

# INTRODUCTION TO SUPPLY CHAIN MANAGEMENT

**PURNAWAN**  
23103017

## Background

Organizations / Companies have had to improve their internal processes rapidly in order to stay competitive (Struggle to live) in the conditions :  
**Advance in technology , Globalization of markets, Stabilization of political economies , Increasing number of world class competitors**

**1960s – 1970s : Develop detailed market strategies, which focused on creating and capturing customer loyalty.**

**1980s : Develop new ones in order to meet ever-changing customer need**

**1990s : Increased focus on the supply base and the organization's sourcing strategy. Getting product to customer when, where, how, and in quantity that they want, in cost effective manner, constituted and entirely new type of challenge**

**More recently : Era “Logistics Renaissance” was born, spawning a whole set of time – reducing information technologies and logistic network aimed at meeting these challenges.**

## As a result of these changes :

Organizations now find that it is no longer enough to manage their organization. They must also be involved in the management of network of all upstream firms that provide inputs (directly or indirectly), as well as the network of downstream firms responsible for delivery and after-market service of the product to the end customer



**“ SUPPLY CHAIN “**  
**CONCEPT**



Define :

**\* The Supply Chain :**

All activities associated with the flow and transformation of goods from the raw materials stage (extraction), through to the end user, as well as the associated information flows.

→ **Management of information system**

→ **Production scheduling**

→ **Order Processing**

→ **Inventory management**

→ **Warehousing**

→ **Customers service**

→ **After-market disposition of packaging and materials**

## **\*\*Supply Chain Management (SCM) :**

The integration of these activities through improved **supply chain relationship**, to achieve a sustainable competitive advantage.



It is important to note that the supply chain includes :

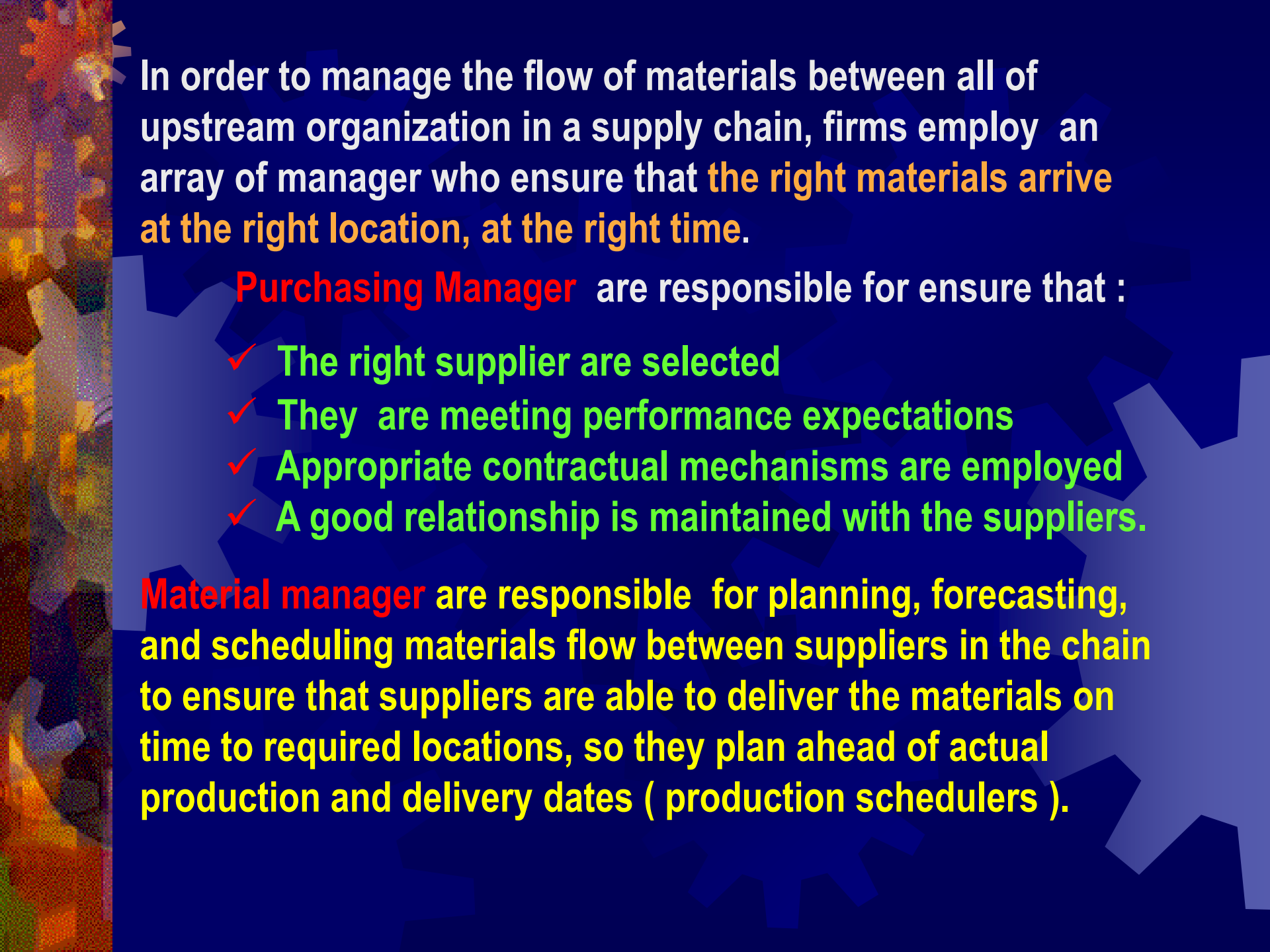
- ✿ **internal function**
- ✿ **upstream suppliers**
- ✿ **downstream customers**

### 3 Part of Supply Chain Management :

1. **Internal Function** , include the different processes used in transforming the input provided by the supplier network.
2. **External Upstream** , is manage the flow of materials between all of the upstream organization in a supply chain. Have function to ensure that the right materials arrive at the right location, at the right time.
3. **External Downstream** , encompasses all of the downstream distribution channel, processes, and function that the product passes through on its way to the end customers.







In order to manage the flow of materials between all of upstream organization in a supply chain, firms employ an array of manager who ensure that **the right materials arrive at the right location, at the right time.**

**Purchasing Manager** are responsible for ensure that :

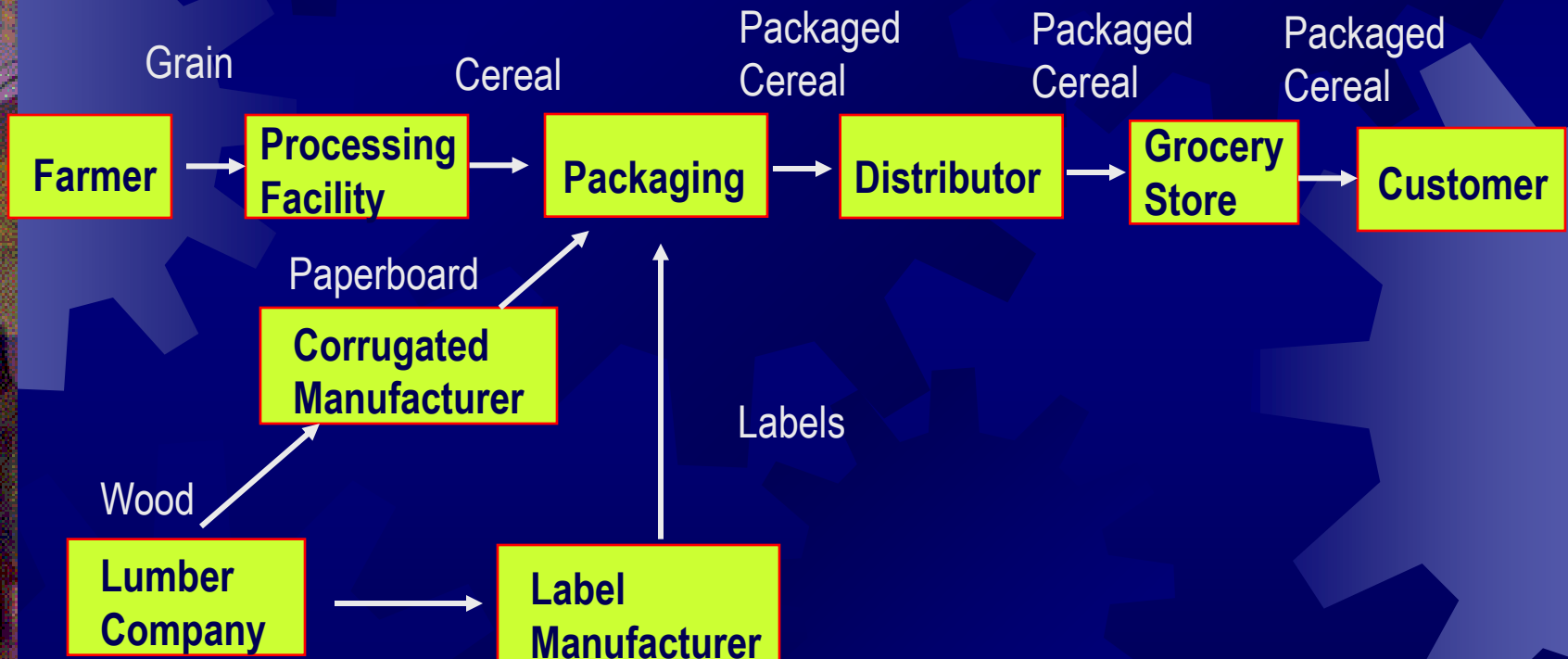
- ✓ The right supplier are selected
- ✓ They are meeting performance expectations
- ✓ Appropriate contractual mechanisms are employed
- ✓ A good relationship is maintained with the suppliers.

**Material manager** are responsible for planning, forecasting, and scheduling materials flow between suppliers in the chain to ensure that suppliers are able to deliver the materials on time to required locations, so they plan ahead of actual production and delivery dates ( production schedulers ).



There are some kinds of types supply chain, depend distribution channel in the part of supply chain. May have relatively small internal function supply chain but fairly long downstream distribution channel.

### Example : A Cereal Manufacturer's Supply Chain



## **New Trend in Supply Chain Management :**

**Recovery, Recycling, or Reuse** of the product from the end user after they have reached the end of their useful life, with transform used product in to new product or material that can returned to the earth without harming the environment.

**Developed extensive repair network** to handle warranty and quality problem that occur with product returned by customers.

**Improve their reserve logistic functions**, to manage the flow of products and services moving backward through the supply chain.



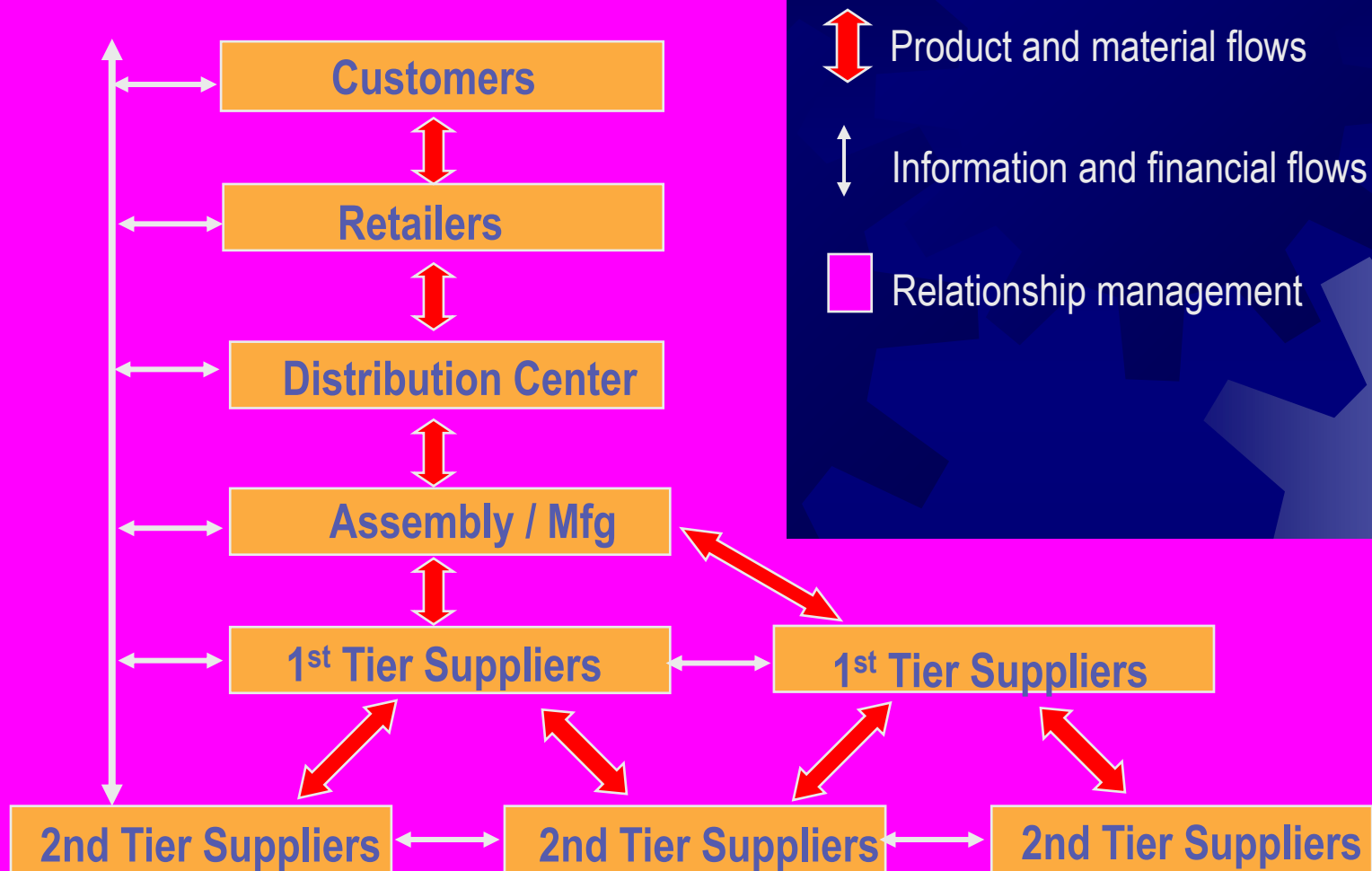
Developments in global markets and technologies have brought supply chain management to the forefront of management's attention :

**1. The information revolution**

**2. Customer demands** in areas of product and service cost, quality, delivery, technology, and cycle time brought about increased global competition

**3. The emergence of new forms of inter-organizational relationship**

The nature of supply chain management and integrates all three development above is illustrated as follow :



# Information System and Supply Chain Management

**With the emergence of PC, optical fiber network, the explosion of internet and World Wide Web, the cost of availability of information resources allows easy linkages and eliminates information-related time delays in any supply chain network.**



This mean that organizations are moving toward a concept know as “**Electronic Commerce** “ , where transaction are completed via variety of electronic media, including Electronic Data Interchange (EDI), Electronic Funds Transfer (EFT), bar codes, fax, automated voice mail, CD-ROM Catalog, and variety of others.



All required information is recorded electronically, and associated transaction are performed with minimum amount of human intervention.

## Characteristics of future system :

- \* **Centralized coordination of information flows**
- \* **All transformation, ordering, and manufacturing system total logistic management – integration**
- \* **Order – change notice that trigger a cascading series of modification to production schedules, logistic plan, and warehouse operation**
- \* **Global visibility into transportation resources across business units and national boundaries**
- \* **Global inventory management – ability to locate and track the movement of every item**
- \* **Global sourcing- consolidation of purchasing function across organization lines**
- \* **Inter company information access – clarity of production and demand information residing in organization both upstream and downstream throughout the value chain**



## Characteristics of future system .....

- \* **Data interchange – between affiliates and non affiliates through standard telecommunication channels**
- \* **Data capture- ability to acquire data about and order at the point of origin, and to track products during movement and their characteristics change**
- \* **Transformation of the business from within-managers who can see the big picture and accept the new forms of business processes and system**
- \* **Improvement in supplier-customer relationship-to justify investment in technology linkages**

The ideal supply chain information system should span all function and organization through-out the entire supply chain. The information is available to any party within the chain as well as number of feedback loops defining a totally integrated system.

# Inventory Management across the Supply Chain

The trend facing organization today is demand for ever-greater levels of **responsiveness** and **shorter define cycle times** for deliveries of high-quality goods and service.

Environmental

“mass-customize” in changes of markets, products, technology, and competitors. Customers require product that incorporates state-of-the-art technology and features, so products are becoming ; **more complex, have a greater variety of options, and must be tailored to a greater number of shrinking market.**

Time

**Time-based capabilities** : throughput time reduction, delivery speed, fast cycle capability, quick response or re supply time, lead-time reduction, and time compression.

Direct linkage to profit

## The advantage achieve by time-based capabilities :

- ☺ Enable to grow faster and earn higher profit relative to other firm in their industry
- ☺ Increase market share through early introduction of new product
- ☺ Control overhead and inventory cost
- ☺ Move to positions of industry leadership

## Effect for companies that achieve time-based capabilities :

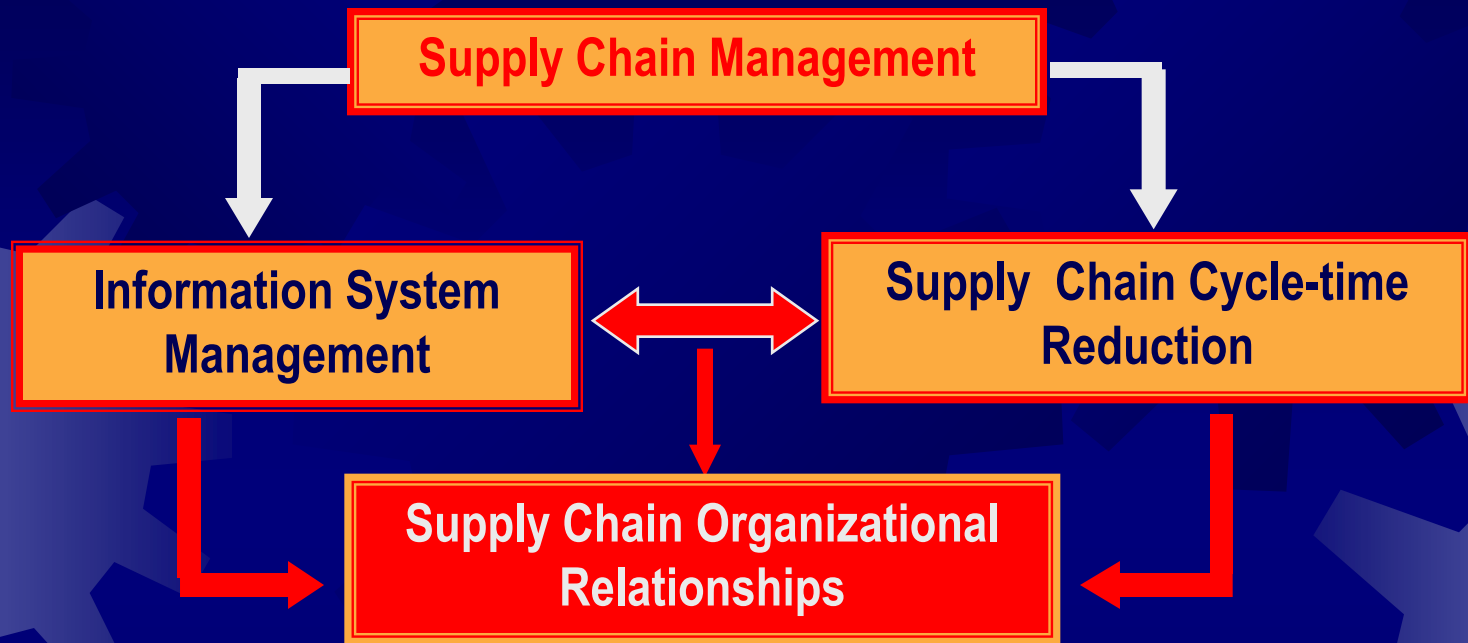
- ◆ Reduction in delivery lead time translate into not only less inventory but also less rework.
- ◆ Higher product quality
- ◆ Less overhead throughout every element of supply chain

## Benefit associated with being a time-based competitors :

1. **The external benefit**, is refer benefits enjoyed by time-based organizations in the market place relative to their competitors (such as higher quality, quicker customer response, technologically advanced products).
2. **The internal benefit**, are found within and between the different functional areas in the firm (including simplified organization, shorter planning loops, increased responsiveness, better communication, coordination, and cooperation between functions)

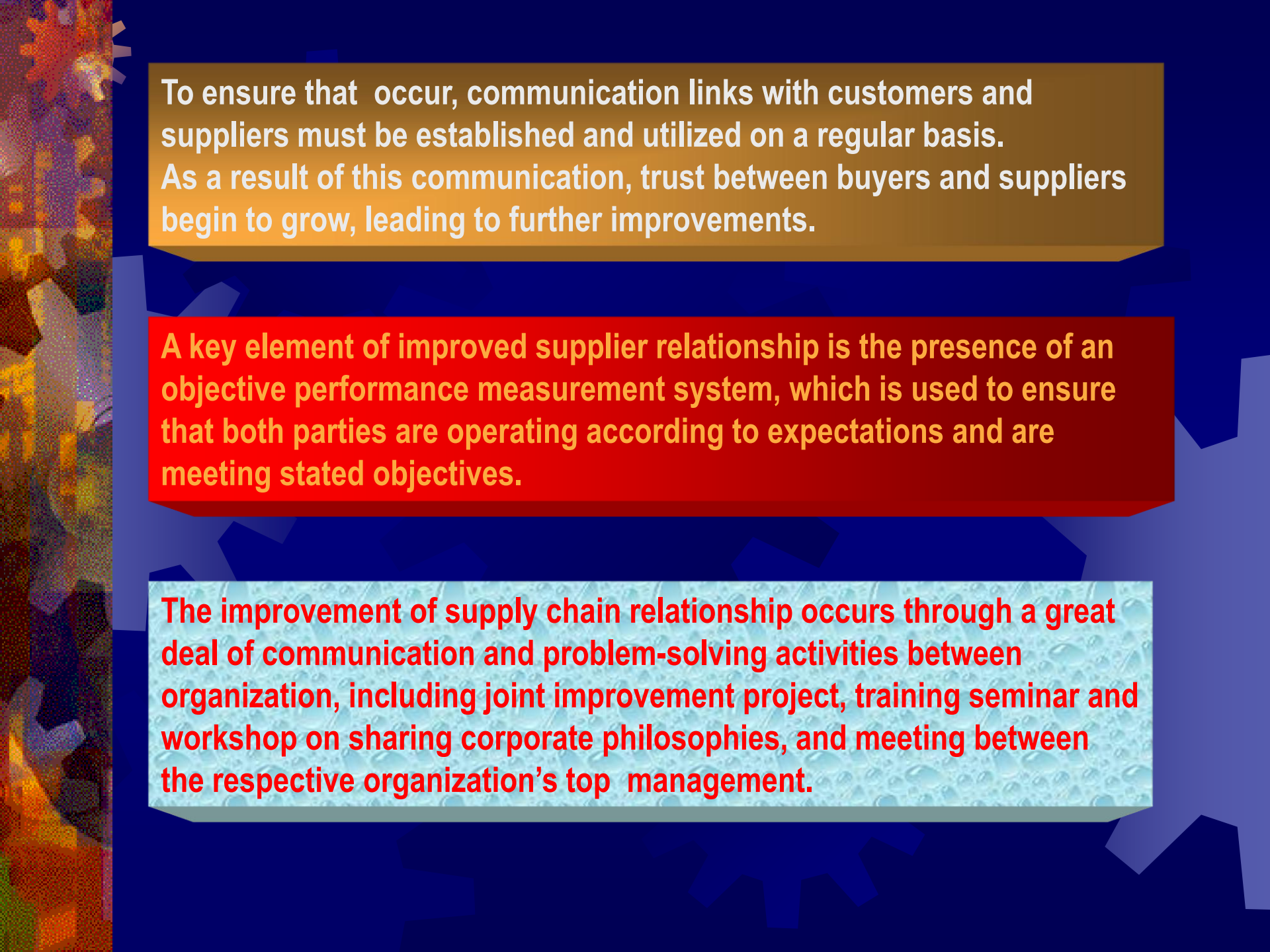
**Summary :** In a well-managed integrated supply chain, the amount of inventory held throughout the chain decreases, such that inventory is now “ flowing “ between parties in the chain with only minor delays. This can occur only when all parties in a supply chain are “on the same wavelength ”.

# Supply Chain Relationship



**A poor relationship with any link in a supply chain can have disastrous consequences for all other supply chain members.**

**To avoid such problem, organizations must develop a better understanding of their processes, as well as their supplier's quality and delivery performance, in order to find better ways to serve the customers.**

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To ensure that occur, communication links with customers and suppliers must be established and utilized on a regular basis. As a result of this communication, trust between buyers and suppliers begin to grow, leading to further improvements.

A key element of improved supplier relationship is the presence of an objective performance measurement system, which is used to ensure that both parties are operating according to expectations and are meeting stated objectives.

The improvement of supply chain relationship occurs through a great deal of communication and problem-solving activities between organization, including joint improvement project, training seminar and workshop on sharing corporate philosophies, and meeting between the respective organization's top management.



# Challenges Facing Supply Chain Managers

Although the topic of integrated supply chain hold great to many academics, consultants, and practitioners, the difficulty involved in implementing this strategy is evident. It is caused by :

1. The Process of implementing an integrated supply chain has been shown to be very difficult. Such as In the implementation of information system, such that the appropriate information is not available to the people who need it. In other cases, the information is available, but supply chain members are reluctant to share it, due to a lack of trust and a fear that the information will be revealed to competitors.
2. There are always delays in shipment for a variety of reason : slowdowns resulting from custom crossing international border, adverse weather patterns, poor communication, and simple human error.
3. Establishing trust between parties in supply chain is perhaps the greater challenge. Conflict management in inter organizational relationship is becoming increasing difficult to manage.



**Thank You**