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**SPECS: STRATEGIC PLANNING FOR E-COMMERCE SYSTEMS—TOWARDS AN E-CUSTOMER FOCUS**

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**Abstract**

The main objectives for this paper, based upon both theoretical constructs and empirical evidence, is to make observations for analysing strategic planning for e-commerce systems (SPECS). These notions have been developed from previous research which considered the nature of SPECS and its contribution to business transformation generally. The opportunity is now taken to map the main characteristics currently found in SPECS business models onto a classification framework. The aim of the current research is to also assess the growth and extent of SPECS in an empirical context (SME’s). The value of this approach, therefore, is to identify the ‘evolutionary’ aspects of e-commerce systems which are strategically managed to enable a more e-customer focussed relationship. It is argued that this provides the recognition of the critical importance of the stages which organisations need to progress to formulate and implement successful e-business strategies.

**Introduction**

In 1996, about 35,000 US companies had a web site, 8000 were taking orders and 5000 settling credit card payments and this figure is of course rising by the hour (Gupta, 1996; Hoffman et al, 1996, 1996a, 1996b). Early information systems planning models are commonly noted to be highly prescriptive and too detailed for the demands of dynamic business environments (Dutta & Evard, 1999; Turban et al, 1999; Pant & Ravichandran, 2001). Clearly, business systems in the last decade have changed significantly with a need for more flexibility and responsiveness to customer requirements (Zwass, 1996; Shaw et al, 1997).

There is a critical need to capture the views of the key stakeholders in the analysis (mainly customers) and thus provide an holistic representation of the organisation as a whole. As Stacey (1993) observes, ‘...shared mental models determine how managers together construct their perceptions of reality and therefore what they agree to attend to’. An earlier summary of trends in thinking towards strategy formulation in this respect is provided by Wittington (1993), as shown in Figure 1. It is useful to map the latent characteristics and requirements of SPECS models within this framework. The classical segment relates to the rational views found in the early literature; the systemic segment represents the political influences found in social systems, the processual segment relates to the need to accommodate strategy formulation to a changing environment and the evolutionary segment considers the ‘fatalistic’ view of the changeable market place. Clearly, the opportunity for an organisation to position itself within this ‘evolutionary’ segment acknowledges the reality of a dynamic and highly competitive market place where customer value and responsiveness are paramount. SPECS requires, therefore, an alternative paradigm which may urge organisations to think differently from conventional formal leadership, restructuring and reengineering approaches (Hamel & Prahalad, 1994). It is recognised that the context in which most approaches to SPECS are applied is complex and currently have significant limitations overall.

For example, the temporal aspects of the analysis are particularly weak as there is clearly a difficulty in determining organisational analysis over time. However, as noted, SPECS models must incorporate these features if they are to capture insights into the strategy process necessary for business performance, particularly through customer relationship management.
Clearly, there are a number of challenges for organisational analysts if the current views relating to strategy are to include such a variety and complexity of assumptions. In addition, there appears to be few studies about the extent and nature of strategic planning for these systems in areas in which the ‘evolution’ of consumer–focused e-commerce is likely to expand over the next few years. A major driver has been the desire to reduce costs and make revenues go further. Savings of 20% are not unusual in the e-business community as they network their supply chains (Burn and Hackney, 2000; Hackney & Burn, 2001). U.S. federal, state and local procurement spending on materials and services in 2000 was estimated at around $550 billion, and in the European Union member states combined procurement spending was around $778 billion (Symonds, 2000). With a 20% cut in costs anticipated savings of around, or even exceeding, $250 billion may be viable. The emergence of e-commerce models through customer contact centres is reflected in these objectives, as shown in Figure 2. It is argued, therefore, that the emerging outcome for SPECS is the opportunity to enable customer relationship management to be achieved through full integration of business functions. This is commonly identified as a move from a ‘call centre’ to a multimedia environment associated with a ‘contact centre’ where customer requirements are managed and adopted more efficiently.

<table>
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<th>pre e-business</th>
<th>early e-business</th>
<th>maturing e-business</th>
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<tr>
<td>application</td>
<td>call centre with front office</td>
<td>transaction oriented web site</td>
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<td>customer</td>
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<td>phone, fax emerging email and web</td>
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<td>contact</td>
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<td>call centre to front office channel integration</td>
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<td>integration</td>
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Figure 2. Evolution of E-business

**Customer Relationship Management**

Thompson (2000) observes that Customer Relationship Management (CRM) is not just software to manage customer relationships within a ‘contact centre’. It requires a customer-centric business strategy where the organization, culture, and work processes will need to change considerably. CRM technology is the enabler not the driver, as obviously technology cannot build relationships. E-commerce CRM solutions have primarily been concerned with direct relationships and a number of software businesses have emerged in recent years to serve this nascent market. Early vendors included Partnerware Inc, ChannelWave Software, Inc, Webridge, Inc. and Allegis Corp. These companies aimed to apply the concepts of relationship management in fresh new applications designed specifically for indirect sales channels. As multi-channel or "click and mortar" strategies become more common it is apparent that indirect channels remain a vital element in most industries. Despite changes in the role of channel
partners, which has shifted to services and more complex sales, channels still account for roughly half of all global commerce. Analyst forecast the market for CRM software and services to will exceed $5 billion in 2000 (Front Line Solutions, 2000).

It is evident that organisations continually rely upon channels and channel partners to reach target markets and add services that customers want. Consequently, the B2B channel partners are still needed to add value and meet customer demands on their terms. The most desired features in a CRM solution are opportunity lead management and integration with other enterprise (ERP) applications. Clearly it is important for any organisation considering a CRM system to carefully assess the needs of both channel managers and partners, because the system must offer value to both parties.

An important driver in this respect also comes from customer expectations as they now have far greater access to information and demand personalised experiences as opposed to simply acquiring goods and services. A consumer driven organisation is one that maintains a focus on the needs and expectations of customers both spoken and unspoken in the creation and/or improvement of the product or service provided. This approach forces the customers to fit or break into this structure if they require a service. Customers must seek out the area that deals with their particular requirement. They must move between many organisations to access all the services they need. The objective, particularly within a consumer environment, to move the customer into the centre (Figure 2) and to offer a wide range of services (Hopkins & Jamil, 1997). This requires organisations to develop close working relationships and implement a structure based on the idea of collaboration. To initiate such developments an organisation needs to perform a full customer value chain analysis in order to set up a number of different alliances through an electronic network. This may form the basis for a one-stop portal where the alliance combines a range of services and facilities in one package forming one single customer supply chain. Participants may come together on a project by project basis but generally the general contracting agency provides coordination.

This approach has usefully been summarised into a ‘value cubicle’ which integrates the value chain into an expanded SPECS model, as shown on Figure 3 (Hooft & Stegwee, 2001). In this way an analysis of the opportunities for different parts of the organisation is possible based on customer relationship management (CRM) principles. The value cubicle enables e-commerce applications to focus upon customer requirements by considering the value chain as the primary framework. In this way several value grids may be created, each focussing on a certain part of the value chain. The cells may then be related where value activities interconnect through SPECS requirements.

Figure 3 is based upon the e-business vision, strategy and application areas where it is possible to identify the relevant cells within the cubicle which need further attention. The result consists of a portfolio of specific applications that realise the e-business benefits and hence contribute to attaining the strategic goals of the organisation (SPECS). Where longer term customer relationships have developed a value alliance may be adopted that forms a value constellation where organisations have multiple interactions and a complex and enduring communications structure embedded within the alliance (Burn and Barnett, 2000). Substitutability has traditionally been a function of efficiency and transaction costs: searching for, evaluating, and commencing operations with potential partners has been a costly and slow procedure, relying on information transfer, the establishment of trust and policy rules, time zones, culture, and legal frameworks. These have determined the relative positioning of partners on the chain and the reciprocity of the customer relationship.

This value-alliance may be built around customer value chains and the sharing of resources, skills and knowledge to produce a ‘best’ customer solution and enable agencies to be more responsive to customer requirements. Each organisation may be required to form several value-alliances depending on what has been identified as requiring one stop processes for customers. In order to achieve a successful value-alliance it is essential that a business planning model (SPECS) is established that ensures each member agency has ‘buy-in’ to the desired outcomes. Therefore, any business planning must be built on services, delivery goals and objectives that focus on its customers through direct front-line employee input. To achieve this there must be a evolutionary shift (Figure 1) in management thinking and practices that include:
Pervasive knowledge sharing, feedback and communication;
Integration of environmental considerations at the earliest stages of design;
Effective partnerships with customers.
Commitment to using customer feedback to drive changes
Frontline employess given the authority to deal with customer issues.

Obviously, it is important to recognise the consumer as an integral member of the virtual organization and approaches to CRM are widely reported (Front Line Solutions, 2000). However, research which incorporates such thinking has, as noted, not been commonly identified within SPECS models as a critical feature of CRM is the extent and nature of channel and customer management. Most importantly this model establishes information flows that:

- Ensure customers can impact on the strategic planning process
- Agreed goals are passed to all levels of each organisation
- These goals are articulated to customers

Prahalad and Ramaswamy (2000), for example, suggest that organisations need to ‘create their future by harnessing competence in an enhanced network that includes customers’. Their three-stage model may usefully be adapted to a SPECS context. That is each partner in the value alliance is able to benefit from access to competencies and customer life cycles, flexible collaborative partnerships, trust and mutual cooperation.

**Classifying Online Business Models: Examples Within the Context of SME’s**

There exists a wide spectrum of approaches that may be broadly categorised under three generic online business models, as shown in Figure 4. Each category has a sub-classifications which can only represent generalised descriptions with significant overlap. For example, portals and electronic malls may both be described as virtual communities since both represent a collection of a wide variety of service providers working as an entity. The unique feature of virtual communities is that they provide a sense of a uniform market-space to all agents including manufacturer, service providers, suppliers, and customers.

<table>
<thead>
<tr>
<th>Online Business Model</th>
<th>Features</th>
<th>Examples</th>
</tr>
</thead>
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| **Virtual Face** (e-shop) | Providing an extra space for presenting organisation and products to a wider market. Usually involves a single enterprise Limited commitment to common business goals in relationships with others | • Harris Technology  
• Boots Online  
• Hawaiian Greenhouse |
| **Virtual Alliance** (e-supermarket) | Involve a number of businesses sharing resources and competencies to develop some product offering Site may represent the common interface for the group or may place varied degrees emphasis on a focal firm while providing visibility to the alliance Significant use of online infrastructure and e-Commerce technologies Cross reference to sites of participating firms | • SCB Co-op  
• Jane Brooks Winery  
• LAA  
• GreenGrocer.com |
| **Virtual Community** (e-mall) | Represents an electronic marketplace involving a large number of firms and grouping of other online models | • Best of Italy  
• Sofcom |

**Figure 4. Online Business Models**

**Virtual Face**

In its basic format, the enterprise usually exists as a single business entity with some online presence primarily to advertise itself and its products. The business may also be organised around the virtual face model as the primary point of access to their entire business and products (Behrendorff, 1996). Harris Technology, Sydney and Boots Online, Melbourne, are typical examples of online SMEs employing the virtual face business model to enhance their competitive performance. While Harris Technology
targets the Australian national market in computer related products, Boots Online is a global oriented SME selling to world wide markets. Both businesses have witnessed substantial growth in sales and profit margins within two years of going online. In an elaborate form of the virtual face model, as in the case of Harris Technology, the SME may undertake extensive business activities online, including sourcing of resources and services, communication and collaboration with other firms, and the management of its customer base.

Virtual Alliance

The third generic category of online business model is the virtual community, which is a large collection of firms in the online market, including other stakeholders such as customers and government agencies. In that environment the focal SME is highly integrated with those of others and its separate existence is hardly discernible to stakeholders of the community. Examples of a virtual community are portal services such BOI (Best of Italy) Srl. and Sofcom.com.au. In both examples, the virtual community owner supplies and manages the online infrastructure on behalf of participating SMEs. This reduces the need for substantial investments in technology and infrastructure management. Participant enterprises can concentrate on selling their products. On the other hand clients are offered a one stop access to a wide range of goods and services and at reduced prices due to the relatively low cost associated with marketing and distribution channel management for the vendors.

Conclusion

Many companies already focus on core value adding processes, working with external partners to jointly enhance their customer services. These companies believe that a more flexible organisation built around a series of alliances and business relationships, is the most effective way to respond quickly and creatively to constantly changing market conditions (Miles and Snow, 1995). The conventional, vertically integrated corporation may be too slow, or have too much retained infrastructure to allow it to compete with companies which can quickly put together a customised response to its customers. If organisations are to provide a superior service then they must embrace the notion of the value alliance. The value alliance emphasises the decentralisation of control, the creation of more flexible patterns of working, a greater empowerment of the workforce, the customer, the displacement of hierarchy by teamwork, the development of a greater sense of collective responsibility and the creation of more collaborative relationships among co-workers and customers (Morin et al, 2000; Burn and Barnett, 2000). It is critical that frontline employees have immediate access to current customer information, actively enabled through a ‘contact centre’ (Figure 2).

Fundamentally, the transformation to SPECS business models is the emergence of the virtual organization requiring intelligent online interactions, operational, financial and technological strategies. The benefits gained will be the creation of online competitive advantage, improved levels of customer service, increased market size and share, and reduced transaction costs. Examples within SME’s have been cited as they are prime targets to profit from ‘smart’ strategies since infrastructures are normally more transparent and flexible when compared to large businesses. This paper, therefore, attempted to develop a SPECS framework to recognize the implications, evaluate the potential and to articulate the advantages for the evolution of an online business to a globally competitive virtual organization. The scope and opportunities within the SPECS framework provide a useful approach in this respect but the issues are complex and further research will need to challenge the existing orthodoxy for strategic management, customer relationship management and virtual organisational environments.

References

Front Line Solutions (2000) www.CRMguru.com