

Market-focussed sustainability as innovation driver in business-to-business relationships

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Purpose of the paper

If marketing has been typically defined as the task of creating, promoting and delivering goods and services to consumers and businesses (Kotler et al., 2006), it has now the task to deliver *sustainable* goods and services, involving the three described dimensions, which broadens up the role of marketing within organisations.

Whereas much of the focus of academic research on sustainable marketing has targeted the environmentally conscious consumer, there are few studies linking sustainability to business-to-business marketing. The aim of this paper is to study how sustainability has become a marketing tool that drives innovation in business-to-business relationships and to discuss the interaction between marketing strategies, innovation and sustainability.

Literature addressed

Our theoretical framework is based on the Resource-Advantage theory of competition (R-A theory) defined by Hunt and Morgan (1995): if we posit that sustainability is nowadays accepted as a key success factor of the firm business strategy (Kuosmanen and Kuosmanen, 2009), resources dedicated to sustainability may create a competitive advantage (Porter and Kramer, 2006) if efficient and innovative sustainable products/services are hence delivered, increasing customer value (Barney, 1991).

Methodology

The field study is based on the researcher's attendance as guest sponsor to practitioners' workshops gathering senior executives from marketing and sustainability departments from multinational companies in Paris (around 60 members) to think over how to better link sustainability and marketing strategy. Such workshops were held regularly from October 2010 until October 2011, when a general meeting was organised to present the outcome of the different sessions.

Main contribution

We suggest a new “sustainability advantage theory of competition” framework (see figure 4), which shows how the sustainability concept is used either to create a new (sustainable) customer segment or retain sustainable-focussed customers with innovation targeted to extend the range of products with new sustainable characteristics, or to avoid customer defection by integrating non-sustainable products into a service (process and organizational innovation) as the function of the core product is embedded into the sustainable use of the product. In both

cases, innovation is driven by sustainability and creates a competitive advantage to the supplier by bringing a higher value share to the customer.

Keywords: Sustainability, marketing strategy, innovation

Introduction

In a Journal of the Academy of Marketing Science editorial for a special issue on sustainability, G. T. M. Hult (2011) quotes Friedman (1970): “the social responsibility of business is to increase its profits”, but after four decades of debates on ecological conservation the concept of sustainability has now emerged (WCED, 1987), linking social responsibility to two other dimensions, economic and environmental, which means that assessment of business results is not only based on economic performance but takes into account the environmental and social impact as well (Sheth et al., 2011: 21).

If marketing has been typically defined as the task of creating, promoting and delivering goods and services to consumers and businesses (Kotler et al., 2006), it has now the task to deliver *sustainable* goods and services, involving the three described dimensions, which broadens up the role of marketing within organisations (Hult, 2011).

Much of the focus of academic research on sustainable marketing has targeted the environmentally conscious consumer, e.g. working on new frameworks such as the “Customer Centric Sustainability” and linking it to “Mindful Consumption” (Sheth et al., 2011), as “sustainability is at the forefront of consumer choice” (Crittenden et al., 2011: 83).

The development of environmentally conscious consumers has anyhow led firms to pay more and more attention to sustainability issues and there is a greater awareness that, not doing so, could lead to a competitive disadvantage. Firms such as BMW, Patagonia, Bodyshop have adopted sustainable practices and innovated in eco-products to answer end-consumer demand, but Nestlé forgot one of their palm oil suppliers was accused to destroy the rain forests¹ and underwent an active and very negative advertising campaign on the social networks from Greenpeace. Hence, sustainability should not be considered only from the mere “end-consumer centricity” but within the ecosystem of vertical relationships. In that perspective, vertical business-to-business relationships are at the forefront of sustainability and a recent study shows that sustainability has now become innovation’s new frontier (Nidumolu et al., 2009: 58).

Besides this, marketing scholars have focussed on understanding environmentally conscious consumers (Sharma et al., 2010) whereas few academic studies link sustainability to business-to-business marketing strategies.

The aim of this paper is to study how sustainability has become a marketing tool that drives innovation in business-to-business relationships. Sustainably driven marketing strategies rely on product or service innovation, which redefines vertical business-to-business relationships by delivering *sustainable* value to customers and bringing forward new competitive advantages. Specifically, this paper discusses the interaction between business-to-business marketing strategies, innovation and sustainability.

We first provide an overview of the Resource-Advantage theory of competition (R-A theory) defined by Hunt and Morgan (1995) as the theoretical foundation for linking sustainable innovation and marketing strategies. Next, we explain the background and design of our research and present several case studies. Then we discuss our findings and present a new “sustainability advantage theory of competition” framework (see figure 1), which shows how the sustainability concept is used either to create a new (sustainable) customer segment or retain sustainable-focussed customers with innovation targeted to extend the range of products with new sustainable characteristics, or to avoid customer defection by integrating

¹ *Nestlé learns to see the wood for the trees*, article published in the Financial Times on 31/05/2010 by Michael Skapinker.

non-sustainable products into a service (process and organizational innovation) as the function of the core product is embedded into the sustainable use of the product. Finally, we discuss the managerial implications and limitations of our study.

Theoretical underpinnings for linking sustainable innovation and marketing strategies

Hunt and Morgan (1995:7) show that a sustained competitive advantage in resources (Barney, 1991) can be gained when a firm is able to produce a market offering which is perceived (compared to competitors’ offering) as having superior value or being produced at lower costs, which will lead to superior financial performance. To sustain such a competitive advantage, firms need to be innovative and create new resources. Already in 1995, Porter and van der Linde showed how innovation could address the root causes of pollution by first improving resource productivity (1995:125). Hence, sustainability can bring this differential advantage over competition, as it becomes an “incentive” and a roadmap to innovate (Mariadoss et al., 2011).

Sustainability has been defined as “meeting the needs of the present without compromising the ability of future generations to meet their needs”, according to the United Nations’ Brundtland report (1987). The three main dimensions of sustainability are the “triple bottom line”: environmental, economic and social. Sustainability can play an important role in product design to start with. Simula et al. (2009) define three approaches to product eco-conception: first, the environmental aspects are taken into account within the material sourcing and production (e.g. raw material recyclability, weight reduction), second, the use of the product (reduced CO2 emissions) and last, the effect of the product once it has become obsolete (recyclability). Hence, sustainability can lead to a renewed approach in product design by rethinking the product life cycle.

The sustainable management of the product life cycle must nevertheless differentiate between actual and perceived greenness from end consumers as shown in figure 1.

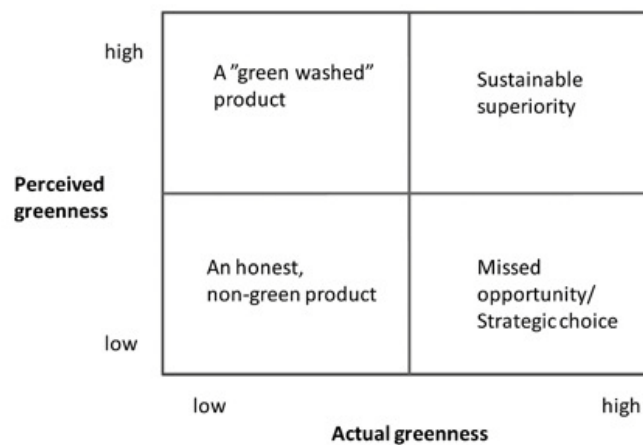


Figure 1 - Perceived and actual greenness (Simula et al., 2009)

Sustainability will only bring a differential advantage over competition if sustainable features are recognised as such by the customer and the end-consumer (“sustainable superiority”).

If customers or end-consumers are not aware of the greenness of the product because suppliers did not reveal they were using eco friendly technology or raw materials, there is a “missed opportunity” to gain a sustainable competitive advantage (Simula et al., 2009:341). To reach that “sustainable superiority”, Nidumolu et al. (2009) present a four stage process that goes beyond the product itself: first, companies comply to environmental norms, second they increase efficiencies throughout the value chain, making the latter sustainable, third they design sustainable products and services, last their quest for sustainability lead them to find novel ways of delivering and capturing value (new business models). The two last stages can be broken down into a series of “waves” that deliver an increasing level of eco-efficiency (Brezet and van Hemel, 1997) as per figure 2.

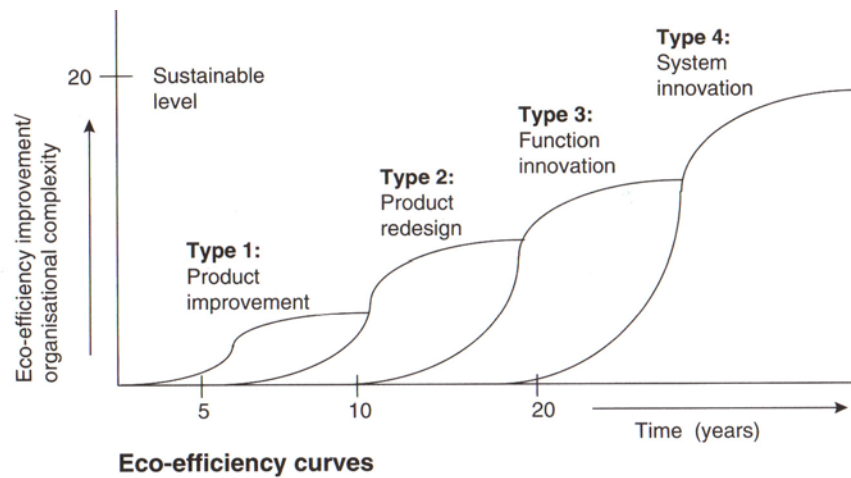


Figure 2 – Eco-efficiency waves (Brezet & van Hemel, 1997).

When innovation is driven by sustainability, it moves on a continuum that starts from incremental towards disruptive innovation as the product life cycle is enlarged to include the complete supply chain. First, the suppliers are either included at the early stage of product conception as they may offer sustainable raw materials or components or other suppliers may be chosen with a better sustainable offering, second the end consumer’s use of the product is analysed and included into the conception loop together with the product end of life process. The supplier involvement may help to improve or re-design the product whereas the end-consumer integration may lead to work on the product functionality and eventually innovate in the business model. Based on Maxwell and van der Vorst (2003) product life cycle, we may re-design the product life cycle as in figure 3.

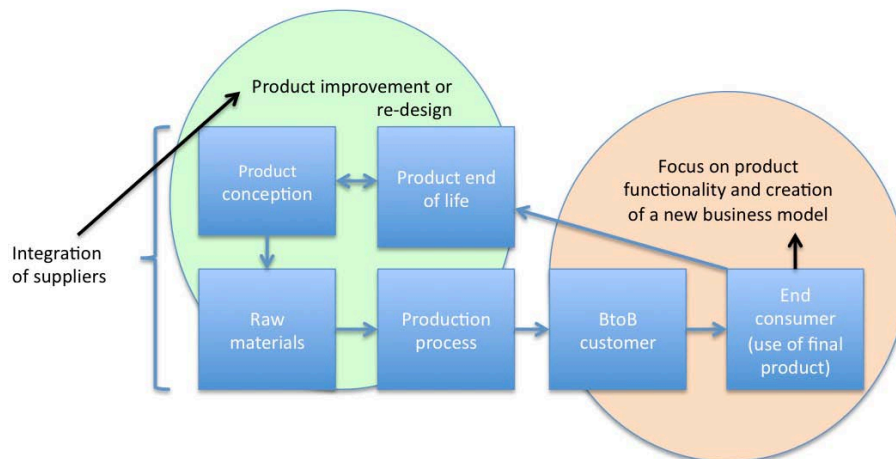


Figure 3 – Sustainable product life cycle in B2B (based on Maxwell and van der Vorst, 2003).

Along this updated product life cycle, sustainable innovation may be “pushed” by customers to answer the needs and values of their end consumers or may be “pulled” by suppliers that anticipate the need for greener products and are able to co-develop such products with their customers.

In both cases, it is obvious that the role of marketing has changed and some scholars have analysed marketing as a discipline in crisis (Grönroos, 2007): marketing is moving away from the focus on exchange (Bagozzi, 1975) to highlight the importance of customer’s value-in-use (Grönroos, 2008) and value co-creation within the supplying/buying network (Gummesson, 2008). The service-dominant logic (Vargo and Lusch, 2004) has finally reunited goods and services by uniting them within the usage and consumption process and focussing on a two-step value process: value proposition (which may be a product offering) followed by value actualisation (use or consumption) (Gummesson, 2008: 117). Although, sustainability has not been the foundation for marketing management to move from products towards services, it has in many cases, been a driver to rethink the product life cycle to extend it and include the use, consumption and even the end of the use of the product, hence leading companies to set up new marketing strategies based on sustainable innovations.

In that sense, sustainability is a key construct that has enlarged the marketing focus from market orientation (Kohli and Jaworski, 1990; Narver and Slater, 1990), targeted at customers and competitors, to stakeholder orientation that address other stakeholders’ issues (community, employees, etc.) embedding sustainability (Ferrell et al., 2010).

Hence, sustainability has extended the vertical relationships from the supplier/customer dyad towards the end consumer: it must be analysed as a complete supply chain networks (Hogevold and Svensson, 2012) which is interlinked to focus resources towards the end-customer in a value creating way (Grönroos and Ravald, 2011). Those new and sustainable resources may lead to innovation that brings a differential advantage over competition. This differential advantage can be based on innovation based on tangible resources (innovative sustainable raw materials or components) or intangible resources such as new organizational know-how that leads to the creation of innovative dynamic capabilities. When sustainability brings unique resources and innovative capabilities, it can sustain a new marketing strategy.

If we take a closer look at the innovation based on tangible resources, this will be first the reduction of the use of raw materials (use of recycled materials) or the introduction of greener raw materials (redesign of the products) that may affect the product itself or its use (longer shelf-life) and its disposal (end product recyclability), but this will all lead to enhanced waste

management (Simula et al., 2009). Second, it can be sustainable technology innovations that rethink the way the product is used (e.g. electric cars with low battery autonomy that induces to rent rather than own the car).

If we take a closer look at the innovation based on intangible resources, this means reviewing not only the product production process to create a new organizational process, but goes as far as reviewing the complete economy model. Innovation here is linked to moving towards “functional economy”, i.e. moving towards innovative eco-efficient services, whereby customer needs are fulfilled by the selling of a service in substitution of the selling of a product, that remains the ownership of the service provider (Meijkamp, 2001). The goal is to fulfil the same function for the end-consumer, but value is created at the far end of the vertical chain (see supra – Figure 3).

So far in the marketing literature, the bridge has not really been filled between the S-D logic (Vargo and Lusch, 1994) and the “functional economy”: recent marketing articles emphasizes the need for “hybrid offering” (Ulaga and Reinartz, 2009, 2011) adding service to product, whereas sustainability may open an innovative avenue to the “functional economy” turning product offering into services (Gaglio et al., 2011) and support new marketing strategies.

Whereas “hybrid offering” suggest the profitable combination of goods (value creation) and services (value actualisation) from the supplier’s perspective and leaving out any sustainability concern, the “functional” economy enhances value creation from the end consumer ‘s perspective. The “functional” economy helps us to move forward the Porterian dichotomy of the cost/differentiation advantage to create a new “ sustainability advantage theory of competition” framework, reinforcing the construct of “captive” customer.

Research design

The field study originated from the researcher’s attendance as guest sponsor to practitioners’ workshops gathering senior executives from marketing and sustainability departments from multinational companies in Paris (around 60 members) to think over how to better link sustainability and marketing strategy. Such workshops were held regularly from October 2010 until October 2011, when a round-up meeting was organised to present the outcome of the different sessions.

Hence, the first stage of the field study was made up from the researcher’s personal reports from the meetings and secondary sources provided by the other attendants (mostly Powerpoint presentations, company websites dedicated to sustainable solutions and meeting proceedings)

From there, the researcher organised some face-to-face meetings with selected companies to further explore the linkage between marketing strategies, innovation and sustainability. The goal was to deepen some case studies from selected companies (3) that had attended the workshop or explore another company (1) who had come with new sustainable offering following different marketing strategies.

First selected company

This multinational company is vertically integrated in the oil industry and produces semi-finished or finished products for the packaging, building and transport industry: they are facing major and contradictory issues in terms of sustainability as product demand is increasing but 28,5 % of greenhouse gas emissions (GGE) in the world result from the use of their products. Most of these emissions are linked to transport, housing and industries, which

means that the company's professional customers are at the forefront of sustainable issues.

The top management validated working on a sustainable product program to show their commitment to reduce greenhouse gas emissions towards their BtoB customers. The first eco-products were launched in 2009.

The company wondered whether they should or not separate such products from their usual range by not linking them to the company name but a study from focus groups showed that if they wanted their initiative to be taken seriously they had to link the product to the corporate name. Furthermore, if they wanted to signal to the end-customer that they were taking sustainability seriously, they had to allow them to see the product brand through the screen of the distributor or industrial intermediate. The second sensitive point was about labelling the product as sustainable: the company had the choice between creating their own label or using "official" labels which would postpone the launching of the products and prevent them from getting the flexibility they wanted. They decided to go for creating their own label based on ISO 14020/21 and using a well-known consulting company to confirm and prove their sustainable claims as they felt they needed a third party to convince sceptical stakeholders.

Because of the large spectrum of products concerned by a greenness need (from housing products to packaging and transport), they decided to work in a transversal way to disseminate knowledge and competencies throughout the company, creating multi-disciplinary teams. The goal was not to work here on disruptive innovation but incremental innovation to improve product performance in terms of energy or waste management (e.g. improve product recyclability). Average market products (not necessary their own ones) were used as a benchmark to improve GGE.

The marketing strategy here was to answer to the needs of BtoB customers in industrial sectors where the eco-pressure was growing, such as food companies that want to reduce their packaging carbon footprint or transport companies that want to manage their gas consumption. In terms of product, it is a range extension as the standard product remains and is not to be replaced by the eco-product. The customer target is mostly to retain BtoB customers by being able to offer them eco-products and second to gain customers from competition by bringing products with superior eco-features. Hence, the marketing retention strategy is stimulating innovation in an organizational way (transversal teams and competency/know-how dissemination) that leads to the creation of greener products as a range extension.

Second selected company

This company is a major player in energy management for local government authorities and businesses (8,6 billions € revenues in 2010). They have moved from providing and managing energy infrastructures to working closely with their customers and making commitments for energy consumption optimisation and the reduction of greenhouse-gas emissions.

They now commit to results in terms of energy use, cost and the environment through long-term contracts, such as Energy Performance Contracts (EPCs) that include actions designed to raise awareness of energy consumption among end users.

Their next move is to become an "aggregator", which means creating an "intelligent electricity system" (smart grid) and turning the consumer into a producer (solar panels, etc.) within a producer/consumer network that they will steer to match in a flexible way local energy needs and production.

In short, sustainability is leading them to move from BtoB vertical relationships (energy provider/ industrial customer) into creating a network embedding the end-consumer, in which

customers/consumers can also become producers of renewable energies.

The EPCs contracts have helped them to develop a strong consumer insight and build a deep understanding of customer/consumer energy needs and consumption patterns. Such a strong knowledge linked to sophisticated software and new outsourced energy technologies are the natural steps to create sustainable energy networks.

Third selected company

This multinational company is a world leader in printing and copying documents. For two decades they have moved from commodity-type and unsustainable products to a new marketing strategy based on the functional economy (Stahel, 1982): the move from a product-focus orientation towards a sustainable usage focus one. They no longer sell equipment but lease them within a service fee-based contract that includes redefining the printing process to increase productivity and reduce energy, paper and consumables consumption*. Since the 90s until 2010 the company has been mostly managing the customer's printing and document handling process.

Sustainability* was the main driver to convince customers to outsource office printing and document management. This know-how that was gradually built on managing customers printing processes has led them to enter completely into the field of business process outsourcing by purchasing another company in 2010.

The intra-organisational knowledge gained by moving from products to service has led them to completely change their business model to move beyond printing and become focussed on all types of business processes.

Fourth selected company

This company is a major corrugated packaging supplier. Sustainability has always been a major issue in this industry and they offer “cradle to cradle” (eco-effective) products.

In the last decade, they have moved beyond the recyclable loop of their products to move forwards in sustainability and optimise their customers' own supply chain, increasing the value they offer them by reducing their packaging material, hence reducing freight cost and carbon emissions. To take this step further towards an integrated sustainable supply chain (from supplier to end-consumer), they have created in 2009 a first “Impact and Innovation” centre, which is a mock-up of a supermarket and back-of-store environment where packaging specifiers and buyers can spend time developing how best to use corrugated packaging to sell more products and cut environmental costs. Together with the Impact and Innovation centre, a software dedicated to analyse the end-customer needs help them no longer to deliver a product, but a service to optimise value creation around the customer's own product (packing and supply chain efficiency).

Main findings and discussion

Our empirical data show that sustainability can be the core construct that entices B to B companies to innovate: either because end customers or consumers want greener products (first case study), or because companies can use “green” arguments to change their customers' or the end consumers behaviour to change their offering and turn it from a product to a complete service one (second, third and fourth case study).

In all our case studies, sustainability is a motivational factor to “think outside the box” and

bring new value proposition to the customer.

Bringing new value proposition to the customer also means for the supplier, increasing its own value appropriation (Wagner et al., 2010). In all cases, sustainability is not an objective per se: it is a grounded argument and the foundation of a marketing strategy that will either help to gain or retain “green” customers (first case study) or to turn a commodity-type products into a high value service (third and fourth case study) to increase profitability.

Our second, third and fourth case studies have entered the “functional economy” by integrating external resources, from suppliers (new IT software) and from moving forward towards new functionalities (third and fourth case studies). If sustainability has helped them to move from a product to a service focus, the next step is to improve the new business process on which they have gained expertise. Their competitive advantage is based on the aggregation of customer understanding and from there moving deeper and extending their service range.

Innovation is initially based on sustainability, but when innovation becomes radical (development of service offering), the new offering comes from the linkage between sustainability and (inter)/intra-organizational learning.

In our findings, sustainability is not an “objective” per se, it is more an emerging “mindset” that disseminates throughout the supply chain, including the end-consumer, and drives the actors to improve their offering by reviewing the use and the life cycle of their product. In that sense, sustainability is the “mindset” that embeds the innovation process.

In our three case-studies that offer innovative services, the knowledge required to build the offering results from some “absorptive capacity” (Cohen and Levinthal, 1990) to assimilate and build on new knowledge gained from external sources, in our three cases, end consumer behaviour and needs. End users were not the direct customers from the focal companies, which explains why acquiring end user or final customer knowledge was a lengthy process. Such knowledge had also to be disseminated throughout the company. This knowledge building was a two step process: first, the inter-organisational step when knowledge is transferred from customer/end customer to sales and marketing departments from the focal company, but more important, the second step, when knowledge is “incorporated” and spread throughout the focal company within the R & D and IT departments so that the aggregation of tangible and intangible resources supports the new offering and creates the competitive advantage. The competitive advantage is built on a network approach integrating the complete supply chain from suppliers to end user or customer.

Derived from these empirical data and analysis, we can now suggest the creation of a new “sustainability advantage theory of competition” framework, as represented in figure 4.

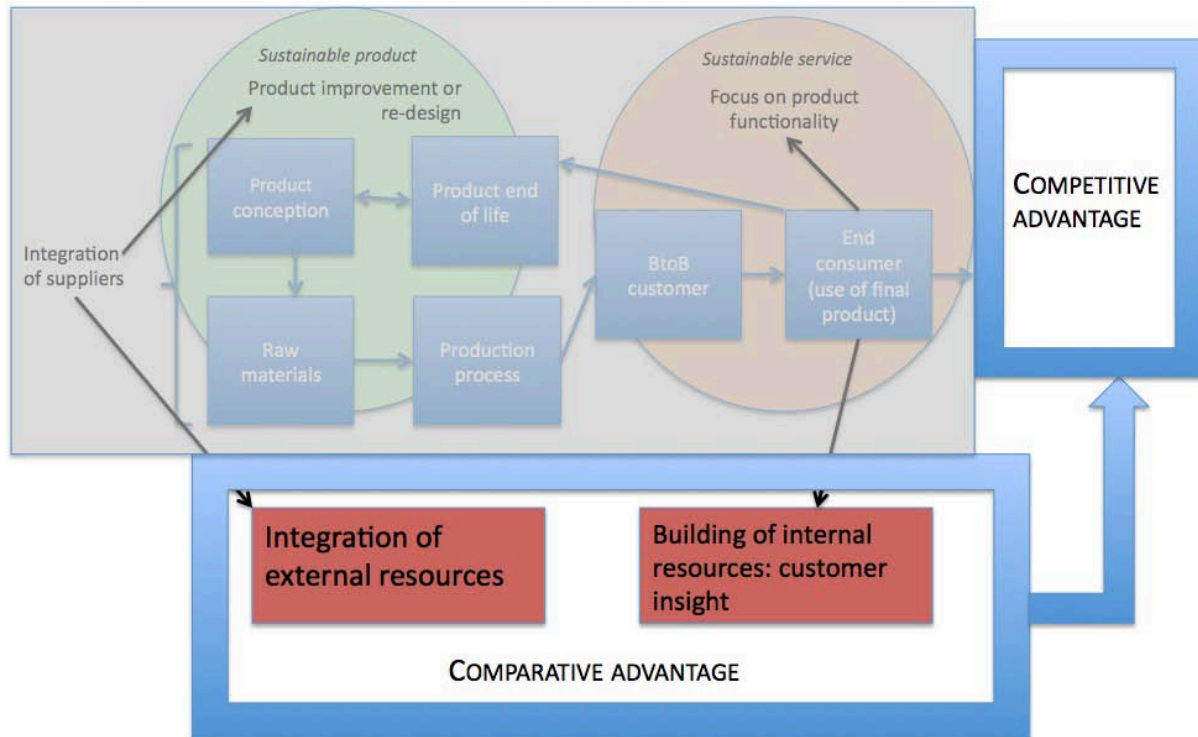


Figure 4 - “sustainability advantage theory of competition” (based on Hunt & Morgan, 1995)

This network creates some strong interdependence between the actors, with contracts that can now be 10 years duration and a B to B customer which is virtually “captive”, but value creation through this knowledge and service network has strongly increased.

Managerial implications and conclusion

Our research should help managers to review their business model and to question how sustainability could help them to create value. They could use our “sustainability advantage theory of competition” framework as a tool to analyse how they could optimise their value chain. Moreover, our study identifies the integration of supplier resources and the building of final customer understanding embedded into sustainability as major resources to build a new competitive advantage in business markets by extending product to service offering.

Of course, managers must develop new skills to leverage customer understanding knowledge, which is often scattered within their own company, often within the front-line employees.

They may also have to create new positions within their companies for people to bridge the gap between customer needs and R & D departments to develop new sustainable product and service offering.

Our study can help managers to define a strategic path to move their company from a product-centric one into a sustainable product and service one.

We hope our study may provide new insight to academics and practitioners, but we are aware that our limited case studies may create some limitations and our proposed framework may not apply to all industries.

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