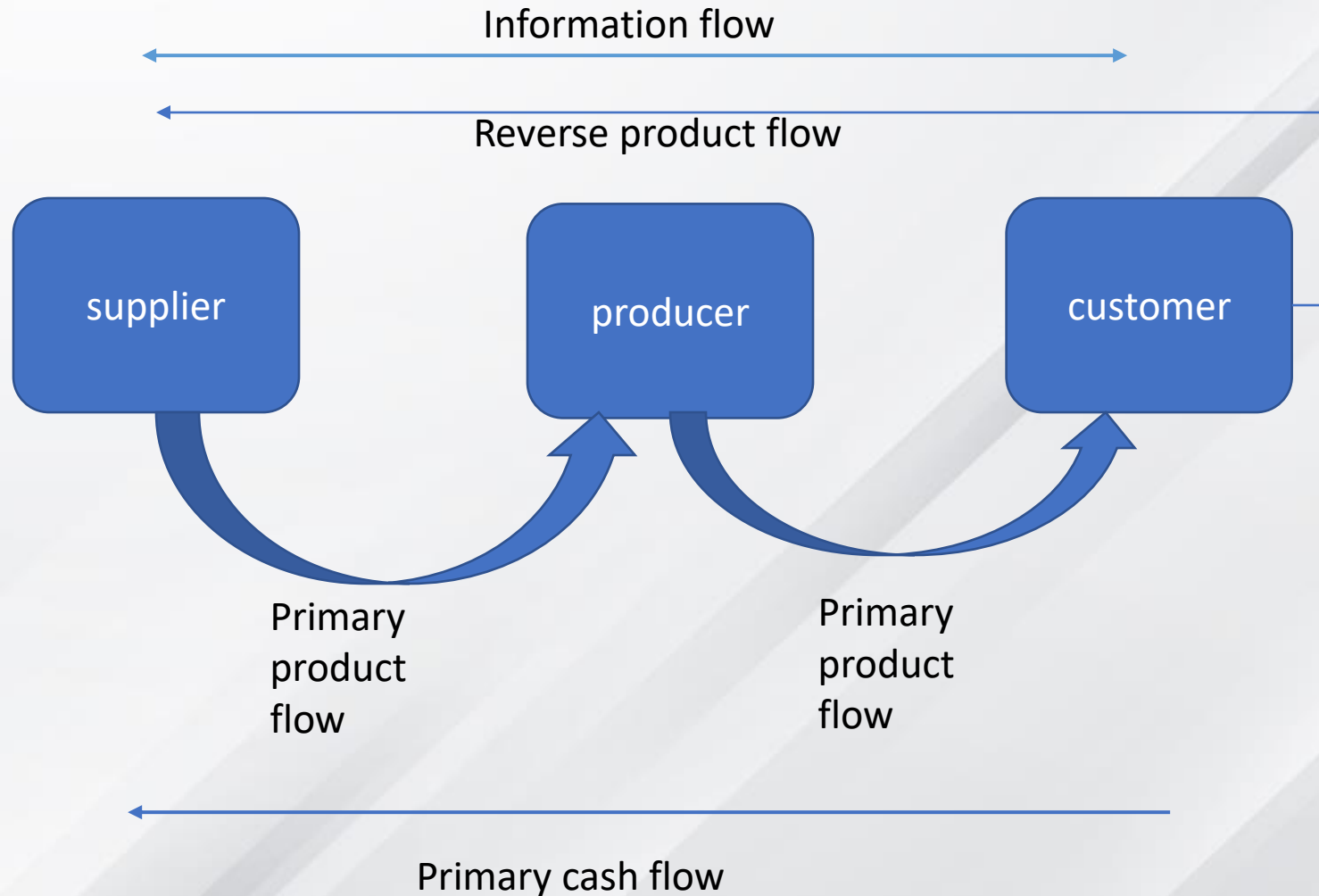


# Supply chain flow diagram



- Supply chain management is control of supply chain as process from supplier to manufacture to wholesaler to retailer to consumer.
- Supply chain management flow can be divided into three main flow
  - The product flow
  - The information flow
  - The finance flow

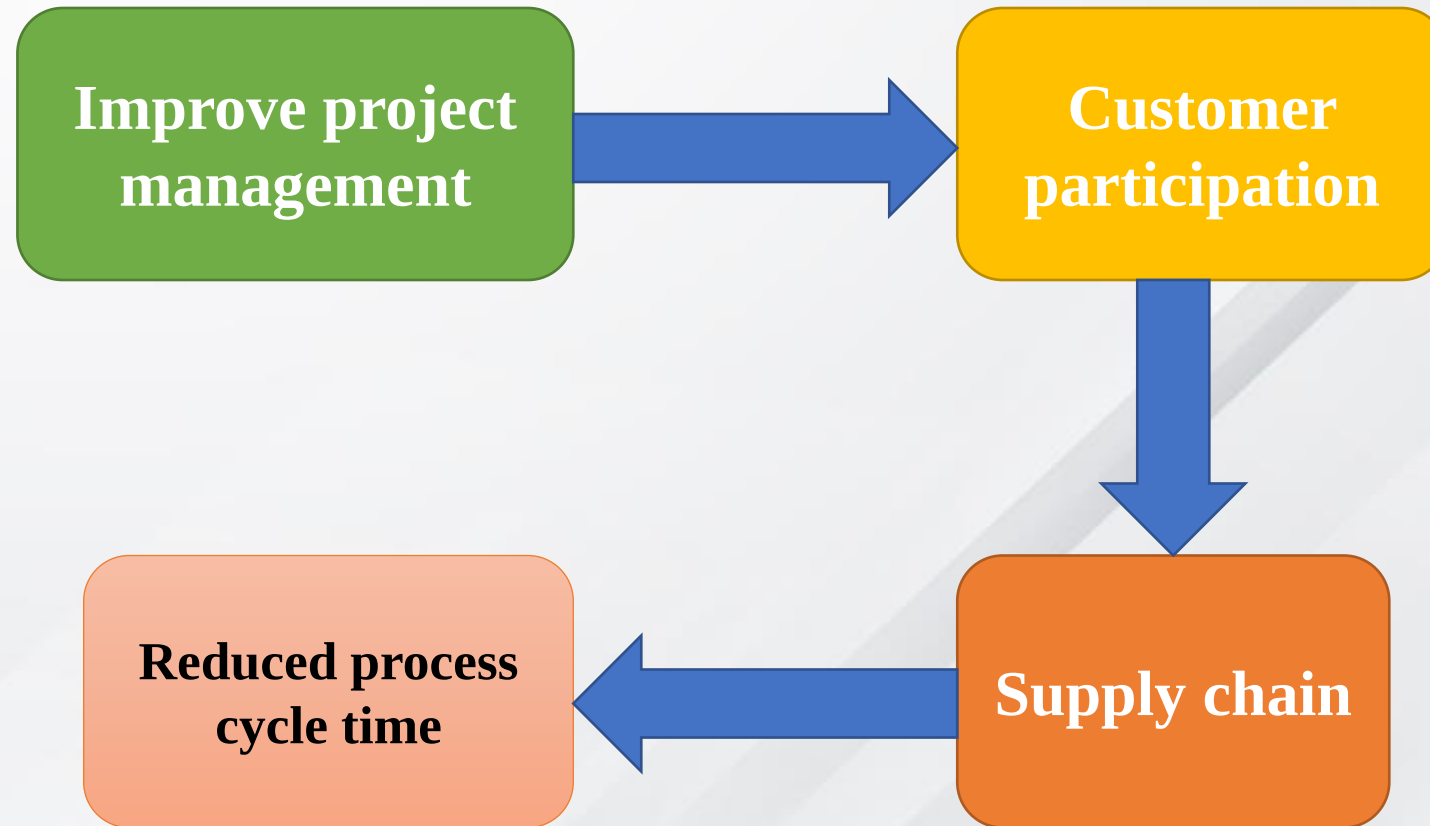
# Supply chain management flow



- Knowledge management is the process of capturing, developing, sharing and effectively using organizational knowledge
- Knowledge management system refer to any kind of IT system that stores and retrieves knowledge, improves collaboration locates knowledge source

- The KM adoption in supply chain makes the environment collaborative that enables the chain to be more adaptive and response.
- This helps to organization to achieves an improvement strategic competitive position in the market.
- More cost effective, efficient and competitively response and adaptive supply chain.

## Benefits of supply chain knowledge management



- **Bullwhips effect-** In supply chain increasing demand and supply variation from retailer, customer to manufacturing. Away from customer the always fluctuated demand like increase and suddenly decrease in supply chain such case is affected on production management and supply chain management, price of product. The effect is known as Bullwhip effect

**Cost/pricing issues**

**Managing inventory and supplier**

**Primary manufacturing process PUSH**

**Maintaining safety and quality**

- ❑ **Customer service** - Supply chain management is all about providing the right product in the right quantity to the right place and the right time. Seems simple, but can get complicated...quickly.
- ❑ **Cost control** - Operating costs are under extreme pressure by rising energy/fuel and freight costs, greater number of global customers, technology, increasing labor rates and new regulations and rising commodity prices.

- ❑ **Planning & risk management** - In order to stay as efficient and effective as possible, periodic assessments and redesigns are needed. These adjustments are in response to changes in the market - changes such as new product launches, global sourcing, credit availability and the need to protect intellectual property. These risks must be identified and quantified in order to control and mitigate.
- ❑ **Supplier/partner relationship management** - It is important to create, understand and follow mutually agreed upon standards to better understand current performance and opportunities for improvement. Having two different methods for measuring and communicating performance and results wastes time and effort. Trust the system that was put in place for consistent results and better supplier/partner relationships.

Managing flow of information through supply chain in order to attain the level of synchronization that will make it more responsive to customer needs while lowering costs

## Keys to effective SCM

- ☐ Information
- ☐ Communication
- ☐ Cooperation
- ☐ trust

# What Is Supply Chain Management (SCM)?

A set of approaches used to efficiently integrate

- ❖ Suppliers
- ❖ Manufacturers
- ❖ Warehouses
- ❖ Distribution centers

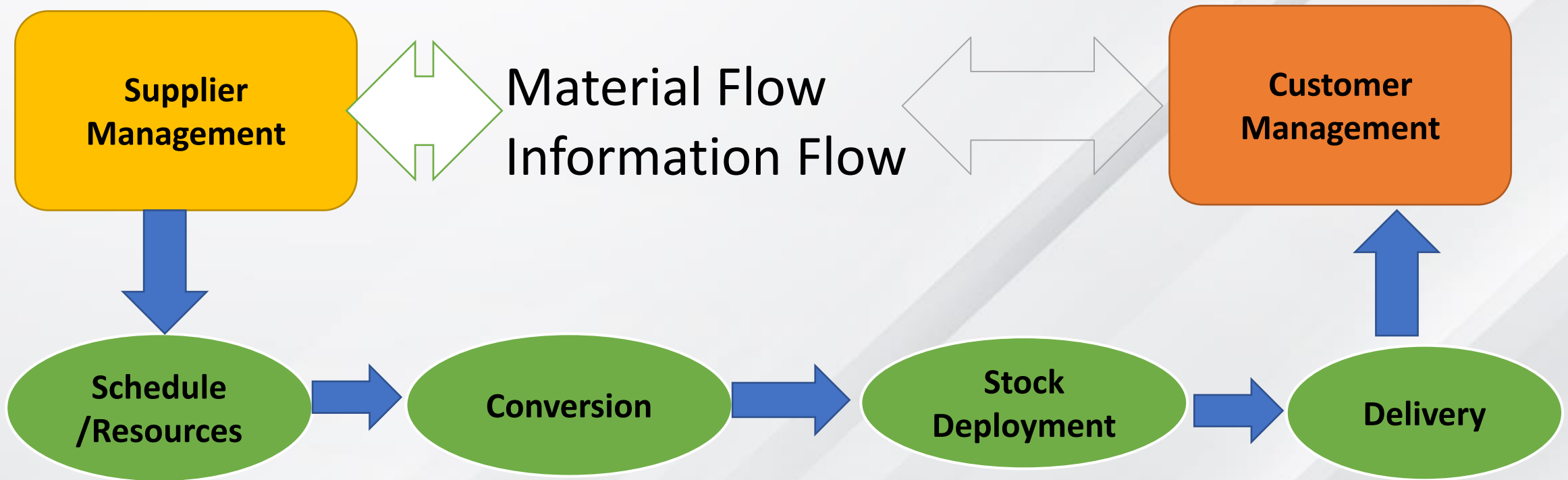
**So that the product is produced and distributed**

In the right quantities  
To the right locations  
And at the right time

**System-wide costs are minimized and  
Service level requirements are satisfied**

# WHAT IS SUPPLY CHAIN MANAGEMENT

Is the strategic management of activities involved in the acquisition and conversion of materials to finished products delivered to the customer"



Leads to Business Process Integration

Supply chain is the system by which organizations source, make and deliver their products or services according to market demand.

Supply chain management operations and decisions are ultimately triggered by demand signals at the ultimate consumer level.

**Supply chain as defined by experienced practitioners extends from suppliers' suppliers to customers' customers.**

## Why is SCM Difficult

**Uncertainty is inherent to every supply chain**

- ❖ Travel times
- ❖ Breakdowns of machines and vehicles
- ❖ Weather, natural catastrophe, war
- ❖ Local politics, labor conditions, border issues

**The complexity of the problem to globally optimize a supply chain is significant**

- ❖ Minimize internal costs
- ❖ Minimize uncertainty
- ❖ Deal with remaining uncertainty



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# Thank You

