Lesson 2: Sustainability as the Context of Business

Sustainable Development: using global resources to meet human needs while preserving the environment so that future generations can meet their needs. It ties together concern for the carrying capacity of earth's natural systems with the social needs facing humanity. It is concerned more generally with environmental, economic and socio-political sustainability.

Sustainability in Canada: Canada's economy is highly dependent on natural resources and Canadian companies are motivated to develop strong stewardship programs to ensure long-term viability of these resources. While Canadian financial institutions and government suffer from the effects of the global financial crisis, they are not as badly affected by it as their neighbors in the U.S. where the financial crisis originated.

Reading Notes: *The World in Context (Cambridge University Brochure, 2003)*

★ **The Challenge of Unsustainability**

- *Increase in population:* By 2050, it is estimated that population will be 8.9 billion.
- *Growth of economy:* global economy has grown considerably, with world gross national product more than doubling since 1970 a consistent growth at around three per cent annually.

→ *Both of these elements put pressure on the environment and increase social disparities.*

★ **The Role of Business**

- Most businesses are on a slow but steady journey towards a more environmentally and socially responsible behavior. Their decisions are driven by a complex mixture of **external pressure** (increased regulation, fiscal measures), **commercial opportunity** (responding to demand), and **internal business leadership.**

- **World Business Council for Sustainable Development (1992):** since its creation, the scale of proactive business interventions on social and environmental issues has increased. Most of the world's leading companies now report on their social, environmental and ethical responsibilities.

- **Partnerships with NGOs and multilateral agencies** like the WHO or the United Nations Environment Program (UNEP) are becoming commonplace. Regular surveys of business leaders demonstrate both a growing awareness of the seriousness and urgency of the problems.

    ➢ **However, the business response has an uneven character.** Even amongst the world's top companies there is a minority that is slow to comply with minimum legal standards.

- One of the reasons why the industrial period was so dynamic was because wealth creators could **externalize** part of their costs – onto the surrounding environment, local communities, their

employees or future generations. Such costs were an acceptable price to pay for economic progress; it made it easier to create jobs and keep prices competitive and profits high.
- Legislation has always defined the permissible level of cost externalization, but too often, they have entertained the interests of industrialists at others' expense.

★ **The Business Case**

Short-term Profit Maximisation: is in the interests of shareholders. It is an unquestionable mandate for Chief Executives and leadership teams. Demonstrating a convincing business case for improving social, environmental and ethical practice has become a precondition: businesses have to prove whatever it is they want to do (beyond compliance with legal standards) will be in the interests of shareholders, or else they shouldn't bother doing it.

好处 The Business Benefits of Sustainable Development

Eco-Efficiency
- Reduced costs
- Costs avoided (Design for Environment, Eco-innovation)
- Optimal investment strategies

Quality Management
- Better risk management
- Greater responsiveness in volatile markets
- Staff motivation/commitment
- Enhanced intellectual capital

Licence to Operate
- Reduced costs of compliance/planning permits/licenses
- Enhanced reputation with key stakeholders
- Influence with regulator

Market Advantage
- Stronger brands
- Customer preference/loyalty
- Lower costs of capital
- New products/processes/services
- Attracting the right talent

Sustainable Profits
- New business/increased market share
- Enhanced shareholder value

Not all of these potential benefits are applicable to every company, it all depends on:
- Which sector they operate in;
- The level of direct contact with consumers, on the inherent levels of risk entailed in different business activities;
- Legislative pressures etc.

Biggest problems faced by companies: investment communities (analysts, fund managers and so on) are ill-equipped to judge the significance of the measures introduced. For big firms, the sums of money they are dealing with are huge, even tens of millions of dollars saved may simply not make a difference.

Cost Internalization: refers to ensuring that the prices people pay for things really do reflect their full environmental and social costs. Many of these benefits would be more substantial if governments showed consistent resolution in their use of the price signal or other fiscal interventions.

成本内部化：将环境成本纳入产品成本之中

Inability to Secure a Level Playing Field: refers to the failure to make all competitors, anywhere in the world, internalize costs equally. This shows that relative competitiveness will always trump concerns about the state of the planet.

- The majority of companies could be doing a much more authoritative and persuasive job in working up what the **specific business case** is for them.
- Without a **values driver,** not much will be achieved. If a company is engaged in these issues only because it believes that the main and only thing affected will be profits. then media and NGOs will mark it down as just another "business-as-usual" stratagem.

★ **Confronting the Dilemmas**

Consumer's Dilemma: Companies have to deal with consumer ambivalence, whilst many people profess to supporting the idea of using their purchasing power in more environmentally, ethically and socially responsible ways, most do not follow through unless more sustainable products are able to offer exactly the same value for money, reliability and quality.

→ **Also, campaigns are much more likely to succeed when the issue is stopping bad things happening rather than making good things happen.** This a problematic driver for change.

NGO's Dilemma: Many NGOs are deeply conflicted when it comes to determining the appropriate role for business in civil society. On the one hand, they dislike the fact that business leaders have some kind of privileged access to politicians, and are deeply critical of special interest lobbying. On the other hand, they look to the same companies, urging them to take on quasi-governmental roles in terms of education, healthcare, community development in developing nations.

★ **Boundary Conditions**

The degree to which the balance of power has really shifted is often exaggerated: A firm cannot sort out chronic market failures, or other dysfunctionalities in society, when it's legal and fiduciary mandate does not say so. The government's job is to shape markets and set tax regimes in such a way as to serve the interests of citizens today without jeopardizing the interests of future generations.

★ **Radical Discontinuities**

The role played in the global economy by multinational companies lies at the heart of the problem. There is a which argues that multinational companies have systematically increased their reach, scope and influence so that they are now the dominant social institution anywhere in the world.

→ This is why NGOs call for more action from corporations.

★ **Business Strategies - The Five Capitals Model (Framework of Sustainability)**

The crisis of sustainability is seen to arise from the fact that we are consuming our stocks of natural, human and social capital faster than they are being produced. Unless the rate of consumption is effectively controlled, vital stocks cannot be sustained over the long-term.

→ Businesses should seek to identify and implement practices that either increase the stocks of these capital assets or (to a limited extent only) that substitute one form of capital for another.

There are five types of sustainable capital from which we derive the goods and services that we need to improve the quality of our lives:

■ **Natural Capital:** natural resources (matter and energy) and processes that produce and deliver goods and services. They include renewable and nonrenewable resources.

■ **Human Capital:** consists of people's health, knowledge, skills, motivation and capacity for relationships.

■ **Social Capital:** institutions that help us maintain and develop human capital in partnership with others. It includes such institutions as families, communities, businesses, trade unions, schools, and voluntary organizations. A critical component of social capital is the development of trust.

■ **Manufactured Capital:** material goods that contribute to the production process or the provision of services, rather than being part of the output itself (tools, machinery, buildings and infrastructure).

■ **Financial Capital:** enables the other types of capital to be owned and traded, for example through shares, bonds or banknotes. Unlike the other types of capital, it has no intrinsic value itself, but is representative of natural, human, social or manufactured capital. Financial capital is the traditional primary measure – the "single bottom line" – of business performance and success.

Lesson 3: Human Development Challenges for Managers

Business managers are being asked to tackle several large-scale human problems as part of their corporate activities. Two key and interconnected challenges are global poverty and human development.

Global Poverty: all parts of the world deal with poverty to some extent. Poverty is a systemic economic problem. Corporations that are engines of economic wealth creation can be helpful in addressing problems of poverty

Human Development: and quality of life are measured by levels of education, health, nutrition and social and cultural indicators.

The Issue of Mobility: Large gains to human development can be achieved by lowering the barriers to movement and improving the treatment of movers. Migrants boost economic output, at little or no cost to locals. While not a substitute for broader development efforts, migration can be a vital strategy for households and families seeking to diversify and improve their livelihoods

→ *UNDP Human Development Report 2009:* Movement involves trade-offs for both movers and stayers, and the understanding and analysis of those trade-offs is key to formulating appropriate policies. The report asks for governments of origins and destination to make better policies regarding admissions and treatment. The world distribution of opportunities is extremely unequal, which drives human movement.

- **Human Development Index (HDI)** composite index measuring average achievement in three basic dimensions of human development: a long and healthy life, access to knowledge and a decent standard of living.

→ A classification of countries based on the value of the HDI according to the most recent data. The ranges are 0–0.499 for low HDI, 0.500–0.799 for medium HDI, 0.800–0.899 for high HDI and greater than 0.900 for very high HDI.

- **Migrant** individual who has changed her place of residence either by crossing an international border or by moving within her country of origin to another region, district or municipality. An emigrant is a migrant viewed from the perspective of the origin country, while an immigrant is a migrant viewed from the perspective of the destination country.

Why do people migrate?
People move to seek better opportunities, but their movement is strongly constrained by barriers—most importantly, by policies at home and at destination and by lack of resources. Overall, the share of people going to developed countries has increased markedly during the past 50 years.

- **Demographic factors:** allowing migrants to enter developed countries where population is older and the dependency ratio is high (old depend on young) can help increase the workforce, who pay taxes.
- **Environmental factors:** the continual warming of the Earth may generate massive population shifts, as climate change increases environmental stress in 'marginal lands'.

How do people migrate?
Most migration occurs within countries in the same category of development: about 60 percent of migrants move either between developing or between developed countries (the remaining 3 percent move from developed to developing countries).

- *Developing to developed countries movements*: costly, and moving long. distances is costlier than undertaking short journeys, and also restricted by policies.

What can be done?
Many governments, both at origin and destination, as well as countries of transit, have signed bilateral agreements. These are typically used to set quotas, establish procedures and define minimum standards. Regional agreements can play an especially important role in establishing free movement corridors.

Lesson 4: The Economic Impact of Climate Change

Reading: Executive Summary of the Stern Review

The Stern Review on the Economics of Climate Change: discusses the effect of global warming on the world economy.

1) It examines the evidence on the economic impacts of climate change itself, and explores the economics of stabilizing greenhouse gases in the atmosphere.
2) It also considers "the complex policy challenges involved in managing the transition to a low-carbon economy and in ensuring that societies can adapt to the consequences of climate change that can no longer be avoided"

- Policy makers should give the same weight to future generations' welfare.
- An important corollary is that there is a high price to delay. Delay in taking action on climate change would make it necessary to accept both more climate change and, eventually, higher mitigation costs.

Main Statement: The benefits of strong, early action on climate change outweigh the costs. Costs incurred now help avoid the risks of very severe future consequences. Tackling climate change is the pro-growth strategy for the longer term. The earlier effective action is taken, the less costly it will be.

Climate-change policy is based on three essential elements: carbon pricing, technology policy and removal of barriers to behavioral change

Governments have a role in providing a policy framework to guide effective adaptation by individuals and firms in the medium and longer term. There are four key areas:

- High-quality climate information and tools for risk management will help drive efficient markets.
- Land-use planning and performance standards should encourage both private and public investment in buildings and other long-lived infrastructure to take account of climate change.
- Governments can contribute through long-term policies for climate-sensitive public goods, including natural resources protection, coastal protection, and emergency preparedness.
- Financial safety nets may be required for the poorest in society, who are likely to be the most vulnerable to the impacts and least able to afford protection (including insurance).

On the international scene: creating a broadly similar carbon price signal around the world, and using carbon finance to accelerate action in developing countries, are urgent priorities for international co-operation. Adaptation efforts in developing countries must be accelerated and supported, including through international development assistance.

Greenhouse-gas emissions can be cut in four ways. Costs will differ considerably depending on which combination of these methods is used, and in which sector:

➢ Reducing demand for emissions-intensive goods and services

- ➢ Increased efficiency, which can save both money and emissions
- ➢ Action on non-energy emissions, such as avoiding deforestation
- ➢ Switching to lower-carbon technologies for power, heat and transport

<u>Investment Needed to Deal with Climate Change (Conclusion of Stern Review)</u>

Stern Review concludes that the benefits of strong, early action on climate change considerably outweigh the costs:
→ 1% of global gross domestic product (GDP) per annum needs to be invested in order to avoid negative effects of climate change.
→ Failure to do so could risk global GDP being up to twenty percent lower than it otherwise might be.
→ Climate change is the greatest and widest-ranging market failure ever seen, presenting a unique challenge for economics.

Reading: *Building a Green Economy*, by Paul Krugman

When there are **"negative externalities"** — costs that economic actors impose on others without paying a price for their actions — any presumption that the market economy will still be efficient is wrong. Environmental economics provides recommendations.

Market-based programs: limit carbon emissions by putting a price on them; and can achieve large results at modest, though not trivial, cost. The debate lies in how fast we should move, whether conservation efforts should start immediately or be gradually increased over many decades.

- **Climate-policy big bang:** Stern, argued for quick, aggressive action to limit emissions, which would most likely imply much higher carbon prices.
- **Climate-policy ramp**: recommendation for a policy that builds gradually over a long period.

<u>Arthur Cecil Pigou:</u> proposed that people who generate negative externalities should have to pay a fee reflecting the costs they impose on others — **Pigovian tax.**

→ The simplest version is an *effluent fee:* anyone who dumps pollutants into a river, or emits them into the air, must pay a sum proportional to the amount dumped. 废水罚款

System of tradable emissions permits, AKA cap and trade: is a variant that caught on. A limited number of licenses to emit a specified pollutant, are issued. A business that wants to create more pollution than it is licensed for can go out and buy additional licenses from other parties; a firm that has more licenses than it intends to use can sell its surplus.

→ This gives everyone an incentive to reduce pollution, because buyers would not have to acquire as many licenses if they can cut back on their emissions, and sellers can unload more licenses if they do the same.
→ Economically, a cap-and-trade system produces the same incentives to reduce pollution as a Pigovian tax, with the price of licenses effectively serving as a tax on pollution.

Differences between cap and trade and a pollution tax:

- Two systems produce different types of uncertainty. If the government imposes a pollution tax, polluters know what price they will have to pay, but the government does not know how much pollution they will generate. If the government imposes a cap, it knows the amount of pollution, but polluters do not know what the price of emissions will be.

- Another important difference has to do with government revenue. A pollution tax imposes costs on the private sector, generating revenue for the government. Cap and trade, however, often involves handing out licenses to existing players, so the potential revenue goes to industry instead of the government.

Hansen has made an interesting moral argument against cap and trade: in a cap-and-trade world, acts of individual virtue do not contribute to social goals. If you choose to drive a hybrid car or buy a house with a small carbon footprint, all you are doing is freeing up emissions permits for someone else, which means that you have done nothing to reduce the threat of climate change.

→ Any serious solution must rely mainly on creating a system that gives everyone a self-interested reason to produce fewer emissions.
→ Restricting emissions would slow economic growth — but not by much. There is no credible research suggesting that taking strong action on climate change is beyond the economy's capacity.

Emerging Economies: feel that they have a right to emit freely without worrying about the consequences —what today's rich countries got to do for two centuries.

The only way to get people to change their behavior y is to put a price on emissions, so this cost in turn gets incorporated into everything else in a way that reflects ultimate environmental impacts.

- **A carbon tariff** would be a tax levied on imported goods proportional to the carbon emitted in the manufacture of those goods.

Some might say it is protectionist: however, as long as the tariff imposed on the carbon content of imports is similar to the cost of domestic carbon licenses, the effect is to charge your own consumers a price that reflects the carbon emitted in what they buy, no matter where it is produced.

Economics Without Ecocide

Professor Brown: the current economic system is a principal driver in the decline of the Earth's life support systems. A complete rethinking of the disciplines of economics and finance is required, as well as macro-economic policy. A successful economy must be based on:

- A scientific understanding of the world;
- Scaled to fit that world;
- Governed, in part, by global fiduciary institutions;
- Concerned with fairness to persons and other species; and
- Measured by considerations of what really is important.

Lesson 5: Strategic Management

Sustainability can be systematically incorporated into the strategy and operations of companies through the processes and tasks of strategic management. Corporate strategy is all about companies adapting to their economic, social, political AND natural environments.

What is Strategic Management?

- Strategy is concerned with the overall direction and performance of the firm. The strategist surveys the competitive landscape, determining grand maneuvers and tactics.
- General managers are responsible for coordinating organizational units, resource capabilities and personal agendas. At the tactical level, managers require technical skills. As they rise in the organization, it becomes more important to have interpersonal skills because they work with more people and in groups.

Effective Strategic Decisions

- The biggest challenge for top management is how to strategically manage their companies in order to survive and grow in a turbulent environment.
- Managing a corporation requires the integration of knowledge from all business areas.
- Managers must make tough economic and social choice involving: rational economic analysis, interactions among managers, political considerations and personal values of managers.

Organization-Environment Relationships

Strategic management and business policy:

- Focuses on managerial issues that affect the whole organization. These issues have long-term implications and deal with organization-environment relationships.
- Aims to maximize the *effectiveness* of the organization while striving to improve *efficiency*.

→ **Efficiency** refers to the ratio of inputs over outputs. An efficiency orientation attempts to maximize outputs for any given set of inputs. It involves producing goods and services in the most technologically and economically competent manner with a focus on a minimum waste of resources.
→ **Effectiveness** is the ratio of achieved outputs over needed outputs (goals), or referred to as the percentage of goal attainment. An effectiveness orientation requires developing organizational objectives that are consistent with the environment, as well as managing the organization's resources to be responsive to environmental changes while meeting specific objectives.

→ The emphasis on effectiveness does not necessarily have to come at the cost of sacrificing efficiency. Although efficiency necessary for success, it is not sufficient on the long term.

Examples: the following companies failed to survive because they placed more emphasis on effectiveness than efficiency.

- *Pan American Airlines (Pan Am)*: did not adapt to the deregulation of the airline industry, worldwide recession, rising price of fuel, tough foreign competition.
- *Facit:* was once the biggest manufacturers of mechanical calculators. HP came up with well-performing and low-priced electronic calculators and flooded the market with them. The firm pursued production efficiency instead of considering important market factors.
- *EPI Products USA*: had enormous success very quickly, but lost its market position through loss of focus, unclear objectives and little examination of the needs of its consumers and competitive environments.

What is Strategic Planning?

In order to function on the long term, and respond to a changing environment, companies must focus on how to be effective and efficient, using well-formulated and consistently implemented strategic plans.

- Plans should be based on correct assessments of environmental demands and objectives.
- They should help managers monitor environmental trends and correctly align the firm's resources with these trends. Strategic plans create organizations that can achieve their objectives.

→ **The goal of good strategic management is:** formulating and implementing corporate and business strategies. Strategic management is not a final or fixed plan, it is an ongoing process.

Strategy: a statement of ends (goals) and the means for achieving these ends. In corporations, strategies consist of a set of goals, strategic programs for achieving these goals, and resource allocations for implementing strategic programs.

- Firms choose their goals to reflect the demands of their stakeholders. Through strategies, they align their internal resources with environmental demands to ensure long-term effectiveness.
- Goals determine strategies, and to some extent, strategic performance shapes and even limits the goals that a company can reasonably pursue.

Understanding Corporations and Their Environments from a Strategic Perspective

Business organizations: systems of production and distribution that serve multiple purposes for their stakeholders. They provide products and services for consumers, profits for investors, jobs for employees, taxes for governments and economic stability for communities. They contribute to the welfare of society by being economically productive and socially responsible. Although organizations primarily serve productive purposes, the focus on economic productivity at the expense of social responsibility can be a source of harm. Some of them include:

- Harm to its consumers through defective products;
- Harm to its workers by using unsafe or unhealthy work practices;
- Harm to the public-at-large by imposing technological risks and causing industrial accidents;
- Harm to the natural environment through pollution and degrading natural resources

Effective management: more than a focus on just organizational productivity; it includes consideration of business actions as they affect the welfare of society.

Strategy & Environment: strategies align or match the organization with its environment. This requires an accurate assessment and identification of environmental forces and potential gaps between the firm and these forces.

- ❑ *This assessment can be done through rational economic and social analysis.*
- Economically: it attempts to optimize and make efficient use of resources. However, optimal allocations are not always politically feasible. Strategic changes invariably involve reshuffling the interests of internal and external stakeholders.
- Social and political processes: intervene in formulating and implementing strategies to maintain trade-offs and balances between competing interests.

- ❑ *It can also be done through subjective, value-laden, personal choices of managers.*

→ The purpose of strategic management is not only maximizing the productive outputs of firms but also minimizing their harm. Strategies can make a firm more useful and productive to society.

Strategic Management Tasks and Responsibilities

Seven tasks constitute strategic management in organizations. In addition to these tasks, managers must address a number of emergent strategic issues involving global strategic management, mergers and acquisitions and crisis management.

Goal Formulation refers to setting organizational objectives and direction. These objectives should reflect the wants and needs of organizational stakeholders and their expectations about performance. Goal formulation, therefore, must balance the competing goals of stakeholders and set priorities on attaining them.

The next two steps should be conducted simultaneously:
Environmental Analysis examining the interdependence between organizations and their environments. More specifically, this involves identifying opportunities and threats facing the organization. The environment consists of economic, technological, social, political, cultural and ecological influences.

Internal Resource Analysis identifies organization’s key strengths and weaknesses by systematically evaluating the resources available to each individual division or business unit. This means identifying capabilities in finance, production, marketing, (R&D), administration and management.

Strategy Formulation developing strategies and strategic plans and programs. Strategy formulation involves matching environmental opportunities with organizational strengths and weaknesses, both at the corporate level and at the business unit level.

Strategy Implementation putting a strategy into action and making it work for the firm. This requires allocating appropriate human and financial resources. To successfully implement strategies, managers may need to change organizational structures, systems and staff. This may require the development of new skills, establishing strategic leadership and creating a new culture.

Strategy Evaluation every strategy should be evaluated for feasibility and soundness. The evaluation should ensure that the strategy is consistent with corporate objectives, environmental demands and internal resources. By identifying and eliminating internal conflicts and contradictions between different elements of strategic plans, the evaluation requires the commitment of organizational resources.

Strategy Monitoring and Control is an extension of strategy evaluation. During strategy implementation, managers must continually evaluate the level of achievement of objectives. Monitoring and control systems must provide managers with timely and actionable information on performance.

Strategy Making

Each organization follows its own system for performing strategic management tasks.

- In some companies there is a separate strategic planning department in charge of facilitating the strategy process.
- In other companies, strategic tasks may be done informally and with little consultation. These decisions may be made by a group of special assistants to the chief executive officer (CEO).

- Historically, the CEO, president, or GM had complete responsibility for strategic management. He or she was the key decision maker, leader and coordinator of the organization.
- However, strategic problems are so complex that it is very difficult for a single individual to solve them. Although the CEO or president shares strategic responsibilities with a top management team, an executive committee or the office of the chairman leads this function.

Different Levels of Strategy Making in the Firm

Strategies must be developed at several levels within the organization to ensure that they cover all organizational activities.

❖ **Corporate Level: describes the firm's scope of operations**

- What businesses should we compete in, given our strengths and weakness?
- Which new product markets should we enter? Which should we exit?

➔ **Corporate level strategies deal with the following:** vertical integration; diversification; strategic alliances; acquisitions; new ventures; business portfolio restructuring.

❖ **Business Unit Level: h**ow should we compete in the product markets in which we operate?

Business unit strategy seeks to develop competitive advantage over other firms in the industry.

- Product design, choice of the marketing mix, and establishing competitive advantage are key strategic factors to consider at this level.
- Differentiation vs. Cost Leadership Strategies

Business unit level strategies deal with the following options: cost leadership; differentiation; market niche focus; functional area

- ❖ **Functional area within business units:** Each business unit has several functional areas such as marketing, production, finance, human resources, planning and distribution.
- These strategies are called functional policies. Companies have policies that standardize and simplify tasks within each function to be most efficient.
- These policies should be consistent with each other and form the basic operating system of the organization.

→ Strategic management, however, is not a sum of individual functional strategies, there are different policies for different functions.

Functional area strategies deal with the following policies and tactical decisions consistent with the organization's overall strategy: manufacturing; marketing; materials management; research and development; human resources.

- ❖ **In addition to these functional levels of strategy making are social and ecological strategies.**
- Companies must ensure their legitimacy in communities and society using these strategies.
- How companies fulfill their responsible roles in society can vary from those who make internal procedural changes to those who institutionalize social responsibility as a regular organizational function and develop social responsibility strategies.

Lesson 6: Understanding the environment of business

Corporate Environmental Analysis

It deals with understanding all the forces and influences on a firm from the outside.

- Scanning the environment for information, identifying trends and understanding their implications for the organization.
- Helps organizations identify key stakeholders or groups that can influence its performance and who might have a stake in its future.

→ The goal is to understand the opportunities and threats posed by changes in the environment, which refers to economic, social, political, cultural, technological and natural forces and systems.

The General Corporate Operating Environment

Adapting to environmental changes is the essence of strategic management. By accurately anticipating (international and national) environmental changes and assessing opportunities and threats, firms can generate greater profits presented by new strategic opportunities.

→ **Telecommunications industry:** US WEST Inc. established a cellular telephone network in the former Soviet Union, the world's second largest telecommunications market. This venture complements the company's initiatives which are already in place in Hungary and Czechoslovakia. Based in St. Petersburg, the venture now provides telephone services to nearly 50,000 customers.

→ **Tobacco industry:** cigarette manufacturers in the U.S. continue to face declining sales due to aggressive anti-smoking campaigns and overall reduction in cigarette smoking. Companies, in order to increase use of its idle plant capacity in the U.S., the companies entered a deal with the former Soviet Union to sell nearly 34 billion cigarettes to close to 70 million smokers in the region.

Environmental analysis thus helps firms to position themselves in a continually evolving environment by matching their characteristics to the environment's demands. The relationship between organizations and their environments are *interdependent*.

Environmental Requirements	Organizational Characteristics
Social, political, legal	Management capability
Industry, competition	Resources
Technology, economy	Innovation, risk-taking
Demographic changes	Values and culture
Global situations	Reward systems
	Financial conditions

Components of the General Environment of Firms

The first step in environmental analysis is in understanding what makes up the firm's environment. It provides resources and markets as well as competitors, non-market forces, and other constraints. The firm has to identify and maps parts of the environment that most influence its performance.

★ **The Natural Environment**

Corporations are economic institutions operating in a natural world of resources, products and people. Their relevant environment is an economic biosphere that includes both human (economic, technological, social, cultural and political) and natural (raw materials, biological and atmospheric) influences.

★ **New (International) World Order**

The international world order refers to aspects which structure social life on earth. This world order shapes economic, social, cultural and political relationships within and between nation-states. For corporations and economic institutions, mutual treaties and international laws govern international economic relations. Despite the apparent separateness of nation-states, economies are interdependent.

★ **Immediate Environment**

Within this international world order lie organizations of various types. Each organization pursues diverse objectives and possesses different resources. This immediate environment consists of: the general economic environment, the technological environment, the social and cultural environment, the political and regulatory environment and the natural environment.

❑ General Economic Environment

- The general economic environment consists of the world economy, the national economy, the regional and local economies and international trade regulations. Macroeconomic indicators (GDP, interest rates, employment rates, production figures) measure the health of the economy.
- It is also important to understand the interdependencies between the various sectors of the economy. For competitive strategies, the most relevant part of the economic environment is the industry in which a business competes.

❑ Technological Environment

- Product technology: product designs, features and innovations. Changes in product technology can render certain products obsolete, reduce demand for products or shorten life cycles.
- Process technology: technological knowledge used in manufacturing or production processes. Production process innovations can reduce the cost of manufacturing for some companies and give them a competitive advantage over others in the industry.

❑ Social and Cultural Environment

The social and cultural environment consists of broad societal trends that affect organizations.
→ These include demographic patterns, lifestyles, social structures, social relationships and trends.
→ The cultural environment of the firm emerges from society's shared beliefs, values, symbols, practices, mores and behavioral norms. Understanding these cultural traits is crucial for designing well-differentiated strategies aimed at culturally different client groups.

Leading Forces for Social Change			
Event	**Change**	**Author/Advocate**	**Change**
Three Mile Island	Nuclear plant safety	Ralph Nader	Consumerism
Bhopal explosion	Plant safety	Rev. Martin L. King	Civil Rights
Tylenol poisonings	Product tampering	Sierra Club	Environment
Milken, Boesky, etc.	Insider trading	Silent Spring	Ecology
Thomas hearings	Sexual harassment	Megatrends	Issues identification
Exxon Valdez oil spill	Environment		

Analyzing the General Environment of Firms

- **Opportunities**

Opportunities represent potential for profitable action. These can range from demand for existing products in unexploited markets to new product possibilities.

→ In order to identify the opportunities and threats within each environmental segment, it is necessary to summarize past, current and future trends.

- For past trends, strategic managers must understand their historical evolution. This analysis should aim at uncovering the critical events and historical relationships that shape the environment today.
- For current strategic issues, an environmental analysis will specify implications for the company. Wherever possible, strategic issues and trends should be measured using objective indicators.

Environmental opportunities are both limited and temporal. The potential for cutting costs or an opportunity for acquiring new businesses may be fleeting and there are also limits to natural resources, consumer demands, social and cultural assimilation, information, and so on.
→ Managers must also act quickly to seize an opportunity, as it is fleeting.

- **Threats**

Threats are events or conditions that can potentially harm organizational interests. They can take the form of new restrictive regulations, the arrival of new and powerful competitors, or emerging product and production technologies that make prior investments obsolete.

- Decline in demand for products is often a major threat to business.
- Other threats include the possibility of labor strikes, consumer product boycotts, an unanticipated financial crunch and disruption of critical supplies.

→ Threatening environmental events affect firms differently. Their influence depends on company size, resources, strategic posture and ability to weather adverse conditions. Environmental analysis should aid companies to develop contingency actions to avoid or circumvent threats.

Lesson 7: The Global Economy in Financial Crisis

Strategic Threat of Financial Crisis

Global Financial Crisis: U.S. and Western Europe were most affected by these events. The rest of the world economies, were also destabilized to varying degrees.
→ These events led to a recession, with over 10% unemployment in the U.S., over 15% in China, collapse of major financial institutions and a steep reduction in commercial and household credit.

Recession slowdown: there were signs of some recovery in the major economies. These were made possible by huge bailouts – stimulus packages – from the central banks. In the U.S. alone, the Federal

Reserve channeled as much as $1 trillion into the economic stimulus. It is therefore unclear whether the recovery is an artifact of stimulus investments or a genuine increase in productive capacity.

Financial Crisis in the Context of Climate Change

The global financial crisis was caused by a combination of macro-economic factors, a failure of regulation and risky business and consumer behaviors.

1) **Macroeconomic factors include:**
    - ➢ Slowdown of aggregate demand
    - ➢ Monetary policies creating excessive liquidity in the U.S.
    - ➢ Excessive preoccupation of central bankers with price stability and inflation control
    - ➢ Large current account deficits in the U.S. and large current account surpluses in China
    - ➢ Central banks ignoring the impact of economic imbalances and asset bubbles
    - ➢ The overarching effect of the U.S. dollar as the only currency of reference for the global financial system, rendering all markets vulnerable to turbulence in the U.S. economy

2) **Poor regulation of the financial sector:**
    - ➢ Regulators failed to handle the rapid growth and complexity of financial derivatives
    - ➢ Banks and corporate entities were allowed to manage and price their own risks, with little risk management at the macro and systemic level
    - ➢ Regulators did not grasp the effects of off-balance sheet items and investment vehicles
    - ➢ Growth of a "shadow banking system" involving unregulated cross-border financial movements and foreign tax havens
    - ➢ Over-reliance on the ratings of risk provided by rating agencies
    - ➢ Lack of cross-border financial regulation

3) **Business and consumer behaviors:**
- Accounting standards permitted policies of "mark to market" valuation of assets, leading to overvaluation during boom times
- Lucrative management incentive, especially in hedge funds, investment banks and private equity funds that led to excessive short-term risk taking by senior managers
- Increases in leverage caused by financial entities originating a loan but distributing risk to others
- The acceptance of "greed is good" as a cultural norm
- Complexity in financial instruments that led to reduction in regulatory capital requirements, and increased risk taking

***Reading: "Reversal of Fortune"* by Joseph E. Stiglitz**

An economic downturn can be V-shaped (short and sharp) or U-shaped (longer but milder). A combination of ideology, special-interest pressure, populist politics, bad economics, and sheer incompetence has brought the USA to its present condition.

- **Ideology proclaimed that markets were always good and government always bad:** key problems in society cannot be addressed without an effective government, whether it's

maintaining national security or protecting the environment. Also, markets have inherent failures- a buildup of micro problems has led to macro problems, underlying issues must be addressed.

→ USA is in the midst of micro-economic failure on a grand scale. Financial markets received generous compensation—presumably for performing two critical tasks: allocating savings and managing risk. But they have failed at both, rather than managing risk, they created more.

- **The populist rhetoric of the right**—persuading taxpayers that ordinary people always know how to spend money better than the government does, and promising a new world without budget constraints, where every tax cut generates more revenue—hasn't helped.

→ Special interests took advantage of this mixture of populism and free-market ideology.

<u>What is to be done?</u>

- **On Interest Rates:** lowering them will not stimulate the economy much, banks won't lend to strapped consumers, and consumers are not going to be willing to borrow as they see housing prices continue to fall. Raising interest rates to combat inflation won't work because the prices that are the main sources of inflation (for food and energy) are determined in international markets; the chief consequence will be distress for ordinary people.
  → Careful balancing is required.

- **On Energy:** conservation and research into new technologies will make US less dependent on foreign oil, reduce our trade imbalance, and help the environment. The government also needs to review its biofuel policy.

- **On Tax Policies:** they need to be changed. Skewing the tax rates in the opposite direction (take more money from rich, give to less rich) would provide better incentives and would more effectively stimulate the economy, provoke more revenues and lower deficits.

- **On Regulation:** markets do not self-regulate thus the government needs to implement stronger regulation, and review its rules on financial markets.

- **On Foreclosures:** it is tragic and pointless. Property deteriorates and the evicted people just move somewhere else. Banks lose money when they foreclose—homes typically sell for far less than they would if they were lived in and cared for. There should have been an expedited special bankruptcy procedure, allowing people to keep their homes and re-structure their finances.

- **On Financial Institutions:** while these institutions may be too big to fail, they're not too big to be reorganized. Also government should be stricter with anti-trust policies.

- **On Balancing Monetary and Fiscal Policy:** balancing the risks of inflation and the risk of a deeper downturn and balancing the risk of a deeper downturn and the risk of an exploding deficit. This is the difficult aspect.

→ Higher interest rates dampen inflation by cutting back so sharply on aggregate demand that the unemployment rate grows and wages fall. Eventually, prices fall, too. The cause of inflation is largely imported—it comes from global food and energy prices, which are hard to control.
→ To curb inflation therefore means that the price of everything else needs to fall drastically to compensate, which means that unemployment would also have to rise drastically.

- **On Slashing Taxes:** confidence in the economy won't be restored as long as growth is low, and growth will be low if investment is anemic, consumption weak, and public spending on the wane. Reducing government expenditures or cutting taxes in this context is just pointless.

→_Spending money on needed investments—infrastructure, education, technology—will yield double dividends. It will increase incomes today while laying the foundations for future employment and economic growth.
→ Investments in energy efficiency will pay triple dividends—yielding environmental benefits in addition to the short- and long-run economic benefits.

Long-Term Solutions

The financial crisis comes at a particularly bad time, when climate challenges are also peaking.
→ The world economy needs long-term solutions that combine economics and sustainability.
→ Upon completion of offering stimulus packages, we will need fundamental restructuring of the global economy to wean it away from fossil energy, make it ecologically sound, reduce waste and pollution.

Lesson 9: Designing Sustainable Vision and Strategies

For an organization to implement sustainable management practices it needs a clear focus and mission. The mission shows the direction in which the organization should be moving.

Why Companies Need a Clear Vision, Purpose and Goal

Clear Corporate Purpose: is the starting point for strategic management. Without it, a company cannot organize itself for long-term strategic success, and may spread its resources thinly making them much less impactful. Long-lasting firms possess the following are:

- **Backward-looking:** firm possesses a core ideology consisting of strategic competencies, leadership from within their own ranks and a consistent set of values and philosophy.
- **Forward-looking:** Vision is essential to strategy, providing businesses with guiding purpose and principles. Corporate purpose emerges out of a vision defining what the company wants to be.

The Corporate Vision: provides a guiding philosophy that is often articulated and codified in the form of a mission statement. Having a clear vision is especially important for large, multiproduct, multinational, multicultural companies. A clear vision steers the company in a chosen direction.

Functions of the Corporate Purpose: it defines what the company is, provides direction, establishes a self-identity for the firm and contains the company's long-term vision. There are many benefits of consciously deciding and explicitly stating corporate purposes:

- It can provide constant guidance and direction to the firm.
- It can be a unifying force that gives the company its raison d'être. It also works as a source of personal and collective strength amongst organizational members and fosters a spirit of camaraderie and solidarity.
- It gives the company an identity and public image, thereby helping external stakeholders to understand what the company stands for and what it is trying to achieve.
- It provides guidance and an anchor for the tasks of strategy formulation and implementation.

Whose Purposes Does the Corporation Serve?

Stockholders' primary purpose: increase their wealth while minimizing their level of financial risk. Although this is essential, it is much less central to the corporation than before.

Corporate stakeholders: include managers, the board of directors, employees, stockholders, customers, suppliers, government unions, competitors, business associates, communities, media and the public.
→ Although all stakeholders are not equally important for the success of a company, each contributes something useful. Most companies would not be able to function effectively without their cooperation. Companies are obligated to pursue purposes that can best satisfy their diverse demands.

Organizational purpose should reflect an acceptable balance between the conflicting goals of these different stakeholders. In selecting their purpose, companies should establish trade-offs between multiple stakeholders. Strategy managers are responsible for creating an acceptable organizational process, for making these trade-offs, and for deciding the appropriate balance of competing demands.

What a company wants to achieve in the future is stated in corporate missions, objectives, goals, targets.
- **Corporate missions** describe the complete guiding philosophy of the company.
- **Corporate objectives** provide guidance for developing corporate-wide strategic plans as well as for deciding the goals of business units.
- **Business unit goal**s are chosen to satisfy corporate objectives collectively. They are based on the role that the individual business unit plays in the corporate portfolio.

Missions	External	Very General	Set aspirations, symbols
Objectives	5 to 10 years	Concrete	Set direction
Goals	2 to 3 years	Broad measure of firm performance	Evaluate performance
Targets	1 year or less	Narrow, task-oriented measures	Serve as benchmarks

Corporate Missions

They represent the broadest and symbolic statements of the company's vision and philosophy. They are general statements of what the company stands for — its core values and responsibilities toward its key stakeholders and provide the cultural glue for the organization. They describe the company's relationship to its external environment and establish the basic identity of the company for external stakeholders. *Many mission statements include the following:*

- Performance: profits, sales, market share, return to owners, growth
- Scope of operations: geographic, industry
- Stakeholders served: community, society, employees, customers
- Service level: best, superior, high-quality
- Desired position: first-place, top, leadership
- Knowledge: innovation, creativity, expertise

→ When a mission statement loses its motivational value and becomes a rhetorical phrase, or when the mission statement is achieved, it may be time to consider creating a new one. Reframing the mission can help a firm rediscover its core values and its central purpose.

Corporate Objectives

- They provide the **foundations** for developing specific corporate and business strategic plans.
- They are also used to **improve organizational performance** and as a standard to measure it.
- They describe **what the company wants to achieve in its various business areas**. They explain what role different business units play in the total corporate portfolio.

- They **show the direction in which this portfolio will change in the future.** That is, specifying what product markets the company hopes to enter and exit, what technologies to develop and what levels of risk the firm is willing to assume.
- They **describe the levels of technological innovation, productivity, and financial performance** the company will seek. The acceptable level of corporate performance may be stated as *profitability* (return on investment), *market penetration* (market shares) *standards, employee performance standards, or social performance standards*.

- **The time horizon of corporate objectives** specifies what the firm wants to achieve in different areas of operation over a *five-to-ten-year period*. This time horizon may vary from industry to industry depending on products and technologies.

→ In industries where investment and product life cycles are long (e.g., oil exploration and production, forest products, mining) objectives may be set for horizons of **ten years or more.**
→ In industries with short product life cycles (e.g., software, consumer electronic goods), firms formulate objectives for **five years or less.**

Developing Corporate Objectives

Objectives: provide operational guidance to strategic plans, decisions and performance evaluation. They are a step toward converting organizational missions into actions. The objectives seek to convert the values and vision embedded in mission statements into specific challenges for each business or area of operation.

- **Systematically assessing the potential of business units and divisions and setting feasible performance standards for them** is a way to generate corporate objectives. Objectives should be stated in specific terms that provide directional guidance to planners and line managers.

- **Objectives are normally set within the context of a planning process.** They are an integral part of strategic planning. *Business unit and line managers* are the best starting points to generate objectives for their respective business areas.

- **Objectives should be set using the same terms of measures** (such as return on investment, sales growth rate, market share, cost per unit, etc.) used in the firm's budgeting, strategic planning and accounting systems.

Business Goals and Targets

The next step in operationalizing the corporate purpose is to convert corporate objectives into statements of business unit goals. At the business unit level, more specific and shorter statements are preferred and take the form of measurable goals and targets.

- ❖ **Goals** describe what a business must achieve in the next two to three years and is stated in terms of specific performance indicators. Performance measures used to set goals vary widely depending on the type of business and tasks.

- *General business* profitability is often measured by indicators such as return on investment, return on assets and return on sales.
- *Goals in functional areas* use function-related performance indicators.

→ Companies usually combine these measures to create composite business goals that cover all critical areas of business.

- ❖ **Targets** specify performance expectations in even more specific terms and shorter time frames than goals. Targets serve as benchmarks against which performance can be measured weekly, monthly, quarterly or annually.

Process Issues in Developing Missions, Objectives and Goals

The purpose of establishing objectives and goals is to **motivate** members of the organization to plan systematically for and achieve progressively **higher levels of performance.**

- The motivational power of objectives and goals is increased if members of the organization believe they are *realistic and achievable*.

- Members are also motivated to fulfill performance expectations if they have participated in *setting them*.

→ The entire process of formulating these statements of organizational purpose should, therefore, be designed to make these choices **realistic and participative.**

Realism in Goal Setting

In establishing organizational objectives and goals, there is a natural tendency to either overestimate or underestimate what is feasible.

- **The tendency to overestimate**, or push for unreasonably high goals, comes from performance pressure. Top managers may purposely set goals 20 to 30 percent higher than their own best estimates of what is feasible. However, line managers, who have at least as good an understanding as top management of what is feasible, may become frustrated or even hostile to the pressure tactic used to attain such goals.
- **The tendency to underestimate goals** or to set lower than feasible goals arises from lack of good information about what is possible. This may be due to defensive inclinations of managers who prefer to accept lower goals simply to overachieve on them.

→ Both of these tendencies are dysfunctional and should be avoided. Goal formulation should aim to be realistic and fundamentally truthful.

→ The marginal benefits to be gained by underestimating or overestimating goals are not worth the risk posed to the credibility of the entire direction-setting process.

Participation: Top-Down or Bottom-Up?

The process for setting objectives and goals adopted by an organization depends on the *degree of centralization* in decision making. The more centralized an organization is, the less participative this process is (and vice versa). Organizations that are too centralized need to make special efforts to open the process for increased participation.

→ **Participative processes** have the advantage of generating objectives and goals that have a sense of "buy-in" for managers who will eventually be responsible for implementing them.

- **Top-down goal setting** refers to organizational goals being dictated by the top management or the CEO. Goals are then communicated to the rest of the organization in policy memoranda.
- <u>Advantage:</u> process is quick, decisive and confines organizational intentions to only few people.
- <u>Drawbacks:</u> it does not consider the cumulative learning and expertise of the entire organization. The lack of participation can also be demotivating and disempowering to many managers who will eventually be involved in implementing goals.

- **Bottom-up goal setting:** lower-level managers who are in touch with market and production realities provide the first inputs on what is feasible. This frames the agenda for setting objectives and goals and skew the process toward the narrow departmental or divisional vision of unit or functional managers.

A balanced process uses both top-down and bottom-up approaches.

1) Top managers formulate the broad corporate philosophy and guidelines for creating objectives and specific goals.
2) These are then used by business unit managers and middle management to come up with specific objectives, goals and targets.
3) Approval of these statements of purpose is done better by top management. Final ratification may be done by the board of directors.

Stakeholder Participation

Stakeholders have **legitimate demands** on the firm and possess resources the firm wants, so their interests should be incorporated into the firm's statement of purpose. Managers need to consider how to generate inputs from stakeholders and how to resolve the conflicting desires among them.

- External stakeholders usually have no official part in the process of goal formulation. If their inputs are to be incorporated into organizational statements of purpose, these inputs need to be elicited through a deliberate process.
- Often, different stakeholders will have conflicting demands on the firm. Ultimate responsibility for setting acceptable goals lies with top management. Even after making best efforts at reaching compromises in instances of conflicts, some goals simply cannot be pursued and others will receive low priority.

Although a deliberate and systematic approach to developing corporate objectives and goals is beneficial, there are disadvantages.

- Process is often time-consuming, engaging top executives over long periods.
- If not handled well, many interdivisional conflicts can arise and battles for resources may erupt.
- Process also opens up the discussion of objectives and goals to many organizational members, meaning information about the company's intentions can leak out to competitors more easily.

→ Because of such political problems, some organizations prefer to keep their objectives and goals ambiguous and unclear. This approach allows firms to be flexible and opportunistic, but detracts the organization away from a systematic formulation of strategy.

Lesson 10: Formulating Sustainable Corporate Strategies

❖ **Different Types of Corporate Strategies**

Corporate strategies: define how the product market domain of the firm is going to evolve. They:

- Describe the total objectives and goals of the firm
- Outline the firm's current and intended future business domains
- Organize and control the firm's general approach to its productive and administrative systems.

Main feature: breadth of product market domain or the degree of diversification of the firm. Firms can make small adjustments by changing a single several business functions. Similarly, the firm can make larger adjustments by changing the entire business unit or reinventing the total enterprise.

→Being responsive to environmental demands includes always focusing on the customer, speed or "hypercompetition", constant innovation and improvement and sticking to core competencies.

Characteristics of Three Corporate Strategies (based on diversification)

STRATEGY	CHARACTERISTIC	GROWTH	PROFITS	RISKS
Dominant product	Single industry	Medium to high	Medium	Medium to low
Related diversification	Few related industries	Low	High	Low
Conglomerate	Many unrelated industries	High	Low	Medium

1) Dominant Product Strategy

➢ Occurs when the firm's domain is limited to a single product or product line. Firms pursuing this strategy seek to establish themselves as the most efficient and most versatile producer in the industry. In order to achieve growth objectives, firms use:
  - Product line extension: innovations that extend the product life cycle and attract new customers.
  - Geographic expansion: branching out from local operations to regional, national and international markets.

➢ Most firms start out using a dominant product strategy. The main shortcoming of this strategy is the high risk of operating in a single industry. A downturn in the industry could severely harm the company.

- *Crown Cork and Seal:* started as a small manufacturer of bottle crowns and corks. Shortly after, the firm's product line was expanded to include metal cans. For over 50 years, their product lines have remained in metal cans and bottle crowns. The company has been continuously successful and has expanded internationally through its wholly-owned subsidiaries.

2) Related Diversification

➢ A company operates in multiple businesses related to each other through common production, marketing, raw materials, or operating characteristics. As firms grow, they enter areas of business related to their original operation. This gives them an opportunity to expand quickly, diversify risks, use their existing resources more efficiently and exploit first mover advantages.

- *Texas Instruments* began its operations in electronics instruments. In the past two decades, this firm has diversified into a wide range of related products including calculators, computers, electronic games, software and defense contracting. Each business division of Texas Instruments uses the core technological and marketing skills of the company to produce related products.

➢ It is the most profitable of the three strategies. Its main disadvantage is that organizational resources and managerial attention must be distributed over multiple industries. Firms using this diversification strategy may have difficulty competing with dominant product firms in the industry; and in achieving large economies of scale in many industries simultaneously.

3) Conglomerate

➢ Operating a set of diverse, unrelated businesses. Conglomerate firms treat their businesses as financial assets, acquiring and divesting assets solely based on their financial performance. There is no consideration given to relatedness of products or markets, interdependencies between skills or facilities, or any other type of linkages between businesses.

- A business unit will remain a part of the portfolio as long as financial objectives of growth and profitability are met.
- However, if a business unit fails to meet these objectives, then the firm will be divested.

➢ This strategy aims at efficient management of financial assets by supplying business units with necessary capital, general management expertise, and tight financial and planning controls.

- *Textron* remained a textiles firm until the mid-50s. In reaction to the crisis in the industry which was marked by several companies leaving the U.S. to seek lower labor costs in less developed regions, the company downsized its operations and diversified into consumer products, industrial products and high-technology industries. By the 1970s, Textron had fully diversified into unrelated areas such as helicopters, chain saws, light machinery and defense contracting.

<u>Patterns of Corporate Strategy and Structure</u>

Corporate Strategic Orientation: how companies solve entrepreneurial, administrative and engineering problems.

- **Entrepreneurial problem**: deals with how the company will create businesses, what businesses to operate in and how to define and renew its domain of operation.
- **Engineering problem:** technologies the company will use to achieve its business objectives. This means deploying technical skills/resources to create a financially viable business.
- **Administrative problem:** involves how the company will structure itself internally—that is, how to obtain the necessary human and financial resources to make the business idea successful.

Companies' solutions involve deploying human, financial, administrative and material resources in enduring strategic forms. Each strategy differs in many dimensions, including the scope of operations, risk propensity and activity orientation (inactive or reactive to proactive).

→ *The resulting four patterns of strategy are:* prospectors, analyzers, defenders and reactors.

Patterns of Corporate Strategy and Structure

- ★ **Prospectors:** firms that have a wide business scope. They operate in many diverse industries, have risk-seeking decision makers who like to undertake high stakes business ventures. These firms actively and aggressively search for business opportunities to improve performance. They are willing to go into virtually any type of business if there are appropriate returns and growth. → *Teledyne*

- ★ **Analyzers**: firms that operate in a broad industry sector, often in related business areas in which they have accumulated experience. These firms do not aggressively seek risky ventures, and try to rationally balance risks and returns by following and improving technological advances made by other firms. To achieve this they actively seek out opportunities that fit their organizational capabilities. Analysis includes assessment of financial, human, market and product strengths. Unlike prospectors, analyzers do not seek out new business opportunities; they imitate successful firms. By creatively and quickly imitating high-performing strategies, they are able to establish a profitable position in the market. Analyzer firms thrive in certain industries, such as apparel and financial services, where imitation of products and strategies is easy.

→ *Matsushita Electronics Industries*

- ★ **Defenders:** firms that focus on a narrow domain of operations, a well-defined industry, or even a single product. These firms will attempt to protect and nurture their well-established businesses. They will only invest in proven long-term prospects because they are risk averse. They tend to seek out opportunities only when compelled by performance pressures.

→ *Union Carbide*

- ★ **Reactors:** operate in diverse business areas without a coherent plan. They respond to environmental pressures and often find themselves in crisis. Their usual mode of operation is trailing behind the competition and reacting defensively to industry problems. Occasionally, they may get lucky and successfully exploit emerging environmental opportunities. Adopting this strategy is rarely effective.

BCG Business Portfolio Matrix

- ➢ The Boston Consulting Group (BCG) originally developed the BCG business portfolio matrix as a framework for developing corporate strategies. In the matrix, businesses are classified into four main categories based on market growth and market share relative to the largest competitor.

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Stars ***(High growth rate, high market share)***

- Maintaining market share in rapid growth industries is expensive, businesses need to reinvest cash generated internally to keep up with the continually expanding size of the market.
- They also may need additional cash infusion from outside.

<u>Objective:</u> **maintain their prominent market position** until the market matures and its growth rate slows (cash cow).

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Wildcats (low market share,high growth rate)

- Not profitable due to their weak market position, they have good potential. They represent risky ventures that can turn in any direction.

<u>Objective:</u> **increase their market share** to make them profitable and become Stars.

➢ One way of doing this is by investing money in market share development. The strategy then becomes one of rapid investments that will provide good returns while the market is still attractive.

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Cash Cows (high market share, low growth rate).

- Generate a large amount of cash due to their high market share. Instead of reinvesting the cash into the same industry, however, the surplus cash gained from these businesses can be used to finance Stars or Wildcats.

<u>Objective:</u> move out of these unattractive markets by slowly phasing out Cash Cows.

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Dogs (low market share, low growth rate)

- Unlikely to be profitable and have few prospects.

<u>Objective 1:</u> Divest these businesses. This strategy, however, may not always be realistic.
Because Dog businesses provide crucial inputs for Star, Wildcat and Cash Cow businesses they may have to be retained in the portfolio.
At other times, Dog businesses provide intangible benefits such as goodwill, image and legitimacy.

<u>Objective 2:</u> If these businesses cannot be divested, the strategy should be to reduce operations to bare minimum levels and mark them for future deletion.

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➢ The objective of this analysis is to create a portfolio with a balanced set of businesses in the four cells of the matrix. Investments into businesses and cash flows from businesses can be balanced by transferring resources among business units in ways that sustain long-term profitability.

<u>Limitations</u>

The matrix described provides a general framework for corporate strategy analysis. However, this represents a simplified framework that has several limitations.

- ➔ The focus on balancing cash flows among businesses. In many situations, managers do not attempt to balance cash flows as part of their corporate strategy, instead, they may try to maximize growth by acquiring outside funds or to maximize overall return on investment.

- ➔ Industry growth rate and market share are imperfect measures of the attractiveness of an industry and a firm's market strength. An industry's historical growth rate may not continue into the future if the product is maturing or if new technologies can provide substitutes for the product. The definition of market is ambiguous: market segments often overlap with each other.

- ➔ Categorizing the dimensions of industry growth rate and market share as resting along a continuum. Having only two categories (high and low) is simplistic; such binary division loses information that is contained in actual market share numbers. Moreover, without huge amounts of comparative/historical statistics, the cut-off points between high and low tend to be arbitrary.

- ➔ The approach considers only two of the many factors that should be considered in formulating strategies. Other factors such as organizational size, core competencies, foreign demand and competition and volatility of the industry are not considered. For these reasons, Dog businesses can find a profitable niche.

- ➔ Some recommendations from this type of analysis might not be practically feasible. Factors other than cash flow, market share and industry growth considerations cause practical limitations. The task of the strategy analyst is to understand what role each unit plays in the total corporate portfolio and accordingly design strategies for those business units.

- ➔ This approach does not deal with strategy implementation problems. For instance, it might not be possible to shut them down because of contractual commitments or unattractive price offers.

Strategic Thrust

Strategic Thrust: general direction in which a company is heading over the long term. The issue here is not simply deciding which businesses to retain, acquire, or divest, but targeting and positioning the firm in a set of attractive technologies and industries.

Strategic realignment: looking at the next five to fifteen years to identify businesses that are likely to be attractive while considering the strengths and weaknesses of the company. Based on this assessment, the firm develops strategic programs to move into attractive arenas.
→ This may involve restructuring existing assets of the company or buying new ones.
→ A firm could also buy equity in new start-up companies that use emerging technologies.

Shell Oil: realized in the early 1970s that it was highly vulnerable to fluctuations in oil prices. Over that decade, the company diversified into new high-technology industries and reduced its dependence on the energy sector.

Scenario analysis focuses on strategic problems facing the firm. Managers are brought together in an informal setting and encouraged to think freely about strategic problems. Brainstorming sessions allow managers to transcend routine ways of thinking and to overcome the normal pressures of organizational politics and personal insecurities to develop truly creative solutions.

Lesson 11: Sustainable Products and Services

Business Competitive Strategy Formulation

Business or competitive strategies: how an organization will compete in the industries in which it participates. Competitiveness can be established on the basis of economic, technological, customer service, marketing, quality, sustainability, reputation or image, and many other variables.

Competitive Business Strategies

Business Unit Level: the key strategic issue is to establish a sustainable competitive advantage within the industry in which the business operates. This may be done by:

- Electing competitive arenas sheltered from competition and turbulent environmental changes
- Focusing marketing and advertising efforts on key product lines
- Cutting costs of production and distribution
- Streamlining operations.

→ Campbell's competitive business strategy was a judicious combination of different ways of establishing competitive advantage.

Competitive business strategies can be developed by

- Changing product features (differentiation, product line breadth, packaging, patents)
- Production efficiencies (economies of scale, automation, cost control)
- Market positioning (advertising, discounting, pricing, distribution channels)
- Financing arrangements (leasing capital equipment, debt).

Generic Business Strategies

Generic strategies: common across many industries. These strategies have proven to be successful in the past and have become popularized. They are based on key determinants of profitability for the industry which can differ for each industry.

- ➢ In the automobile and brewing industries lowering production costs through large-scale operations is critical for profitability.

- ➢ In the fashion apparel industry, however, production costs are low and profitability hinges more on creating new product designs and brand names which can be very expensive.

Profitability: trade-off between low-cost operations that achieve high volume by offering lower-priced goods and services or high-value operations that achieve high margins by offering higher priced goods and services.

→ The worst situation is to compromise or be ambivalent, getting "stuck in the middle." Theoretically, there are many possible generic strategies for competing. In practice, however, there are a few common strategies that are used in many industries. These include:

Least Cost Strategy

→ This strategy works best where there is a large demand for standard products.

- Delivering goods at the lowest cost in the industry. Low cost can be achieved through producing high volumes of standardized goods which means exploiting economies of scale in production, distribution and raw materials purchase, and through product and process standardization.

- Selling high volumes of production at small margins can be a very profitable strategy. Least-cost firms can underprice their product for long periods to gain market share and even drive competitors out of the market.
    - ➢ Japanese firms in consumer electronic, steel, automobile and motorcycle industries have used this strategy. They produce large volumes of standard products for a collective world market. Their cost of production is very low due to economies of scale and experience effects. They then enter new markets at prices much lower than competition.

- It allows a firm to participate in many market segments within the industry. It involves large investments to produce and market a broad line of products to satisfy several market segments.

Niche Strategy

→ *Ideal for firms that do not have the extensive resources required to follow a low-cost strategy*

- It refers to focusing on a clearly defined segment of the market and fulfilling customer expectations in that niche. Usually this means producing specialized products and marketing them through limited, focused delivery systems.
- Most industries have small market niches for specialized products. The total demand for the product may be low but constant.
- These firms are difficult to dislodge once established because over time they gain specialized knowledge about customers, distribution systems, product features and production systems, which gives them competitive advantage over others.

Differentiation Strategy
→ It involves creating products that have distinct and hard-to-imitate features and selling such products across multiple market segments.

- Uniqueness can be in product features or product functions, but does not necessarily have to be based on objective product characteristics and can be based on intangible elements such as reputation, image, or symbolic value.

- Once customers are convinced of the product's uniqueness, they are willing to pay higher prices for it. The competitive advantage afforded by this strategy is that companies can have higher than average prices and profits.

<u>Strategies for Entry, Exit, Decline and Turnaround</u>

Strategies for entry, exit, decline and turnaround are specialized strategies for unique situations.

- **Entry strategies** involve giving consumers competitively favorable short-term benefits. This is done to gain initial consumer acceptance for products and services during the introductory phases. The benefits include discounted prices, attractive payment or credit terms, maintenance services and promotional giveaways. Once achieving a desirable volume of sales, the firm can revert to more competitive practices.
- **Exit strategies** help firms withdraw from an industry, which may be necessary in a declining industry. They involve reducing the product line and price to reduce inventories. Production assets may be dismantled and redeployed in attempts to improve efficiency or cut costs.
- **Turnaround strategies** attempt to revitalize businesses in a slump. They involve a combination of cost-cutting measures and revenue-enhancing strategies.

<u>Choosing Competitive Business Strategies</u>

Choice of Business Unit Strategies: depends on a combination of the structural forces governing competition and profitability in the industry as well as the firm's strengths and weaknesses.
→ Such strategies must seek to establish sustainable competitive advantage by using strengths of the firm to exploit opportunities in the industry. Three additional factors that should guide the choice of business unit strategies: the stage of the PLC of the business, the experience effect and the market share-profitability relationship for a business.

➢ **<u>Product Life Cycle Theory</u>**

1) **Introduction Phase:** (riskiest stage) demand for the product is just beginning to emerge. Customers who adopt products in this phase are innovators and are willing to experiment with new products and services. The price of the product is usually high because firms prefer to skim the market. Production volumes and profits are low because of the small demand.

2) **Growth Phase:** (investment-heavy stage) demand increases very rapidly. Many early adopters enter the market. These customers use the product for its functional and efficiency-improving

attributes. Producers begin to distinguish their products through product differentiation and by charging multiple and varied prices. They also improve production efficiency in anticipation of the increasing demand. Industry profits are better than in the introduction phase.

3) **Maturity Phase:** (high industry profits) demand plateaus. Most users for whom the product serves some useful function are now in the market; very few new customers enter. You can get better-performing products for lower prices than before. Most initial investments are recovered, and the book value of capital equipment is considerably depreciated. Production is highly efficient and automation and mass production techniques are used where applicable. Profits may be reinvested into maintaining market share or used to develop new products.

4) **Decline Phase:** (low/stable profit stage) the demand for the product falls. Customers who buy the product are not first-time adopters but rather purchase the product for replacement purposes. Prices decrease with decline in demand. There are no improvements in production techniques. Some manufacturers divest out of the industry at this stage.

Some stages of the cycle may be particularly receptive to certain generic strategies.

→ In the introduction stage, a niche strategy that targets innovators may be effective. However, because the market is expanding and diverse customer demands surface in the growth stage, the differentiation strategy may be more effective.

→ The least-cost strategy may be feasible and lucrative in the maturity stage given the large customer base. This strategy may not be feasible in the introduction phase of the cycle due to the uncertainties about demand which may not justify the investments required to become a low-cost producer.

→ Similarly, the niche strategy may not be feasible in the decline phase of the product life cycle, because industry participants have already targeted all possible niches. The niche strategy may be an option in this stage if there is a proliferation of product features that make the market highly fragmented.

➢ **Experience Effect**

→ Refers to lowering per unit production costs through cumulative manufacturing experience. Lowering of production costs occurs because of learning, scale economies, improvement in administrative and production techniques and substituting raw materials and components with less expensive alternatives.
→ As experience effects allow firms to lower costs of productions, this produces a strong strategic advantage. Given that low costs are associated with the ability to lower prices, this can lead to increasing market share, profitability and ultimately market dominance.

Least-cost strategy: its goal is to exploit advantages of the experience effect. Firms can go down the experience curve quickly by having large-scale production. However, large-scale production may not be warranted given limited demand for the product in the domestic market.

- When this is the case, firms can use a single large facility to produce for several markets around the world. This allows the firm to compete with other producers who supply fewer customers within a domestic market.
- It also provides managers with an objective basis for anticipating who in the industry can adopt the least-cost strategy. By comparing competitors on accumulated production experience, the firm can identify those who can sustain low costs and low prices.

➢ **<u>Market Share-Profitability Relationship</u>**

→ *In some industries, profitability of a firm correlates highly with its market share*.

- In such industries, companies play the game of gaining market share by expanding internally or buying market share by acquiring competitors.
- Gaining market share is expensive and in fact so costly in some industries that advantages of size become nullified.

Not only is market share highly correlated with profitability, but that long-term profitability also depends on several other factors:

- The most important is the quality of the firm's products as compared with the competition. Quality boosts profits by allowing the firm to charge higher prices in the short term and by building growth over the long term.
- Another one is investment intensity (investment per dollar of sales). High investment intensity acts as a drag on profits.
- Another one is vertical integration: businesses with average or above average market share stand to gain substantially by becoming vertically integrated.

Reading: *Business Strategies for Sustainable Development (International Institute for Sustainable Development)*

<u>Sustainable Development:</u> For the business enterprise, sustainable development means adopting business strategies and activities that meet the needs of the enterprise and its stakeholders today while protecting, sustaining and enhancing the human and natural resources that will be needed in the future. However, it is important to emphasize that sustainable development cannot be achieved by a single enterprise (or, for that matter, by the entire business community) in isolation.

<u>Implications for Businesses</u>

- Perform a stakeholder analysis
- Set sustainable development policies and objectives
- Design and execute an implementation plan
- Develop a supportive corporate culture
- Develop measures and standards of performance
- Prepare reports
- Enhance internal monitoring process

Small Businesses
Applying the proposed framework will be a challenge for all enterprises, but smaller businesses may encounter additional challenges. Besides sustainability reporting, smaller businesses will have to adapt to the new corporate climate with less in-house expertise, fewer resources and less formal management structures than larger corporations.

Lesson 12: Ethics of Strategy and the Ethical Organization

Ethical Strategy Formulation

Strategy Making: is influenced by the personal values of key managers and a variety of social, behavioral and political processes.
→ Thus, when making a strategy, it is important to acknowledge the wider role of corporations and not take a narrow, economic view of things.

Multiple stakeholders: are the reason that a corporation has social responsibilities. These stakeholders include stockholders, employees, customers, suppliers, the public, government agencies and the media.
→ Management is responsible to balance competing demands of stakeholders and provide an acceptable level of performance to each stakeholder group.
→ This is the reason many managers run into dilemmas about ethical and social responsibilities.

Ethical Issues in Strategy Making

During the 1980s: several scandals involving questionable ethical practices by corporations rocked the business world in the 1980s. The following events occurred often:

- Fraud in the savings and loan industry, laundering of illegal money by banks and unsafe dumping of toxic waste by chemical and waste disposal firms.
- Public agencies and the media have started questioning practices and scrutinizing corporations on their ethical performance.

Ethics: moral philosophy that deals with matters that are right or wrong. Business decisions cannot be considered solely as being efficient or inefficient, effective or ineffective and must include the moral dimension.

Three Levels of Ethical Issues
The examination of ethical issues can be done at three levels:

- **Individual:** what is good for the individual is considered ethical. Plato and the Epicureans have advocated that a person should act in ways that achieve the greatest good and cause the least

amount of harm to him or herself. It involves seeking personal freedom, self-realization and personal virtue through authenticity and personal integrity.

→ *Ethical egoism*: places emphasis on self-interest and is at the heart of the capitalist economic system. More recent doctrines of individualism, libertarianism and existentialism have also suggested a similar ethic, though in a less materialistic form.

- **Organizational/Group**: ethics involves acting in ways that maximize benefits to the widest community (organization or group) affected by an action.

→ *Utilitarianism:* Benevolence toward others is a hallmark of utilitarianism. A variety of ethical concepts such as social justice, fairness, equity, the greater good and altruism originate from this collective notion of ethics.

- **Societal:** The ethical orientations which focus on self and on others represent two ends of a continuum. Between these ends are several dualist conceptions of ethics that attempt to relate self to society.

→ For example, the premise that individuals have a need to universalize their free will is the basis of Kant's view of ethics. Ethical acts should reflect a will that would be acceptable as universal law. Being ethical requires treating humanity (self and others) always as an end and never as just a means.

Resolving Ethical Conflicts

Tensions/Conflicts: between what is good for individuals, organizations and society are the reason that dilemmas of ethical decision-making arise. These conflicts manifest themselves in rules that govern organizational behavior and in concrete decision situations.

- *Individual vs. Organizational Conflicts:* are apparent when the personal values of employees conflict with the requirements of organizational tasks.

- *Organizational vs. Societal Conflicts:* arise when corporations consume public goods without paying for them or when goods are sold with harmful effects. These conflicts are most common in the areas of environmental pollution and community protection from technological and product hazards.

- *Individuals vs. Societal Conflicts:* arise when self-interest overshadows collective interests. With businesses becoming international, we have also seen the emergence of ethical conflicts between societies that follow different ethical standards.

→ **To deal with ethical conflicts**, companies should establish and communicate ethical standards to their employees. Decision-making procedures should also be implemented to resolve ethical conflicts. Conflict resolution should involve an explicit set of ethical criteria for making legitimate choices.

→ Today, many companies are instituting **ethics programs** that provide information on ethical problems that managers are likely to face. Broadly, the structure of such programs is as follows:

1) Identify the organizational, technological and strategic decision areas that have important ethical dimensions (insider information, facilities, avoiding job discrimination).
2) Describe a procedure for conducting a situational analysis of facts for each of the decision areas. This involves studying the background and history of decisions, identifying the key stakeholders and their interests and examining decision options along with their likely consequences.

3) Analyze the ethical issues involved by using an explicit and predetermined set of ethical criteria. Identify the dilemmas and tensions they pose. Examine moral conflicts, costs-benefits and accountability-responsibility issues related to the decision.

4) Select a resolution strategy among the following to deal with the dilemmas and conflicts:
- Act on personal ethical values and take responsibility for consequences
- Compromise personal ethics with organizational and societal demands
- Broaden participation in decision making by inviting other perspectives into the process.

5) Discuss the approach to resolution with relevant peers, superiors and subordinates.

6) Implement the resolution strategy by bringing necessary resources to bear on the situation.

Lesson 13: Socially Responsible Strategies

Corporate Social Responsibilities and Strategy Formulation

ACCEPT	SHOULDN'T ACCEPT
Allows for greater responsiveness to a wide range of societal demands	Assumption of social responsibilities detracts business from its purpose of maximizing profits
Firms can gain legitimacy to operate and draw resources from society	Business organizations lack the skills to manage social programs
Improves public image as being sensitive to societal needs	Social programs are costly for business; they can make businesses noncompetitive
Avoids governmental regulation of activities due to voluntary responsibility to prevent harm to society.	Private business lacks accountability to the public and should not get involved in public social programs.
Fulfills societal expectations by providing more than just profits and products. Businesses can satisfy multiple stakeholders	Business already wields too much power in society
Leverages its access to a breadth of resources which enables the firm to solve many social	There is a conflict of interest between the profit-driven goals of businesses and the public-social

problems	good of social programs
Provides for potentially new profit opportunities.	

Organizational Stakeholders: How Can a Firm Address Their Needs?

Stakeholders are both inside and outside the organization. Some stakeholders, such as the board of directors, are on the boundary of the organization and its environment.

- *Internal stakeholders* include workers, staff and management.
- *External stakeholders* include stockholders, customers, suppliers, competitors, communities where the organization operates, governmental agencies, labor unions and public interest groups.

Recently, conflicts have increased with the advent of hostile takeovers, leveraged buyouts and pension fund activism. Investors:

- Are playing an increasingly active role in redirecting companies.
- Can cooperate to displace current management.
- Can divest parts of the firm and redeploy its assets in different ways.

→ Organizations can develop stakeholder-sensitive strategies by adopting a broad stakeholder orientation. This requires pursuing broad stakeholder objectives, resolving conflicts among opposing groups of stakeholders and developing strategic programs to address stakeholders' needs.

In Which Areas Can Corporations Exhibit Their Social Responsibility?

Following are a few of the many areas in which corporations have acknowledged their social responsibility and have established programs to address them. Responsibility towards:

- *Natural Environment:* judicious use of natural resources, energy conservation, limiting polluting emissions and waste management.
- *Consumers*: creating safe products/packages, educating consumers on product use and disposal, being truthful in advertising and establishing a procedure for dealing with consumer complaints.

- *Employee Welfare*: providing fair compensation and benefits, opportunities for personal professional development, having safe work environments and progressive human resource policies and eliminating discrimination.
- *Local, state and federal government agencies* including fulfilling obligations under regulations and statutes of these agencies, cooperating in planning and investigations, and coordinating administrative activities with these agencies.

- *Public or communities* where the corporation operates including providing economic stability, safeguarding public safety, protecting the environment and aiding in the development of social and cultural resources of the community through corporate philanthropy.
- *Media* including being cooperative and truthful about issues that affect public welfare.

How Can Companies Forecast Strategic Social Issues?

- In each area of social responsibility, managers need to forecast the **emergence and life cycle** of strategic social issues.
- Instituting an **issues management program** in the company can do this. Issue management refers to early identification, tracking and resolution of strategic issues that could affect the company.
- By considering emerging strategic issues early, firms have the opportunity to **shape strategies** as they become important to the firm and put them on their strategic agenda.

How Can Companies Organize Themselves for Social Responsibility and Formulate Socially Responsible Strategies?

Some firms have institutionalized social responsibility by creating a new position of corporate responsibility officer or a public affairs function. Other firms have expanded their public/external affairs or strategic planning departments to include the function of monitoring social issues. How can corporations formulate socially responsible strategies? There are two basic approaches:

1) *The company evaluates the social merits of each corporate and business strategy based on its financial, technological and market criteria*. The following as to be asked about the strategy:
- If it strengthens social goods
- If it creates any public risks or harm
- If it harms the interests of our stakeholders
- If it affects public image and goodwill?

2) *Adopting specific strategies toward all key stakeholders of the firm*.
- Pursuing multiple stakeholder objectives rather than simple profitability objectives.
- While acknowledging that a primary responsibility of the company is to increase shareholder wealth, stakeholder strategies acknowledge responsibilities toward customers, suppliers, employees, business associates, communities, media and government.

→ **Stakeholder analysis** begins with identification of who they are, their sources of influence, their size and power. The history of relations with stakeholders and specific organizational decisions in which the stakeholders have the greatest interest are also important considerations.

Lesson 14: Sustainable Organizations

What is a Sustainable Corporation?

In the context of sustainable development, what does it mean to be a sustainable corporation?

- Corporations are groups of individuals with a common vision and purpose.

→ They use energy and natural resources as inputs and technological systems of production to convert these inputs into products. Outputs take the form of products and wastes.

- Corporations seek to meet the multiple and conflicting goals of profitability, growth, competitiveness and stakeholder demands.

→ Corporate economic and ecological performance depends on resolving conflicts and balancing competing demands.

VITO Framework: represent the key elements of corporations – vision, inputs, throughputs and outputs (VITO) – they have direct consequences for the natural environment.

→ **Corporate vision** defines the relationship of the company to its natural and human environments. Managing each corporate element in an ecologically conscious manner can help rather than hinder the pursuit of corporate objectives.

Corporate Elements	Environmental Concerns	Positive Potential
	Vision	
Self-identity	Anthropocentrism Economic/technological enterprise	Social, ecological enterprise
Relationship to members	Members as labor	Concern for the whole person
Relationships with stakeholders	Investors are primary stakeholders	Multiple stakeholders plus nature
Relationships with nature	Nature viewed as resource to be exploited	Nature as a renewable resource
	Inputs	
Raw Materials	Raw materials Depletion of resources Harm caused by toxic materials	Conservation Resource renewal User education
Fuels	Fossil fuel depletion	Conservation Efficiency
	Throughputs	
Plant	Plant safety/accidents Risks to neighborhoods Hazardous materials storage	Liability insurance Eliminate bulk storage
Workers	Occupational hazards Injuries/ill health	Training in humane policies

Wastes	Toxicity, disposal Pollution emissions	Reduce, reuse, recycle Eliminate
Transportation	Spills and losses	Preventive measures
	Outputs	
Products	Product safety Health consequences Product liability Environmental impacts	Safer designs Product improvement User education Insurance Opportunities for environmentally friendly products
Packaging	Garbage Reliability Pollution	Recycle, reuse Design improvements Pollution control efficiency

<u>How Can You Change the Organizational Vision, Inputs, Throughputs and Outputs to Achieve Sustainability Goals?</u>

- **For Inputs:** Through energy conservation, improved product stewardship and sustainable harvesting of resources, companies can cut costs and improve their competitive position.
- **During Throughput:** companies can reduce costs by using cleaner production technologies with closed-loop systems and reduce resource consumption by recycling and reusing wastes. They can provide safe and healthy working conditions within plants and cooperate with communities to reduce risks of accidents. They can adopt more efficient transportation systems.
- **For Output:** companies can address environmental concerns by developing safer and environmentally friendly product and package designs and engaging in customer education for safe product use and recycling.

Below are some nontraditional ways by which companies can foster sustainable development:

- Expand primary mission from economic performance to ecological performance.
- Introduce a comprehensive environmental management program. Create ecologically responsible strategies, products, production systems and waste-management practices.
- Get involved in solving problems of global sustainable development, including food security, ecosystem protection, reducing population, conserving energy and resources.
- Establish a focus on developing countries, which need the greatest help in sustainable development.
- Help local communities to practice ecologically sound economic development.

→ Engage government policymakers in creating regulations and infrastructures that encourage sustainable development.
→ Cooperate with ecologically and socially oriented non-governmental organizations to increase community awareness of ecological problems.