Unit-5

CASE STUDIES

Telecom Sector

5.1 ENVIRONMENTALLY RESPONSIBLE BUSINESS STRATEGIES (ERBS)

ERBS is a **business** approach that incorporates environmental factors in it. The major elements of ERBS are:

the business architecture

Green policies

processes that create waste and emissions

enablement of efficient use of resources

metrics for monitoring the greening of the organization

Implementation of environmental strategies.

Environmental sustainability is induced by planning and implementing appropriate strategies and functions like green processes, product developments, energy conservations etc. It is necessary to ensure that all the business aspects such as product life cycle management, operations, Information and technology

are effective enough to preserve the environment. The overall strategies of the company to improve business efficiency must include complete environmental obligations and energy consumption guidelines. Companies must introduce innovative methods to improve Information and technology operations to enhance the performance, without increasing the energy consumption. Also, by minimizing waste, preventing pollution and eliminating health and safety risks, the company saves on operating cost.

5.1.1 Stakeholders of ERBS

The ERBS is a goal that can be achieved be involving the employees at high, mid and low levels. The management must commit itself to foster environmental sustainability. Some of the stake holders involved in implementing ERBS are:

Decision maker

Green consultant

Engineers

Quality Assurance manager

Technical manager

Researchers & developers

Environment regulators

IT consultant

5.1.2 Formulating Environment Sensitive Business and Strategic Plan

The organizations must implement green practices at every levels. It is the responsibility of the top level management

to formulate the business and strategic plans to foster green environment. Some of the important sectors to be attended are:

Understanding current business scenario

The following points are the matter of concerns regarding understanding the overall business trends:

Has a higher power consumption than other similar organizations

Assumes responsibility for its carbon footprints

Measures its carbon emissions accurately

Has a person responsible for environmental matters

Is aware of the importance of Green metrics

Uses devices and/or software to measure carbon emissions

Understanding your business policies with respect to environment:

This deals with the mapping the business objectives with the environmental goals. Some of them are:

Policies for purchase of Green equipment and related services

Policies related to safe disposal of hazardous waste, material, or equipment

Policies for adopting and implementing recycling of equipment

Policies for optimizing energy consumption in all business processes

Policies for use of renewable energy (e.g., solar, nuclear)

Policies to influence attitudes of staff toward carbon emissions

Influencing factors of the organization to adopt Green policies

The following are the factors that plays prominent role in adopting green policies:

Government rules and regulation in implementing environmental measures

Customer's demand or pressure for Green policies and Green products

Pressure from society (physical/electronic groups) to adopt Green policies

Self-initiated implementation of environmental policies

Energy consumption in your organization

Carbon footprint in your organization

Operational costs in your organization

Environmental goals of the organization to adopt Green policies

Reduction of energy consumption in your organization

Reduction of carbon footprint in your organization

Reduction of the operational costs in your organization

Improvement of the reputation of your organization

Meet government regulations and legislation

Meet the sustainability goals of your organization

Increase revenue and profitability due to Green initiatives

Some of the Green ICT practices:

Videoconferencing

Telecommuting/Teleworking

Fleet and field force management

Web and use of collaboration tools such as e-mails

Mobile phones/PDAs

5.1.3 Technical Strategy and Planning

The organizations practices regarding energy saving data centres and equipment are deals under technical strategy and planning. Some of them are:

Energy saving choice when purchasing new ICT hardware

Reducing energy used by data centres (ICT)

Uses open source system software (ICT) and applications

Machine/Server Virtualization (ICT)

Counts and monitors ICT devices for emissions

Replaces conventional devices with environment friendly devices

Reduce the use of paper and related materials (e.g., ink or toner)

Reduce use of hazardous materials that can damage the environment

Reduce number of high power consuming equipment

Use of alternative energy source such as wind, solar

Monitor emissions and evaluate on a regular basis

Provide training to employees to implement and enhance Green practices

Separately monitor the electricity consumed by the data centre

Encourage product innovation and environmentally conscious design

Life cycle assessment of energy consuming equipment

Maintain equipment and instruments in good condition to reduce wear

It is very important to measure the carbon emissions. The tools that aid in that area are:

Dashboard displays attached to the devices to display emissions

Mobile gadgets attached to devices for measuring emissions

Surveys of employees and other stakeholders

Inventory of the organization to identify unused goods

Interviews of employees and stakeholders to ascertain carbon emissions

5.1.4 Procurement and Supply Management

The green practices must be followed in procurement of raw materials, processing them and their storage organization etc.

Supply management procurement

Adheres to environmental criteria for approved suppliers

Requires or encourage suppliers to undertake environment certification

Builds environmental criteria into supplier contract conditions

Incorporates environmental conscious staff on sourcing team

Keeps record of supplier environmental questionnaires

Records and evaluate supplier environmental audits and assessment

Modify the current ERP system to meet environmental challenges

Buy a new ERP software package that will meet environmental needs

Seek external help for training and implementation of Green ERP

Apart from greening the supply chain management, periodical audits must be done to check whether the environmental goal are met.

Compliance audits

Well-documented model for carbon emissions that can be audited

Regular updates and modification of environmental parameters

Standard approach to accessing government rules and regulations

Provides feedback to the government on carbon emission

Periodically checks environmental documents of the vendor

5.1.5. Strategic Measures for Reducing Emissions

The mission for reducing emissions is very essential to reduce the harmful impact. **Some of the measures are:**

Use of ICT in minimizing the organization's environmental footprints

Government regulations that require organizations to limit carbon emissions

Implementing monitoring methods for carbon footprints in an organization

Use of alternate source of energy such as solar/wind energy

Costs involved in implementing Green initiatives

Formation of an executive body for overall responsibility for environment

Documented targets for carbon footprint reduction

Investment funds dedicated to incorporate Green policies

Training plans and budgets to help employees understand Green issues

Seek external help for upgrades to a Greener business system

Modify the current business processes to incorporate environmental needs

Create power management policies to reduce energy consumption

Methodology to undertake suitable and defensive power consumption

Use of power management software

One of the option in reducing the impact of carbon emissions is deploying cloud computing technologies. Software as a Service (SaaS) can be used. Also other devices that can be used to foster green ICT

Use of SaaS in reducing carbon emissions

Use of process reengineering to reduce waste

Use of Cloud computing to implement environmental policies

Use of new ICT initiatives as part of a strategy to reduce power consumption

Use of devices that provide real time statistical data

Use of devices that configured and managed from central services in an organization

✸ Use of devices that configured in any designated boundary in the organization