

formance can be improved (e.g. through shorter order to delivery cycle times) and costs reduced (*as time is money!*) at the same time.

## A NEW ERA

However, whilst the foregoing has been adopted and implemented in many leading edge organisations in recent decades, we are now living in a new era as a result of a variety of separate but inter-related factors, including:

- The growth of international (and even global) business and the concomitant globalisation of supply chains;
- The development of highly virtual supply chain architectures as a consequence of the outsourcing of supply chain activities deemed to be “non-core”;
- Increasing awareness of the impact of business activity on environmental degradation.

The latter has sharpened the focus of firms on the need for more sustainable business models and more sustainable supply chain practices. It is the focus of the remainder of this article.

## SUSTAINABILITY

In recent years, a growing acceptance has developed that society is facing a number of critical environmental challenges that require major changes in the way in which societies and their national economies, as well as individual firms and their supply chains, are organised. In some cases the environment is degraded by various business activities in the supply chain, while with other supply chain processes there is a growing sense that we are reaching the limits of the natural environment’s ability to sustain its people and their activities.

A widely cited definition of sustainability is incorporated into the 1987 Brundtland Commission definition of sustainable development: “Sustainable development is development that meets the needs of the present without compromising the ability of future generations to meet their own needs.”

This focus on meeting present needs without compromising the future is in essence what the concept of sustainability is about. Adapting this definition slightly provides a useful definition of a sustainable supply chain: “A sustainable supply chain is a supply chain that meets the needs of the present without compromising the ability of future generations to meet their own needs.”

This definition recognises the fact that business activ-



ities can have detrimental effects on the planet’s natural systems and encourages all actors in the wider supply chain to adopt policies and practices that promote environmental protection.

It can be argued that SCM practitioners have long been at the vanguard in relation to sustainability, given SCM’s strong focus on the elimination of waste (or “muda” or “NVAs”) throughout the supply chain. However, the sustainability dimension of SCM needs to be deepened and broadened, given the now widely accepted scientific evidence in relation to environmental degradation and its causes.

For example, there is a need to more specifically and explicitly acknowledge that sustainability, along with the customer service and financial issues discussed earlier, is in itself a key objective of SCM. This is analogous to the so-called “triple bottom line” approach focused on people, planet, and profit. Similarly, the “blitzes” on waste that have long been a feature of lean philosophy and the Japanese “Kaizen” concept need to be adopted as a means of ensuring that waste in all its forms is eliminated throughout the supply chain, thus improving environmental sustainability. In short, throughout the supply chain, businesses need to factor in the environmental implications of their decision-making processes

## AN ENVIRONMENTALLY FRIENDLY APPROACH TO PACKAGING

There are clear messages from all of the above in relation specifically to packaging and the packaging supply chain. For many years now, the need for more environmentally-friendly approaches to packaging has been acknowledged, with the phrase ‘sustainable packaging’ now very much part of the industry lexicon. Based on the Brundtland Commission concept, this phrase may usefully be defined as:

“Sustainable packaging is packaging that meets the needs of the present without compromising the ability of future generations to meet their own needs.”

This is easily said but to put it into practice in a meaningful way requires a mindset shift, as well as the adoption of a range of innovative processes and practices throughout the supply chain. More specifically, the Sustainable Packaging Coalition defines the concept in terms of packaging being:

- Beneficial, safe and healthy for individuals and communities throughout its product life cycle;
- Able to meet market criteria for performance and cost;