EMERGING COMMERCIALIZATION OF ELEARNING

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ABSTRACT

Technology innovation drives the current elearning market but recent events suggest this model is failing economically. Alternately a market driven by learners, rather than technology is more likely to be competitive and profitable. We examine elearning within the context of a developing academic and skills educational market to pose the question: do existing suppliers (old and new) meet the new market needs? Using Porter's competitive environment model to analyse the current market position of universities, publishers and other education providers within the Reeves-Ellington Producer/Consumer Framework. The authors examine what an elearning customer research model might look like by using a customer -Reeves-Ellington's supplier within the Kaplan and Norton *Balanced Scorecard* approach and the Palmer *Learning Design Framework*.

METHODOLOGY

As electronic commerce affects every aspect of learning, its impact on post-compulsory education is profound, particularly in the form of distance or elearning. Soon this global market will overtake the healthcare market in value. For those whose desire is to be smarter, this fast-paced, rapidly changing market must off offer integrated product-focused and customer-focused solutions. We believe the true power of elearning will be its ability to bring the *right* information to the *right* people at the *right* time.

In this paper we focus on the current elearning market and suggest alternate market paradigms and analytical models. This paper has two basic sections. First we review the development of the market as expressed by the producers of e-education/elearning. To understand the original market dynamics, we use Reeves-Ellington's producer/consumer framework to establish the theoretical context and apply Porter's environmental five forces model to establish how the leading producers of elearning might view and analyse their market. Secondly we suggest an alternate framework, that of customer/producer (Reeves-Ellington, 1995), that places greater emphasis on understanding the recipients of elearning and their needs as consumers. We further suggest that the balanced scorecard (Kaplan and Norton, 1996) offers a dynamic tool to gain competitive advantage, by having the primary customer drive the market. Our data sources are online materials of organizations in the industry and reports of organizations that analyse the current market.

THE MARKET DYNAMICS

Traditional bricks-and-mortar providers of tertiary education and integrated training within organizations now find themselves under substantial market pressures from their own online subsidiaries (not all successful), from commercial external providers, and from their own academics. Moreover, this marketplace is becoming increasingly global as the digitization of education enables education providers to reach previously isolated, or simply widely dispersed, markets.

The elearning market is economically significant. In the United States the figures for adult education in 1997 were: Continuing Education (\$12 billion), Corporate Training (\$66 billion), Tertiary Education (\$268 billion) (US Department of Education, National Center of Education Statistics, 1997;): \$346 billion in total and with no reason to suppose that this figure has done anything but grow in the meantime. In 1999, one in three US colleges offered some sort of accredited degree online and approximately one million students took online classes (13 million take traditional classes only). Traditional students in higher education make up less than 20% of all students. The fastest growing group attending higher education institutions are working, part-time students over 25 years of age (U.S. Department of Education, National Center of Education Statistics, 1997). As discussed in the *Hambrecht Report* (March, 2000), this new group of "learning adults" is seeking education principally to advance their careers and increase their salaries. For universities and business-to-consumer training providers, these individuals are excellent candidates for education delivered to their homes or offices. According to Morgan Keegan, in 1999 organizations spent more than \$62 billion on training-related resources, salaries, and technology. While the elearning component of these expenditures totalled +/- \$1 billion, all indications are that training in the future will be delivered less and less by instructors in a classroom and increasingly by networked technology.

Market analysts forecast the corporate elearning market to be \$10 billion by 2003. Within this sector are three areas: traditional degrees; training needs; life-long learning. (SunTrust Equitable, 2000). The underlying reasons for this are well summarized by Peter Stokes, when he says, "Social, technological and economic drivers are transforming education around the world. As globalisation encompasses local economies like never before, the development of a skilled workforce becomes a genuinely international concern." (Stokes, 1999)

Current elearning market providers and those analyzing the market follow a producer/consumer paradigm (product oriented) that focuses technology and product designs that are compatable to state of the art technology. The resultant goods and services are announced to potential consumers – primarily organizational customers who then etail to the acutual learner. For the producer, courses are the central object for action and the learner is an object to be manipulated. Courses are developed, branded and piloted. The pilot groups are then projected to represent more aggregate markets. Necessary changes and alterations are made and courses taken to market by advertising, sales and distribution teams. Underlying this paradigm is the concept that power remains with the producers and that the power of the consumer is limited. This is particularly marked in UK-style degree programs and professionally-focused training anywhere: courses are strung together into unified programs with very small (sometimes no) choice of electives. So how do existing producers fit this paradigm?

To understand the current producer market, we look at who offers distance learning and, using the Porter competitive environment model consider how they view the current and emerging market. At first glance, there are broadly five main groups of existing adult elearning provider: offshoots of traditional universities (e.g. NYUonline, Duke Online), traditional publishers (e.g. McGrawHill Online, PearsonEducation), traditional consultancies (e.g. Accenture), new online universities/university partnerships (e.g. UNext, Shanghai University) and new skills-focused training companies (e.g. WideLearning, ElementK). All of these bring their own, or licensed, product to market. To them needs to be added the etailers and educational portals (e.g. Peterson Learning, AOL) which bring products to market from a wide range of sources. Yet these divisions are not as clear as they may seem as attempts are made to merge the content creators, content publishers and educational etailers into product-driven supply chains (e.g. the Deitel computer language courses published by PrenticeHall and promoted through InformIT, or Harvard Business School online courses promoted in the UK by Xebec McGraw-Hill).

By applying Porter's competitive environment model one sees that these organizations' new positioning is a defensive reaction. In face of new entrants, traditional universities have mostly not altered their basic syllabi and degree titles, merely the mode of delivery (e.g. HeriotWatt MBA). New rivals, the online universities and university partnerships have deliberately kept programme structures identical to those in mainstream education (e.g. Jones International University, the Open University of Hong Kong with China Central Radio and Television). In both cases, new and old, the universities are responding to the bargaining power of their suppliers (the accreditation agencies and Ministries of Education that dislike surprises) and their customers, the students, who are subject to the social forces which drive individuals to choose more academic qualifications rather than vocational ones even when the demand for graduates in the workforce is oversupplied (Keep and Mayhew, 1995). Further bargaining power came in the source of governmental funding (recently stopped in the US) for online learning in response to world economic drivers (UNESCO 1996, OECD 2001). Rivalry for market position and market share has also been key especially in the hard-contested MBA market leading to some (e.g. Cornell) vigorously defending their independent brand and others looking for high-profile brand associations (e.g. the UNext model). For publishers, the switch to online learning is a response to the threat of substitution in the interface between the knowledge provider and the learner. Valuable corporate print-publishing rights threatened to be undermined by individual authors or universities producing their own digital versions; so publisher/author contracts were renegotiated and a new medium adopted. Traditional publishers control the new medium. Training and consultancy companies then faced new, less person-dependent media for their programme delivery (substitution). The result is that publishing companies with their new elearning divisions encroachion short-course training territory (new entrants) and corporations demandimore cost and time effective solutions (bargaining power of customers).

Using the Porter framework again, we see etailers and elearning portals as new entrants but again, we contend that they are largely product led with the suppliers offering only minimal dialogue to help the customer in their selection (e.g. buttons to lead to particular types of course).

Among the etailers, UNext was one of the first organizations to start to break the mould. It offers a number of brands in one location. Working with Columbia Business School, the University of Chicago Graduate School of Business, Stanford University, the London School of Economics and Political Science, and Carnegie Mellon University it offers both short courses for corporations and individuals, and a full MBA with students able to sign up for whatever they need within the

offered range. IT website has a similar "with or without" qualifications policy but goes further: many of the skills courses are provided free of charge with only expert help and assessments attracting fees – and all courses are self-paced. The product offering is wider and more flexible, but is one-sided with no producer ownership of the relationship with the individual.

eLearning portals such as HungryMinds (http://www.hungryminds.com), the International Centre for Distance Learning (http://www-icdl.open.ac.uk) and WorldWideLearn (http://www.worldwidelearn.com), all leave the onus on the potential learner to define their needs. This has spawned yet another layer of information: the elearning portal guides e.g. (http://www.hoyle.com). LIMU (http://www.limu.com) is slightly different, a "knowledge asset" trading site where would-be trainers and potential students meet, agree terms and interact live online but here the product is the platform and neither trainers nor students enter a true dialogue with the producer.

THE WAY FORWARD

The adoption of a customer/supplier paradigm, in the face of an industry locked into a producer consumer one, offers a major opportunity for a strategic competitive advantage since it maximizes the elearners benefits in ways the learner wants and not in ways dictated by the supplier. The supplier, through self-knowledge, provides only those goods and services that represent core competencies to the learner, by offering in Kenichi Ohmae's concepts, strategic degrees of freedom to both customers and suppliers.

In contrast to the producer paradigm, the underlying principle of the customer paradigm is that the customer, though expression of needs and desires joins with the supplier in determining what goods and services are to be developed and sold. The customer acts upon or toward the supplier and anticipates that the supplier will respond positively or negatively, which in turn influences the customer's further actions. If the customer talks, the supplier will respond; thus the two will alternate in a chain of interaction until a basis of exchange or technology transfer is completed. Dell Corporation has mastered these interactions very well. A visit to the company web site indicates at least four levels of technology sophistication from which base the potential customer can choose to continue. Within each of the offerings, there is the opportunity to purchase the recommended package, or to adapt it to personal needs. Within each level of choice, a number of alternatives are available. Should the customer require additional information, , additional advice is an email or telephone call away. We argue that a true Dell type of operation will appear within the elearning system and thereby gain substantial sustainable advantage; there have been attempts along this route but none so far has been either comprehensive or sustained.

The task in moving from the producer paradigm to that of a customer paradigm is to redefine supplier activities; to avoid merely marketing what has been produced and instead focus on meeting external customer requirements. The current industry players might be defined as monadic organizations that are ideologically driven, inward looking, working in abstractions, and practicing asymmetrical power. The consumers are then monadic purchasers who view themselves as powerless with respect to the companies from whom they buy, and highly isolated.

On the other hand, the customer views themselves as an independent player, a commercial player who has negotiating power and power of choice, and a player in purchasing. The supplier is a commercial entity that practices symmetrical power with its customers, is socially driven in wanting to achieve mutually satisfactory outcomes, and works to articulate known values. In the vocational skills arena, Intelinfo (http://www.intelinfo.com) is working towards this goal with the basic product portal supplemented by customer-focused tailored information. Academic institutions have yet to follow.

We project that successful organizations within the future e-learning market will couple the customer paradigm with necessary underlying commercial values by shifting the critical keys for success from technology and from what can be produced to the needs of the customer (as defined by the customer) and the method of learning preferred by the customer. If one of the existing e-learning companies is to be successful they will shift from the underlying assumption that more technology makes for better elearning to offering customer degrees of freedom of products that are meaningful to the customer. Intuitively, one might assume that these degrees of freedom would include learners the opportunity to learn within a classroom experience (c-learning), with a combination of c-learning and elearning (a mix of web, video, DC-Rom, or intranet) and with a purely distance learning experience. Additional degrees of freedom would include the ability to choose between synchronous or asynchronous environments. To ensure successful completion and social acceptance, this places particular emphasis on the proposal refinement stage of the Learning Design Framework (Palmer, 2001).

The Reeves-Ellington model, used in conjunction with Kaplan and Norton's four stage framework to measure various stages of the customer/supplier model (Reeves-Ellington, 1995; Kaplan and Norton, 1996), offers a better market understanding and should result in a strong competitive position. In order to systematize the learning-taking place in the interaction between

customer and supplier, the scorecard's "learning and growth" measures are applicable. However, rather than applying these to internal (albeit customer-related) factors as do Kaplan and Norton, the measures are better when concentrated on the end customer or user. In this case that is the elearner. Referring back to the Dell example, that is the nature of the interaction between Dell Corp and those who purchase directly. What is necessary is that there is a clear strategy of cause and effect of desired outcomes at each stage of the customer/supplier model.

Defining both the customer and customer requirements in supplier language uses the measures of customer objectives in terms of product or service outcomes, not corporate measures such as percentage increase in "credentials". This may seem obvious but is frequently impossible, as the supplier has no clear identity for the customer. A market analysis based on geography (in a global sense), age, ethnicity, aspirations, needs and income would provide a sharper ability to segment the market in ways that lead to supplier success. Only after a deep understanding of key customer needs, can a customer acquisitions strategy be developed. This is the missing link of current elearning market definitions.

With appropriate information, contacts can be made that assure a customer base that matches the suppliers' core business. Clearly if suppliers are to achieve long-term superior financial and sales performance, they must create and deliver products and services that customers value. This area is not transparent nor of real interest to the end customer, in this case elearners. They are interested in the outcomes. But they will know if the product is what they want. That needs to be determined prior to production.

Arguably, the customer base is not as homogenous as at first imagined. Learning providers therefore have to select their customer categories as some will fit into a supplier's core competency and others not. Having made this basic selection, customer needs are defined by both customers and suppliers (starting with the potential product user and working back through the supply chain to assure continuity and consistency) (Kaplan and Norton, 1996). The supplier then can segment the needs into self-contained markets and correlate them to core capabilities.

As the supplier makes the course or program, it will continually check against the learner specification. Referred to as the Development stage in the Learning Design Framework, this area is the operations process where products are made and delivered to customers. As such developers can select from many well-established appropriate measures.

The final set of Kaplan and Norton measures is two pronged: that of product performance by the elearner and of sales and profits by the company. Both must be satisfied (cf Learning Design Framework, stage 6). This stage assesses the satisfaction level of customers along specific performance criteria within the value proposition discussed above. Within the elearning product and service delivery, one might consider product content, format, delivery systems, accordance with total quality and academic frameworks (where necessary) and cost.

CONCLUSIONS

The product focus of existing suppliers is not sustainable: the market is too diverse, the costs too high and learners are being encouraged by international and national initiatives to see themselves as customers. A customer-supplier paradigm using an appropriate eLearning design framework offers a market opportunity that, as yet, has not been fully explored.

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