

ENVIRONMENTAL AND PRODUCTIVITY MANAGEMENT - THE BUSINESS SUSTAINABILITY SYNDROME

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Abstract – Every organisation must ensure that its responsibilities are encompassed within its legal, social and economic domains. Environmental and productivity issues thus need to be entwined to form the foundation of such an effective corporate strategy. The inter-relationships of sustainability, growth and the improvement in quality of life are discussed through a stakeholder approach where ‘green’ yardsticks are explored and related to productivity. A framework for analysis is constructed, illustrating the flow from inputs, through processes, to outputs and, ultimately, to outcomes, highlighting impacts on society. Such a perspective can be perceived as the contemporary sustainability vision through sensible resource utilisation.

Keywords : Performance, productivity, environmental management, business sustainability, decision-making, corporate social responsibility, business ethics, resource utilisation

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Introduction

For every business, financial outcomes and market performance parameters must be evaluated in order to ensure progress in every relevant aspect of operations thus allowing it to gain a strategic competitive advantage. The challenge for management, according to Elkington (2004), is to understand and address the 'triple bottom line' of sustainable development. Such a triadic agenda requires organisations to focus, not simply on the economic value they add, but also on the environmental and social value they add – or, conversely, could destroy. It must be remembered that both social and environmental issues ought to be seen as business issues rather than 'voluntary' deeds; that is why, increasingly, they play a more significant role in management thinking. In part, it is the national and international regulations as well as societal pressures that are enticing the business world to take into account the full impacts of its resource utilisation, processes as well as products and services.

In recent years, there has been much attention placed, at both the operational and strategic levels, on environmental systems and standards. In relation to environmental auditing, Ledgerwood *et al* (1997) point out that this requires a balance of facts and values and, unlike financial audits, it does not involve the application of hard and fast rules. Instead, it necessitates a creative case-by-case development of specific audit designs, coupled with moral judgment, arising from discussions and agreements with the appropriate decision-makers and stakeholders. Decidedly, grave legal, financial and reputational consequences may result from corporate decisions which ignore the discipline of environmental responsibility. Therefore, corporate environmental management structures and techniques must be firmly installed to underline the need to develop and establish norms which can ensure that environmental performance is improved over time. Indeed, in this regard, it must be taken into account that every business is, of course, individual because of its differing operations, products or services, internal and/or external financial and political

factors as well as priorities. But, whatever system used, the organisation must assess its own performance in order to compete and, perhaps, facilitate benchmarking in the pursuit of achieving both business and environmental excellence.

Among the major stakeholders, Solomon (1994) famously claimed over a decade ago that it is the environment which is the 'silent stakeholder' as it possesses neither a voice nor a vote in the running of business. That is why, today, many forces, such as non-governmental organisations and pressure groups, are driving firms to measure their environmental performance, be it by demonstrating progress towards targets, ensuring better data availability for decision-making or supplying information to regulators and major stakeholders. The scenario ought to be perceived as a dialogue between the specialist measurers and the functional managers as well as being a focal point across the organisational divide. Consequently, it is those managers who would have the ultimate responsibility for formulation, implementation and improvement once metrics have been ascertained. To achieve these steps, Sumanth (1998) provides an ordered approach which he inculcates into his productivity cycle. This details a continuous process which links measurement, evaluation, planning and improvement. In effect, it provides, not a two-dimensional productivity spiral, but a three-dimensional one which includes the important facet of time. This is particularly effective regarding resource utilisation and the consequent impact on the environment.

When surveying the scene, it seems that, whatever control configuration an organisation may adopt in relation to its productivity and environmental management, there must be a partnership of purpose whereby stakeholder interests are not put at risk. This is because the notion of stakeholding potentially bears the key to long-term economic wealth and social well-being through the core values of the organisation because 'we are what we do'.

Therefore, there must be an inter- linkage between processes, efficiency, effectiveness and ultimate outcomes. In relation to human resources, Cowe (2002) states that companies do find that recruitment costs are lower, absenteeism is decreased and productivity is improved when management acts in a responsible manner – an impact of which is an enhanced reputation. As *Ecclesiastes 7:1* relates : ‘A good name is more valuable than precious oil’. Certainly, there is a direct correlation between the implementation of sustainable business strategies and the substantial benefits derived from communicating core business values. As a corporate philosophy, this can be exemplified by what Per Grunewald, Senior Vice President for Group Environmental Affairs at Electrolux, states : “It has become more and more evident that our long-term, holistic approach was the right way to go. We are aiming towards both sustainability and creation of shareholder value”. The economic and ethical link is undeniable in the quest for success and requires the urgent attention from both business and government. Once viewed as a luxury, sustainability within the ethical decision-making process is now perceived as a necessity. In the words of Charles Wang of the Wang Corporation : “Ultimately, it’s not about the money we make, it’s about the journey we take”.

The Environmental Dimensions of Productivity

The formal definition of productivity is the relationship of the output of a process or entity with one or more of the inputs used to create that output. It can also be viewed as a ratio of the value of goods/services to the cost of resources consumed, monitoring the efficacy of the business process. When the question ‘what is productivity?’ was posed to Dr. Krish Pennathur (1990), President of the World Academy of Productivity Science, he replied in one phrase : ‘The elimination of waste in all forms’. For the Dow Chemical Company, reducing waste means a cleaner and safer environment but, for them, the best way to manage it is to avoid producing it in the first place as this reflects inefficiency; in their

eyes, where there is inefficiency, there is also a definite opportunity to reduce costs. These cost savings can be made in such areas as improved production techniques, recycling, treatment and destruction of hazardous materials as well as secure landfills. This type of philosophy, graphically illustrated [Figure 1], does pay long-term dividends in that it makes good sense from both a business and environmental viewpoints :

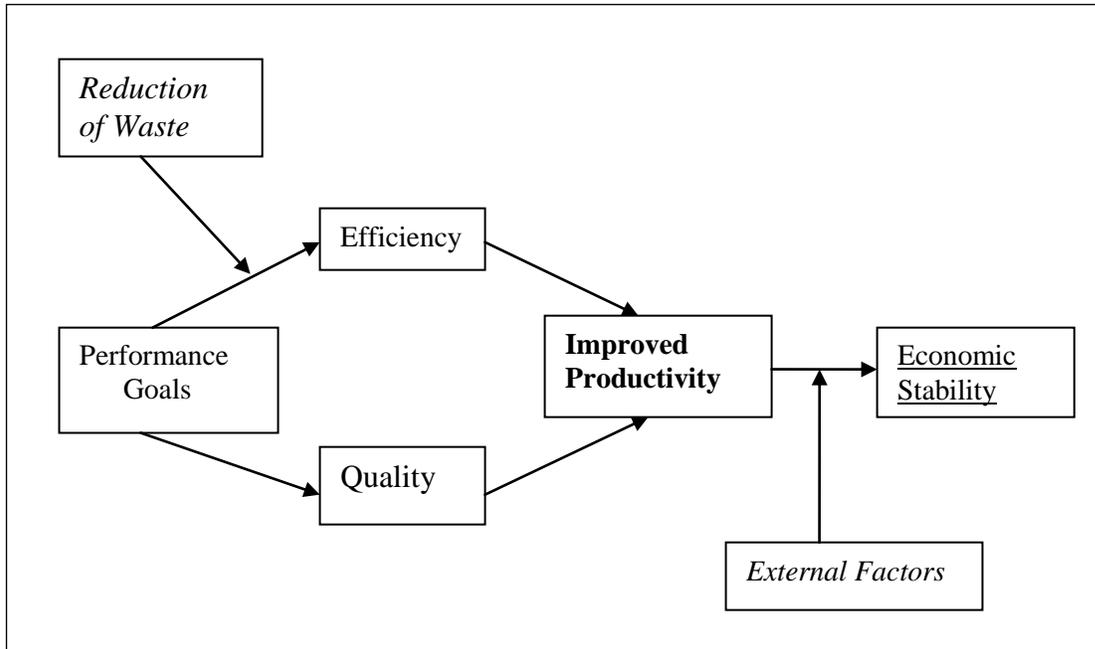


Figure 1. *The Productivity Relationships*

What transpires is that performance goals ought to incorporate efficiency and quality, by eliminating or at least minimising waste, in order to achieve improved productivity; thereafter, taking into consideration external factors such as the markets and competition, economic stability would ensue, be it survival, growth or profitability. Krugman (1995) states that productivity isn't everything but in the long run it is almost everything; this standpoint is supported by Cornelius & Porter (2002) who claim that 'true' competitiveness is measured by productivity. Yet, Pratt (2007) gives a word of warning that, although productivity may be perceived as a vital ingredient for success, without a

strategy that takes into regular account the key changes that can occur in the world outside, no business can be serious about winning.

Productivity management needs to be both alert and sensitive to the ‘green’ agenda. Yet, many organisations are struggling and experiencing problems in incorporating ‘green’ principles, such as sustainable development and protection of the environment, into their accepted management practices. This is mainly due to the difficulties they encounter in balancing economic with societal factors. Indeed, they intuitively and frustratingly know that such a procedure is cardinal for their long-run corporate performance and that high levels of commitment to improving the environment should stand along their other performance indicators. Thus, in striving for a better environment, the social and ethical performance dimensions should also be embraced in productivity management thinking. With this in mind, a framework is developed for the analysis of environmental factors in relation to the overall business process and its productivity [Figure 2] :

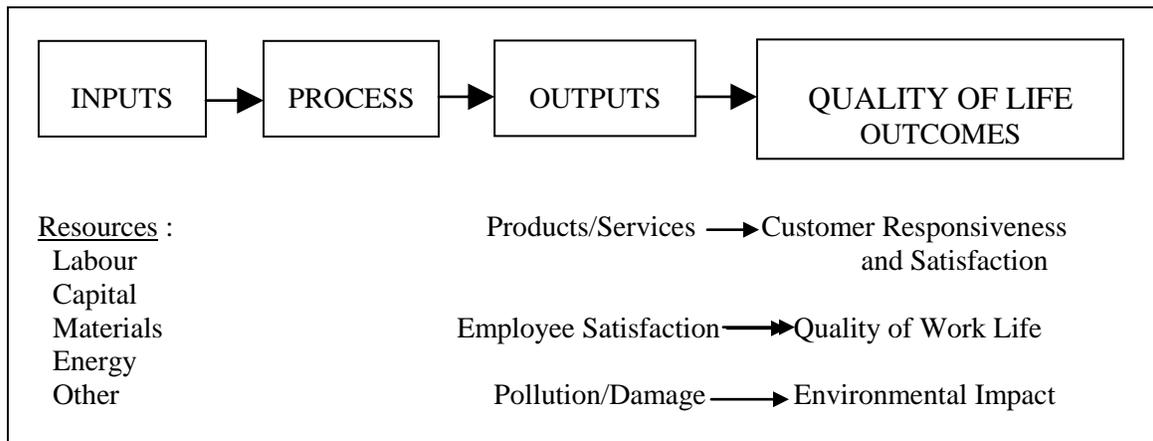


Figure 2. *A Schema for the Business Process*

As can be seen, outcomes are downstream from outputs, representing the ultimate termination of a productive process and highlight the salient quality of life features. Unfortunately and illogically, the environment – the ‘silent’ stakeholder – is often under-

estimated and under-valued. Forward-looking organisations should perceive that positive environmental action must be part and parcel of their public image, alongside with honest marketing, community support and concern for third world issues, each and everyone encompassing an ethical component. Hence, productivity management should not be just concerned with the ratio of product/service outputs to resource inputs but must also examine **all** outputs and outcomes, whether tangible or intangible.

The salient proposal is to find efficacious methods that would assure reliability, efficiency, practicability, relevance and well-being of employees. In relation to the latter, Spiers (2007) strongly advocates that a healthy workplace culture is the key to sustainable success. Thus, a broad and more inclusive principle is required which inter-links the three components of productivity, regard for the environment and respect for society [Figure 3] :

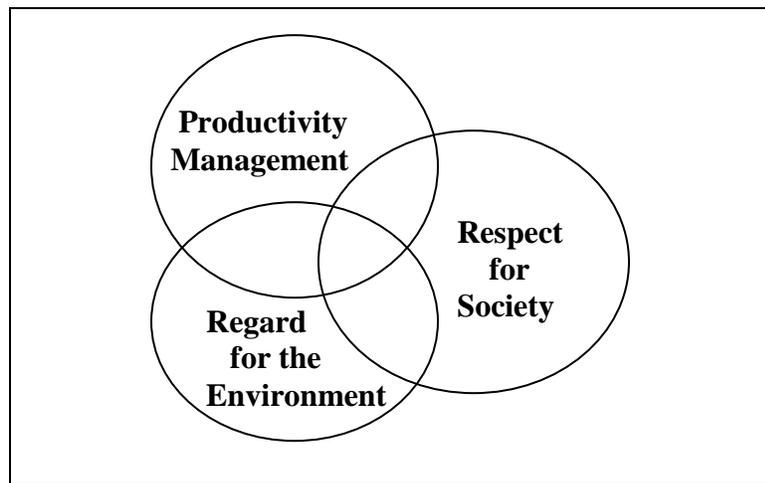


Figure 3. *The Inter-Linking Challenges of Organisations*

Productivity management must be integrated into the business excellence concept, with strong emphasis on the impact on internal and external stakeholders. Indeed, the term ‘stakeholder’ is not new; over time, successful organisations, such as the John Lewis Partnership and Cadbury’s in the United Kingdom as well as Levi Strauss and IBM in the

United States, have recognised that they accept inherent responsibilities to a range of stakeholders that go beyond mere compliance with the law. Summerfield (2001) reports on research carried out by the Institute of Directors which reveals that about 90% of respondents admit to trying to devise policies which are stakeholder-sensitive. It seems that the complex journey taken in this terrain is ever continuous.

Productivity improvement provides two major benefits to society : firstly, it allows ameliorated economic well-being through increases in output per capita and, secondly, it would aid in the conservation of resources per unit of output. Indeed, productivity must be underpinned by total quality in order for it to be an effective lubricant of business success and, thus, drilling performance into action. Stainer & Stainer (2003) strongly illustrate that total productivity [TP], reflecting the impact of **all** inputs on the output of goods/services, should be unquestionably used instead of partial measures, such as labour productivity. In their view, this avenue provides a more flexible, meaningful and powerful decision-making metric. As such, they produce an over-arching model which is represented as the Super Total Productivity [STP] Index, providing examples in manufacturing and health services. This index consists of three components of satisfaction for :

- Customers - consistently meeting their requirements
- Employees - ensuring quality of work life
- Society - achieving environmental and ethical objectives

In relation to the latter, the European Association of National Productivity Centres [EANPC] (2007) discuss the 'green productivity' notion, perceiving it as no longer a luxury. In its opinion, organisations must pay due attention to the environmental protection aspects of production and product development. They stress that environmental protection and know-how of environmentally-friendly production processes is an important

factor to overall competitiveness. Moreover, the 'green productivity' syndrome also impacts favourably on the wider societal context other of productivity development. In this regard, workers at all levels of the hierarchy can, indeed, play a role in identifying and eliminating waste as well as monitoring 'green' production strategies; even the smallest of changes in attitude can, individually or cumulatively, have a favourable influence on efficiency.

Patricia Hewitt (2001), when Minister of Small Firms in the United Kingdom, stated that protecting the environment is an increasingly urgent issue for government, business and consumers alike. She propounds that sustainability makes good sense and the more businesses create sustainable wealth through productivity, the better off society will be. What is pronounced is that businesses should have an environmental action plan to respond to the challenge where, to achieve outcomes, all stakeholders would gain something. The new language of sustainability should be clearly understood because the environment itself can contribute to economic output and, so degrading it by such factors as pollution and waste, may reduce productivity performance. Management at all levels ought to have the moral courage to behave with integrity and be accountable to the organisation's stakeholders. In this way, there must be an ethical approach balancing economic reward with the welfare of life and the conservation of the environment. After all, it is the actions taken by business that are ultimately judged by society.

Environmental Management and Corporate Social Responsibility [CSR]

Corporate culture, the aggregation of expectations, beliefs and shared values, must perceive 'greening' as a business value which should become an inherent rather than a conscious issue. An organisation is to be perceived as a moral community because everything with which it associates itself has some repercussion on its business and natural

environments; these should be monitored and controlled by developing appropriate management systems with relevant standards set. The term ‘environmental management’ has to do with integrating environmental considerations into normal management functions in all areas of business rather than merely with the development of a separate management entity. In some areas, some specialised processes have been established as part of the emerging environmental ‘profession’, by equipping, powering, feeding and watering such a *modus operandi* in place. Ultimately, the smooth and effective running of the business must be carried out via moral kinship and a shared vision.

The primary concerns of business are to survive, increase efficiency and make better business decisions, especially in an era of more discerning and better informed stakeholders. The contemporary organisation, as far as McDermott *et al* (2002) believe, must include overarching enviro-societal goals as one of its targets for business excellence. They also affirm that, to complete socially useful activities, businesses ought to consume limited and finite natural resources as well as engage in improving processes that may be harmful to the physical and social environments. Grando *et al* (2007) purport that even performance measurement systems that are properly designed can be less effective over time, due to the rapid evolution of the context in which they were initially founded. Therefore, every organisation should face up to its CSR commitment by taking on board, simultaneously, environmental and ethical concerns [Figure 4] :

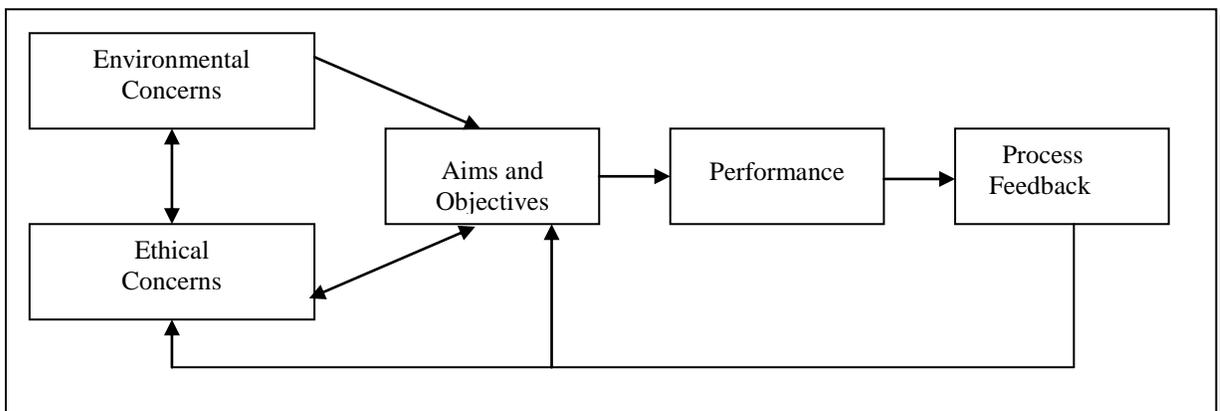


Figure 4. *The Principled Business Operations Model*

As can be seen, environmental and ethical concerns should nourish the aims and objectives of the business which, in turn, would be reflected in performance management. Subsequently, the process feedback loop, a major feature of the business ‘game’, ensures continuous improvement in the *kaizen* fashion to create a high performing organisation. William Kendall (2004), Chief Executive of Green and Blacks, believes that, in the same way boards became more aware of environmental matters, they are becoming more aware of ethics as an issue in business – they have to do it because it is part of the product and the cost of being in business.

In business, the activities of environmental policy making, auditing and strategy must be carried out in an ethical climate for a more enlightened corporate culture. But, both management and employees need guidance on how to handle potential ethical problems. As such, several European industrial organisations have produced codes of ethics in order to respond to environmental issues. These range from a one-sentence statement by Digital Equipment Corporation to fuller and more explicit declarations by Ciba-Geigy, RTZ and Royal Dutch Shell. However, there is a distinct difference between compliance and genuine commitment to such implicit codes because, as Blanchard & O’Connor (1997) state, genuine success does not come from just proclaiming values but from consistently putting them into daily action.

Subconsciously, every individual or organisation should display environmental responsibility because each has become, over time, the custodian of the limited natural resources. Nixon (2006) purports that sustainability in the broadest sense, be it

environmental, social or economic, is the most urgent issue facing people everywhere. Thus, the demands on business have never been greater with the role of organisations ever changing and progressing; they have advanced from being solely creating and providing society with goods and services to, today, also embracing environmental concepts. But, one can argue whose role is it anyway in this regard and should business have the moral obligation to protect the environment for future generations beyond what is legally required? The answer must be in the affirmative but Porritt & Tang (2007) emphasise that long-term sustainability and short-term capitalism do not automatically make natural bedfellows. A major difficulty, as Bennett (1999) reveals, is that businesses are substantially driven by profitability levels, which themselves reflect the consumption demands of the current rather than future generations. What is salient are the sentiments of Colin Skellett, Chief Executive of Wessex Water, in relation to sustainable development : “Whatever the business, tomorrow is too late”.

The bottom line is indeed evolving through aligning environmental management with the notions of CSR. As Rowledge *et al* (1999) propound, there is a fundamental shift occurring in mainstream business moving environmental and social sustainability into the forefront of strategic planning and positioning. Rosen *et al* (2005) report that this evokes a balance that is vital in contemporary business, the intention of which is to link sustainability with business performance, looking ahead at the short, medium and long-term consequences. Research studies, such as those carried out by The Performance Group (1999), Webley & More (2003) and Ugoji *et al* (2007), demonstrate that improved environmental and social responsibility – welded to business ethics - in fact, increases value to shareholders and other stakeholders, rather than adding cost, thus making ethics in decision-making a real ‘plus’. The factors of risk must be considered in relation to the societal element of health, safety and comfort as well as the environmental facets of

conservation, preservation and re-generation. All these can rebound on the organisation's value chains, markets, products/services and operations, linking people to the environment and sharing a common concern. This, itself, calls for the best individual effort from as many people as possible!

Melnyk *et al* (2004) underline the fact that there is a maze of metrics in the domain of performance measurement and operations. Needless to say, there is no single-answer model in relation to values and business success to suit all organisations or all industries. Such a framework should only be developed after reflection on the corporate mission and objectives, embracing the fundamental expectations and values of major stakeholders as well as include enough measures to ensure completeness but not so many as to lose direction. Such a procedure would undoubtedly allow effective monitoring. Thus, thinking outside the 'box', in the context of strategy, the related concepts should formulate the umbrella that provides the overall environmental horizon. The processes of measurement, whether qualitative or quantitative, as well as those that control the progress of sustainable development, should be directed towards the panorama of an enduring industrial society.

Over time, the inevitable 'green' concerns have prompted the initiative to develop approaches and techniques for contemporary environmental management by looking at such issues as key emissions, amounts of hazardous waste generated and recycling rates. Traditional performance measurement devices, especially those purely relating to finance, are being increasingly perceived as inadequate. As such, non-financial performance yardsticks have become vital tools in management decision-making and strategic planning. The momentum is to harness the real drivers of value by taking an inclusive approach - Coulson-Thomas (2007) believes that directors must reconcile the concerns of various

stakeholder groups as well as respect the view of colleagues. Any development will be enduring only when it supports the communities and environments on which the business strategically depends. Therefore, the general theme of all activities is to persuade all organisations on both moral and practical grounds to do much more in this direction. Good management coupled with an active environmental policy should be the way forward for social acceptability.

The real balancing act is between economics, ethics and law, where the latter is the lowest denominator of acceptable ethical behaviour. However, sometimes, many practices that are considered legal may well be situated in an ethically grey area. Therefore, businesses should review their operations by helping to protect both the natural and built environments upon we, as a society, all depend. Of course, ethical leadership plays a meaningful role by inculcating a moral corporate culture, thus generating a potentially distinct competitive advantage economically and reputationally. Doubtlessly, managers must always be on their toes! In the words of John H. Stookey, President and Chairman of Quantum Chemical Corporation, “ethical issues come down to the fundamental question of how much of today’s benefit you are will to forgo for tomorrow’s gain”. Cervi (2008) affirm that a business relationship is all about openness, honesty, responsiveness, fairness, sharing and communication; but perhaps most importantly it is the ability to spot when things are going wrong. Thus, it is the actions rather than standards and words which are ultimately judged by society.

The need for environmental, social and economic sustainability, in both global and local contexts, is stark. All businesses, large and small, manufacturing and services, low and high-tech, urban and rural, need to marshal their knowledge and skills to satisfy customers, exploit market opportunities and meet society’s aspirations for a better environment.

Success or failure, growth or decline, depend upon how organisations respond to, not only the macro-economic, but also the macro-environmental and macro-social changes that are becoming consistently inter-related, demanding, tough and complex. As such, the notion is simplicity to ensure effective communication being intertwined with engagement. What is salient is to look ahead at the big picture by measuring and improving through the development of tools and taking on board value chain indicators. Management should conduct itself in three distinct ways : Be Innovative, Be Creative and Be Resourceful with principles of sustainable development to embrace eco-efficiency with social justice. Of course, concerns are mounting about the viability and sensibility of current management theory and practice in the face of growing worldwide issues such as global warming, corruption and resource depletion. Businesses must positively embrace and face this challenge through CSR.

The Business Sustainability Landscape

Sustainability has evolved as one of the catchphrases of the last two decades and, as Smith (1991) views it, it is perceived as “how to destroy the environment with compassion”. By facing the continuous social and environmental problems, organisations ought to be steered towards sustainability with prospects of implementing not sophisticated but successful solutions through productivity frameworks. This route would generate confidence and shape reputation which is often under increased scrutiny. Of course, common sense is not often common practice and, as such, alignment and synergy would be key to secure value for the organisation; this is because no involvement would mean no commitment. What is disappointing, according to Mashford (2008), is that many manufacturers are only scratching the surface of sustainability and are failing to reap the business benefits of it! It must be understood that the landscape is that business affects and is affected by its constantly changing and, often, unstable environment. Frequently in the past, despite

economic growth, innovators have failed to anticipate the consequential disproportionate environmental harms, as witnessed by the automobile, plastics and pesticides. Therefore, before focusing on the micro elements of productivity and, subsequently, business sustainability, four macro sustainability concepts ought to be digested [Table 1] :

Concept	Definition
Sustainability	where society must use more natural resources than the natural environment can re-generate
Qualitative Sustainable Growth	where there is a sustainable increase of welfare per capita, achieved with a decreasing or constant use of natural resources as well as with a decreasing or constant amount of pollution
Sustainable Development	where development meets the needs of the present generation without compromising the ability of future generations to meet their own need
Sustainable Society	where society is well structured and behaves in such a way that it can exist for an indefinite numbers of generations

Table 1. *Definition of Sustainability Concepts*

These, and their consequential goals, should formulate the umbrella that provides the overall long-term picture. For organisations, it is the highly inter-active practice, rather than theory, of the twin peaks of good ethical behaviour with environmental responsibility that will formulate insights, joined-up thinking and better understanding of the dynamics of sustainability performance. After all, the view must be to ‘make it all happen’ for the well-being of both business and society in the long-term. Hopkins (2007) brings this opinion to the micro level of the business by reiterating PriceWaterhouseCoopers’ definition of corporate sustainability : as meeting society’s expectation that companies add social, environment and economic value from their operations, products and services. Undoubtedly, there is a fundamental shift occurring in mainstream business moving

sustainability into the forefront of strategic planning. To support such a practical process towards business sustainability, a cycle has been devised, putting mission and values at the heart as well as ensuring a perpetual meta-reasoning for survival, endurance and growth [Figure 5] :

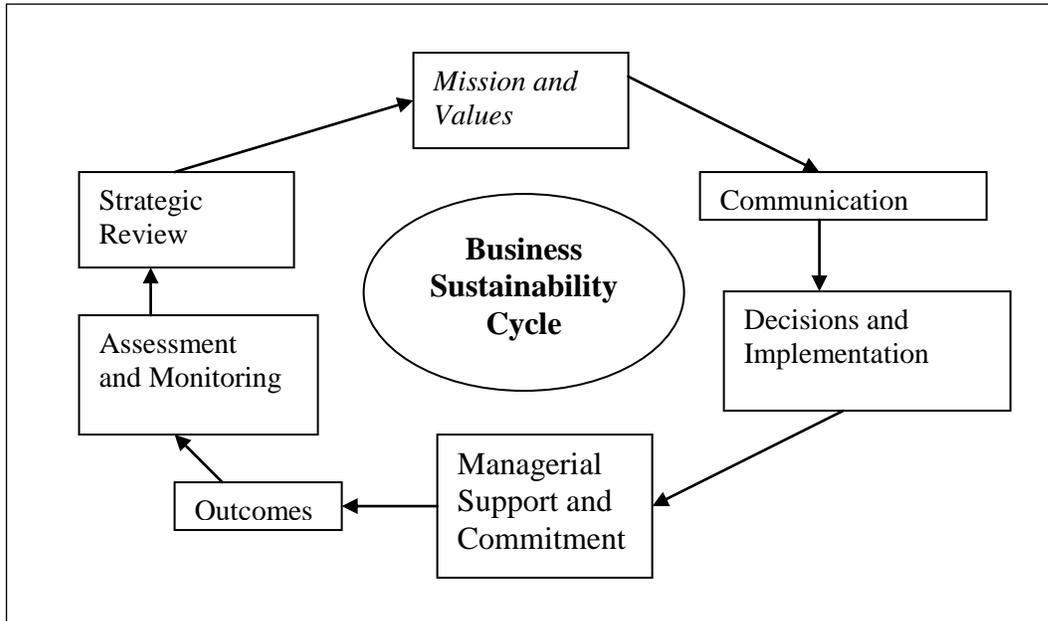


Figure 5. *The Business Sustainability Cycle*

As can be seen, sustainability is central to the survival of the organisation – and the planet – where companies need to plan their operations and commit themselves to substantial year-on-year eco-efficiency programmes, taking full account of product of service life cycle. In this regard, strategic decision makers must look further into the horizon and be aware process of moral decision-making. Monks & Minow (2001) believe that it requires, at a minimum, the capacity to utilise moral reasoning as well as control not only overt corporate acts but also the structure of policies and rules. A two-step practical values-based decision making criteria is proposed to :

- [1] identify core values of the business that would be

appropriate in a particular situation

[2] ensure accountability to, and dialogue with, appropriate stakeholders

When resolving an issue or dilemma, this becomes a process to discover a thorough, powerful and complete ‘correct judgment’ about should and should not be done. In practice, genuine decision-making success does not come from just talking about CSR but through initiating, establishing and maintaining values that are transparent and in harmony with society’s expectations. This is because society itself, as it becomes more knowledgeable, ethically and environmentally aware, continues to make increasing demands on businesses and hence pressurises them into constantly tightening standards. Thus, common sense core values, welded within insightful structures, systems, tools and metrics, are to be at the ‘top’ of any action agenda, turning theory into practice. Of course, there are no defined recipes for improving management judgement on such challenging and sensitive questions - measurement should be perceived only as the starting point. The paramount pro-active avenue is suitably presented in a strategic matrix [Figure 6]. This illustrates that, by securing good resource utilisation – especially via total productivity – and good environmental management, commendable business sustainability objectives can be fulfilled.

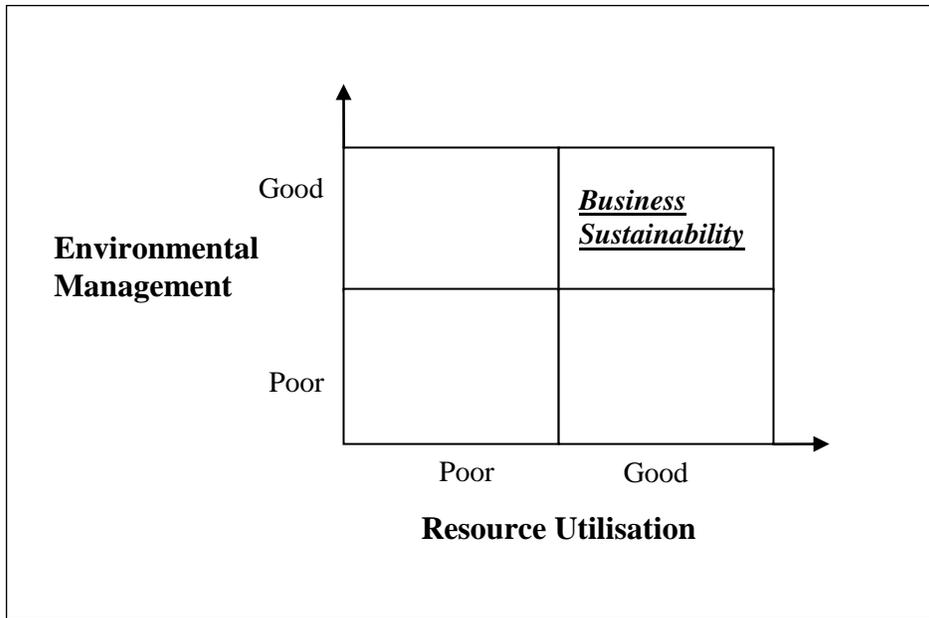


Figure 6. Resource Utilisation and Environmental Management Strategic Matrix

The nagging concern is that the current international standard system scenario, which depends on the voluntary interlocking efforts of industry, governments, accreditation bodies and third party registrars, is both conflict-ridden and clumsy. Organisations cannot afford to, and indeed it is dangerous for them not to, take the risk of ignoring sustainability issues – such an action is itself unethical. Making good sense, the rationale is to behave in the ‘right’ way.

Ideally, sustainability aims should not forget respect for the environment, creating something that would be beneficial to society and contributing to quality of life factors. In the midst of competitive warfare, businesses ought to understand fully the underlying philosophy of sustainability as well as demonstrate high standards of conduct to achieve excellence in this direction. However, Zadek (2001) warns of the difficult and stressful scenarios in the pursuit of sustainability. He believes that a corporation’s degrees of freedom are certainly limited, the critical issue being more often the need for a company to

satisfy the current market conditions and short-term financial gain. Simultaneously, and sometimes in conflict, it is suggested that investment in strategic change, not often vigorously promoted, may allow the firm to open up 'new' opportunities that are consistent with sustainable development and competitiveness. In this regard, Cooper (2007) asserts that CSR, the caring face of business, is not to be perceived as a public relations exercise but as a consolidated effort to ameliorate, not only businesses, but also the planet's future. Simms (2008) concurs by proclaiming business insistence on growth as a measure of success is in direct conflict with the urgent need to slow down and priorities must change – 'green' means lean and "we can't have our planet and eat it". Such is the nature of business sustainability where an organisation should display the characteristics of, not only being competitive, but also being 'virtuous'!

Conclusion

Industrial competitiveness and protection of the environment ought to be inextricably linked as the latter should be perceived as the 'natural economy'. What is essentially required is for organisations to thoroughly examine their business ethics and corporate cultures in the pursuit of productivity advancement. They should proceed in a direction that fully considers the 'green' scenario as the latter is increasingly becoming a corporate pre-requisite. In an ever-expanding global economy, they must build up a paradigm of values, principles, strategies and practices to create the trust factor with all major stakeholders. Epstein (2008) echoes this theme by stating that this would work proficiently with skilful, forward-looking, motivated and organised leaders. Thus, the trust factor, based on moral behaviour and reputation for integrity, would inevitably. In order to become a world-class competitor, only the highest standards of societal and professional ethics should be embraced and demonstrated. Enlightened organisations are beginning to realise that they must take charge of their own environmental concerns as the level of

ethical behaviour should extend far beyond what is legally required to what is morally 'right'.

Elkington (2007) observes that businesses can turn the environmental gain into one in which they, their customers and the environment, are all winners but stresses that it is not easy to be 'green'! Public opinion aside, there is no doubt that it is never too late to recognise the 'environment' as a core business value, a vision to be aspired towards. In this way, it can become a significant measurement of the organisation's well-being and carry as much weight as other closely-held business priorities. Much attention should be given to ensuring that environmental standards are applied effectively to all levels of commercial activities and at each point of transaction. This is because these would generate, with adequate resources, a positive impact on the 'greening' of industry as a whole. The concept of sustainability should be broad-based so as to incorporate such considerations as equity, productivity, employment, ecology and energy, in addition to those of economics. Decidedly, there must be a balance of the social and economic development which would require changes in people's attitudes, perspectives and lifestyles. It is the integration of environmental excellence into productivity management thinking that would play a vital role for organisations to achieve business sustainability.

Approaches to decision-making should reflect a broad understanding of long-term resultants of activities. In truth, it is actions, rather than standards or codes, which are the ultimate societal judgement. In the end, essentially, each forward-looking business is to inculcate into its soul that it is important to be aware and learn that business performance must go hand-in-hand with social responsibility and sustainability. However, Hunt (2003) adds a word of caution; the idea that corporations should make themselves more sustainable and responsible could make them risk averse. This is because there could be an

underlying assumption that they are admitting to wrecking the environment, being uncaring in the local community, stressing out employees and ruining their work-life balances. In his view, such a kind of restraint or self-regulation is irrational because corporations are not the unsustainable and irresponsible institutions they are made out to be. In effect, the CSR agenda could involve defensive corporations to listen too eagerly to an increasingly suspicious and fearful society – this notion may prove to be most damaging. The two sides of the coin seem to relate to empathy : corporations are worried about their reputation by appearing unethical if they are not seen to be taking CSR on board whilst stakeholders demand organisations to minimise damage and expect them to exercise caution and restraint. In such a context, the paramount factors for the two standpoints are those of transparency and sincerity.

It should be recognised that, whatever productivity and performance measurement procedures are in place, limitations will always exist and, undoubtedly, there is no substitute for sound judgment in decision-making. It should be easy to understand that stakeholder dialogue should be perceived more as an essential management technique as those galvanised values that emanate from it are, indeed, necessary to lubricate the engine of business sustainability. True business success ought to relate systematically and consistently by putting value into daily operations because, as Gordon *et al* (2000) claim, there is a strong relationship between values congruence and organisational sustainability. The real challenge ahead is the way in which values are, firstly, utilised in the overall corporate strategy and, secondly, accepted by society. This perspective is a business imperative and those who fail to take it seriously will, indeed, forgo opportunities and enhancement.

The message is plain and simple. Organisations need to be *au courant* about the change in attitude and behaviour. According to McManus (2002), there is really no reason to think that

the conscientious and continuing practice of stakeholder management will conflict with conventional financial performance goals. The conviction that transcends is that the Holy Grail for every organisation is to ensure that it judges it necessary to embody social responsibility into its productivity management decision-making and be accountable to the wider society. As Mahatma Gandhi (1869-1948) once stated : ‘Productivity is about making the most of time and talent and, hence, energising the whole surrounding environment’.

References

- Bennett, R. (1999) *Corporate Strategy*, London, Financial Times/Pitman Publishing
- Blanchard, K. & O’Connor, M. (1997) *Managing by Values*, San Francisco, Berrett-Koehler Publishers
- Cervi, B. (2008) ‘Missing links’, *Manufacturing*, January, Vol.86, No.6, pp.10-11
- Cooper, C. (2007) ‘The caring face of business’, *Director*, December, Vol.61, No.5, p.26
- Cornelius, P. & Porter, M. (2002) *Global Competitiveness Report*, Geneva, World Economic Forum/Oxford University Press
- Coulson-Thomas, C. (2007) ‘The chosen’, *Management Services*, Winter, Vol.51, No.4, pp.33-34
- Cowe, R. (2002) ‘Winning board games’ in *Business Sustainability*, J. Reeves (ed), CBI Business Guide, London, Caspian Publishing Ltd.
- Elkington, J. (2004) ‘Enter the triple bottom line’, in *The Triple Bottom Line – Does It All Add Up?*, A. Henriques & J. Richardson (eds), London, Earthscan
- Elkington, J. (2007) ‘It’s not easy being green’, *Director*, October, Vol.61, No.3, p.26
- Epstein, M.J. (2008) *Making Sustainability Work : Best Practices in Managing and Measuring Corporate Social, Environmental and Economic Impacts*, San Francisco, Berrett-Koehler Publishers
- European Association of National Productivity Councils (2007) ‘Concepts related to productivity’, *Management Services*, Autumn, Vol.51, No.3, pp.6-11
- Gordon, J., Harrington, W.J. & Preziosi, R.C. (2000) ‘Perception of the relationship between values congruency and organisation sustainability’, in *Productivity & Quality Management Frontiers – IX*, E. Dar-El, A. Notea & A. Hari (eds), Bradford, MCB University Press

- Grando, A., Tapiero, C.S. & Belvedere, V. (2007) 'Operational performances in manufacturing and service industries : conceptual framework and research agenda', *International Journal of Business Performance Management*, Vol.9, No.2, pp.110-126
- Hewitt, P. (2001) 'Sustainability and common sense', Foreword to *Sustainable Development – Improving Competitiveness through Corporate Social Responsibility*, London, Institute of Directors
- Hopkins, M. (2007) *Corporate Social Responsibility and International Development – Is Business the Solution?*, London, Earthscan
- Hunt, B. (2003) *The Timid Corporation – Why Business is Terrified of Taking Risk*, Chichester, John Wiley & Sons
- Kendall, W. (2004) 'Cover story on William Kendall', *Director*, March, Vol.57, No.8, pp.56-61
- Krugman, P.R. (1995) *The Age of Diminished Expectations*, Cambridge MA, MIT Press
- Ledgerwood, G., Street, E. & Therivel, R. (1997) 'A model protocol and international standards for environmental audit', in *Green Management – A Reader*, P. McDonagh & A. Prothero (eds), London, The Dryden Press
- Mashford, K. (2008) 'Unearthly mess', *Manufacturing*, January, Vol.86, No.6, pp.20-23
- McDermott, T., Stainer, A. & Stainer, L. (2002) 'Environmental sustainability and capital investment appraisal', *International Journal of Environmental Technology and Management*, Vol.2, No.4, pp.328-343
- McManus, J. (2002) 'The influence of stakeholder values on project management', *Management Services*, Vol.46, No.6, pp.8-15
- Melnyk, S.A., Steward, D.M. & Swink, M. (2004) 'Metrics and performance measurement in operations management, dealing with the metrics maze', *Journal of Operations Management*, Vol.22, No.3, pp.209-218
- Monks, R.A.G. & Minow, N. (2001) *Corporate Governance*, Oxford, Blackwell Publishing
- Nixon, B. (2006) *Living System – Making Sense of Sustainability*, Cirencester, Management Books 2000 Ltd.
- Pennathur, K. (1990) *What is Productivity?*, Calcutta, World Confederation of Productivity Science, South Asia Region
- Pratt, A. (2007) 'Foresight is 20/20 vision', *Director*, October, Vol.61, No.3, p.22
- Porritt, J. & Tang, K. (2007) 'Sustainability and capitalism as if the world matters' in *Cut Carbon, Grown Profits – Business Strategies for Managing Climate Change and Sustainability*, K. Tang & R. Yeoh (eds), London, Middlesex University Press

Rosen, P., Hall, D. & Stainer, L. (2005) 'Sustainability and ethical decision making : the Bovince case', *International Journal of Management and Decision Making*, Vol.6, Nos.3/4, pp.359-371

Rowledge, L.R., Barton, R.S. & Brady, K.S. (1999) *Mapping the Journey –Case Studies in Strategy and Action Toward Sustainable Development*, Sheffield, Greenleaf Publishing

Simms, J. (2008) 'Why green means lean', *Director*, January, Vol.61, No.6, p.20

Smith, J.W. (1991) *The High Tech Fix : Sustainable Ecology or Technocratic Megaprojects for the Twenty-First Century*, Adershot, Academic Publishing

Solomon, R.C. (1994) *Above the Bottom Line – An Introduction to Business Ethics*, Fort Worth TX, Harcourt Brace

Spiers, C. (2007) 'Healthy and happy', *Management Services*, Winter, Vol.51, No.4, pp.18-23

Stainer, A. & Stainer, L. (2003) 'Total productivity : a stakeholder perspective', *International Journal of Business Performance Management*, Vol.5, Nos.2/3, pp.166-173

Sumanth, D.J. (1998) *Total Productivity Management*, Boca Raton FL, St.Lucie Press

Summerfield, D. (2001) 'Corporate governance : the stakeholder debate' in *Business Ethics – Facing up to the Issues*, C. Moon & C. Bonny (eds), London, Profile Books

The Performance Group (1999) *Sustainable Strategies for Value Creation - Reflections from a Learning Journey*, Oslo, The Performance Group

Ugoji, K., Dando, N. & Moir, L. (2007) *Does Business Ethics Pay? Revisited – The Value of Ethics Training*, London, Institute of Business Ethics

Webley, S. & More, E. (2003) *Does Business Ethics Pay?*, London, Institute of Business Ethics

Zadek, S. (2001) *The Civil Corporation – The New Economy of Corporate Citizenship*, London, Earthscan