HP AUSTRALIA:

STRATEGIES IN RESPONSE TO GLOBAL SUSTAINABILITY

CONTEXT

> *Our global economy is outgrowing the capacity of the earth to support it, moving our early twenty-first century civilization ever closer to decline and possible collapse. In our preoccupation with quarterly earnings reports and year-to-year economic growth, we have lost sight of how large the human enterprise has become relative to the earth's resources. A century ago, annual growth in the world economy was measured in billions of dollars. Today it is measured in trillions.*

So begins a 2006 publication by Lester R. Brown, Founder and President of Earth Policy Institute and one of the world's most respected environmentalists. According to the Millennium Ecosystem Assessment (2005), two thirds of the ecosystem services it examined are being degraded or used unsustainably. The point for business is not only that it cannot function if this level of degradation continues but that new business opportunities will arise as a result (Bledzki, 2005). In response to these calls for more responsible management of the earth's resources, many companies have begun to espouse rhetoric and engage in practices that emphasise voluntary, proactive control of environmental impacts in ways that exceed or go beyond environmental laws and regulatory compliance.

Indeed, leading strategy scholars have begun to describe global sustainability as an emerging challenge that will change industry landscapes and unearth new and exciting business opportunities (Hart and Milstein, 1999). In 2008, the global sustainability phenomenon shows no sign of abating and their forecast that Oil Age technologies will give way to Information Age technologies that will cause society to experience dramatic technological and economic change seems to be unfolding before us right now.

APPROACH AND METHODOLOGY

This paper analyses the strategic response by HP Australia to these global challenges for business and for wider society. As is appropriate when exploring the 'how' of strategy

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development and organisational responses to the changing business environment, we use qualitative methodology to gather our case material (Yin 2003). Semi-structured interviews were conducted with senior managers at HP with responsibility for sustainability, logistics and product development – all key areas for global sustainability. Interviews were recorded and transcribed and then analysed by our team of researchers. Other material was gathered from secondary documents such as company reports.

THE CASE OF HP AUSTRALIA

HP is a technology solutions provider to consumers, businesses and institutions globally with products and services that span IT infrastructure, personal computing and access devices, global services and imaging and printing for consumers, enterprises and small and medium businesses. For this global organisation, the concept of sustainability is certainly not new. HP's commitment in upholding corporate social responsibility and sustainability practices has a long history in the organisation. It dates back to HP's first founders in the 1930's when Dave Packard spoke of concepts that appear commonplace in today's corporate arena. Even then initiatives such as making charitable donations and other contributions to the community set the company apart, providing a clear public statement that HP had a vision beyond that of solely making profits.

Today, HP Australia espouses sustainability initiatives as a key to achieving social responsibility. HP management argues that sustainability initiatives do not stop with the product designers or the engineers but are infused across the organisation. According to Environmental Manager, Annukka Sairanen, for instance, HP's network of environmental professionals, ranging from front-end staff like herself who deal directly with stakeholders, to packaging engineers, to HP suppliers, all play a part in ensuring that the sustainability initiatives both perpetuate and build on the financial strengths of the organisation (Sairanen, 2006).

HP's strategies can be identified as follows:

Strategy 1: Maximise on market leader position

Be visionary and proactive

According to HP managers we interviewed, HP sets itself apart from other companies in their industry in that it is not satisfied with mere compliance with government environment protection legislation. As leaders of the industry, they recognize that actively contributing to government rule-making and taking on pro-active strategies to pre-empt policy changes enables the organisation to progress human and ecological sustainability measures, enhance their reputation and take leadership in order to increase competitiveness.

For example, in line with its corporate vision, but also in preparation for the passing of environmental legislation mandating IT companies to recycle their electronic parts, HP Australia has chosen to take on a 'beyond compliance' stance. HP Australia's 'C4PA Program' (Cartridges 4 Planet Ark) is an example of HP's commitment to becoming the 'leader in delivering environmentally sustainable solutions for the common good' by 'providing customers with inventive, high quality products and services that are environmentally sound throughout their lifecycles' (HP, 2006a). For their commercial customers, HP provides a take-back program called 'Asset Recovery Services' where customers are able to return their products back to HP for responsible recycling. Returned products that still have retained value are refurbished and

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resold on the client's behalf. In some instances, the recouped value can be returned to the customer allowing them to offset some of the costs when they buy a new product from HP.

Strategy 2: Building collaborative relationships

Recognizing the benefits of collaboration with governments, HP was the first IT company in Australia and in the world to sign a 'Sustainability Compact' with the environmental regulator NSW Department of Environment and Climate Change (DECC) in order to encourage more sustainable practices throughout the sector. Collaborating with government agencies through signing of voluntary agreements and compacts not only demonstrates HP's leadership in sustainability, but acts as a risk management measure. The closer relationship with regulators enables the company to more accurately predict likely legislative change. The program is described as a core strategic initiative and follows a natural progression from HP's Global Citizenship commitment (HP, 2006a).

The 'Sustainability Compact', essentially a partnership agreement between HP and NSW DECC Business Partnerships Section, commits HP for three years to the advancement of sustainability practices across HP's facilities, operations and supply chain. The Compact emphasizes joint implementation of sustainability projects according to agreed upon targets and timelines. The Compact Commitments include:

- Strategic sustainability planning and reporting
- Staff and other stakeholder involvement in sustainability planning, training and project development
- Product stewardship relating to computer hardware, printer supplies (consumables) and packaging
- Environmentally preferable IT purchasing by consumers, business and government
- Enhanced environmental performance of HP sites and operations including resource efficiency, waste avoidance and recovery and other aspects of facilities management
- Environmental auditing supported by staff education and training

HP's vision and reputation as one of the world's most respected global citizens is enhanced through this Compact. It provides business opportunity through more efficient management of resources as well as a key proof point when demonstrating environmental leadership to customers whose procurement decisions take environmental sustainability of suppliers into account. It also provides leverage when seeking to influence other organisations to adopt the sustainable initiatives for their own systems. It is HP's aim that by setting themselves as an example, they can inspire and lead others in the IT industry to operate together as a sustainable network.

Strategy 3: Turning environmental priorities into competitive advantage

Recycling as a way of business

One facet of HP's competitive advantage comes from making sure that recycling of electronic goods, one of HP's environmental priorities, is embedded in the way they do business. Instead

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of looking only at the disposal phase of a product, HP implements environmental considerations throughout the lifecycle of each product through a competitive core design strategy, 'Designed for Recyclability, Designed for Environment'. This more preventative and strategic approach means that design according to environmental principles continues through to manufacturing, packaging and finally disposal of products. A key question underpinning the organisation wide design strategy is:

"How can you design a better product that is easier and cheaper to recycle at the end of its life?"

The linked understanding is that recycling as a cost in the supply chain needs to be minimized.

"…instead of having twelve screws in your printer why don't [we] just eliminate all the screws and have snap-on features? [Snap-on features as fixture that affix product materials and components together similar to screws. Using snap-on features mean reducing the time to separate plastics…thus saving] money in the recycling proportion and having a competitive advantage over someone who doesn't do that" (Sairanen, 2006).

Sustainable design and innovation

Sustainable and innovative product design ideas have led to an approach by HP which focuses on reducing materials used in the making, packaging and delivery of the product. By minimizing the amount of packaging that surrounds each product, HP effectively minimizes the space that the products take up, hence reducing transportations costs that comes with airfreight or sea freight methods. In 2005, the number of PC's which fit on one shipping pallet rose from 28 to 40 units, thus affecting a 40% reduction in the energy required for shipping (HP, 2006b).

An example of the design and packaging innovations at HP is the shift towards modular designs so as to facilitate easier disassembly and recycling. Additionally, products are now assembled using 'snap-on' features. As well as reducing costs associated with recycling, as noted above, these features remove glues and adhesives from the production process – adding environmental and human health benefits to the production process. It also now uses moulded pulp (which is also recyclable post use) to produce packaging or protective casing for its products.

Harnessing human resource innovation

According to Krueger and Killham (2006), creativity and innovation is derived from:

"engaged employees who work with passion and feel a profound connection with their company. They drive innovation and move the organisation forward."

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HP has been long known for its emphasis on innovation –espousing a policy of total innovation management through mutually reinforcing innovation in all elements of its business system (Menke, Xu and Gu 2007). This strategy is also applied to its sustainability agenda. HP's product designers or environmental design engineers are also known as environmental product stewards who are specifically tasked to incorporate and translate the environmental guidelines into the design of their products. Internal environmental design awards such as the PEAC (Packaging Environmental Advisory Council) award are examples of tools that HP utilizes to ensure that environmental guidelines are always translated into practical product packaging solutions. The various packaging design ideas are then stored on the intranet serving as a valuable innovation resource.

HP Product designers are trained on the company's Design for Environment principles. HP has its own recycling centres in Europe and North America and first-hand learning from these organisations has translated into a sustainable perspective across the organisation. Management of the recycling process has helped the company to learn from its experiences in product recycling and to translate these experiences into effective, better approaches to product disassembly and recycling and to, in turn include them in the product design engineer training. During the design process, there is opportunity to assess an element and remove it from the product in order to enhance the product's ability to be recycled. Designers are also trained in the regulations around the world that require HP to remove certain hazardous components (e.g. batteries for instance) from the products before they recycled.

Full circle benefits

As a first mover in the industry, HP has had to re-educate their partners and suppliers along the way in fulfilling their environmental corporate objectives. As awareness of environmental sustainability builds in the IT industry and overall business environment, HP finds itself in an interesting position where customers are now demanding solutions for the dilemmas that they now facing as a result of global environmental regulations. Effectively, the market and regulatory forces have now provided the impetus for the industry to catch up with HP. This push from the supply chain provides HP with more support for their sustainability initiatives.

DISCUSSION FOCUS

Sustainable Product Service System (SPSS)

The Sustainable Product Service System (SPSS) is an example of HP's continued investment in creating innovative services and product systems, all part of harnessing their competitive advantage. The SPSS is an aspect of a total cost of ownership (TCO) approach founded by HP and Gartner in the 1990's.The SPSS represents a "cradle-to-cradle" approach; where people are offered solutions as products. Need-focused solutions are inherently more sustainable than products as they offer the value of use rather than the product itself (Tukker and Tischner 2006).

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As Michael Wagner (2006), Business Development Manager of HP points out, buying the device is only the tip of the iceberg, and HP is committed to providing their customers with the whole iceberg – a solution which manages the hardware, software and services in a Sustainable Product Service System (SPSS).

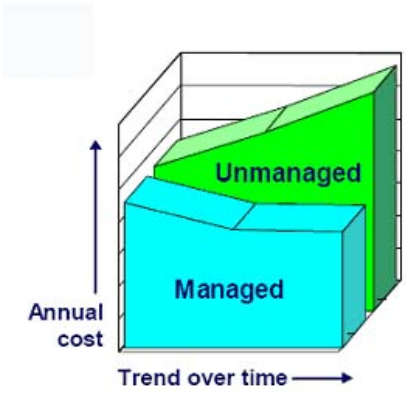

Figure 1: Total Cost of Ownership

Total cost of ownership (TCO) is defined as the cost of procuring, deploying, managing and maintaining Information Technology (IT) systems (HP TCO, 2006). Figure 1 is a graphical representation of how a much lower total cost of ownership can be achieved over time by using a managed approach for all the costs involved in the lifecycle of IT systems.

The "unmanaged" approach results from purchasing decisions made only on initial hardware cost without considering the impact for on-going support and services costs. The reality is that initial hardware costs of the technology amounted to only 20-25 percent of the total cost, whilst post-deployment costs may constitute up to 80 percent of total IT expenses (Wagner 2006).

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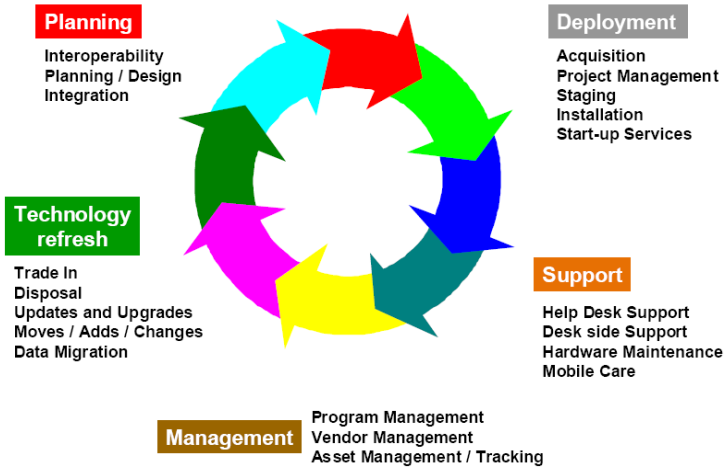

Figure 2: Life Cycle approach to TCO reduction

(Source: HP TCO, 2006)

This is where the SPSS fits in – the life cycle approach of SPSS, in Figure 2, enables HP to realize measurable TCO cost savings for customers in the management, maintenance, upgrade, and support of their overall IT environment. Effectively, HP has proven the value of applying TCO reduction strategies within its own organisation, reaping a dramatic savings of over "*$200 million annually in overall IT costs"* (HP TCO, 2006). The conception of SPSS was customer driven. Customer feedback signalled demand for a sustainable model of funding, for someone to run and manage their IT system in a responsible and efficient manner (Preston, 2001). Despite being initially customer-driven, when it comes to selling the system, HP has experienced a low level of market penetration. HP has tried to get around this hurdle by training its executives and sales team to sell the financial benefits of the SPSS, through concepts such as:

- Net Present Value
- Return on Investment – the total cost of ownership approach is important in measuring the correct ROI as it ensures that all costs are incorporated.

However, whilst almost all customers whom they approached recognized the innovative approach underpinning the SPSS, few would commit to buying it. This hesitance by the market can be attributed to intra-organisational issues and responsibilities as well as cultural resistance. HP's experience with the SPSS has been that the managers to whom they are selling the product are mainly from the procurement function, and do not see the benefits of the TCO approach. Procurement officers or managers in general are not privy to the fact that savings in administration, productivity, and service costs will benefit the bottom line in the short term. Relatively short-term departmental budgets and responsibilities are regarded as a priority over the greater long-term benefits that SPSS can bring to their business as a whole.

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The sustainable business model may be attractive to the CEO, with an umbrella vision of the firm, but the differentiation of responsibilities in most organisations means that the project decision is delegated to the CFO and CIO. Using traditional financial indicators as a measure, the probability of SPSS being adopted is further reduced. Effectively, "*the financial value of environmental drivers is lost*" (Preston, 2001) as financial managers in companies have yet to recognize what environmental or socially responsible values can bring to the bottom line:

"*the decision level must be raised to the point where all costs to the organisation are relevant"*(HP Invent, 2006)

CRITICAL ANALYSIS

As the SPSS example highlighted, until there is legislative force behind sustainability initiatives, short termism on the part of customers (and investors) may prevail and will inhibit highly innovative product development that could address some of the major toxic waste issues currently caused by the IT industry. Until this time, for companies such as HP, sustainability will be viewed through a highly instrumental lens. The company clearly sees sustainability advantage in business terms – reducing waste, getting a competitive edge, increasing employee engagement, stimulating innovative practices, are all positive outcomes a firm in the strategic phase of sustainability (Dunphy, Griffiths and Benn 2007) would expect from its sustainability endeavours. Yet sustainability in the business context is a delicate balancing act and the company makes careful decisions about where it places its priorities. For example, sustainability at HP is very much dictated by the firm's global agenda and the firm shows a tendency to focus more on developing its global reputation for CSR and sustainability than in the Australian context. For example, HP Australia has not participated in the Corporate Responsibility Index run in Australia by St James Ethics Centre but has competed successfully for a number of sustainability reporting and other such awards in Europe and USA.

The HP case highlights the fact that sustainability needs to be integrated into all decision-making in the organisation, its customers and the supply chain for long-term benefits to be achieved. Corporate social responsibility is not limited to restrictive practices relative to corruption or human dignity; it is also about protection of the environment. HP as a large multinational is a good example of a company that has demonstrated this aspect of social responsibility through proactive strategies. Interestingly, these strategies have the capability of yielding competitive advantage for HP. However, the sustainability of this competitive advantage is reliant on future strategic actions of its competitors and may be dependent upon future shifts in national policy making. For some constituencies, such as Australia, for instance, it seems likely that future legislation will address both the need for product stewardship in the electronics industry and for all industry sectors to reduce their carbon footprint.

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QUESTIONS FOR CONSIDERATION AND DISCUSSION

1. Why has HP chosen to be proactive as opposed to reactive in relation to environmental sustainability?

2. What are the benefits derived by HP through its strategy of building collaborative relationships?

3. How does HP utilise environmental friendly initiatives to yield competitive advantage?

4. What should organisations adopt do to educate procurement managers on the benefits of the Total Cost of Ownership (TCO) approach?

5. What are the main lessons to be learned from analysing the strategies of HP?

6. What is the next big step for HP in relation to environmental sustainability? In your prescriptions clearly identify the associated supply chain issues.

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