Green Environmental Business

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Abstract:

The process of market globalization has lead to many changes. Corporate responsibility now extends to encompass not only the needs of employees, but also the environment and society as a whole. The article focuses on green environmental business as a part of global marketing. Integrated marketing management integrates the requirements of sustainable green development and environmental excellence. The world is today facing unique environmental challenges. The idea that business has a responsibility other than producing goods and services is not new. Corporate responsibility now extends to encompass not only the needs of employees, but also the environment and society as a whole. As industry grows in strength and importance, it is also is being called upon to share the benefits of its growth with members of society. The article focuses on Sustainable Green Business as a way for sustainable development. PESTLE analysis is a useful tool for understanding the industry situation as a whole, and is often used in conjunction with a SWOT analysis to assess the situation of an individual business.

Key words: business, environment, management, PESTLE analysis, sustainable development

1 Introduction

A sustainable business is any organization that participates in environmentally-friendly or green activities to ensure that all processes, products, and manufacturing activities adequately address current environmental concerns while maintaining a profit. In other words, it is a business that “meets the needs of the present world without compromising the ability of the future generations to meet their own needs”[1]. It is the process of assessing how to design products that will take advantage of the current environmental situation and how well a company’s products perform with renewable resources [2]. The Brundtland Report [3] emphasized that sustainability is a three-legged stool of people, planet, and profit. Sustainable businesses with the supply chain try to balance all three [4] through the triple-bottom-line concept—using sustainable development and sustainable distribution to impact the environment, business growth, and the society [5]. Everyone affects the sustainability of the marketplace and the planet in some way. Sustainable development within a business can create value for customers, investors, and the environment. A sustainable business must meet customer needs while, at the same time, treating the environment well [6].

2 Environmental Organizational Scanning

PESTLE analysis is a useful tool for understanding the industry situation as a whole, and is often used in conjunction with a SWOT analysis to assess the situation of an individual business. PESTLE stands for “Political, Economic, Sociological, Technological, Legal and Environmental” factors. The questions to ask yourself are:

- What are the key political factors likely to affect the industry?
- What are the important economic factors?
- What cultural aspects are most important?
- What technological innovations are likely to occur?
- What current and impending legislation may affect the industry?
What are the environmental considerations [7]?

Originally designed as a business environmental scan, the PEST or PESTLE analysis is an analysis of the external macro environment in which a business operates. These are often factors which are beyond the control or influence of a business, however are important to be aware of when doing product development, business or strategy planning [8].

<table>
<thead>
<tr>
<th>Factor</th>
<th>Often Comprised Of</th>
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<tbody>
<tr>
<td>Political</td>
<td>- Current taxation policy&lt;br&gt;- Future taxation policy&lt;br&gt;- The current and future political support&lt;br&gt;- Grants, funding and initiatives&lt;br&gt;- Trade bodies&lt;br&gt;- Effect of wars or worsening relations with particular countries</td>
</tr>
<tr>
<td>Economic</td>
<td>- Overall economic situation&lt;br&gt;- Strength of consumer spending&lt;br&gt;- Current and future levels of government spending&lt;br&gt;- Ease of access to loans&lt;br&gt;- Current and future level of interest rates, inflation and unemployment&lt;br&gt;- Specific taxation policies and trends&lt;br&gt;- Exchange rates</td>
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<tr>
<td>Sociological</td>
<td>- Demographics&lt;br&gt;- Lifestyle patterns and changes&lt;br&gt;- Attitudes towards issues such as education, corporate responsibility and the environment&lt;br&gt;- Social mobility&lt;br&gt;- Media views and perceptions&lt;br&gt;- Ethnic and religious differences</td>
</tr>
<tr>
<td>Technological</td>
<td>- Relevant current and future technology innovations&lt;br&gt;- The level of research funding&lt;br&gt;- The ways in which consumers make purchases&lt;br&gt;- Intellectual property rights and copyright infringements&lt;br&gt;- Global communication technological advances</td>
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<tr>
<td>Legal</td>
<td>- Legislation in areas such as employment, competition and health &amp; safety&lt;br&gt;- Future legislation changes&lt;br&gt;- Changes in European law&lt;br&gt;- Trading policies&lt;br&gt;- Regulatory bodies</td>
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<tr>
<td>Environmental</td>
<td>- The level of pollution created by the product or service&lt;br&gt;- Recycling considerations</td>
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Table 1: PESTLE analysis [7]

It is important to take into account PESTLE factors for the following main reasons:

- Firstly, by making effective use of PESTLE analysis, you ensure that what you are doing is aligned positively with the powerful forces of change that are affecting our working environment. By taking advantage of change, you are much more likely to be successful than if your activities oppose it.
- Secondly, good use of PESTLE analysis helps you avoid taking action that is likely to lead to failure for reasons beyond your control.
- Thirdly, PESTLE is useful when you start a new product or service. Use of PESTLE helps you break free of assumptions, and helps you quickly adapt to the realities of the new environment [8].

So where did the term PEST or PESTLE derive? What were the origins? The term PESTLE has been used regularly in the last 10+ years and its true history is difficult to establish. From our research, the earliest known reference to tools and techniques for ‘Scanning the Business Environment’ appears to be by Francis J. Aguilar (1967) who discusses ‘ETPS’ - a mnemonic for the four sectors of his taxonomy of the environment: Economic, Technical, Political, and Social. Shortly after its publication, Arnold Brown for the Institute of Life Insurance (in the US) reorganized it as ‘STEP’ (Strategic Trend Evaluation Process) as a way to organise the results of his environmental scanning. Thereafter, this ‘macro external environment analysis’, or ‘environmental scanning for change’, was modified yet again to become a so-called STEPE analysis (the Social, Technical, Economic, Political, and Ecological taxonomies). In the 1980s, several other authors including Fahey, Narayanan, Morrison, Renfro, Boucher, Mecca and Porter included variations of the taxonomy classifications in a variety of orders: PEST, PESTLE, STEEPE etc. Why the slightly negative connotations of PEST have proven to be more popular than STEP is not known. There is no implied order or priority in any of the formats. Some purists claim that STEP or PEST still contain headings which are appropriate for all situations, other claim that the additional breakdown of some factors to help
individuals and teams undertaking an environmental scan. It is important to clearly identify the subject of a PESTLE analysis (that is a clear goal or output requirement), because an analysis of this type is multi-faceted in relation to a particular business unit or proposition - if you dilute the focus you will produce an unclear picture - so be clear about the situation and perspective that you use PESTLE to analyze.

A market is defined by what is addressing it, be it a product, company, organization, brand, business unit, proposition, idea, etc, so be clear about how you define the market being analyzed, particularly if you use PESTLE analysis in workshops, team exercises or as a delegated task. The PESTLE subject should be a clear definition of the market being addressed, which might be from any of the following standpoints:

- A company looking at its market
- A product looking at its market
- A brand in relation to its market
- A local business unit or function in a business
- A strategic option, such as entering a new market or launching a new product
- A potential acquisition
- A potential partnership [8].

### 3 Importance of Change

The difficulty with any change phenomenon during its infancy is that evidence supporting the importance and viability of the various mechanisms and techniques is scant. There are many issues that warrant attention and require a response. Interpreting the importance of change means that one can understand its implications. A single stakeholder group may not suggest a trend, but many such groups indicate a powerful force for change. Listening and learning about needs and wants of customers and stakeholders provide the inputs necessary for determining how to deal with forces of change within the business environment. It can establish the underlying conditions, trends, patterns, and related consequences. Today, however, solutions have to be framed in the context of the social, economic, political, environmental, and technological structures as well as the legal and regulatory ones. Interpreting the mechanisms of change within the complexity of this more holistic view requires an enormous amount of information from a multiplicity of sources. Some of the most important consideration are:

- What is the speed of change?
- What are the most compelling opportunities for effecting improvement?
- What are the required means and mechanisms to achieve sustainable competitive advantages? [xx].

### 4 Corporate Responsibility

Corporate responsibility now extends to encompass not only the needs of employees, but also the environment and society as a whole. As industry grows in strength and importance, it is also being called upon to share the benefits of its growth with members of society. The key element of a precautionary approach, from a business perspective, is the idea of prevention rather than cure. In other words, it is more cost-effective to take early action to ensure that irreversible environmental damage does not occur [10]. An EMS is the organizational structure and associated responsibilities and procedures to integrate environmental considerations and objectives into the ongoing management decision-making processes and operations of an organization. According to an EPA summary, an EMS is a continual cycle of planning, implementing, reviewing and improving the processes and actions that an organization undertakes to meet its business and environmental goals. Leaders of successful, high-growth companies understand that innovation is what drives growth, and innovation is achieved by awesome people with a shared relentless growth attitude and shared passion for problem solving and for turning ideas into realities. Companies that continuously innovate will create and re-invent new markets, products, services, and business models – which leads to more growth. Innovation is founded on your enterprise's ability to recognize market opportunities, your internal capabilities to respond innovatively, and your knowledge base. So, the best thing to do to guarantee growth is to build a sustainable innovation organization around the following components:

1. Vision and strategy for innovation
2. Culture supporting innovation
3. Processes, practices and systems supporting innovation
4. Top management team leading innovation
5. Cross-functional teams mapping innovation road
5 Vision and Objectives of Sustainable Development

Plan B for Slovenia is an initiative for sustainable development by a group of non-governmental organisations and individual experts. With it we offer for consideration, adoption and implementation a series of programmes and projects which we believe are essential for achieving the development objectives adopted at the national level with the Development Strategy for Slovenia (Government of Slovenia 23.6.2005). The economic development objective is to overtake the EU average level of economic development (measured in GDP per capita in purchasing power parity) and raise employment in line with the Lisbon Strategy. The social development objective is to improve the quality of life and increase the prosperity of all citizens, measured by indices of human development, social risk and social interconnection. The intergenerational and ecological development objective is adherence to the principle of sustainability as the fundamental qualitative measure in all domains of development, including sustainable population renewal. The sustainability principle, namely, requires that the present generations fulfil their needs in a manner that does not compromise the ability of future generations to satisfy their needs at least as well. In the international arena Slovenia’s development objective is to become a country recognised and distinguished in the international community by its developmental model, cultural identity and active engagement[12] . They propose the following vision for Slovenia by 2020:

Slovenia is a country of prosperity and quality of life in true co-existence with nature. It achieves competitive advantage and fulfils its obligations in the global world by:

- Respecting the constraints of the environmental space, particularly by rapidly transiting to a low-greenhouse gas emission society;
- Effectively adapting adaptation to climate change;
- Incorporating and interlinking local resources for regional development;
- Innovative technologies grounded in human resources, the spatial pattern, the natural, cultural resources and the social edifice of Slovenia (e.g. ecoremediation)
- Educating creative people;
- An efficient state based on participative democracy and respect for human rights;
- Effectively preserving areas and ecosystems;
- Giving an example to other countries by its sustainable development.

They also propose the following temporally limited and quantified implementation projects, which are ambitious but nevertheless realistic and feasible in their view.

Economy
Higher global competitiveness: by 2020 Slovenia is ranked at least 20th on the WEF competitiveness index.
Greater energy efficiency: zero growth of primary energy use by 2020.
Higher share of renewable energy in final energy use: by 2020 the share of renewable energy sources (RES) is at least 30% of final energy use, and at least 70% by 2050.
Natural potentials for added value in the countryside are realised: by 2020 the share of persons employed and self-employed in their municipality of residence rises to 65% (2005 = 54.5%).
High rate of employment for the active population: by 2013 unemployment is under 4% of the active population.
Higher investment in research and development (R & D): by 2013 gross domestic expenditure for R&D is at least 3.2% of GDP.

Society
Better public health: by 2020 life expectancy rises to 80 years of age.
Uprooted poverty: by 2020 less than 8% of the population lives below the poverty line.
Accelerated development of all regions: by 2020 the Human Development Index (HDI) in every region is above 0.949 (which was the HDI for Italy as a whole in 2004).
Housing for young families: by 2020 a rented flat is available for every young family for 30% of the average net wage.
Higher education of the young: by 2020 the full generation attends secondary school. 50% of the generation finishes tertiary education.
Better educational structure of the population: by 2013 the annual share of actively engaged in education is above 50%.
Stronger civil society: by 2013 the share of added value created by non-profit civil society organisations is at least 2% of total added value.

Environment
A balanced ecological footprint: by 2020 the ecological footprint of global hectare per person is less than 2.8.

Lower contribution to climate change: by 2020 greenhouse gas emissions are at least 30% lower than in 1990 and 80% lower by 2050.

Adaptation to climate change: by 2020 less than 5% of the population is threatened by environmental or economic impacts of climate change.

Proper nature preservation: by 2013 the Natura 2000 network is fully implemented and ecologically important and protected areas are respected.

Sustainable growth of built-up areas: by 2013 the growth of built-up areas is lower than the growth of GDP.

Sustainable agriculture: by 2015, 20% of agricultural land and 15% of farms are engaged in sustainable agriculture.

Preservation of water resources: by 2015 good water condition is attained in line with the Water Framework Directive.

Environmental pollution is no threat to public health: by 2015 no region of Slovenia is under threat according to the Environmental Protection Law.

Access to public transport: by 2015 at least 80% of the population has access to public transport of good quality [12].

5 European Business Awards

Public opinion surveys show that Europeans are more worried about the environment. This reflects growing awareness among Europeans of environmental problems and increased commitment to protecting the planet’s vital resources. Seven out of ten Europeans believe that environmental protection and fighting pollution represent "an immediate and urgent problem". More than 65% of Europeans think that the destruction of the ozone layer, water pollution, the greenhouse effect, and the disappearance of tropical rain forests are worrying phenomena.

Our health and quality of life and that of our children are dependent upon the state of the environment. In close co-operation with the Member States, the European Union is working to ensure a high level of wellbeing for everyone. We need to restore the quality of the environment and ensure that we improve our patterns of consumption and environmental behaviour.

This will in turn encourage more sustainable development in the future.

The environment is not just a matter for experts. It may be a complex and varied subject, but every stakeholder, whether they represent industry, public authorities, citizens, or NGOs, has a duty to be fully involved and committed to the cause.

Integrating the respect for the environment has gradually become a day-to-day component of business life. The challenge over the next few years is to build on this, so that major corporations and SMEs assume sustainable development and good practice.

The EUROPEAN BUSINESS AWARDS FOR THE ENVIRONMENT are an opportunity to recognise and promote companies that integrate sustainable development into their activities [13].

The European Business Awards for the Environment's steering committee has drawn up a number of general and specific criteria for each award category. These criteria will give applicants a better idea of what the judges are looking for. The criteria are explained below and vary from one category to the next.

Category 1: Management

- **Commitment**: The corporate mission and policy statements (including environmental policy) must be consistent with the principles of sustainable development.

- **Integration**: Environmental and social issues must be fully integrated into mainstream business management, alongside financial performance, with clear objectives and targets for improving performance.

- **Performance improvement**: There must be continuous improvement in performance against the organisation’s stated environmental and social objectives demonstrated by regular monitoring and reporting.
Accountability: There must be regular and systematic dialogue with stakeholders (employees, suppliers, customers, non-governmental organisations, etc.) with feedback of the results into management decision-making.

Employee involvement: Employees must be closely involved with all aspects of environmental management and there must be a degree of capacity-building in other areas of corporate social responsibility.

Replication potential: There must be clear potential for good practice and innovation to be shared with other organisations (e.g. through involvement in business networks, dissemination at conferences).

Category 2: Product

Innovation: Substantial innovation in the product or service must bring improvements in environmental performance over comparable alternatives, whilst at least maintaining functional performance.

Environmental benefit: Clear and quantified analysis must demonstrate increased resource efficiency and reduced environmental impact over the complete life-cycle of the product or service (e.g. through LCA).

Social benefit: The product or service must meet the needs of consumers and bring wider social benefits (e.g. by providing decent working conditions, safeguarding consumer health, improving quality of life, etc.).

Economic benefit: Proof must be given that the new product or service is at least economically viable (e.g. through sales performance data or credible sales projections).

Commitment: Senior management must be clearly committed to the development and marketing of the product or service and must show its importance with regard to the organisation’s overall strategy.

Replication potential: There must be clear potential for wider adoption of the innovative aspects of the product or service, and a willingness to share this knowledge and expertise with other organisations.

Category 3: Process

Innovation: The technology must include specific innovative elements that promote more eco-efficient production (e.g. by increasing resource efficiency, or reducing waste and emissions).

Environmental benefit: The environmental benefits of the new technology must be clear and quantified (e.g. through use of eco-efficiency indicators).

Social benefit: Adoption of the new technology must have either neutral or positive social impacts (e.g. employment opportunities, working conditions, or effects on local communities).

Economic benefit: Proof must be given that the new technology is economically viable (e.g. with reference to capital and operating costs).

Commitment: Senior management must be clearly committed to adopting the new process or technique and must show its importance in the context of the organisation’s overall operations.

Replication potential: There must be clear potential for wider adoption of the innovative aspects of the technology, and a willingness to share this knowledge and expertise with other organisations.

Category 4: International Co-operation
• **Clear objectives**: The partnership must be guided by a clear statement of objectives demonstrating how it expects to contribute to the environmental, economic and social aspects of sustainable development.

• **Planning and resource allocation**: The partnership must be thoroughly planned and must be allocated sufficient human and financial resources to enable it to work effectively towards its objectives.

• **Sustainable benefit**: The partnership must produce measurable and lasting benefits that are consistent with the principles of sustainable development (e.g. reduced resource consumption, improved working conditions, poverty alleviation).

• **Equity**: The benefits must be evenly distributed among those involved, and the partnership must be managed in a way that is fair and transparent to all partners.

• **Synergy**: Benefits must be produced more efficiently and effectively as a result of the partnership (e.g. by avoiding duplication of effort, mobilising greater expertise, building trust, etc.).

• **Replication potential**: There must be potential for applying the innovative aspects of the partnership to other situations and partners [14].

Environment policy has moved steadily up the Community agenda over the years. The promotion of sustainable development and a high level of environmental protection are now key objectives of the EC Treaty. Within the European Commission, the Environment Directorate-General (DG ENV) is responsible for preparing and ensuring the implementation of Community environmental laws and policies. The principles and objectives of EU environmental policy have over the years been presented in action programmes with specific duration. The sixth environment action programme 2001-10 (6EAP) gives a new sense of purpose and direction to the Community’s environmental policy. It clearly sets out the objectives for the next decade and determines the actions that will need to be taken within a 5 - 10 year period if those goals are to be achieved. The 6EAP takes into account discussions with Member States and input from business, NGO’s and the general public. It also takes into account the results of the 1999 State of the Environment Report made by the European Environment Agency. The 6EAP calls upon the active involvement and accountability of all sections of society in the search for innovative, workable and sustainable solutions to the environmental problems we face. A key principle is the integration of environmental considerations into other policy areas: sustainable development requires a balance between environmental, social and economic needs. Integration of the environment in other policies is also a specific request of Heads of Government and an explicit objective in the Amsterdam Treaty. Further information on DG ENV policies and actions can be found on their website: [http://europa.eu.int/environment](http://europa.eu.int/environment) [14].

Managing quality to achieve excellence means managing an organisation, business or unit so that every job, every process, is carried out right, first time, every time. To be successful this must be viewed as a holistic approach that affects, and involves, everyone – employees, customers, suppliers, shareholders and society. It must be driven from within the organisation, as it cannot be imposed from outside and is not a simply a cost-cutting or productivity improvement exercise [15]. The EFQM Excellence Model was introduced at the beginning of 1992 as the framework for assessing organisations for the European Quality Award. It is now the most widely used organisational framework in Europe and it has become the basis for the majority of national and regional Quality Awards. The EFQM Excellence Model is a practical tool that can be used in a number of different ways:

- As a tool for Self-Assessment
- As a way to Benchmark with other organisations
- As a guide to identify areas for Improvement
- As the basis for a common Vocabulary and a way of thinking
- As a Structure for the organisation's management system [16]

The Model, which recognises there are many approaches to achieving sustainable excellence in all aspects of performance, is based on the premise that:
Excellent results with respect to Performance, Customers, People and Society are achieved through Leadership driving Policy and Strategy, that is delivered through People, Partnerships and Resources, and Processes.

The EFQM Model is presented in figure 1 form below. The arrows emphasise the dynamic nature of the Model. They show innovation and learning helping to improve enablers that in turn lead to improved results [4]. The reputation of any organisation, be it public, private, small or large, is built on the quality and excellence of the products and/or services it provides. Quality management is a very powerful, competitive weapon that any business wishing to be, or stay, successful cannot afford to ignore. Reputations for poor quality last a very long time, ignore it at your peril! Never-ending improvement is the process by which greater customer satisfaction and, if appropriate, greater market share are achieved. In a commercial organisation, these show up on the bottom line [15].

6 Nokia’s Environmental Strategy

Nokia is a market leader in mobile devices and with leadership comes great responsibility. Nokia aims to be a leading company in environmental performance. Their vision is a world where everyone being connected can contribute to sustainable development. They want to shape their industry and drive best practices.

Figure 1: The EFQM Model

Achieving environmental leadership means minimizing their own environmental footprint. With the expansion of mobile communications, this is all the more important. They strive to reduce the environmental impact of their products, solutions, and operations. They also collaborate with their suppliers to improve the environmental performance of our supply chain.

They have a user base of more than 900 million people which means that they have a unique opportunity to make an impact that goes beyond our own activities. That’s why they aim to offer people products and solutions that help them make sustainable choices. Together, we can achieve more [17].

Minimizing our environmental footprint

Nokia’s environmental work is based on life cycle thinking. This means that they aim to minimize the environmental impact of their products throughout
their operations, beginning with the extraction of raw materials and ending with recycling, treatment of waste, and recovery of used materials. They achieve this by better product design, close control of the production processes, and greater material reuse and recycling.

![Figure 3: Nokia life cycle thinking](image)

Their environmental efforts focus on three issues:

- **Substance management.** We work closely with our suppliers and require full declaration of the substances we use in our devices. Our work is based on the precautionary principle and we aim at continuously reducing the amount of substances of concern. In addition, we explore the opportunities for using new, more environmentally friendly materials, such as bio plastics or recycled metals and plastics.

- **Take back and recycling.** We want to increase consumer awareness of recycling, offer superior recycling in all markets and promote the recycling of used devices through specific initiatives and campaigns. The backbone of Nokia’s take-back program are the collection points of used devices in 5000 Nokia care centres in 85 countries.

- **Energy efficiency.** We make sure our devices use as little energy as possible. We also work to reduce the energy consumption of our operations, and agree on energy efficiency targets with our key suppliers.

**Basic principles**

Our environmental work is based on global principles and standards. Our targets are not driven by regulatory compliance but go way beyond legal requirements. Environmental issues are fully integrated in our business
activities and are everyone’s responsibility in Nokia. It is a part of everything we do [17].

6 Conclusion

One of the key reasons for the problems of today is the absence of an integral approach in planning or drafting development strategies. It is a feature of natural ecosystems that each thing or living creature can do several things at the same time and that each important task is supported by several different elements. Human society may also be viewed as an integral system made up of individuals and groups, but subjected as a whole to the laws of nature. To achieve a desired objective we have to know the law that determine interactions in order to be able to foresee all the main consequences of our actions [12]. Specially in Green Environmental Business. The theory on the basis of the practical experiences envisages sustainable development planning as a process of continuous improvement [19]. The successful green development and implementation of green innovation in an organizational system can produce a significant saving in the amount of business and environment resources and therefore a smaller environmental impact [17]. Leaders of successful, high-growth companies understand that green innovation is what drives growth, and innovation is achieved by awesome people with a shared relentless growth attitude and shared passion for problem solving and for turning ideas into realities[20].

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