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**Extending Richness and Reach: Empirical Evidence
from Public Access Web sites of UK Legal Practices**

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Abstract

In their book *Blown to Bits: How the New Economics of Information Transforms Strategy*, authors Evans and Wurster see the transfer of information as a 'trade-off between richness and reach'. *Reach* refers to the number of people who share particular information, with *Richness* ('Rich') being a more complex concept combining: bandwidth, customisation, interactivity, reliability, security and currency. They argue that with the advent of powerful information and communication technologies, this historic trade-off between Richness and Reach - in general the greater the reach, the less the richness, and vice-versa - may no longer apply. It is now possible to have increasing amounts of both Reach and Richness. In the context of the marketplace for legal services, the concepts of Reach and Richness have a resonance with, for example, Susskind's latent legal marketplace and the interaction and community advocated by Terrett.

This paper has two inter-related themes. Firstly, it describes Evans and Wurster's concepts, and relates them to recent literature regarding the impact of technology on the marketplace for legal services in the United Kingdom (UK). In particular, it is suggested that Richness and Reach can be used to extend *The Legal Grid*, Richard Susskind's tool for analysing the strategic impact of technology on the legal practice. To test the refined tool, the second part of the paper examines a particular application of technology - the provision of public access Web sites by UK legal practices. Using James Ho's value-added Matrix as a tool for measuring the 'Richness' dimension of the site, the results of two surveys of legal firms' public access Web sites are presented.

Combining both the theoretical and empirical aspects of the paper, a number of issues are considered including the Web as a 'democratising' opportunity for smaller firms, and the use of client-specific Extranets, in addition to publicly available Internet sites. The paper concludes that although the Web provides Reach, offering Richness and the sense of community required for creating and sustaining relationships with potential clients could be difficult. Some suggestions are made for enhancing the 'Richness' of Web sites; along with avenues for further research.

Keywords: E-business, Internet, Web sites, Legal 500, Scotland, Evaluation, Richness and Reach.

1. Introduction

Professor Michael Porter of the Harvard Business School notes:

'[T]he key question is not whether to deploy Internet technology - companies have no choice if they want to stay competitive - but how to deploy it' (Porter, 2001, p.64),

and he concludes that:

'[T]he next stage of the Internet's evolution will involve a shift in thinking

from e-business to business, from e-strategy to strategy. Only by integrating the Internet into overall strategy will this powerful new technology become an equally powerful force for competitive advantage' (Porter, 2001, p.78).

Professor Porter was speaking in particular about Internet technology, but the point can also perhaps be made regarding the use of technology in general. Porter suggests a retrenchment in strategic thinking to the core disciplines of business and strategy, from which the e-commerce and e-business opportunities will spring.

At a time when the miasma of technology, change, globalisation and increased competition makes choosing strategic direction difficult, those who make strategic decisions frequently have turned to what are variously called tools, models or frameworks to help formulate, or crystallise, their thoughts. Classical examples of strategic thinking tools include the BCG portfolio matrix (adapted by Macfarlan and McKenney for Information Systems and termed the applications portfolio matrix) and Porter's Five Forces and value-chain. Mintzberg et al (1998) provides an excellent review of approaches to strategic management, and many of these models. In a similar vein Robson (1997) provides an overview of strategic management and information systems concepts, including a chapter entitled 'The information systems strategic planning 'toolkit'', describing the classic models/frameworks relating to information systems, including the applications portfolio matrix.

The overall aim of this paper is to consider a recently developed conceptual framework, Richness and Reach (described in the following paragraph), and how it might contribute to the strategic thinking 'toolkit' available to practitioners and academics interested in the current market place for legal services.

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This paper has two intertwined themes:

Firstly, it describes Evans and Wurster's concepts, and relates them to recent literature regarding the impact of technology on the marketplace for legal services in the United Kingdom (UK). In particular, it is suggested that Richness and Reach can be used to extend *The Legal Grid*, Richard Susskind's tool for analysing the strategic impact of technology on the legal practice.

Leading on from the theoretical discussion, the paper shows how a refined Legal Grid might inform a practitioner's thoughts or (in this case) a research agenda regarding the impact of technology. The second half of the paper examines a particular application of technology - the provision of public access Web sites by UK legal practices. Using James Ho's value-added Matrix as a tool for measuring the 'Richness' dimension of the site, the results of two surveys of legal firms' public access Web sites are presented.

The remainder of the paper is divided into six parts. Section Two outlines Evans and Wurster's concepts of Richness and Reach, and their implications for business strategy. Building on this foundation, Section Three considers some recent developments in the literature regarding models of e-business, particularly in the context of the marketplace for legal services.

Sections Four and Five present results from a survey carried out during June-August 2000 of the public access provision of Web sites offered by the largest 100 firms listed in the UK section of the *Legal 500*. This builds on work concerning a similar survey of sites offered by Scottish legal practices (Barton, Duncan, McKellar and Ruiz-Nieto, 2000). As a proxy for 'Richness', in both surveys, evaluation was based on James Ho's Matrix (Ho, 1997), which considers the sites according to the visitors' possible perception of value-added benefits. Section Six discusses the results, including a comparison with the Scottish survey. In the final section (Section Seven) conclusions are presented, based on both the theoretical and empirical work, including some suggestions for enhancing Richness and avenues for future research.

2. Richness and Reach, and the New Economics of Information

In their book *Blown to Bits: How the New Economics of Information Transforms Strategy*, authors Evans and Wurster see information as 'the glue that holds value chains and supply chains together' (Evans and Wurster, 2000, p.13). In particular, they argue that the transfer of information is a 'trade-off between richness and reach' (Evans and Wurster, 2000, p.23). *Reach* refers to the number of people who share particular information, with *Richness* being a more complex concept combining: bandwidth, customisation, interactivity, reliability, security and currency, (Table 1).

Concept	Brief definition
Bandwidth	The amount of information transferred in a given time.
Customisation	The degree to which information can be customised.
Interactivity	Dialogue between sender and recipient of the information is possible.
Reliability	Information is reliable when exchanged among a small group of trusted individuals, but not when it is circulating among a large group of strangers.
Security	Managers share highly sensitive business information only in closed-door meetings, but they will disseminate less sensitive information to a wider audience.
Currency	How up-to-date is the information? Time may be money.

Table 1: Key dimensions of Richness, Source: adapted from Evans and Wurster, 2000, p.25.

Traditionally, organisations have a choice - to increase the Reach of their products or services requires a compromise in the Richness of the product or service, and vice-versa (Figure 1).

Figure 1: The trade-off between Richness and Reach, Source: Evans and Wurster, 2000, p 24.

The concepts are applied to various dimensions of a product or service such as their marketing, as well as the nature and delivery of the product or service themselves. Evans (2000, p.37) gives the following example from marketing:

‘Newspaper advertisements reach a wide range of possible customers but have a limited, static content. Direct mail or telemarketing are a bit richer in customization and interactivity but are much more expensive, and therefore have to be targeted. ... A salesman giving his pitch offers the highest level of customization, dialogue and empathy but with only one customer at a time’.

However Evans and Wurster argue that with the advent of powerful information and communication technologies, this historic trade-off between Rich and Reach - in general the greater the reach, the less the richness, and vice-versa - may no longer apply. It is now possible to have the benefits of both Reach and Rich. This sea change in strategic possibilities has come through greater connectivity through electronic networks and, increasingly, the adherence to standards for transmitting and receiving information in a digital format. Connectivity and standards have led to the ‘deconstruction’ of business structures (Evans and Wurster, 2000, p.39) and the ‘disintermediation’ of traditional intermediaries (Evans and Wurster, 2000, p.69). In this new environment organisations can compete on three dimensions: Reach, Affiliation and Richness.

Increased Reach implies greater choice on the part of the consumer. With the Internet this choice extends beyond the number of possible service providers to include the possibility of 24 hour, 7 day a week, 365 day purchasing. The extended Reach may, for example, benefit the consumer through the ability to find precisely what is required and/or the lowest cost. On the other hand, choice ‘beyond a certain point, implies bewilderment’ (Evans and Wurster, 2000, p.64) and search costs may be too ‘exhausting to be exhaustive, and people rarely do it’ (Evans and Wurster, 2000, p.103). We tend to follow a familiar path, rather than endure the time and expense of a comprehensive search. Technology may reinforce this tendency, for example, Web browsers’ ability to employ a system of Favourites or Bookmarks to keep track of sites visited may lead to revisiting sites rather than searching for new, perhaps more appropriate, ones (Evans and Wurster, 2000, p.107). This can lead to the emergence of industry of business sector ‘navigators’ who can guide those searching for product or service providers through the myriad of alternatives. Extending the concept of navigation, retailers are themselves navigators guiding the consumer through the range of products offered by manufacturers.

Alternatively navigators might be software based (such as a Web search engine), or people-based.

Competing on Richness has two dimensions - Richness with respect to the *consumer*, or the *product/service* (Evans and Wurster, 2000, p.149). With respect to the consumer this refers to customer specific marketing to a 'segment-of-one' (Evans and Wurster, 2000, p.149). Increasing the Richness of the product or service might include increasing the availability of technical and product/service information as well as 'branding' of the product, service, or the firm itself. In general 'distance constrains richness' (Evans and Wurster, 2000, p.220), though it may be possible to 'forestall reach by escalating richness' (Evans and Wurster, 2000, p.145).

The traditional trade-off between Reach and Richness (Figure 1) can be replaced by a new trade-off curve along which although a trade-off may still exist, both the Reach and Richness dimensions operate at higher levels than before (Figure 2).

Figure 2: Richness versus Reach - new opportunities, Source: Evans and Wurster, 2000, p 148.

In the context of the legal services marketplace, the concepts of Reach and Richness have a resonance with some of the concepts, ideas and models espoused by authors such as Susskind, Terrett and others. The following section explores some of these links.

3. Reach, Richness and Resonance

3.1 Susskind and the Future of Law

In his seminal work *The Future of Law*, Richard Susskind (1998) foresaw three distinct types of market for legal services: traditional, commoditised and latent. The *traditional* market for complex, socially significant and high value work provided in the traditional one-to-one manner will still exist. However it would be enhanced where possible to improve efficiency and speed of delivery. Many other categories of legal work will become *commoditised* as price is increasingly based on market forces and the client's perception of value, rather than cost to the practitioner plus an appropriate margin. Technology allows the systemisation of routine, repetitive legal work leading to the 'disintermediation of legal advisers' (Susskind, 1998, p.xlvii) as less highly qualified staff are required. This will result in the use of paralegals and greater leverage, or the re-packaging of legal advice which will become available via, for example, the World-Wide-Web.

As IT facilitates the cheap and speedy delivery of legal advice, many new markets will open up for legal advice where the traditional paradigm of legal services rendered delivery too slow and expensive, capturing a *latent legal market*. This could be caricatured as a move from 'It's never too late to call your solicitor' (reactive and one-to-one) to 'It's never too early to receive on-line legal advice' (pro-active and delivered using IT perhaps without any input from a human legal advisor). An apology is due for liberties taken here with the Law Society of Scotland's marketing slogan.

In Evans and Wurster's terms, the traditional delivery of legal services is highly Rich but has limited Reach; but with the advent of technology both the Reach (latent legal market) and Richness can be extended. For example, in the latent legal marketplace technologies such as the Web and CD-ROMs could be used to extend the availability of legal information. This could allow individuals to benefit where previously the information and advice was inaccessible or undesirable to seek due to cost, time or location.

In his most recent statement and refinement of his views regarding the impact of IT on the legal profession (*Transforming the Law: Essays on Technology, Justice and the Legal Marketplace*, 2000), Susskind introduces *The Legal Grid* as a model to assist in:

'clarify[ing] the complex and often confusing interrelationships between the concepts of IT, information and knowledge' (Susskind, 2000, p.5).

The Grid, as adapted by Susskind for the legal marketplace, is shown in Figure 3.

Figure 3: Susskind's Legal Grid, Source: Susskind, 2000, p 9.

The grid is divided into four quadrants along two dimensions: Firstly, a horizontal dimension portraying the transformation of data through information to knowledge. The term Technology rather than data is used for pragmatic reasons (Susskind, 2000, p.8). Secondly, a vertical dimension where there is a demarcation between the internal processes and demands of the firm; and an external, client-facing aspect.

A key factor is the linking of the various aspects of the Grid through appropriate network and communications technologies. These are frequently Web-based in their delivery and could be characterised as:

Intranets: sharing of information and knowledge within the firm.

Extranets: sharing of information and knowledge with key partners (eg clients).

Internet: sharing information and knowledge with clients, prospective clients and other interested parties outwith the firm. Usually conducted via a 'public access' Web site.

The three '-nets' are depicted in Figure 4. The subdivision is for heuristic purposes only and is not a perfect representation of all possible situations. For example Extranets might also be formed as part of inter-firm alliance or used to deliver particular services, as well as client relationships.

Figure 4: Key network paradigms

It is not the intention here to reiterate Susskind's observations and insights arising from

the Grid. Susskind (2000, p.45) does refer to Evans and Wursters' work, and the authors of this paper suggest that it may be possible to use Reach and Richness to enhance the Grid as an analytical tool for strategic thinking. In extending the Susskind Grid the key notion is that as an additional dimension, within each of the quadrants of the Grid there can also be a tradeoff between Richness and Reach, with technology offering the possibility of enhancing Richness, Reach or both.

In keeping with the technology (data) → Information → Knowledge transformation, Richness increases from left to right along the horizontal axis. Similarly, Reach increases from the lower part of the graph to the upper, moving from an internal to external focus. See Figure 5. The key dimensions of Susskind's Grid have been shaded for emphasis. Similarly, the axes of the Richness-Reach trade-off have been repositioned and labeled. A curve illustrating a traditional trade-off between Richness and Reach is shown in reach quadrant for illustration purposes only; Evans and Wursters' thesis is that existing trade-offs will be 'blown to bits' through the impact of technology.

To give some examples: The provision of on-line legal services via the Internet (top right hand quadrant) enhances the Reach dimension in that, potentially at least legal services are more widely available than before. Similarly the advent of client relationship systems provides additional Richness to the client's day to day understanding of how the matter is progressing; this is made possible by technologies extending Reach. In the Back-office quadrant, mobile computing (eg laptops and WAP phones) is extending Reach. The use of integrated systems provides the opportunity for data warehousing and data mining, allowing users to interrogate the system concerning matters, trends, performance and outputs in a way that would have not been possible with manual systems or even disparate IT systems (greater Richness).

Figure 5: Extending the Susskind Legal Grid with Reach and Richness

3.2 Encounters and Relationships

Gutek and Welsh (2000) characterise the delivery of services in terms of the ways in which customers (clients in the case of legal firms) and the service providers interact. They argue there are two basic modes of interaction:

In an *Encounter*, the customer interacts with the organisation, and whoever happens to be representing it at the time. Encounters are typically one-off transactions and new customers come via traditional advertising media routes. In contrast, *Relationship* transactions are usually between a specific customer and individual within the firm. Transactions are usually repeated (giving the 'relationship'), and new customers typically come forward via word of mouth.

Legal practices traditionally see themselves as engaged in a relationship-based form of service delivery. However as Maister notes, in return for their fees, clients of a professional service firm seek Expertise, Experience and Efficiency (Maister, 1993). Expertise requires considerable knowledge and problem-solving skills to provide clients

with a creative solution to a unique problem. With Experience the problem to be solved may not be unique but still require considerable skill, and clients will look to firms with individuals who have a good record of work in similar areas. Efficiency work can be handled competently by many firms or individuals, and cost and speed are key concerns.

Although not a perfect match, Expertise work would be perhaps best served in a relationship type transaction where the client dealt with a firm where trust and confidence had been built up over a period of time. Equally, over the course of the relationship the firm would be gathering a unique insight into the specific client as well as into its markets. In contrast, Efficiency work may be carried out equally well by a number of individuals so one-off encounters would be suitable with low cost and high-speed providers.

Maister argues that the tendency of any expertise is for it to become more generally available, and to move from Expertise through Experience to Efficiency. This migration of legal services can be achieved through the application of technology, including the Web, and provides what is called the 'commoditisation' of the legal marketplace into a low cost, easy access environment (Susskind, 1998, 2000; Terrett, 2000).

Focusing on the use of the Web to market and deliver legal services, Terrett (2000) argues that, Content, Communication and Community are paramount ('the '3 Cs'' (Terrett, 2000, p.27). The *content* of the site must be focused on the needs of its audience. He sees three categories of potential audience: existing clients and potential clients of the firm; potential employees and recruits to the firm; and casual visitors. The quality of information provided is important, particularly as reputation is a key element in many practices' overall business strategy (Love et al, 1995). *Communication* refers to the opportunity for visitors to interact, and perhaps establish some form of dialog with the firm through the site. Quality content combined with suitable interactivity can provide a potent mixture that can sustain the site's value over time by providing visitors with a sense of *community*. Of course these values could be applied to all Web sites, not just those offered by legal practices. Terrett's (2000) sense of community equates with a relationship type series of transactions. If a Web site can achieve the interaction and community advocated by Terrett (2000) it may achieve both the Reach, and the Richness defined in Gutek and Welsh's (2000) relationship type transactions.

The potential trade-off between Reach and Rich is also alluded to by Katsh who uses the term 'informational distance' (Katsh, 1995, p.79), which refers to the manner in which information is used, and the skills needed to access it. In the print era information was in a tangible form interpreted and applied by the lawyer whose credibility could be established, at least to some extent, on the basis of membership of a professional body. Compare this to the digital era where 'experts may be easily accessible but trustworthy information may not' (Katsh, 1995, p.90). So ease of access (Reach) may be at the expense of insecurity regarding validity of the advice (Rich).

3.3 Summary

Sections Two and Three described the concepts of Reach and Richness, and showed how

the twin dimensions are reflected in the literature relating to technological developments in the marketplace for legal services. Combining Evans and Wursters' concepts, a refinement to Susskind's model of 'the Legal Grid' was suggested (we term this 'the extended Legal Grid'). The aim is to add to the 'conceptual toolkit' of practitioners, rather than replace existing models - at a time of considerable change new models are emerging and new concepts (or combinations of concepts) may be appropriate in understanding, and perhaps predicting, the likely pattern of changes.

To give one example of how the extended Legal Grid could be used, the second part of this paper considers the Reach and Richness concepts in relation to one particular aspect of technology - the public access Web sites offered by legal practices. The next section describes the rationale behind the empirical work, the population/sampling frame, and the instrument used.

4. Empirical Work

4.1 Rationale and Objectives

As a test bed for applying the concepts of Richness and Reach to the marketplace for legal services, the focus of the empirical research was 'public access Web sites' offered by legal practices. In other words those Web sites which are available to, and can be visited by, any member of the general public with 'typical' access to the Internet. The reasons for selecting this particular area are discussed below.

Firstly, public access Web sites extend the Reach of legal practices to provide information regarding the firm, its services, personnel and so on via a medium not restricted by conventional boundaries of location and time. Beyond basic promotional information ('on-line brochures'), the Richness of the site can be enhanced, becoming more sophisticated by offering regularly updated legal articles and publications and so on; building interactive relationships with visitors and a sense of community. The acme of these sites could be to provide legal services delivered on-line, for payment, which also takes place on-line.

Secondly, by definition, the sites are available to the vast majority of Web users. Legal practices offering sites have a number of interesting choices in deciding who the site is targeted at - the extent of their Reach, at least from their own perspective. For example, existing clients, potential clients, the general public, potential recruits (including graduates), press/journalists and others such as fellow solicitors, accountants or surveyors, and so on. The targets' status may vary over time: as the general public becomes potential clients, then existing clients, and so on. As the target audience of the sites may vary so will their visitors' perceptions of the Richness offered, or required, by the site.

Thirdly, the particular niche of public access Web sites was chosen for pragmatic reasons. In evaluating the Richness aspect of the sites, an appropriate instrument was available and had been used by the authors in the past. See Section 4.3 below for a description of the

instrument used and evaluation method (also Barton, Duncan, McKellar and Ruiz-Nieto, 2000). Furthermore, restricting the scope of the empirical work to public access sites was appropriate within the resources available to the project in terms of the time-scale for data collection and opportunity. The researchers were not clients of the firms and so had not, for example, paid for access to Extranet sites (see Figure 4 above). Although the existence of Extranet type sites and other additional sites (eg for recruitment) offered by the firms was noted as part of the assessment of the sites (see below) the evaluation did not extend to these additional sites. This was because, firstly, they were out with the remit of the study, but more importantly were not considered due to the difficulties in securing access to these sites to evaluate them in a manner consistent with the public access sites. The empirical work therefore focuses on a particular type of Web site offered by legal practice so although e-business and e-commerce issues are discussed, the intention was not to provide a comprehensive review of firms' e-business provisions.

In general terms, the objectives of the empirical research were two-fold. Firstly, to identify all the public access Web sites offered by the top 100 legal practices in the UK at the time of the study (June to August 2000). Secondly, to evaluate these sites according to a number of clearly defined criteria to gain a picture of the Richness of the sites.

4.2 Identification of Sites

Taking the number of fee-earners of a firm as a proxy for firm size, the sample is based on the largest 100 firms listed in the UK section of the *Legal 500* Web site (see <http://www.icclaw.com/l500/uk_fee.htm>, accessed June-August 2000. The International Centre for Commercial Law compiles the Legal 500, and as well the number of fee-earners, the site also provides data on gross annual fee income and average profit per equity partner. In addition the site offers an independent evaluation of the strength of firms in particular segments of the legal services market. Although the site focuses on firms conducting business primarily with commercial clients, many firms also have a private client dimension to their practice. The reputation and cachet of appearing in the Legal 500 listing is such that a number of firms use their ranking and assessment descriptions as a marketing feature on their Web sites.

The size of firms in the sample ranged from 113 to 1,996 fee-earners. The sample is contiguous with the 100 largest legal firms in the UK (abbreviated to L100). However it is worth noting that these represent an extreme in size and in general, legal practices, the focus of our research, are typically small organisations (see for example Christian, 1998). For small firms the Web provides an opportunity to break free from the traditional indicators of reputation and expertise such as the size and opulence of offices, and offers what Susskind calls a 'democratization within the legal profession' (Susskind, 1998, p.229).

The identification and evaluation of sites took place June-August 2000, based on Legal 500 data accurate as at 1 May 1999 and available via <<http://www.icclaw.com/l500/howto.htm>>. In ascertaining whether or not a firm had a Web site, four sources were used:

- Details from the Legal 500 listing itself.
- Delia Venables' *Portal to Legal Resources in the UK and Ireland* (<<http://www.venables.co.uk>>).
- Nick Holmes' *InfoLaw: Information for Lawyers Limited's Gateway to the UK Legal Internet* (<<http://www.infolaw.co.uk>>).
- A general search engine - Infoseek.

The first two sources are well-respected portals to a wide range of legal information and resources, including links to legal practices' Web sites. In practice, none of these sources, by themselves, proved to be comprehensive.

Ninety sites were identified, and evaluated, representing 90% of the total sample, see Table 2.

Status of Web Site	Number of Firms
Web site identified	90
No site found	3
URL gave directory listing, but no site	2
Site 'under construction' or 'available shortly'	2
Firm merged with another Legal 100 firm	2
Very brief one page listing in general Internet directory	1
Total number of firms	100

Table 2: *Categorisation of Web sites - L100*

As the position, both in relation to the number of sites and the numbers of firms, is ever-changing, comparing the 90% of firms with Web sites in the L100 with the introduction of Web sites by UK firms as a whole is problematic. As a working calculation, taking approximately 11,000 firms and 800 Web sites in total in the UK at the time of writing, the equivalent penetration of Web sites into the profession as a whole is 7%. These figures are based on information from Venables' site, Terrett (2000, p.xiii) and Barton, Duncan, McKellar and Ruiz-Nieto (2000).

The overwhelming majority of the L100 firms were based in London or the south-east corner of the UK. A small number of firms were International with offices in London. Several of the small number of regionally based firms (including some from Scotland) also had offices in London. As the Legal 500 focuses primarily on commercial law, and London is the commercial centre of the UK, this geographical imbalance is not surprising. For this reason, the results have not been analysed in relation to location of the firms' offices.

4.3 Assessment Instrument

Sites were evaluated using James Ho's Matrix (1997). Ho's Matrix was chosen because it provides a general framework for evaluating Web sites from the perspective of the customer, or prospective customer. Ho surveyed a varied sample of over 1,000 commercial sites across a range of countries, industries and firm sizes. Based on his sample Ho concluded that at the time of his survey sites mainly provided added value in terms of promotion and provision, with on-line processing of business transactions still undeveloped. Similarly, and closer to home, Webb and Sayer (1998) found that small and medium-sized enterprises (SMEs) in Northern Ireland were only beginning to make use of the Web as a business tool.

Ho classified the business purposes of a commercial web site into three categories:

1. **Promotion**, which is specific to the products and services that a business offers to customers;
2. **Provision** refers to the supply of information to gain goodwill, exposure, credibility, or to expedite communication;
3. **Processing** refers to those business transactions that are beyond the generation of sales leads by promotion.

He also considers four types of value creation:

1. **Timely** applies to time-sensitive information and not to the speed of its delivery;
2. **Custom** is predicated on predisposed preferences of the visitor;
3. **Logistic** is predicated on pre-programmed propositions of the site;
4. **Sensational** is totally subjective.

To clarify the terminology, Custom can be regarded as value arising out of the interaction between the Site and the visitor where the visitor has the choice (their 'predisposed preferences') - we prefer to use the term 'Interactive' - whereas Logistic is more a case of 'take it or leave it' (Non-interactive). The framework can be illustrated as a three by four matrix in Table 3. To aid understanding, examples are given of the specific facilities a legal site might offer in each quadrant.

PURPOSE	Promotion	Provision	Processing
VALUE			
Timely	Services on offer	Press releases; Job adverts	Special offers
Custom/ Interactive		E-mail link to fee-earners	General e-mail

link to firm Services offered <i>and paid for via site</i> (E-commerce)			
Logistic/ Non-interactive		List of services offered	General info re staff
etc (not services)		Services offered by site but paid <i>by non-site method</i>	
Sensational	Superior web design	Downloads	Discounts for web users

Table 3: Examples of Ho's Matrix for evaluating commercial Web sites

In evaluating the sites, one point is allocated to each quadrant if the site has a facility that meets the relevant criteria. The maximum score is 12 points (one per quadrant). This method has the virtue of simplicity, although a limitation is that it penalises sites where several aspects fulfil the same criteria since only one will count towards the overall score.

The matrix was chosen because Ho's concepts echoed Evans and Wurster's dimensions of richness (see Table 1) - for example Customisation (Custom in the matrix) and Currency (Timely) and the matrix's focus on interactive/non-interactive aspects of the added value dimension. An additional benefit was the simplicity of the scoring system, with a higher score for the matrix equating to greater Richness in Evans and Wurster's terms. Finally, the authors had prior experience in using the instrument (in conjunction with a second instrument) in evaluating public access Web sites offered by legal practices in Scotland (Barton, Duncan, McKellar and Ruiz-Nieto, 2000).

5. Results

Overall, the scores achieved by the 90 firms ranged from two to eight out of a maximum possible score of 12, and had an average of score of 5.4. Even the sites with the highest score fell well short of scoring in all quadrants of the matrix and the scores achieved tended to hit particular quadrants and miss others (discussed below).

Comparing the scores by size of firm (Table 4) there was, overall, little variation in the average scores for firms between 100 and 999 fee-earners (around 5.4). The small number of firms with 1000 fee-earners or more fared slightly better, with an average of 6.5.

	Score (Out of 12)		Minimum Score		Maximum Score	
	Average Score	% of sample				
Overall	2	8	5.4		100%	
No of fee-earners						
1000 plus	5	8	6.5		7%	
500-999	2	7	5.5		11%	
300-499	4	7	5.5		12%	
200-299	4	7	5.4		23%	
100-199	3	8	5.2		47%	

Table 4: Ho's Matrix: results by size of firm

Across the sample there was little variation in the maximum values scored (7 or 8 across

the board). The minimum values showed slightly more variation with the largest firms also achieving the highest minimum value (a score of 5). However the next largest group 500-599 showed the lowest minimum values of any of the groups.

The average scores suggest larger firms may be able to produce more effective Web sites. However there is little variation in maximum scores, and a poor site offered by a larger firm may be worse in some aspects than a poor site offered by a smaller firm. This latter finding offers some support for Susskind's (1998) concept of 'democratisation' within the profession via the Web.

In evaluating the sites, a 'hit' occurs when a feature of the site was observed and allocated to one of the twelve quadrants of the matrix. As mentioned above, one limitation of the matrix is that multiple 'hits' in the same quadrant does not improve the firm's overall score. For example if the evaluation of a firm's site noted five features in the Promotion and Timely quadrant, this would still only count as a score of '1' under Ho's original scoring method.

Table 5 presents the total number of hits, by size of firm. Rather than having a maximum score limited to 12 points as required under Ho's method, in this case the maximum score is only limited by the total number of features of the site 'hitting' quadrants in the matrix (eg in the earlier example, five hits gives '5' points scored).

Score	Minimum Score	Maximum Score	Range:		
Maximum Score minus Minimum Score	Average Score		% of sample		
Overall	4	17	13	10.8	
100%					
No of fee-earners					
1000 plus	9	15	6	12.0	7%
500-999	7	13	6	10.8	11%
300-499	6	14	8	10.6	12%
200-299	6	16	10	11.1	23%
100-199	4	17	13	10.6	47%

Table 5: Total number of hits: L100 results by size of firm

Analysis by the number of hits bolsters some of the themes emerging from the matrix scores, but undermines others. The average total number of hits was 10.8. The averages were slightly more varied than for the matrix scores, with again firms in the 1000 fee-earner or more (1000 plus) cohort having the highest average number of hits.

Reinforcing the results of the matrix scores, there was a clear relationship between the minimum scores and the size of firm. The minimum score for the largest cohort of 1000 fee-earners or more (9 hits) was more than twice that of the 100-199 fee-earner cohort (4 hits).

Apart from the 1000 plus cohort (maximum hit score of 15), the maximum scores were inversely proportional to the size of firm and reinforces the view of the democratic aspect of the Web that smaller firms can produce Web sites of a standard which larger firms might envy. The range of scores (the Maximum score minus the Minimum score for each cohort) reveals that the larger firms showed, overall, a similar variation in standard (a difference of 6 or 8). Whereas, in contrast, the cohort of smallest firms had a range of 13 points having both the lowest and highest scores overall.

As could be expected, the number of hits and the scores for the Ho matrix were positively related, with a correlation coefficient of 0.74.

Having considered the pattern of firms' overall scores, the dispersion of the scores within the matrix itself was examined. Table 6 identifies the overall distribution of hits across the Purpose and Value dimensions. (Due to limitations in column space, *Processing* has been abbreviated to *Process*.) The percentages refer to the score in each quadrant (or row/column total) as a proportion of the total number of hits (976) rounded to zero decimal places.

PURPOSE	Promotion	Provision	Process	Totals	
VALUE					
Timely	8 1%	154 16%	0 0%	162 17%	
Custom/ Interactive	82 8%	174 18%	0 0%	256 26%	
Logistic/ Non-interactive		111 11%	354 36%	14 2%	470 49%
Sensational	6 1%	73 7%	0 0%	88 8%	
Totals	207 21%	753 77%	14 2%	976 100%	

Table 6: Ho's Matrix: L100 number/percentage of hits in each sector

Across the *Purpose* dimension 'Provision' clearly scored the highest, with 753 points from a total of 976 (77%), 'Promotion' was 207 points (21%) and 14 points were scored in 'Processing' (2%). Based on these results, it can be concluded that the main business purpose of the L100 sites was clearly the provision of information about the firm such as:

- A profile of the firm;
- Details of the location of the firm;
- Potted biographies of partners and, perhaps, other fee-earners;
- Legal articles and newsletters;
- Details concerning recruitment opportunities.

Although less significant than Provision, Promotion of the firm and its services was still important with 21% of the hits. The results highlight that at the time of evaluation, the L100 web sites were not directly utilising the Web as a tool for delivery of legal services

to the general public. Based on Ho's criteria, only a limited number of sites were offering e-commerce applications, (2% of the total number of hits). This finding is described in more detail below; it is perhaps worth reiterating that these (typically) Extranet sites were not evaluated.

Considering the *Value* dimension of the matrix, the value creation of the L100 sites comes from 'Logistic/Non-interactive' with a total score of 479 (49% of the total number of hits), then 'Custom/Interactive' with 256 (26%). 'Timely' is third with 162 points (17%) and finally 'Sensational' with 79 (8%).

Some of these points, along with examples of the features of the sites, are discussed in more detail in the next section.

6. Discussion

6.1 Who is the Audience?

As described by Terrett (2000) the sites surveyed appeared to be aimed at several potential audiences - existing clients, potential clients and potential employees. In particular many firms devoted considerable effort to their recruitment pages, with an emphasis on graduate trainees, and running on occasion to having a separate graduate recruitment site. As well as information about the firm, current vacancies (but see Section 5.4 below), testimonials from current or qualified trainees, and, in a number of cases application forms, were available on-line. In a small number of cases the application could also be submitted on-line.

The whole area of graduate recruitment and the impact of the Web could, in itself, provide the focus for future research - see for example the debate regarding Web-based and CD-ROM-based alternatives to the traditional graduate recruitment fair (Barker, 2000).

6.2 A Sense of Community?

Both Terrett (2000) and Evans and Wurster (2000) highlight the importance of interactivity in creating a site that offers value to visitors and encourages them to revisit, and perhaps build up a relationship with the firm - a sense of community. In terms of Ho's matrix this was, in particular, related to the Custom or (as we term it) Interactive level. To reiterate, the key element is that the visitor can elect when and how they relate to/with the firm/site. Examples of Interactive features included:

- A general search engine allowing visitors to quickly find the parts of the site they want to see;
- A general e-mail link or electronic form allowing correspondence on whatever legal topic the sender wishes.

These examples would relate to the general Provision of the site. The following relate more directly to the promotion of the firm's services:

- Instructing the firm on-line via an electronic form;
- E-mail links to particular partners. This was only appropriate when it was related to the firm's services. In several sites links could be made from particular services offered, to potted biographies of partners who specialised in that area, and in turn the partner could be e-mailed.

This last example illustrates that in some case it was the way the site was designed that was important, and the way the features and pages inter-linked to provide or enhance the opportunities for interactivity. For example without the service ↔ partner ↔ e-mail linkages, a visitor would have to know that a specific partner was in fact the firm's leading expert on the specific area of interest.

6.3 Where is the E-commerce?

Reiterating the point made in earlier in Section 4, 2% of the total number of hits were in the Processing column of the matrix, which is concerned with conducting business transactions via the Web (e-commerce). At first glance this seems a relatively 'poor' result. However a number of caveats must be made.

Firstly, like most survey data, the necessary gap between data collection, analysis, interpretation, and presentation of results means that the data represents the historical position (Summer 2000) rather than the current position (Spring 2001). The current position is likely to be understated. Secondly, the percentage figure is diminished by its presentation as a proportion of the total number of hits; it is only one element among many. An alternative analysis is that the percentage figure represented 14 hits across 12 firms. This equates to 13% of the 90 firms who had Web sites and indicates that a significant minority of firms provided an e-commerce aspect to their site, conducting business on-line. These e-commerce services were delivered via Extranet type services rather directly from the public site which, as stated earlier in this paper, were not included as part of our survey. Some examples are given in Table 7.

Firm	Name of Service	Subject/purpose
Clifford Chance	NextLaw	World-wide data protection.
Linklaters	Blue Flag	European Financial/banking regulation.
Simmons and Simmons	Matchco	Links those with business ideas with potential investors.
Addleshaw Booth	ENACT	Web and traditionally based volume conveyancing and re-mortgage services.
Rowe and Maw	Fastrack	On-line access to insurance/underwriting reports and information for clients.
Dechert	Docshare	Secure on-line environment for sending,

receiving, editing and filing documents.

Mourant de Feu et Jeune	ESOPs	Secure on-line access to employee share ownership plans administered by firm.
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Table 7: Examples of legal Extranet services

Beyond general information regarding the services offered, these Extranet services were typically client specific and password protected. In some cases they were value-added services for clients, rather than truly separate stand-alone products. As the researchers were not actually in the market to purchase the legal services offered, and/or had sufficient funds available, they could not gain access to the secure areas of these sites. To reiterate the point made in Section 4.3 these Extranet sites were beyond the scope of the research - the research involved evaluation of the firms' primary site (public access Web site), and stopped short of a detailed investigation of the cost and scope of the services offered via these ancillary sites. The authors' interest was in evaluating the public access sites in the context of Evans and Wurster's concepts.

6.4 As Time Goes By

One facet of the matrix was the use of time-sensitive information to add value to the experience of visiting the site. In general firms scored in this area through the Provision rather than Promotion or Processing areas (154 hits compared to 8 and zero respectively). Typical time-sensitive items in the Timely-Provision sector included:

- Press releases/media briefings;
- 'What's New' features regarding the firm or the site;
- An events or seminar programme;
- Recruitment/job vacancy details.

However, to score in this sector the feature had to have a date indicating when an item related to, or was released, and show some evidence of being 'current' and kept up-to-date. In general, this was an area that much more could have been made of by almost all of the sites surveyed. In many cases, what could have been a Timely/Provision feature became a Non-Interactive/Provision feature as there was no date, or if there was, it was hardly 'current' and hence time-sensitive. For example, 'latest' press releases dated August 1999 would not be considered time sensitive when viewing the site in August 2000.

To take another example, a number of sites had as part of a Recruitment section 'current vacancies' or 'current opportunities'. But this is not enough; there needs to be a date, or else it is an act of faith on the part of the interested visitor that the vacancy still exists rather than relating to when the site was last updated several months before. For example one site's recruitment pages noted 'No current vacancies this month', but there was no

indication as to which month or year was being referred to. The copyright link from the home page of the site gave a date of 1999 - if this was the last time the site was updated then it would not be very current for the visitor in August 2000. If the site had been updated more recently, then perhaps that should have been stated.

The issue of timeliness poses questions not only about the design of the site (dating items or pages) but also its maintenance (Eisenstadt and Vincent, 2000, p.x):

‘The significance of the ‘maintenance burden’ cannot be overstated. Not only can everyone access your Web site now, but they can see how out of date it is with respect to recent developments.’

Should sites positively promote their timeliness?

6.5 What is Sensational?

As noted in the description of the matrix (see Section 4.3), the ‘Sensational’ dimension was a subjective element. In the Sensational-Provision sector items included having the option of a number of languages for the Home Page, puzzles on the recruitment pages, a trainee chat messaging forum, and the ability to send an on-line postcard. Another example was a virtual tour of the firm’s offices, including the ability to pan through 360 degrees, and to ‘move’ between rooms.

Overall, perhaps the low score for the ‘Sensational’ sector is not surprising, as traditionally legal practices would generally prefer themselves to be perceived as reputable, and perhaps even conservative (with a small ‘c’).

One unexpected result was that only 29 from the 90 firms evaluated, around a third, had links to external organisations or sites. The importance of external links as part of your site is forcefully expressed by Neilson (2000, p.70) in the following terms:

‘The most fundamental reason to include outbound links on your site is that they form a value-added part of your content that comes very cheaply. At any given point, it is the web designer’s duty to give users the best links to the most valuable destinations that will be of the most use to the users. Whatever value the user derives from the external site will partly rub off on your site because you guided the user to that site. If users feel that they get good results out of going to your site, they will return again and again. The links turn into content and become a reason all by themselves for users to like your site and use it.’

Providing external links from your site is a cornerstone of the Web culture - link to my site and I’ll link to yours. For example only a handful of sites offered links to some of their clients’ Web sites, and an even smaller number provided links to their clients’ Web sites where the client was mentioned in, for example, the firm’s press releases - an opportunity lost?

6.6 Netscape Versus Internet Explorer

The sites were primarily evaluated using the Web browsing software Netscape Communicator version 4.7. Although the survey was not based on technical criteria, it is worth noting that on a small number of occasions the site was better viewed using the browser Internet Explorer version 5. The types of difficulties associated with Netscape included links that did not work, pages that did not load (in Internet Explorer a pop-up window appeared), and images of partners that appeared in Internet Explorer but not Netscape.

It is not known whether the compatibility of the site across different browsers was an issue considered by the site developers, but it is important if the firm is to present its site in the best light to all potential clients and employees who visit the site (Nielsen, 2000). The developers of the site should normally test this aspect of the site's design prior to its launch.

6.7 Comparison with Scottish Survey

As already noted the L100 firms are, for legal practices, large-scale organisations. A comparison can be made with an earlier survey (conducted in 1999) by the authors of this paper of 83 web sites offered by legal practices in Scotland (at that time this represented all the sites offered by Scottish legal firms). The Scottish survey also used Ho's matrix as the evaluation instrument and its conduct and results are described in detail in Barton, Duncan, McKellar and Ruiz-Nieto (2000). The two surveys overlap only in the case of four firms. An important difference between the two surveys is that firms in the Scottish survey are predominantly small-scale with 70% of the firms with sites studied having 10 partners or less (Barton, Duncan, McKellar and Ruiz-Nieto, 2000, Figure 1). By way of comparison, the first ranked firm in the L100 listing had 270 partners, and the smallest (ranked 100th) had 23 partners. This provides a good contrast between the two groups based on the size of firm, bearing in mind, of course, differences in jurisdiction and client base.

Comparing the minimum and maximum scores, there is little difference between the two surveys, with the L100 firms being one point higher at both extremes (Table 8). On average, the larger L100 firms scored 1.7 points higher than the smaller Scottish firms did. This appears to suggest that larger firms who may, potentially, spend more on their site, and have greater in-house expertise will, on average, obtain the fruits of their investment and obtain a higher score for their site. At the extremes however, there may be little difference.

Survey	Minimum Score	Maximum Score	Average Score
L100	2	8	5.4
Scotland	1	7	3.7

Table 8: Comparison of L100 and Scottish surveys by Ho's Matrix scores (maximum = 12)

Comparing the total number of hits and the sample size in both surveys, the L100 survey had, on average, 11 hits per firm and the Scottish survey 4 hits. This suggests that along with a higher average score for the matrix, the larger firms had considerably more developed sites and were scoring almost three times the number of hits on the matrix. Again perhaps the available resources are a factor.

Looking within the matrix itself, Table 9 presents the percentage of hits in each sector of the matrix for both surveys. The upper figure is the L100 result, and the lower figure (in bold) is from the Scottish survey. Figures have been rounded to zero decimal places.

PURPOSE	Promotion	Provision	Process	Totals	
VALUE					
Timely	1% 0%	16% 8%	0% 0%	17% 8%	
Custom/ Interactive		8% 17%	18% 25%	0% 0%	26% 42%
Logistic/ Non-interactive		11% 19%	36% 22%	2% 0%	49% 42%
Sensational	1% 2%	7% 6%	0% 0%	8% 8%	
Totals	21% 38%	77% 61%	2% 1%	100% 100%	

Table 9: Comparison of L100 and Scottish surveys: percentage of hits in each sector

Comparing the scores for the main sectors of the matrix, in some cases, such as the percentages for Sensational and Processing, little distinction can be made between the surveys. For example both surveys showed Logistic/Non-interactive to be the main value adding dimension. However in other areas, interesting differences arose:

The incidence of time sensitive information (Timely) in the L100 (16%) was double that of the Scottish firms (8%). Could this reflect the larger L100 firms having more resources to keep the sites up-to-date?

Regarding the value-added axis of the matrix, the Scottish sites were more Custom-Interactive in comparison with the L100 sites (42% versus 26%). Alternatively, the L100 sites appear to favour the Logistic-Non-interactive sector (49% versus 42% for the Scottish sites). This is an interesting finding as this is an important dimension relating to building up relationships and community with visitors. This even though the Scottish sites were on a smaller scale and the Scottish survey was carried out a year earlier to the L100 survey, at an earlier point in the history of the use of Web sites by legal practices. In general, less sophisticated sites might have been expected as the norm.

The explanation for the difference may lie in the nature of the two themes. Interactivity by its nature (eg a search engine, general e-mail link) gives choice to the visitor and so each feature covers a number of possible alternative uses. On the other hand non-interactive features (eg on-line publications, location of offices) are added one-by-one like the foundations of a wall. On average Scottish firms had two hits each for interactive and non-interactive whereas the L100 firms had 3 and 5 respectively. It could be that as sites become larger and more feature-laden, it is the non-interactive features, which tend to be added.

Looking at the Purpose axis of the matrix, Promotion accounted for 21% of the L100 hits compared to 38% for Scotland. The balance is reversed for Provision with the L100 firms having considerably more hits (77%) than the Scottish firms (61%).

Without knowing the strategy and rationale behind developing the sites and why particular features were included in particular ways, it is difficult to explain these differences. As tentatively suggested, one possible explanation is that it is easier to add certain features to a site, and those features naturally appear in certain sectors of the matrix (or firms are more likely to add to those sectors). As the L100 sites are, in general, larger and more complex than the Scottish sites then perhaps the percentage profiles for the two surveys (Table 9) represent the balance between the elements of the matrix for smaller (Scottish) versus larger (L100) sites? The differences between the two surveys, and the reasons behind the results, provide one avenue for further investigation. However there is also an important caveat that the surveys took place at different times, and the pace of technological change, experience and expertise may make such comparisons of limited value.

6.8 Synergy

The overall appeal of a site is greater than the sum of its parts and as already noted, interactivity is what is required, not just a 'billboard'.

For example, one L100 site had very eye-catching and distinctive graphics. However although it had a number of contact e-mail addresses, these were not hypertext links to allow a visitor to click on a name or address and have their e-mail system provide a blank message to be completed already addressed to the intended recipient. (This would require only the use of a simple HTML command to supplement the existing name/address). In addition, the site lacked on-line materials (brochures, technical updates and so on) but you could order these via e-mail. Moreover, it was one of a minority of sites not to make great import of the expertise of their partners to establish the firm's reputation and experience via links to short biographical details about each partner.

The final section draws together the twin threads of the extended Legal Grid and the empirical results.

7. Conclusions

With the continual growth of the Internet and the Web, traditional and new legal services are being developed, offering potential opportunities and implications for the legal profession. But as suggested by the literature (Susskind, 1998; Terrett, 2000; Wall, 1998), solicitors should face the rapid technological changes that are taking place around them and be more innovative if they do not want to be left behind.

The first part of the paper argued that Evans and Wurster' concepts have a resonance with the literature regarding the provision of legal services and it is suggested that Reach and

Richness augment rather than replace models from Christensen (1997), Susskind (1998, 2000), Terrett (2000) and others. The authors proposed an extended Legal Grid (see Figure 5) which can be seen as an addition to the 'strategic thinking toolkit' of practitioners, and also as providing a research agenda in the area of the impact of IT on legal practice.

Based on the extended Legal Grid, the second part of the paper presented empirical data regarding public access Web sites offered by the L100 firms using Ho's Matrix to measure the Richness of the provision of information and services. As well as providing a benchmark survey of the features offered by the L100 firms, the aim was to provide an insight into how the concepts of the extended Legal Grid could be used.

7.1 Principal Findings from the Surveys

Taken together, the L100 and Scottish surveys indicate that, in general, the larger the firm the more likely it is to produce a 'better' Web site (ie score more highly for this assessment instrument). In this case 'better' also equates to 'Richer' in Evans and Wurster's terms through greater customisation, interactivity, currency and so on (see Table 1). Furthermore, the larger firms of the L100 survey achieved a greater 'depth' to their sites (as evidenced by the greater average number of 'hits'). This apparent linking of the quality of site to firm size goes against Susskind's (1998) notion of the democratisation of the profession. However it is in keeping with the view that smaller practices have more limited resources available in terms of time, money and IT expertise than larger firms (Barton, Duncan, Maharg and McKellar, 2000).

There is reason for the smaller firms to take heart, as beyond the averages, firms of all sizes can offer both excellent and poor Web sites, supporting the view that in cyberspace size does not, or at least should not, matter. For firms scoring poorly this would seem to hint at quality control issues and in some cases a lack of resources. Enthusiasm to be part of the Internet phenomenon may on occasion overcome the need for taking a strategic view of what is possible or desirable in a Web site. Alternatively lack of knowledge, expertise, or advice results in poor bargains being struck with external developers.

At present UK legal practices' Web sites appear to be somewhere between Susskind's (1998) second and third generation, with e-commerce still in its infancy rather than mainstream (even as part of firms' Internet strategy).

7.2 Limitations of the Empirical Work

The approach for evaluating the site - a researcher with a PC in her or his office working through a site and categorising the features according to a pre-determined matrix - is to an extent artificial. It does not, of course, truly mimic the actual experiences of those who wish to access legal information, purchase services, or find a solicitor over the Web. The researchers were not actually looking to select a solicitor to act on their behalf, or purchase a house or business. The evaluation may also have been biased towards a certain standard of site, or towards e-commerce. The authors did not have any insight into the

firms' purpose(s) for offering the site, nor the actual business benefits achieved. (The authors have collected survey data regarding this, and results will form part of a future paper.)

A further weakness of the instrument used is that it was not possible to eliminate subjectivity entirely and individual tastes, preferences and experience will influence people in the way they evaluate sites. The electronic marketplace for legal services is evolving rapidly. The survey data relates to 1999 (Scottish survey) and 2000 (L100 survey) rather than 'now' (Spring 2001) so inevitably sites, opportunities, standards and technology will have moved on.

Due to the framing of the populations/samples of both surveys, public on-line legal services such as those offered by Kaye Telser or Desktop Lawyer were not considered. Similarly although larger legal practices have developed a number of Extranet facilities to offer clients enhanced, or additional, services and information, these facilities were not part of the sample. Reiterating the earlier point, it is difficult to look at Extranets in any meaningful way without being an 'insider' as a client or user of the system. It may have been possible to secure access to a small number of these sites for the purposes of evaluating the sites, but such a 'case study' approach would fall well short of the more comprehensive coverage of the main surveys; so it was not attempted.

7.3 The Extended Legal Grid: Reach and Richness Revisited

Using the enhanced version of Susskind's Legal Grid was a useful tool for the researchers in framing their research agenda and empirical work. The empirical work was focused on the external end of vertical dimension of the Legal Grid, and towards the knowledge dimension on the horizontal dimension (see Figure 6). The top right quadrant of the Legal Grid - on-line legal services. An alternative view is that as providing value to existing clients was part of the remit of many sites, there empirical work straddles both external quadrants ie top left and top right.

The starting point is that traditionally legal services offer a Rich service but with comparatively limited Reach (Susskind's one-to-one and reactive relationships) - represented by the Richness/Reach trade off dotted line in Figure 6.

Figure 6: The extended Legal Grid: public access Web sites

The empirical work presented in this paper shows that the Web extends Reach via the public access sites, and content can be aimed at a range of visitors: existing or potential clients, prospective employees, the press, and so on. However, offering Richness and the sense of community required for creating relationships with visitors to sites, and that can sustain those relationships, could be difficult. Issues regarding the content and design of sites are still important, for example timeliness and interactivity. The solid line in Figure 6 represents this new trade off between Richness and Reach. Although both dimensions have increased, the relationship between the two has become skewed, the evidence suggests it is easier to increase Reach than Richness. Note that the diagram is indicative

of trends, and does not quantify values relating to the dimensions.

Web-site usability expert Jakob Nielsen provides the acronym **HOME RUN** (Nielsen, 2000, pp 380-381) for extending the usability of Web sites (Richness in our terms). The acronym is based in part on results from a survey of 8,900 Web users asking what caused them to return to sites. He defines the key factors in developing high quality Web sites as:

H igh-quality content	R elevant to users' needs
O ften updated	U nique to the online medium
M inimal download time	N et-centric corporate culture
E ase of use	

His book provides a wealth of examples of good practice to follow.

7.4 Future Work

The empirical surveys of public access Web sites offered by legal practices forms an important benchmark for practitioners and researchers interested in how firms have operationalised one aspect of their strategies in relation to the Internet, and the opportunities it presents. It will be absorbing to follow how legal practices adapt and shape the great adventure that is the Internet to serve the interests of both them, and their clients. A periodic re-evaluation of the L100 and Scottish sites would provide an intriguing progress report on the 'state of the art' Richness of features offered by such sites.

The authors' future work will use the enhanced Legal Grid to inform their research agenda; and part of that agenda will be to further test and refine the model. For example in the top right hand quadrant of the grid 'Client relationship systems' (a Technology-External focus; see Figure 3), how can the use of technology extend the Reach and Richness of the interaction between client and firm? There also exists the opportunity to test the usefulness of the model against data already collected by the authors (Barton, Duncan, Maharg and McKellar, 2000) relating to the back office use of technology (bottom left quadrant, a Technology-Internal focus). Finally, the authors are currently involved in the work of a Teaching Company Scheme based within a legal practice. One of the objectives of the scheme relates to knowledge management systems, the Knowledge-Internal perspective of the grid (bottom right quadrant); providing an opportunity for melding the theoretical concepts of the enhanced Legal Grid with the practicalities of introducing new systems and technology into a legal practice.

7.5 Finally

This paper described developments to theory regarding the use of technology in the market place for legal services and also presented empirically based research findings, with the one aspect informing the other. We are all conditioned by theories since our decisions are based on assumptions about the past and conjectures regarding the future (Gill and Johnson, 1991; Walsham, 1993). As Kurt Lewin (quoted in Van de Ven, 1989,

p 486) puts it, 'nothing is so practical as a good theory'. The enhanced Legal Grid, is only one tool from the 'strategic thinking toolkit'. As Walsham admonishes, we must also maintain a healthy scepticism as the use of theory is 'both a way of seeing and a way of not seeing' (Walsham, 1993, p 6) - it can help us organise a complex empirical world, but may also close the mind to new possibilities.

Bibliography

Barker A (2000), 'Forget the Old-style Milk Run, Find the Cream On-line', *The Times Law Supplement*, Tuesday 5 September, pp.14-15.

Barton K, Duncan P, Maharg P and McKellar P (2000), 'The Paisley Pattern: IT and Legal Practice in Scotland', *Scottish Law and Practice Quarterly*, Vol. 5, No. 3, July, pp.217-239.

Barton K, Duncan P, McKellar P and Ruiz-Nieto L-M (2000), 'E-commerce and Legal Practice in Scotland: A Benchmark Survey', *The Journal of Information, Law and Technology (JILT)*, No. 2, <<http://elj.warwick.ac.uk/jilt/00-2/barton.html>>.

Christensen C M (1997), *The Innovator's Dilemma: When New Technologies Cause Great Firms to Fail*, Boston, USA, Harvard Business School Press.

Christian C (1998), *Legal Practice in the Digital Age: The Quest for the Killer Legal App*, London, UK, Bowerdean Publishing.

Eisenstadt M and Vincent T (2000), *The Knowledge Web: Learning and Collaborating on the Net*, London, UK, Kogan Page.

Evans P (2000), 'Strategy and the New Economics of Information', in Marchand Davenport and Dickson Eds, *Mastering Information Management: Complete MBA Companion in Information Management*, Financial Times Mastering Series, pp.37-42, Harlow, UK, Pearson Education.

Evans P and Wurster T S (2000), *Blown to Bits: How the New Economics of Information Transforms Strategy*, Boston, USA, Harvard Business School Press.

Gill J and Johnson P (1991), *Research Methods for Managers*, London, UK, Paul Chapman Publishing.

Guterk B A and Welsh T (2000), *The Brave New Service Strategy: Aligning Customer Relationships, Market Strategies and Business Structures*, New York, USA, American Management Association.

Ho J (1997), 'Evaluating the World Wide Web: A Global Study of Commercial Sites', *Journal of Computer Mediated-Communications*, Vol. 3, No. 1, <<http://www.ascusc.org/jcmc/vol3/issue1/ho.html>>.

- Katsh M E (1995), *Law in a Digital World*, New York, USA, Oxford University Press.
- Love J, Stephen F and Paterson A (1995), 'Business Strategies and the Small Professional Firm: Evidence from the Conveyancing Market', *Small Business Economics*, Vol. 7, No. 4, pp.457-468.
- Maister D H (1993), *Managing the Professional Service Firm*, New York, USA, Free Press.
- Mintzberg H, Ahlstrand B and Lampel J (1998), *Strategic Safari: A Guided Tour Through the Wilds of Strategic Management*, Hemel Hempstead, UK, Prentice Hall Europe.
- Neilsen J (2000), *Designing Web Usability*, Indianapolis, USA, New Riders Publishing.
- Porter M E (2001), 'Strategy and the Internet', *Harvard Business Review*, Vol. 9, No. 3, pp.62-78.
- Robson W (1997), *Strategic Management and Information Systems*, 2nd edition, London, UK, Pitman Publishing.
- Susskind R (1998), *The Future of Law: Facing the Challenges of Information Technology*, revised paperback edition, Oxford, UK, Oxford University Press.
- Susskind R (2000), *Transforming the Law: Essays on Technology, Justice and the Legal Marketplace*, Oxford, UK, Oxford University Press.
- Terrett A (2000), *The Internet: Business Strategies for Law Firms*, London, UK, Law Society Publishing.
- Van de Ven A H (1993), 'Managing the Process of Organizational Innovation', in Huber and Glick Eds, *Organizational Change and Redesign: Ideas and Insights for Improving Performance*, 1995 paperback edition, New York, USA, Oxford University Press.
- Wall D (1998), 'Information Technology and the Shaping of Legal Practice in the UK', *13th Annual BILETA Conference, The Changing Jurisdiction*, 27-28 March, Trinity College, Dublin, Eire.
- Walsham G (1993), *Interpreting Information Systems in Organizations*, Wiley Series in Information Systems, Chichester, UK, John Wiley.
- Webb B and Sayer R (1998), 'Benchmarking Small Companies on the Internet', *Long Range Planning*, Vol. 31, No. 6, pp 815-27.