

# “UNDERSTANDING RISK AND SUSTAINABILITY - THE FUTURE FOR RISK MANAGERS?”

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**Abstract:** The way people define risk has significant repercussions for the way risks are identified and the way they are managed. Risk professionals see risk as a combination of the consequences of an event and the likelihood of an event with those consequences occurring (technical risk). However, as Sandman has pointed out, society’s view of risk equates with hazard plus outrage (sociological risk). In other words we concentrate on calculating the risk, identifying the controls in place, determining the residual risk, and assessing on that basis if we will accept the risk or not. The community’s response, however, equates to the level of outrage the event produces.

Sustainability, likewise, has many definitions and encompasses anything from social justice issues and the environment to how an organisation can continue to survive a globally competitive environment.

Of recent times organisations have been looking at triple or quadruple bottom line reporting and have started identifying sustainability as a risk (both threat and opportunity) they must manage to increasingly greater levels in the future. The nature of sustainability risk is seen as new and emerging, different to the risks that organisations and risk managers have traditionally faced, and one that will require different solutions than those that caused it to become an issue in the first place.

While this may be true it is the contention of this paper that risk and sustainability are two sides of the one coin and are therefore inextricably linked. One cannot be understood without the other.

A holistic model is put forward that clearly identifies the link and demonstrates how an understanding of both risk and sustainability will be essential for future decision making.

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**Keywords:** Risk, uncertainty, sustainability, environmental, social, economic

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## 1. INTRODUCTION

*“We don't know what sustainability means.” – Jane Castor*

Risk management and sustainability are often seen as two distinct frameworks for managing uncertainty. The urgency for organisations has become increasingly important especially when we realize that in the next 23 years between now and 2030, we will use as many economic resources as humanity has used since it first stood on two legs – over 3 million years or so [1]. Global warming, climate change, socially responsible investment, consumer boycotts, scarcity of resources, and environmental disclosure are all quickly becoming part of the Risk Manager’s lexicon.

As a result, “sustainability risk management” has become extremely popular at the moment. The term was coined by Dan Anderson in his popular but still surprisingly hard to obtain book “Corporate Survival: The Critical Importance of Sustainability Risk Management” [2]. What does it mean and how will it impact on the risk management of organisations? To understand this we need to define exactly what we are talking about.

## 2. A DEFINITION OF RISK

*“Targeting brands was like discovering gunpowder for environmentalists.” - Greenpeace.*

In my paper at the last HKARMS conference in December 2005 [3] I discussed how risk has been defined variously from a technical perspective, where risk is seen as the combination of the consequences of an event and the likelihood of an event with those consequences occurring; “sociological risk” where Sandman [4] defines risk as hazard plus outrage; and “emotional risk” [5] to the brand image and goodwill of an organisation. The draft ISO 31000 standard for risk management defines risk as “uncertainty” and risk management as the management of that uncertainty. It is the management of economic uncertainty, social uncertainty and environmental uncertainty that will be the battleground for risk managers for at least the next few years.

Many authors on sustainability have limited “economic uncertainty” to environmental issues or the “polluter pays principle” [6], and have missed the point that organisations are not in the business of managing down size risk, they are in the business of seizing opportunities (upside risk) [7]. The need to increase shareholder value is the major driver for organisations and while environmental factors should not and can not be ignored they are still secondary and not primary drivers. In dealing with financial or economic risk we need to avoid what Marxist sociologists have derogatively termed “economism” where economic reductionism explains all social, political and cultural activity in financial terms.

“Social uncertainty” is equally important and not only includes the concept of emotional capital mentioned above but also the ideas of Ulrich Beck who argues that “we, as a society, and through our individual activities and tacit as well as open acceptance - and taking- of risk, define collectively the levels of risk we, deem acceptable” [8]. Shareholder activism, attraction and retention of staff, class actions, and equal opportunity risks all demonstrate how far society’s collective understanding of risk has changed. Organisations need to understand these social risks and effectively manage them.

For the purpose of this paper I do not wish to enter the debate within organisational theory that has been discussing the “environmental uncertainty” construct for decades. Basically the argument is divided into two camps – contingency theory that is concerned with reading the environment and fitting the organization to its reality and perceptual theory which is process oriented in that it seeks to describe the stages involved in noticing, interpreting, or learning the environment in order to reach closure as to its meaning. I have strong leanings to the latter. For a more detailed discussion I suggest you look at reference [9].

In the context of this paper “environmental uncertainty” has been interpreted narrowly by sustainability authors. Risk managers need to consider the organisations total environment including the risk management context, the organisational context, and the external context when addressing uncertainty in their organisations. In other words we need to consider “environmental uncertainty” in its broadest context and not just as the environmental movement would have us.

Risk or uncertainty is not then a straight forward construct as it encompasses the economic, social environmental and organisational domains.

### **3. A DEFINITION OF SUSTAINABILITY**

*“The first rule of sustainability is to align with natural forces, or at least not try to defy them” – Paul Hawken.*

In 1997 John Elkington introduced the concept of the triple bottom line [10]. In this he included not only the traditional bottom line of financial performance, but also added the company’s environmental record, and its social responsibility in the way that it ethically treated its workers and the community. In other words, profit, planet and people. The argument goes that if one element is emphasised over any of the other then the company’s triple bottom line will be affected.

Elkington’s triple bottom line covers the three domains highlighted in our discussion on the definition of risk. “Economic sustainability” at the micro level is an organisation’s capacity to

remain in business and to adapt or recover quickly from adverse events. At the macro level it considers the impact that the organisation has on its community's long term economic viability. For a community to function and be sustainable, the basic needs of its residents must be met. A socially sustainable community must have the ability to maintain and build on its own resources and have the resiliency to prevent and/or address problems in the future. "Social sustainability" for companies is where they "add value to the communities within which they operate by increasing the human capital of individual partners as well as furthering the societal capital of these communities." [11]. "Environmental sustainability" is the ability to maintain things or qualities that are valued in the physical environment [12].

As with risk or uncertainty, the concept of sustainability can be applied to a number of domains. These include the environment (environmental sustainability), society (social sustainability), and the economy (economic sustainability). For the risk manager organisational sustainability underpins all of these.

#### **4. A COMPARISON OF RISK AND SUSTAINABILITY**

*"Human history becomes more and more a race between education and catastrophe." - H. G. Wells*

From the above discussion it can be recognized that "risk" and "sustainability" are not mutual exclusive but have much in common.

Firstly, by definition sustainability is concerned with the future and decisions which affect the future. However, the future, is unknown, to most of us, and therefore decisions regarding the future involve uncertainty and thus risk with regard to unknown implications of current decisions. This uncertainty has been addressed through the Precautionary Principle [13].

Secondly, Grays and Wiedemann [14] point out that risk management and sustainability have much mutual relevance and are both practically used alternatives for assessing and evaluating (often) the same organizational risks.

Thirdly as Slovic [15] has argued lay people assess risk in a more holistic way which takes into account social, environmental and economic impacts of risk related decisions, rather than narrowly focusing on the technical aspect of risks relating to health impacts. Hence, this is more in line with the concept of sustainability, as it allows for the balancing or a trade-off between different aspects of risk without being reductionist.

Finally both are ambiguous terms that suffer from the vagaries of risk perception [3] and social amplification [16].

#### **5. THE CURRENT SITUATION**

*"Maybe this world is another planet's Hell." - Aldous Huxley*

A recent sustainability report [17] highlighted some interesting facts. First and foremost its major finding was that of the organizations that are committing to sustainability 90% are doing so to enhance or protect their reputation. The larger and more visible the organisation the more likely it was to develop a sustainability programme.

Those companies that had not developed programs cited the lack of a solid business case, insufficient stakeholder interest, a limited understanding of sustainability as well as the long-term nature of sustainability for not moving forward.

In future as regulators, shareholder activists, and community perception links sustainability with corporate governance, reputation, and financial value the business case will become clearer. In fact the ASX Corporate Governance Council has released stricter guidelines governing the reporting of sustainability risk and corporate responsibility risk that came into effect on 1 January 2008 [18].

As community and regulatory pressure places higher expectations on organizations both private and public they will not be able to ignore sustainability issues for much longer.

## 6. A PROPOSED MODEL FOR UNDERSTANDING RISK AND SUSTAINABILITY

*"It has become appallingly obvious that our technology has exceeded our humanity." - Albert Einstein*

Wehrmeyer and Padiaditi [6] added a risk dimension to the standard economic/environmental/social Venn diagram (see Figure 1). Whilst this addition added the missing dimension of risk it provides little in the way of practical assistance to risk managers.

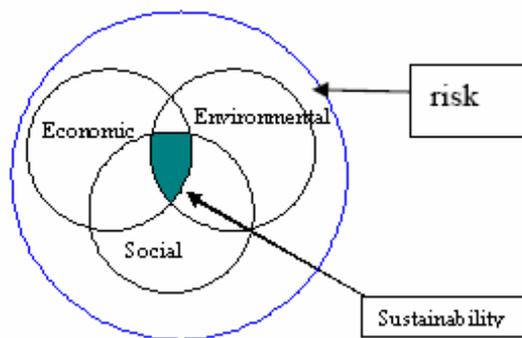


Figure 1: Adding the risk dimension to sustainability

Dyllick and Hockerts [11] have developed six criteria required for organisational sustainability.

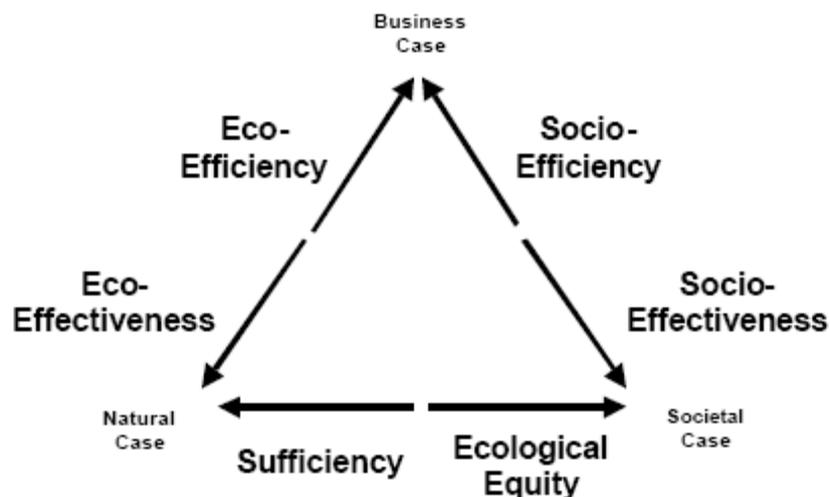


Figure 2: Sustainability business case criteria

The advantage of the criteria in Figure 2 is that it is an organisational model for sustainability, however the terminology is confusing, and does not concentrate on the sustainability risk that need to be managed.

What Risk managers need is a sustainability risk model that can be a useful tool and an aide memoire that takes into account economic, environmental and social issues within an organisational context, and looks at equity, viability and bearability issues.

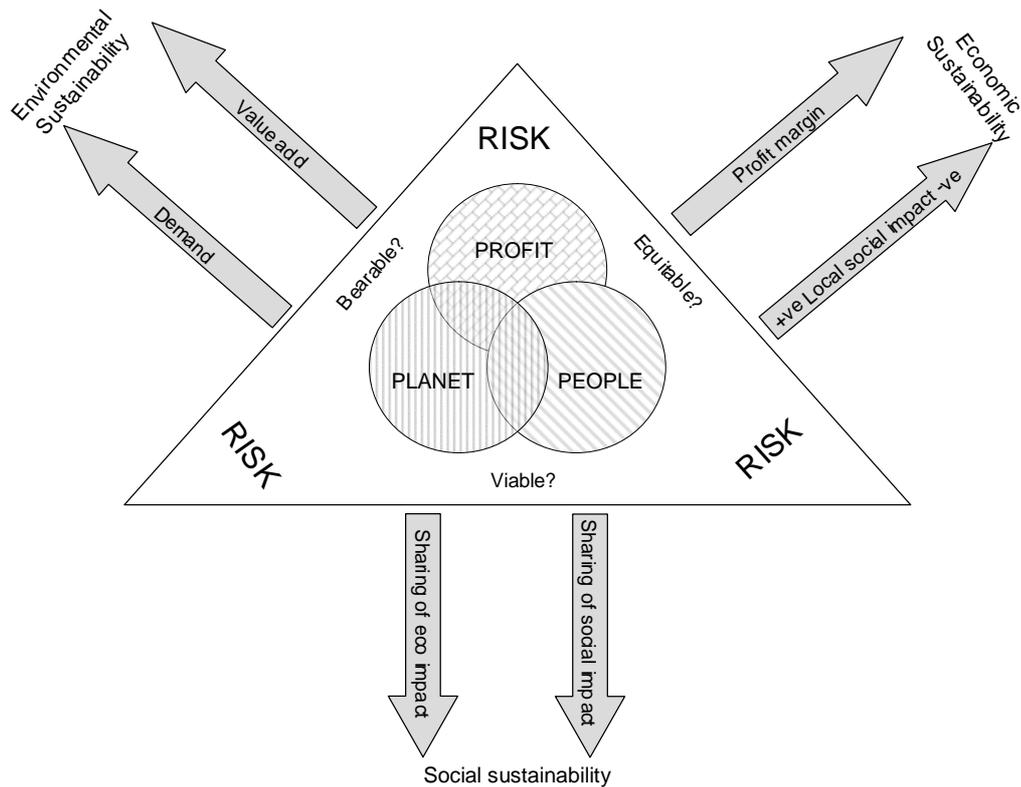


Figure 2: Organisational sustainability risk

The figure consists of the three domains consistent with a number of sustainability models, including that of Wehrmeyer and Padiaditi [6] and Dyllick and Hockerts [11]; six impacts (the arrows), and three questions that need to be applied to each of these impacts. The purpose of the model is not to cover all aspects of sustainability risk but to act as a guide and a prompt for risk managers to carry out their risk assessments, evaluations and treatments.

The most difficult domain for organisations to deal with is social sustainability. Firstly you need to consider the sharing of ecological impact both positive and negative. Often a select few share the advantages of a company's actions and large groups or communities suffer the environmental damages. More often than not it is the developed world reaping the benefits in the form of consumer goods or profits at the expense of developing countries. Similarly it is often the consumer societies of the developed world that can afford or access the social impacts of new drugs, technologies and opportunities while they are not available or affordable for those in the third world. How can these be factored into a corporations risk profile?

The assessment matrix in Table 1 can be used to identify potential sources of risk in relation to the sharing of ecological impacts. For example some of the potential sources of risk in the equity/people box may be a narrow benefit with wide broad disadvantage, or disruption to a small but powerful (or highly vocal) group and so on. The same analysis can be applied across the matrix and indeed across the model, giving you potentially fifty-four boxes to consider!

Sharing ecological impacts:

	People	Planet	Profit
Equitable?			
Bearable?			
Viable?			

Table 1: Organisational sustainability risk assessment matrix

When looking at environmental sustainability, demand and the ability to value add are key factors. Demand includes the availability of resources, product demand, and demand creation. The latter two can be particularly problematic if the product requires diminishing resources or the organisation is perceived to be promoting unpopular products. The ability to add value to natural resources can create a greater demand for those resources and therefore place pressure on environmental sustainability.

Economic sustainability is the area we are most comfortable with. Profit margins are often considered a straight forward financial calculation, however risk managers would rarely consider the issues outlined in Table 1. The complexity of sustainability risk requires us to do so. Local social impacts include the positive aspects of employment, and the impact on the local economy, and the negative impacts of poor occupational health and safety, and EEO issues.

## 7. CONCLUSION

*"First they ignore you, then they laugh at you, then they fight you, then you win." - Mahatma Gandhi*

It is difficult to adopt an appropriate business case for sustainability risk as it is such a complex construct. By simplifying the elements into their constituent forms the proposed model has built upon those put forward by Wehrmeyer and Padiaditi [6], and Dyllick and Hockerts [11], and provides a tool for risk managers to analyse the sustainability risks for their organisation. The model is not meant to be comprehensive but is put forward as a useful tool for risk managers to consider.

Remember, as Edward de Bono said "the purpose of science is not to analyze or describe but to make useful models of the world. A model is useful if it allows us to get use out of it."

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