

RADIO FREQUENCY IDENTIFICATION (RFID)



ADVANTAGES

- STORES MORE INFORMATION THAN OTHER ELECTRONIC IDENTIFICATION TECHNOLOGIES
- NO 'LINE OF SIGHT' REQUIRED TO READ TAGS
- SIMULTANEOUS READING OF MULTIPLE TAGS
- COMPLETELY AUTOMATED – ELIMINATES HUMAN INTERVENTION
- HIGH DATA ACCURACY
- EASY TO USE

HOW IT WORKS

USES RADIO WAVES VIA A READER TO COMMUNICATE WITH A TAG TO RETRIEVE THE DATA WHICH HAS BEEN PROGRAMMED INTO ITS MEMORY

WHAT IS RFID?

A METHOD FOR TRACKING OR IDENTIFYING PRODUCTS, PEOPLE, EQUIPMENT, ANIMALS

APPLICABILITY

AT PRESENT BEST SUITED TO MEDIUM/LARGE FIRMS GLOBAL CORPORATIONS WHERE TRACKING AND IDENTIFYING IS VITAL TO OPERATIONS

A SUCCESS STORY

- NEW ZEALAND KIWI FRUIT PACK HOUSE EastPack
- PAY BACK IN LESS THAN 12 MONTHS
 - DELIVERY ON TIME PENALTY COSTS DECREASED
 - FEWER QUALITY BREACHES
 - OCCUPATIONAL SAFETY & HEALTH BENEFITS
 - CAPITAL SAVINGS ON EQUIPMENT

BUSINESS BENEFITS

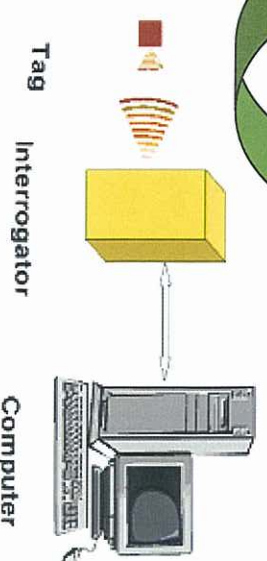
- TRACKING OF PRODUCTS, EQUIPMENT
- ABILITY TO SHARE REAL TIME INFORMATION
- ENHANCE CUSTOMER SERVICE
- IMPROVE INVENTORY MANAGEMENT

BEST PRACTICES

- DEVELOP BUSINESS CASE
- PILOT TESTS
- PERFORMANCE MEASURES
- EMPLOYEE TRAINING

ISSUES

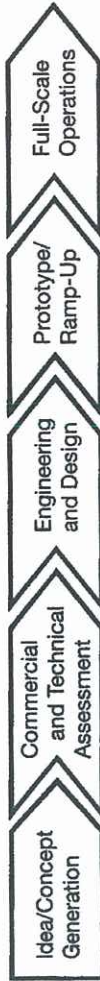
- COST AND TIME TO IMPLEMENT
- SYSTEMS INTEGRATION
- COMPETING STANDARDS ISO/EPCglobal
- OBTAINING STAFF BUY-IN
- PRIVACY CONCERNS
- OUTSIDE PRESSURE TO ADOPT RFID



WHAT IS EARLY SUPPLIER INVOLVEMENT?

The Process of involving suppliers in providing support early in:

- Strategic planning, demand and supply planning
- Continuous improvement projects and project planning;
- New technology and product development



development cycle, even at the generation of a concept.

This sees suppliers assuming responsibility for design leadership, which forms an alliance with the customer company.

Sometimes referred to as Japanese-style partnerships, as ESI was a strong initiative of Japanese auto industry.

There are different levels of supplier design involvement, the highest being known as black-box.

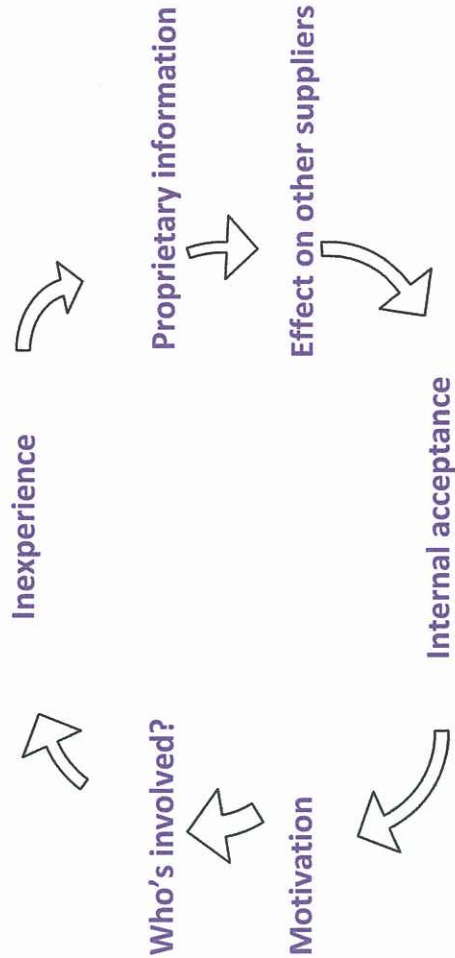
EARLY SUPPLIER INVOLVEMENT

WHY INVOLVE SUPPLIERS EARLY?

The need for continuous improvement in the business world demands innovative ways of doing business. ESI allows companies to;

- Tap into suppliers expertise (synergy 1+1=3)
- Gain insights into market requirements and changes, improvements in material technology.
- Gain cost and quality management techniques and problem solving skills.
- Design capabilities and engineering talent and new product features.
- Increase in focus on outsourcing requires greater collaboration between suppliers and customers.
- Reduce design changes. 'Do it right the first time'.

THE ISSUES WITH ESI



SAMSUNG AND BANG & OLUFSEN

B&O originally collaborated on a phone with Ericsson, but due to poor management it never made the shelves.



Samsung then approached B&O to be involved in the production of a new line of phones, involving them early in the concept design stage.

By leveraging B&O technological capabilities they were able to improve product development effectiveness and efficiency.

Although B&O headquarters are located in Denmark and Samsung in Japan, the companies were able to form a bond that enabled the production of very successful products.

Green Logistics

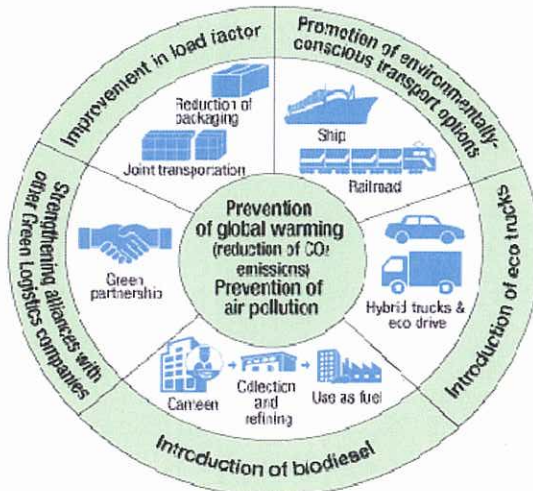
By Jae May Tan (12947788)

There has been growing concern over the impact of transportation on the environment and this matter is being investigated heavily by both environmentalists and transportation planners at governmental levels. Transportation is one of the factors that cause pollutions to air, sound and water and with well-publicised issues such as global warming, ozone layer depletion and acid rain, green logistics is introduced to the industry.

Green logistics is defined as environmentally friendly and efficient transportation and distribution system. Traditional logistics organise distribution from producer to consumer through transportation, warehousing, packaging and inventory management. However, green logistics expose the industry to recycling and disposal that leads to a new sub-sector called reverse logistics (RL). RL involves in reducing, managing and disposing hazardous and non-hazardous waste produced from packaging and products. Large organisations such as Xerox, Kodak and Hewlett Packard have adopted RL programs.

There are many strategies that have been used to manage and respond to environmental issues in logistics. Recycling materials and reducing consumptions are the most popular strategies among organisations. Redesign logistical system components for greater environmental efficiency and increase the education and training among company personnel are also accepted as important strategies in promoting green logistics. Besides actions taken by organisations, International Standards Organisation (ISO) has developed an international standard, ISO14000, which applies to vendors

worldwide. These vendors must meet certain types of environmental qualifications in order to service or supply organisations. Apart from those strategies mentioned, organisations continuously developed more strategies for green logistics, which can be summarised by the diagram below.



Compliance with laws and regulations

Source from Panasonic.net

Green logistics offer benefits to organisations such as:

- Reduced costs and better cost control
- Enhanced revenues and customer service
- Improved inventory management
- Increase competitiveness among organisations
- New market opportunities with environmentally conscious customers

Green logistics still seems to be a new concept, which has just started to evolve for the last decade. Nevertheless, larger organisations and governments are working hard together to make this green logistics a success and bring a step forward to a better and cleaner world.