الأَكَادِيمِيَّة العَرَبِيَّة للعُلُومِ والتكنولوجيا والنقل البَحَرِي

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Cloud Business Intelligence
# *A Solution For Smart Ports & Logistics*

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AGENDA

- **Introduction**
- **Business Intelligence (BI)**
  - **Data Warehousing مستودعات البيانات**
  - **OLAP المعالجة التحليلية للبيانات**
  - **Data Mining التنقيب فى البيانات**
- **Cloud Business Intelligence (CBI)**
- **Smart Port الموانى الإلكترونية**
- **Logistic Services الخدمات اللوجستية**
- **Impact of Cloud Business Intelligence**
- **Conclusion**

منظومات الأعمال الذكية What is BI

Business Intelligence (BI) a category of applications and technology for gathering , storing, analyzing and provide access to data to help users make better business decision.


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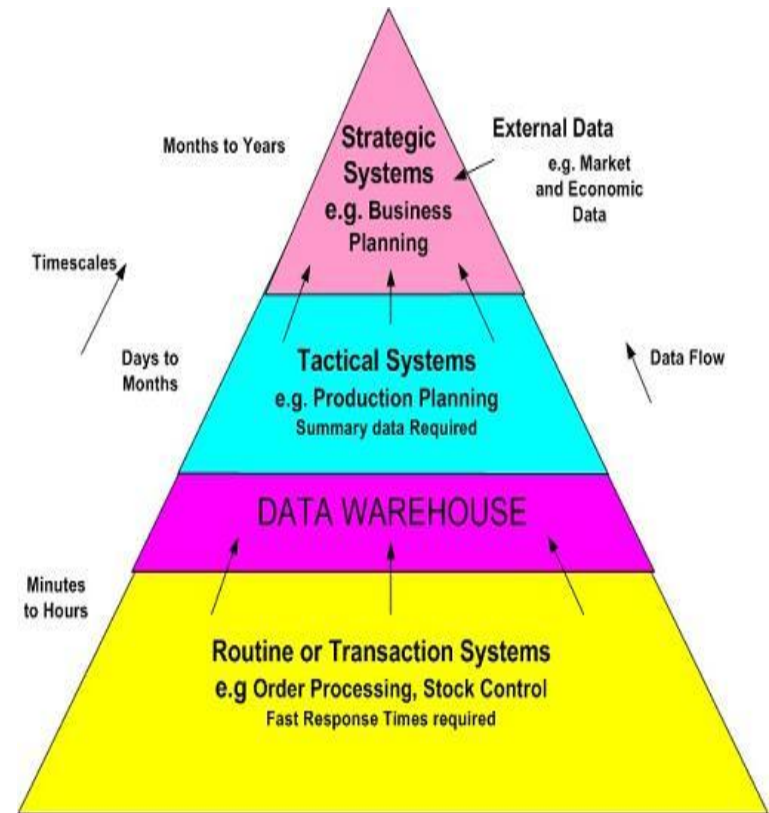
What is BI منظومات الأعمال الذكية

➤ Business intelligence consists of:
- Sourcing the data.
- Assessing the situation.
- Filtering out unimportant information.
- Developing solutions.

➤ Business intelligence is the ability of an organisation to understand and use information to its gainful operation.

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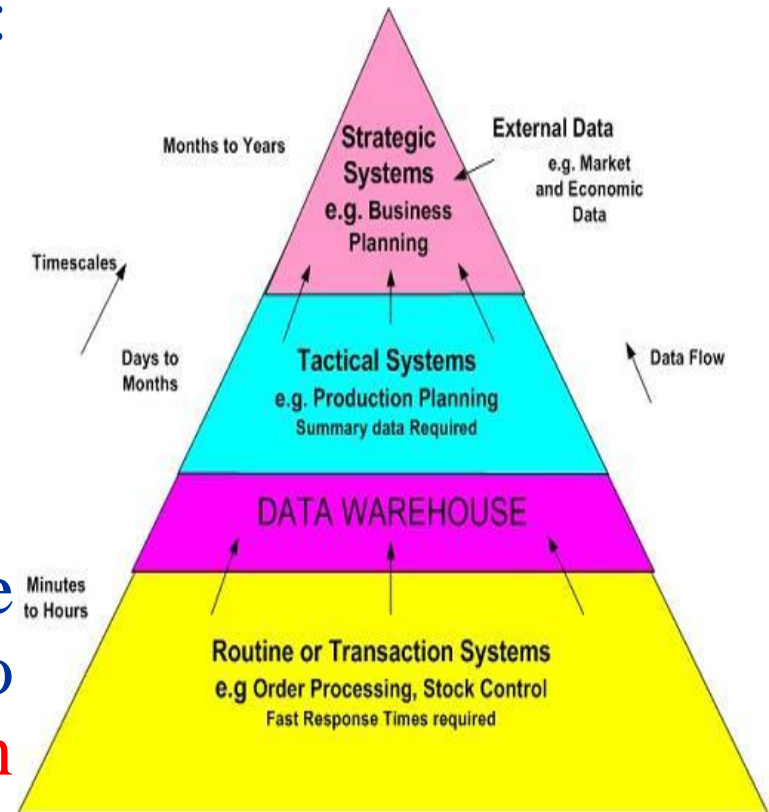
Why Business Intelligence (BI)

➢ Business process created mountains of data stored inside complex IT systems.

➢ Efficient analysis of these data is crucial for a success of any organization

➢ **BI** technology can collect and transform millions of records for comprehensive analysis every which way.

➢ **BI** support decision-making capabilities to attain and maintain a competitive advantage in today's turbulent market

BI Technology

Data Warehousing (DW)
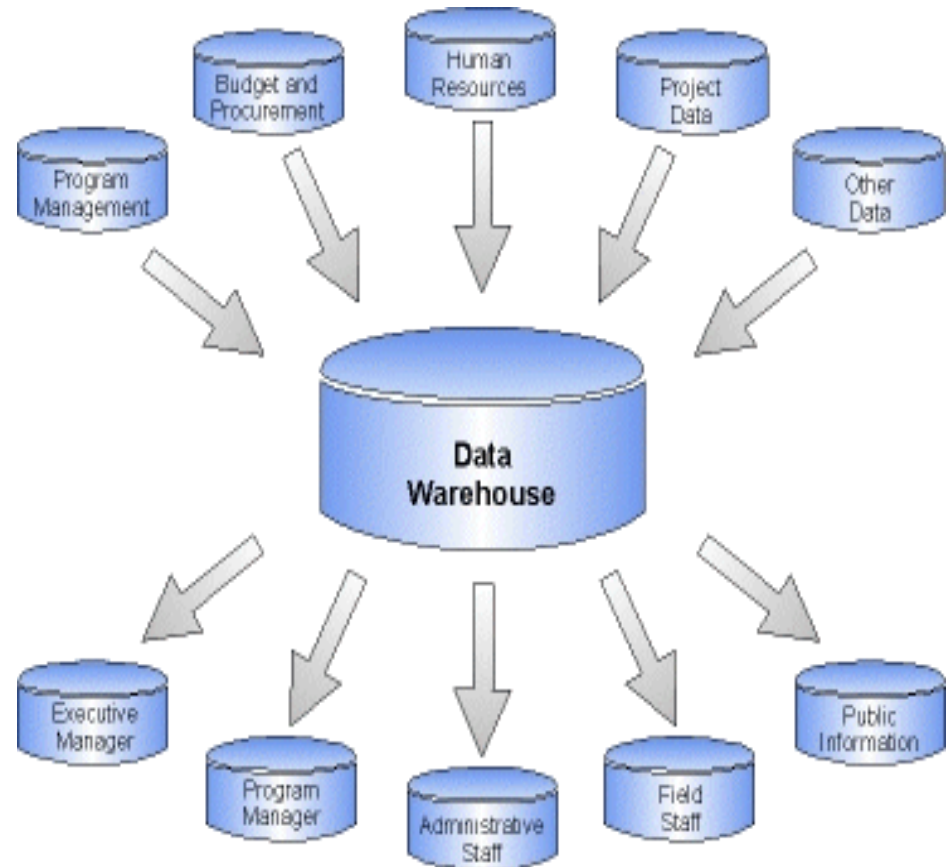
On-Line Analytical Processing (OLAP)

Data Mining (DM)

Data Warehouse مستودعات البيانات

➢ Data warehousing is a database designed for query and analysis rather than for transaction processing.

➢ Contains historical data derived from transaction data.

➢ Include data from several sources.

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Data Warehouse مستودعات البيانات

➤ Benefits are most obvious in companies with several Computer platforms and versions and with many different data sources.

➤ DW reduce time to locate access and analyse information.
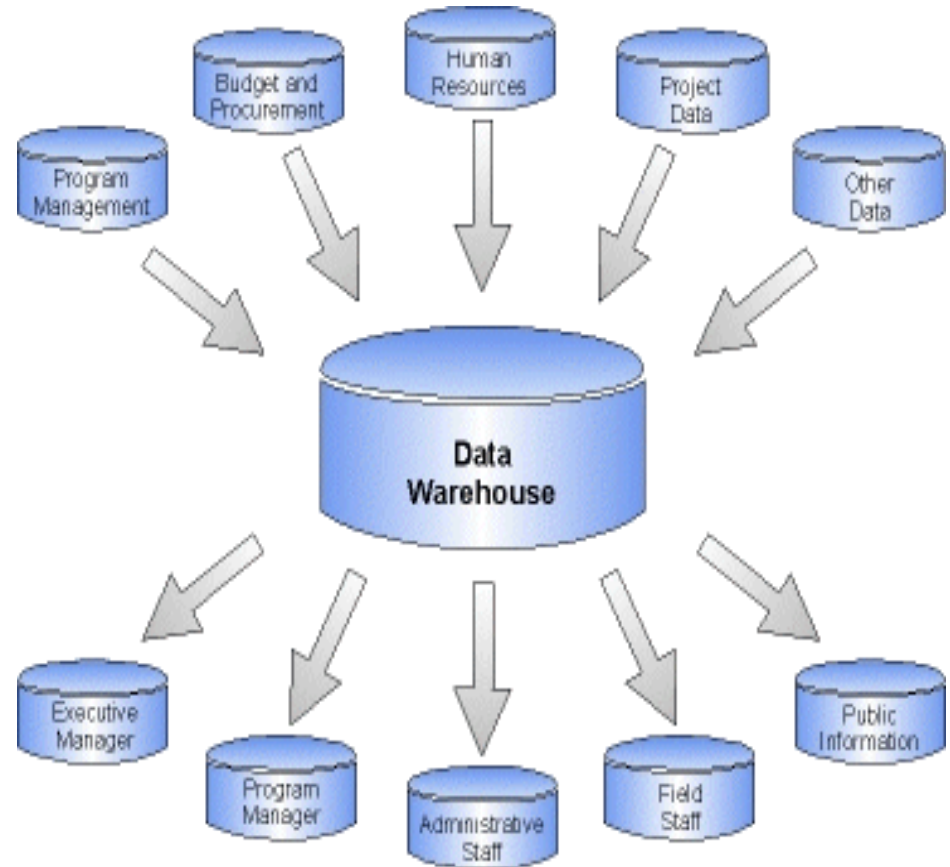
# OLAP Architecture المعالجة التحليلية

➢ **OLP** tools are a combination of analytical processing procedures and graphical user interfaces.

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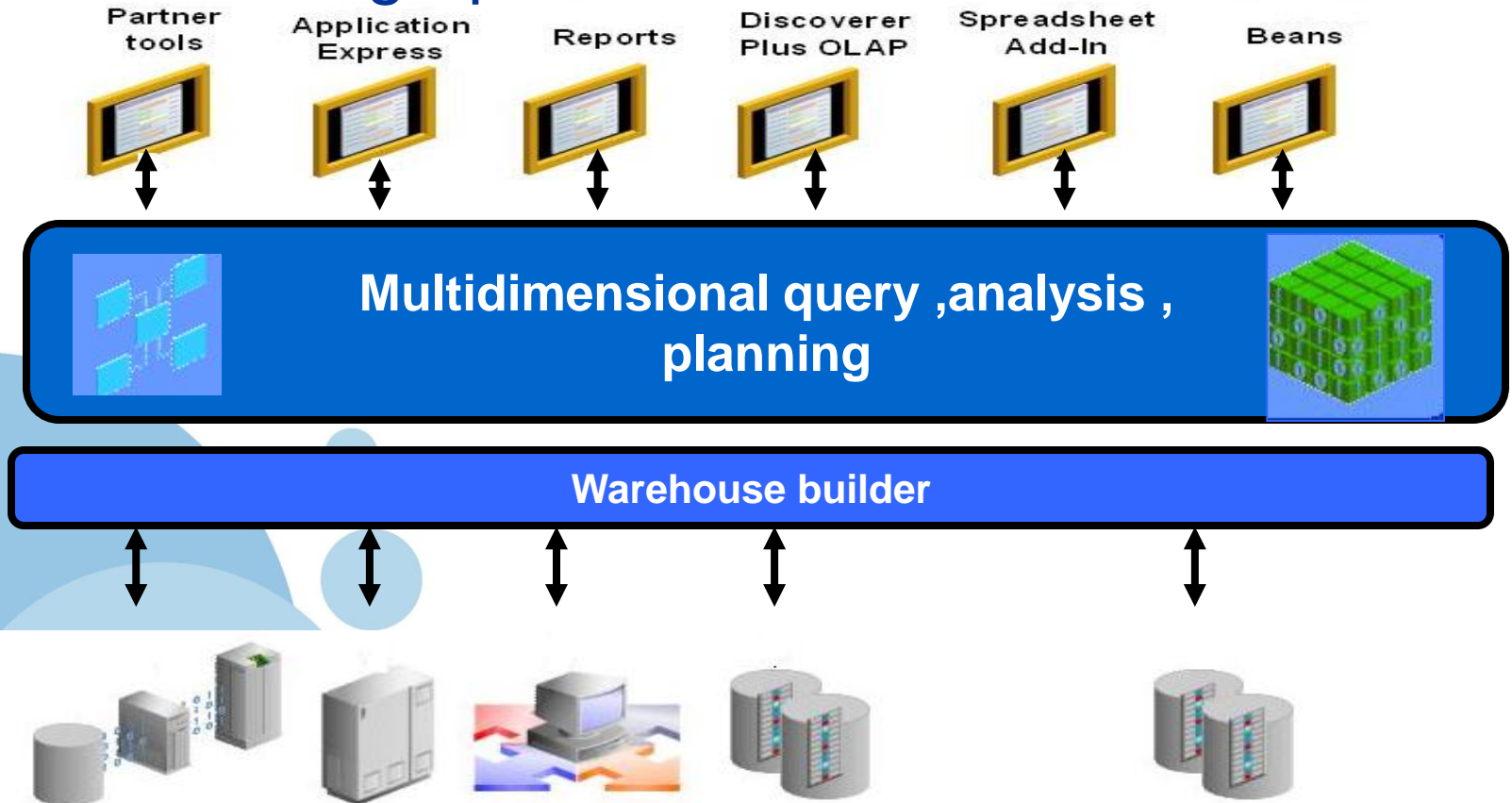
Data Mining التنقيب فى البيانات

➢ **Data mining** is a process of discovering new correlations, hidden patterns, and trends from large volume of data stored in repositories.
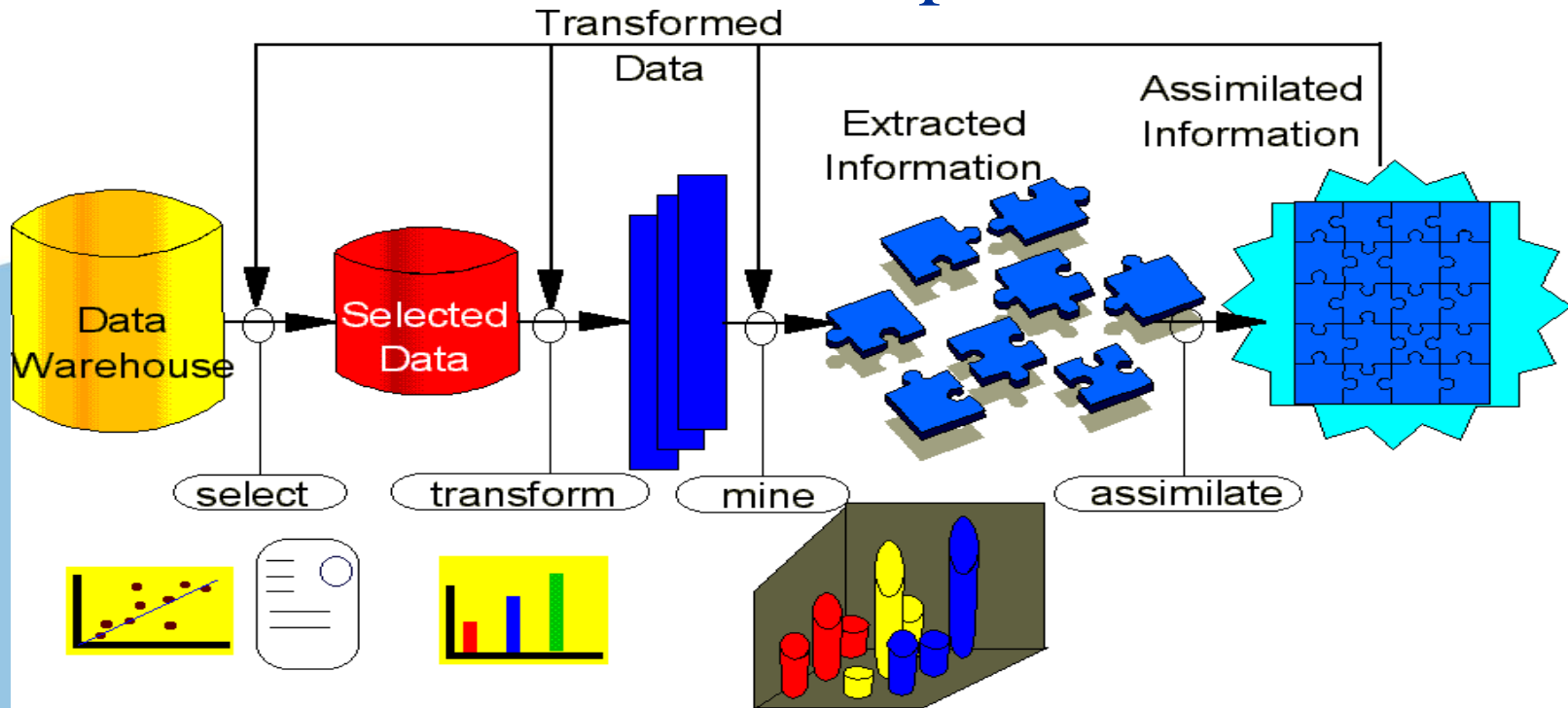
Cloud Computing

➢ Cloud Computing may be defined as common, location-independent, online, utility that is available on demand.

➢ Thus, no matter where the client is geographically located, he can access the information in the cloud.

➢ The on demand feature means resources have to be dynamically allocated .

Why Cloud Computing

- ➢ *Flexibility*
- ➢ *Disaster recovery*
- ➢ *Automatic software updates*
- ➢ *Capital-expenditure Free*
- ➢ *Increased collaboration*
- ➢ *Work from anywhere*
- ➢ *Document control*
- ➢ *Security*
- ➢ *Environmentally friendly*

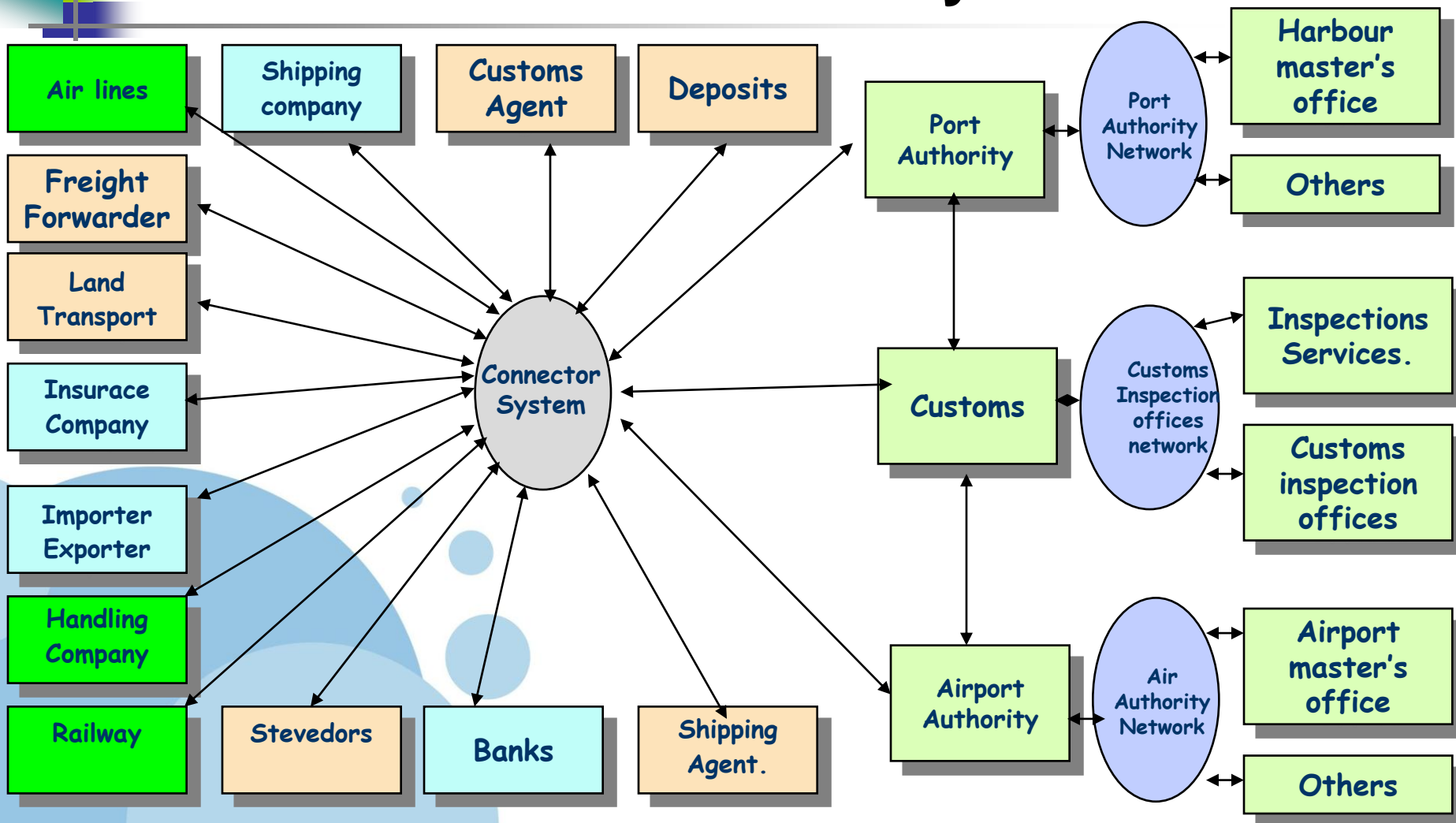*Cloud Business Intelligence A Solution For Smart Ports & Logistics*
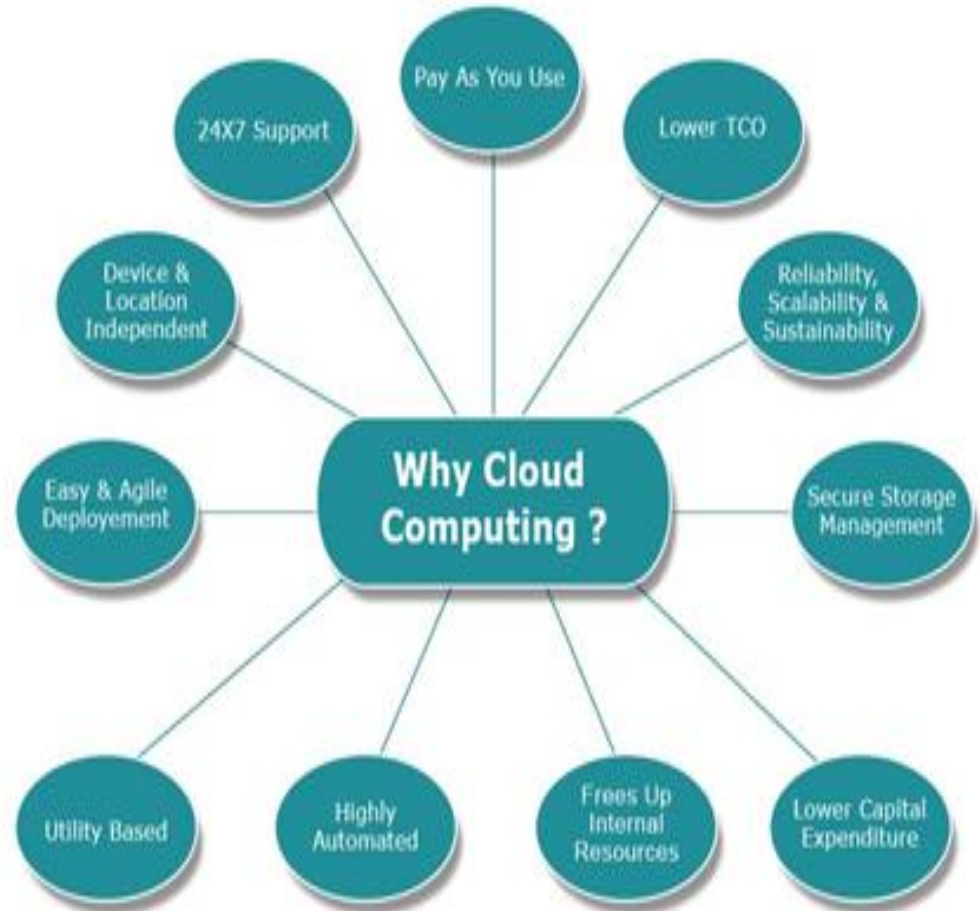
Cloud Business Intelligence

➢ **Cloud BI** is a revolutionary concept of delivering business intelligence capabilities as service using cloud based architecture that comes at a lower cost, faster deployment & flexibility.

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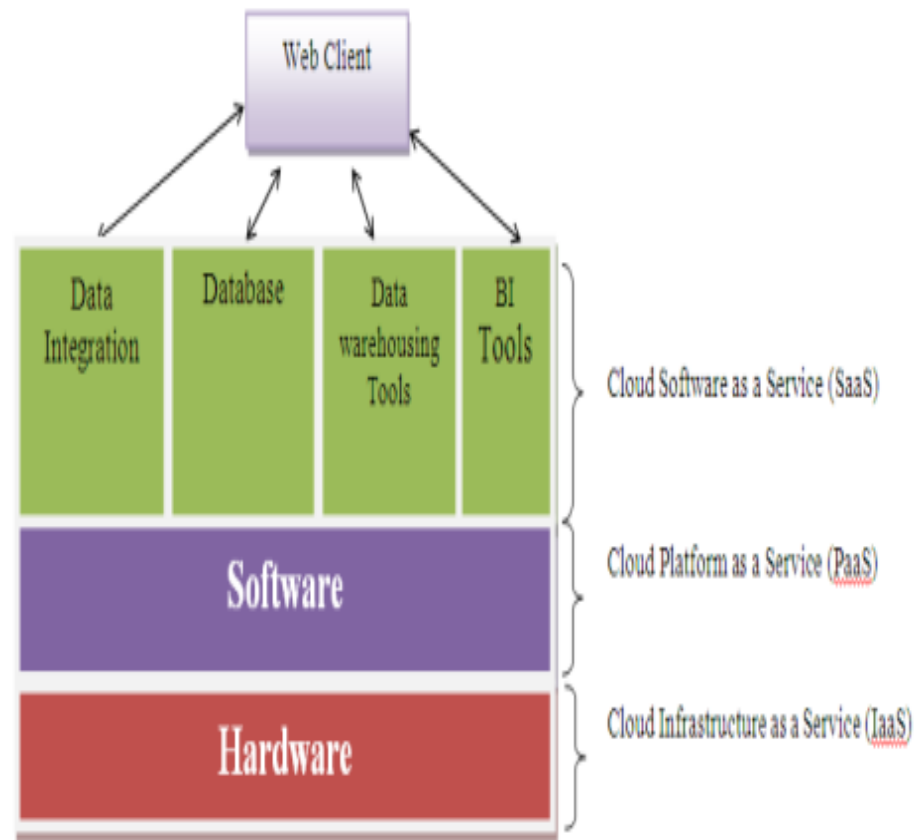
Maritime Sector Community

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Smart Port

➤ **Smart Port :** To get the most out , the following components must be included:

○ **Port Community Single Window System** نظام النافذة الواحدة الإلكتروني

○ **Port E-Marketing System** نظام تسويق الإلكتروني بالميناء

○ **E-Commerce Systems** نظم الشراء فى ظل التجارة الإلكترونية

○ **Process Control E-Surveillance** التحكم عن طريق الرقابة الالكترونية

○ **Archiving System** نظام حفظ وإدارة الوثائق

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Single Window System

➢ **Port Community Single Window System**

نظام النافذة الواحدة الإلكتروني

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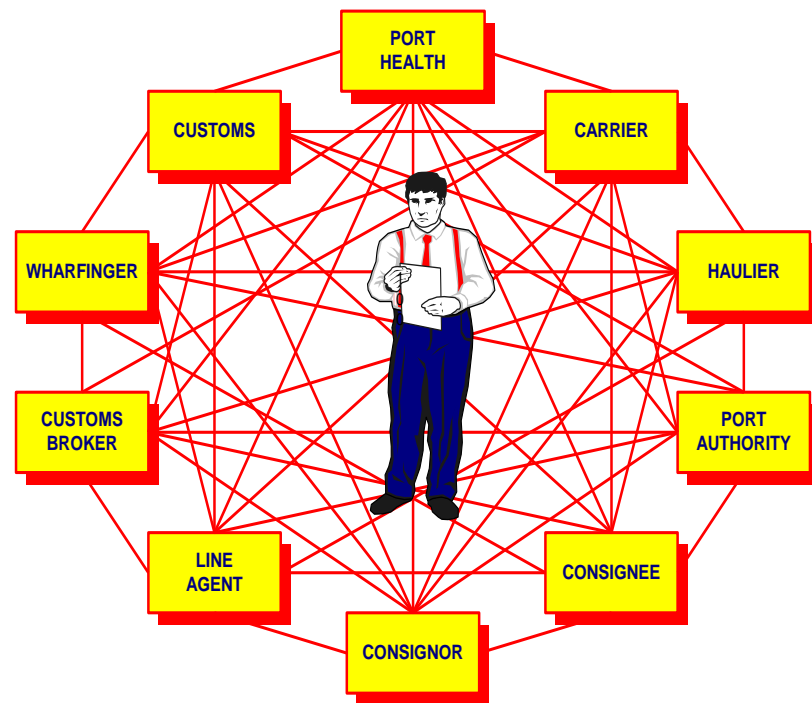
E-Marketing System

➢ **Port Electronic Marketing System** نظام تسويق الإلكتروني بالميناء
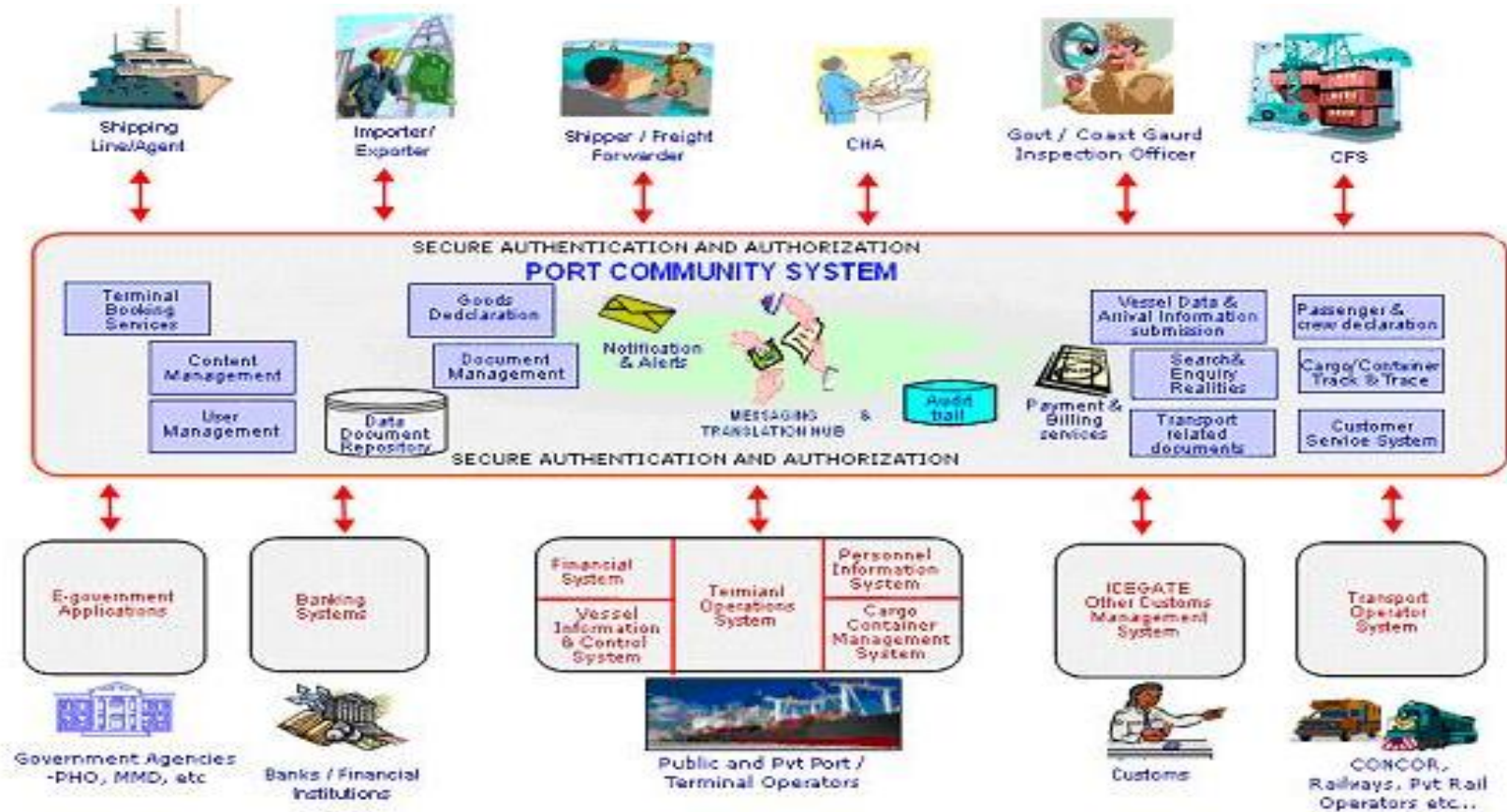
E-Commerce System

➤ **E-Commerce Systems**   **نظم الشراء فى ظل التجارة الإلكترونية**

Documents Flow in a Procurement Process

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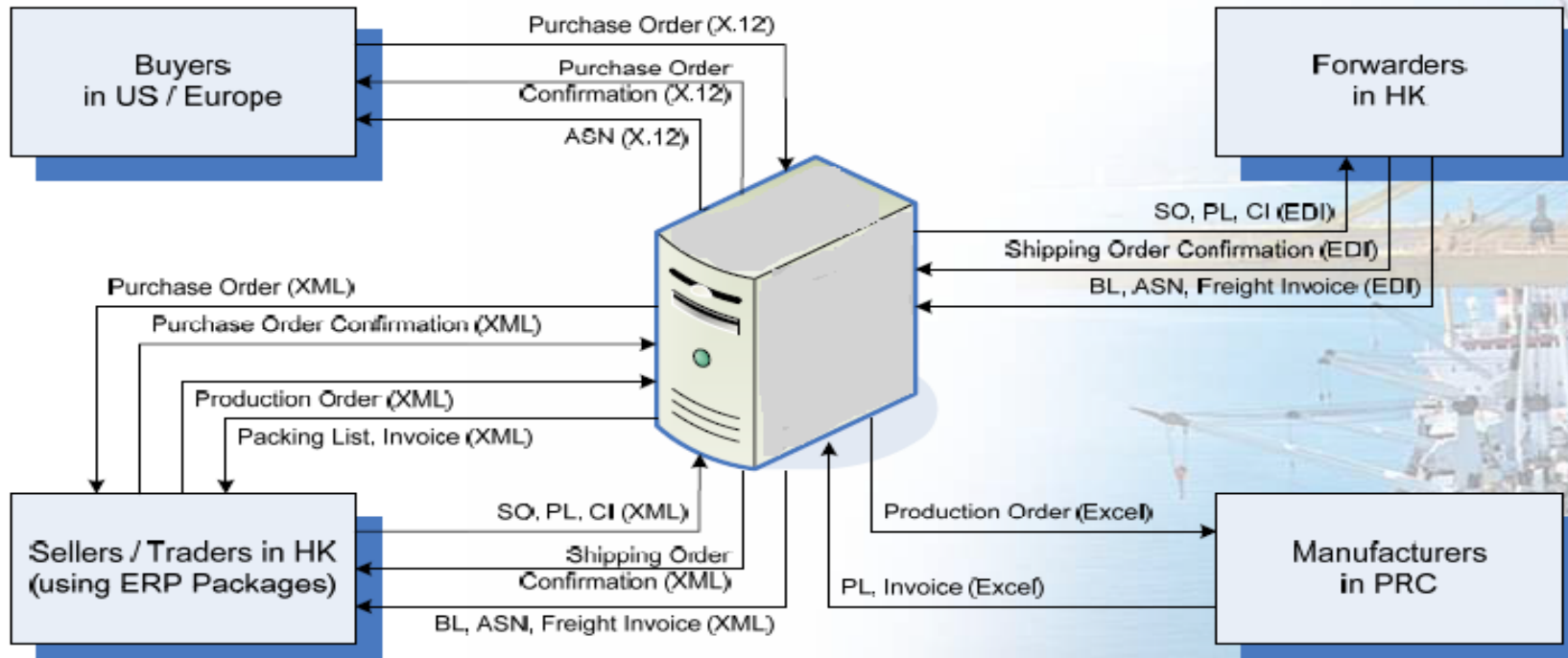
E-Surveillance

➤ **Process Control E-Surveillance**

التحكم فى العمليات عن طريق الرقابة الالكترونية

Archiving System

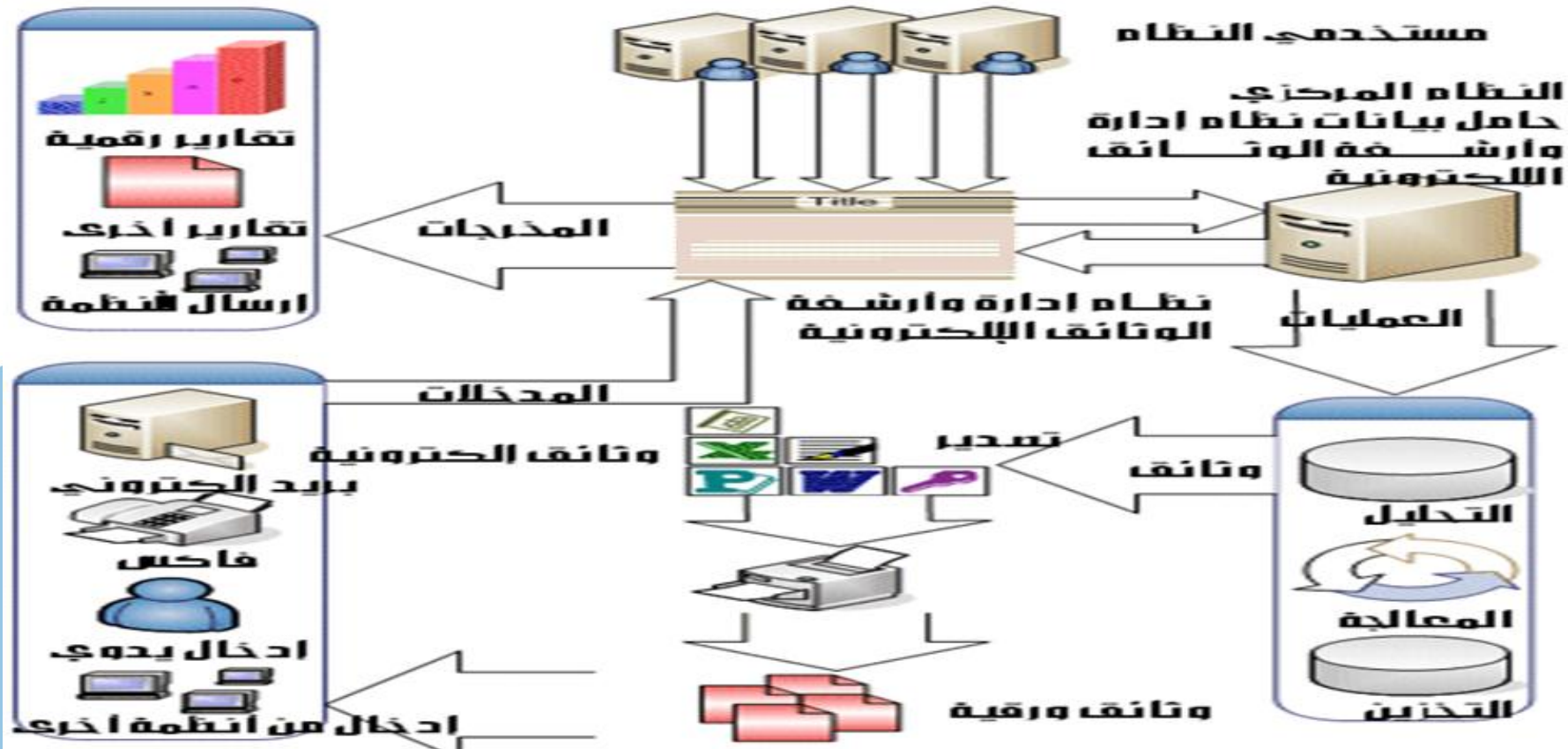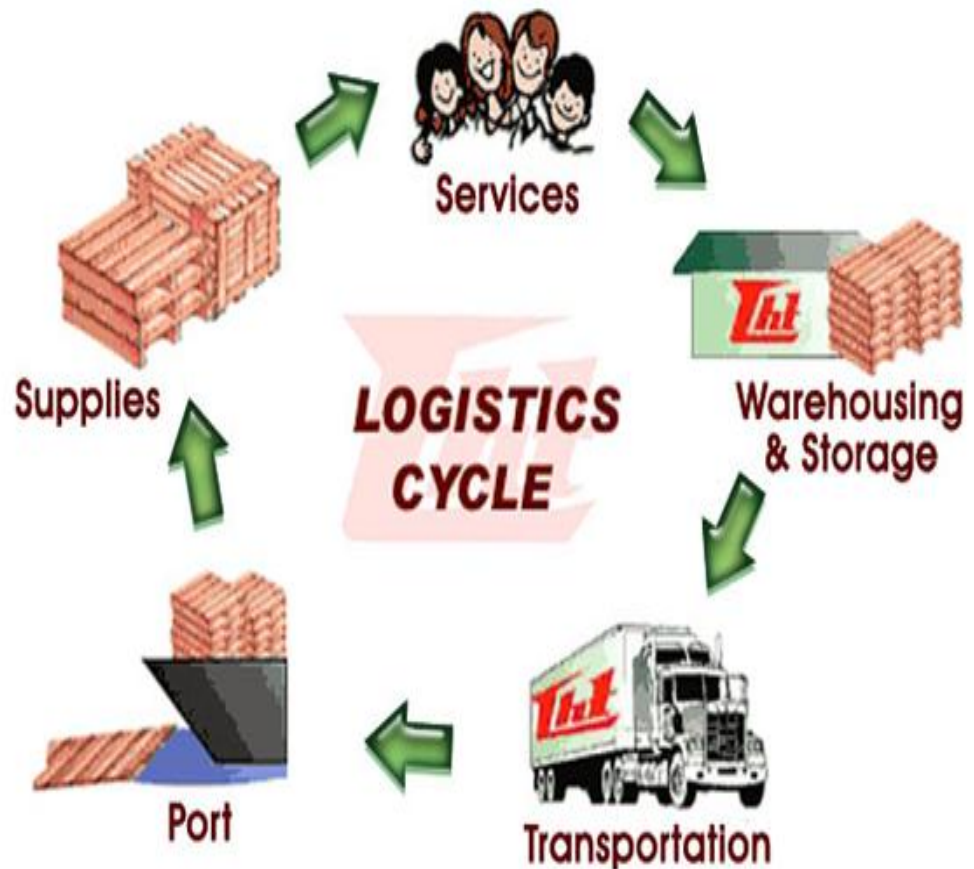➢ **Archiving System**   نظام حفظ وإدارة الوثائق

E-Logistics Services

➢ **E-logistics Services** is a set of computer programs are used to provide services to customers & business partners.

Services

Supplies

LOGISTICS CYCLE

Warehousing & Storage

Port

Transportation

What is Logistics

➢ **Logistics** is defined as the process of **movement of materials** and **products** into, through and out of a firm.

The Logistics Flow Chart

SUPPLIERS → SALES FUNCTION (SUPPLIER) → TRANSPORTATION → PURCHASING FUNCTION (DISTRIBUTOR)

PURCHASING FUNCTION (CUSTOMER) ← TRANSPORTATION ← SALES FUNCTION (DISTRIBUTOR) ← WAREHOUSING

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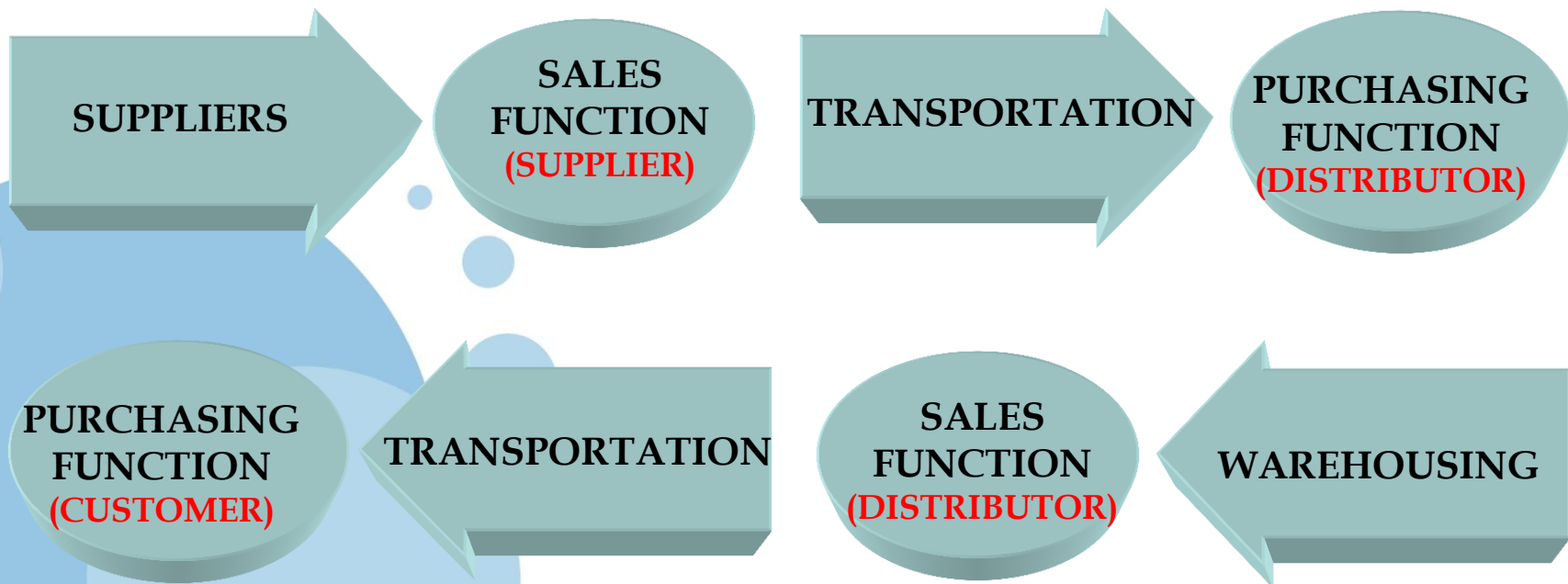
E-Logistics Services

E-logistics Services Global Vision

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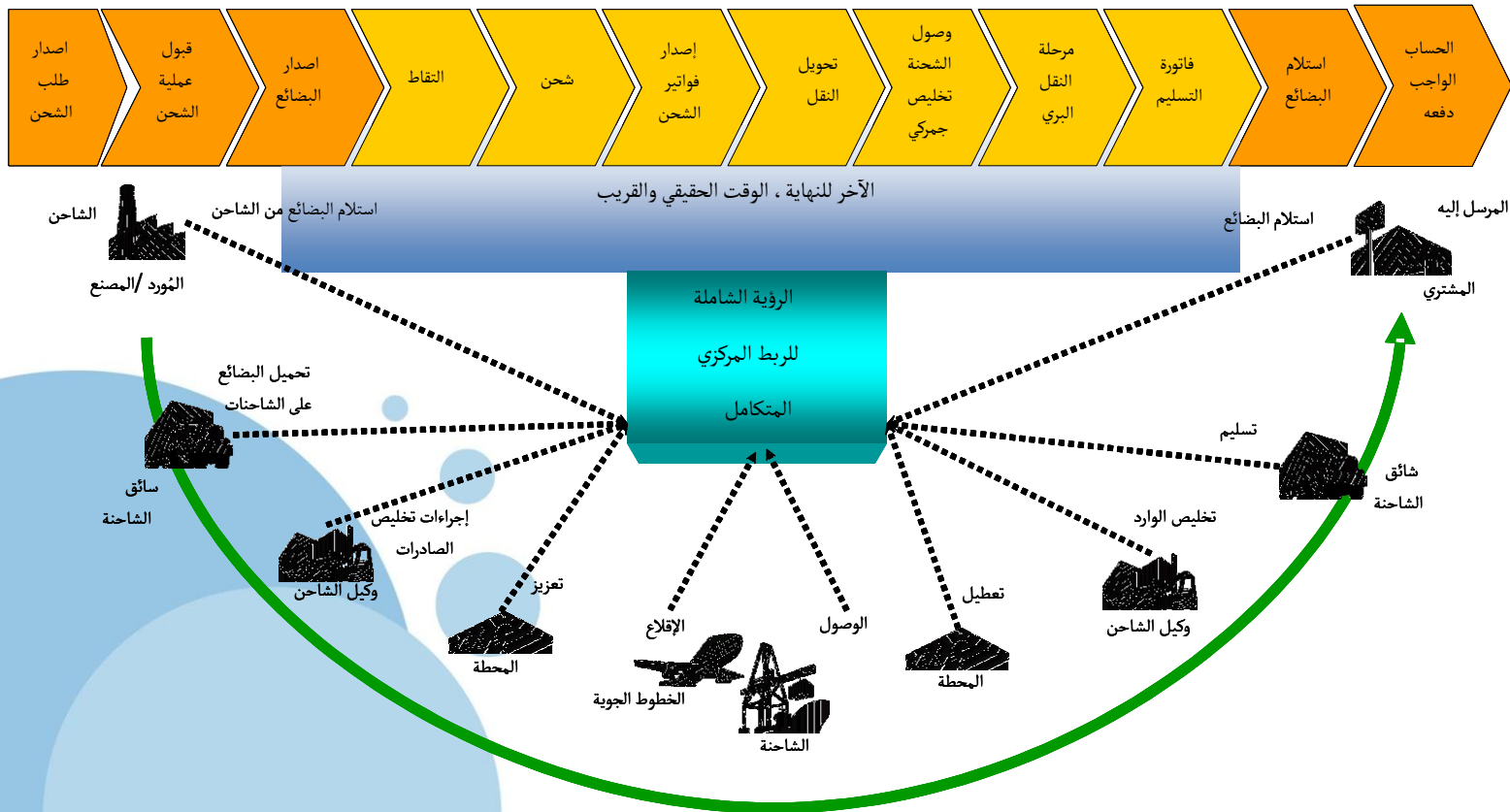
CBI Technology And Key Business Factors

➢ Key business factors (KBF) are measures or indicators that are significantly related to the business success of a particular industry.

➢ KBF contribute to the overall improvement of results and as such have to be closely and continuously monitored.

➢ Defining KBF requires specific knowledge and understanding of maritime sector's core business and services, behaviour and habits of its clients, the ways its services are being used.

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CBI Technology And Key Business Factors

➢ Implementation of KBF monitoring requires CBI tools.

➢ CBI help users identify risk early and any material changes in business condition.

➢ CBI technology can collect and show data about each client, and service, and provide an aggregate panoramic view of business performance.

Business Intelligence Role

➢ Logistics service providers and Smart Port require:

- ○ *Stringent and* *standardized* *process management.*
- ○ *Fine-tune and Better overview of all* *logistics processes* *.*
- ○ *Fast* *evaluation* *of data for a real time overview.*
- ○ *Optimize and run the* *transportation chain* *more efficiently.*
- ○ *Accomplish the* *tracking of packages* *in real-time.*
- ○ *Keep an ongoing record of the* *status* *of your parcels and deliveries.*
- ○ *Provide your customers with on-time, reliable and efficient services.*

Impact of Cloud Business Intelligence

➢ **Smart Port use CBI to:**

- *Track the status of deliveries and goods in real-time.*
- *Adjust services accordingly*
- *Monitor the capacity utilization of your service fleet.*
- *Streamline the on-the-ground management of your vehicles.*
- *Facilitate maintenance-repair-overhaul (MRO) .*

➢ **Logistics services providers use CBI to:**

- *Manage the supply chain through real-time analysis.*
- *Fully utilize warehouse capacity.*
- *Keep stock size workable.*
- *Enjoy seamless tracking of deliveries.*
- *Streamline the order-monitoring process.*

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Conclusion

➢ The term Cloud Business Intelligence refers to the process for increasing the competitive advantage of a business by intelligent use of available data in decision making.

➢ CBI support of the decision making process to augment competitiveness, making an efficient link between business strategies and IT systems.

➢ CBI achieves complex analysis of big data in no time providing a comprehensive review of business-critical performance to help maximize performance of company-critical processes.

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Conclusion

To prosper in Today's Complex Business Environments

To Face Business Environment Challenges

1

- Operational details Information is required.

- Record & Store Operations and processes

2

- Create Data warehouses.

- Manage Data with Intelligent Techniques.

3

- Implement CBI Technology

In All Operations Level In The Future

Thank You