

New Normal Legal Practice: Automated Legal Services Online?

A book review of Peter Hinssen, *The New Normal* (Gent, Belgium: Mach Media, 2010)

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1. Plan for change

In his book, the *New Normal* (2010), futurist Peter Hinssen reviews the past 40 years of business technology development, pointing to landmarks and trends, and presents a pathway for the next 40 years. His focus is on how businesses will be affected. However, this can be configured to what legal practice businesses might expect in order to plan for changes in practice, clients and the business world. What is envisaged by Hinssen can be compared to what was suggested by legal knowledge engineers, Gray (1997) (an author of this article) and Susskind (2000).

This review is published in three parts. Part 1 deals with a macro view of the emerging *New Normal* legal practice, showing major problems in the legal system that may be remedied by technology adaptations. Part 2 presents some micro views of implementations of the technology adaptations, and Part 3 refreshes professional perspectives in the *New Normal* legal practice. All three Parts require a developing plan for change.

In Chapter 1, Hinssen opens (p.13) with a quote from Justin Rattner, Vice President of Intel, the company which builds the technology of the future:

“The next 40 years will blow you away, and will make the past 40 years look pretty tame.”

If Rattner is correct, then the legal profession might expect a major paradigm shift in the way law is practised. Gray and Susskind have also predicted major paradigm shifts in legal practice.

In an evolutionary study, Gray (1997) compared the cycle of the ancient Roman legal system with the cycle of the English legal system, and concluded that the English legal system has just entered its codification period, the final stage in the cycle, lasting about 300 years. She posed a dynamic electronic codification, an advance on the static Justinian codification, and went on to develop a spherical legal logic (Gray, 1990; Gray and Gray, 2011) as a model of legal reasoning and the basis for formalization of heuristics and a computational algorithm for applying, to user cases, hierarchical, case-detailed forms of action, with automated combinatorics. Her doctoral design of the quality control, superexpert shell, *eGanges*, provided user-friendliness (Gray, 2007) and was programmed by her son, Xenogene Gray, (an author of this article), (Gray and Gray, 2003) who also validated the system in his postgraduate thesis on *superexpertise* (Gray, 2011). Work has now been undertaken to add to the shell automated metrics to calculate the combinatorial size and complexity of the alternative cases that are possible within the finite rule system of an application. This measure extends the science of legal choice and can be used, *inter alia*, to evaluate relative freedom and to estimate the extent of the work of those responsible for the law.

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Today's Legal Paradigm	Tomorrow's Legal Paradigm
Legal Service	Legal Service
advisory service	information service
one-to-one	one-to-many
reactive service	proactive service
time-based billing	commodity pricing
restrictive	empowering
defensive	pragmatic
legal focus	business focus
Legal Process	Legal Process
legal problem solving	legal risk management
dispute resolution	dispute pre-emption
publication of law	promulgation of law
a dedicated legal profession	legal specialists and information engineers
print-based	IT-based legal systems

Figure 3.2 The Shift in Legal Paradigm

Figure 1: Susskind's Shift in Legal Paradigm

Susskind establishes a number of themes that might characterize a New Normal of legal practice and services; his Figure 3.2 (Susskind, 2000, p.101), summarizes specifics of the shift in legal paradigm, and is reproduced as Figure 1. He also posed a Legal Grid, as a simplification of the realities of legal practice according to which technological changes could be understood and planned. Eight strategies in order to effect the paradigm shift detailed in Figure 1, are suggested by Susskind (2000, pp.30-40): (1) consolidation with continuous improvement, (2) putting the house in order with teams and skills that meet market demands, (3) client relationship systems with legal knowledge systems, (4) knowledge management with online legal services as intellectual capital, (5) legal electronic commerce online, (6) entrepreneurial online practice, (7) progressiveness and (8) complete commitment.

In addition to these eight strategies, Susskind (2000, pp.63-76) gives six practical suggestions to effect the paradigm shift, including the identification of the main business episodes of clients. The following innovations were seen by Susskind as indicating the way forward:

- The Blue Flag services of Linklaters: www.linklaters.com;
- The NextLaw services of Clifford Chance: www.nextlaw.com;
- Newchange documents of Allen & Overy: www.newchange.com;
- Automated legal audits: www.bdw.com.au;
- Collaboration: www.sjberwin.com/media;
- Legal Research Network: www.lrn.com; and
- Document assembly systems (Susskind, 2000, p.25).

(For more recent developments, see: <http://roadtrafficepresentation.com/RTR/PublicForms/Home.aspx>)

Susskind (2000, p.50) also notes the emerging virtual law firms whereby small firms can collaborate as a team under a virtual roof. Further he considers infomediary agents who are engaged by a group of customers to advise on the selection of a legal services business; online auctions for legal services, and calls for tenders for legal services, which also indicate the shift to consumer power and infomediaries.

Hinssen suggests that strategies may be developed on the basis of the rules of the New Normal. Four pillars of a re-imagined technology paradigm are given : information, intelligence, integration and innovation (p.19). These challenges are implicit in Susskind's eight strategies. In Chapter 4, Hinssen sets out customer strategies, followed by information strategies in Chapter 5, and technology strategy in Chapter 8.

2. Rules of the New Normal

Hinssen considers attention spans, intelligence, pricing, privacy and control to construct four rules of the New Normal. Chapter 3 identifies the four rules that emerge from the extremes of user behaviour in the limits of the New Normal:

- Zero tolerance for digital failure;
- Good enough beats perfection;
- Total accountability; and
- Abandonment of total control.

Given traditional standards of care and confidentiality of legal practitioners, these four rules could provide a framework for addressing growing problems for the legal profession.

Firstly, the law has expanded greatly, with increasing complexity; legal practice has lost control of the information explosion. Susskind (2000) observes:

"In the first place, we are governed by a body of law whose scope is so great that no one can pretend to have mastery over anything other than small subsets of a legal system. At the same time, we are, every one of us, under the law, expected to have knowledge of all legal provisions that affect us ..." (p.86)

As a corollary, professional costs have escalated, decreasing the accessibility to legal services, and increasing rates of unrepresented litigants.

Australia, as a common law country, has special problems as the common law in Britain slips irregularly under the EU mat (there is some question as to whether common law courts will impose their standards of administrative law on the administrators of the EU). Further, the rapid economic ascendance of China (as a non-common law country) might affect the regional influence of the common law. .

Australia trains a high proportion of lawyers relative to its population, yet employment opportunities in traditional legal practice diminish as legal costs become increasingly unaffordable. Susskind (2000, p.102) suggests that legal information engineering will emerge as a new area of legal work. Legal practice may become divided between online only customers, receiving automated services, and personal clients, receiving traditional services. Susskind (2000, p.113) identifies a large new online market for legal services which he calls the latent legal market that can be served by online legal guidance systems:

"... there are innumerable situations, in the domestic and working lives of all non-lawyers, in which they need and would benefit from legal guidance (or earlier and more timely help) but obtaining that legal input today seems to be too costly, excessively time-consuming, too cumbersome and convoluted, or just plain forbidding. This is the latent legal market, which I believe will be liberated by the availability of straightforward, no-nonsense, online legal guidance systems. They will not replace conventional legal services, but they will provide affordable, easy access to legal guidance where this may have been unaffordable or impractical in the past."

Unemployed lawyers in Australia may work independently to provide for the latent legal market; they might expand their professional capabilities in doing so. A Technology Lag which hinders the development of

online legal services is identified by Susskind (2000, p.91) as follows:

"The reality today is that our ability to use IT to capture, store, retrieve and reproduce information wildly surpasses our ability to use technology to help analyse, refine, and manage the mass of information which conventional 'data processing' has itself created for us. ... I call this disparity the Technology Lag. It is the all important lag between what technologists call 'data processing' and 'knowledge processing'"

The Grays Knowledge Engineering shell, eGanges, a Java program, is now available for the legal system of any country (www.grayske.com). It presupposes a common law epistemology (Gray, 2007) and may be used to quickly construct, develop and maintain specialist applications which are thorough and complete. Applications can be converted readily to applets so that the shell is not required by users for online consultations. Because of the automated combinatorics of eGanges' superexpert processing, thorough and complete applications would be superior to human specialists. However, beta applications, to varying degrees, may have also varying values *pro tem*.

Susskind (2000, p.29) notes that the Latent Damage Law expert system which he constructed with Phillip Capper in 1988, clearly outperformed leading specialists; it had two million potential reasoning paths. (Susskind, 2008, p.15) This software was constructed under the limitations of a tree design and chaining that required all possible alternative cases within the rules to be specifically programmed; maintenance of the system to accommodate changes was onerous. Logic to support, develop and validate artificial intelligence expanded considerably after 1988. See, for example: Antoniou (1997; Berger (2002); Ciesielski (1997); Ebbs (1997); Fitting and Mendelsohn (1998); Gabbay and Woods (2005); Gradel, Kolaitis, Libkin, Marx, Spencer, Vardi, Venema, and Weinstein (2007); Jubien (1993); Krivine (1993); Mohanty (1999); Schechter (2007); Smithson (1989); Soames (2005); Walton (1997); Wansing (1996); and Way (1991).

eGanges (Gray and Gray, 2003) established a River system hierarchy (Gray, 1988), rather than a tree, and uses a four valued truth table to automate the combinatorics of the possible cases that fall within the finite rule system of any application River; this minimizes the specific programming required and the River graphics convey complexity according to a commonly understood paradigm of a flow system. An eGanges application can be consulted in any order selected by the user and can be readily maintained if changes to the law are made.

The new online market for legal practice is an opportunity for the legal profession to provide total accountability of the law. Automated information services also provide an opportunity to modify the professional duties of care owed to clients. Just as good enough beats perfection, so the standard of care is lowered for online legal information services. The cost of online legal services may also be adapted to the freemium pricing (see Part 2) of the New Normal; more fees may be required for a higher standard of personal care services.

Legal information services that are provided at beta standard allow their development expeditiously in accordance with the twitter communication limits of the Gen Y drivers of the New Normal.

3. Gen Y drivers

Hinssen considers the Gen Y mindset to be a driver of the New Normal, in which multitasking is a way of life: Facebook is for personal interaction, Twitter is for succinct alerting and broadcasting information, Wikipedia is for knowledge, and Youtube is for discussion of videos and for fun. Moreover, the culture of the New Normal has seen home computer resources of employees exceed their office equipment. The Internet, with its large accessible market, has provided an opportunity for independence, individual control and profit, so that online community culture is replacing corporate culture. As free agent employees, the Gen Y value placed in knowledge and skills has eclipsed traditional notions of an exchange of employment security for employee loyalty. If working from home computers becomes commonplace in legal practice, there may be even further shifts in the employer-employee relationship. The office may become virtual – a chat room or online forum, supported by an office Twitter, Facebook, Youtube, a Lawpedia, Skype and email. Home technology now drives office technology. Gen Y technology is for life, not for work. As Hinssen observes:

“IT departments will have to adapt to a world where they no longer introduce hot new technology, but where they will have to play catch-up to what their employees are using in their homes and find completely natural.” (p.15)

“... In today's ever-changing environment, it pays to look at the limit of where we are going, because we are getting there fast.” (p.43)

4. New Normal Marxism

In painting a picture of the New Normal mindset, Hinssen (p.122) quotes comedian, Groucho Marx:

“I won't belong to any organisation that would have me as a member.”

Susskind (2000, p.44) refers to a ‘paradox of traditional reactive legal service’ which he defines as follows:

“... you need to know quite a bit about the law to recognize not just that you need legal help but when best to seek such counsel.”

People need legal expertise to know when they need to instruct a lawyer. Gray (1997, pp.180-2) points to similar paradoxes of justice in the rule that ignorance of the law is no excuse, yet the law is inaccessible to its beneficiaries and those who must obey it. Such paradoxes support the case for developing artificial legal intelligence.

In his Preface, Susskind (2000, p.ix) defines formal, substantive, and distributive justice, and aims to show that the Internet can promote all three by making the law and legal processes more widely and readily accessible. Unlike Gray (2007) and Gray (2011), he does not claim to be defending a coherent epistemology or intellectual elegance (p.8).

Hinssen argues that the total corporate control paradigm can not be sustained (p.57):

“Generation Y has experienced a digital world driven by bottom-up thinking (Wikipedia), and network thinking (Facebook), and has very little rapport with the old top-down models.”

Google's success is the model to follow in the New Normal, with its ‘outside-in, bottom-up’ strategy. Hinssen is clear about what this means for businesses: a flattening of the organisational hierarchy, management by teams of T-shaped people (people with a breadth of skills and expertise in addition to a deep expertise in a specific discipline), a transition of values to sustain a market edge, and openness to innovation. The way forward is to connect and integrate the firm's information with outside information.

T-shaped individuals are better able to collaborate as they will have some overlaps and some things to exchange. Teams of T lawyers are required already for cases that involve various specialisations such as company law and taxation law. Susskind (2000 p.20) suggests that multi-specialist matters are treated like project management, a new form of legal practice.

5. Legal practice in the cloud

In the New Normal, the digital world is taken for granted by businesses, their employees and their customers. Hinssen poses an analogy to the establishment of the electricity power grid. With cloud computing, company servers will become outmoded as electricity generators once did. Hinssen (p.177) asks:

“Instead of each company buying its own hardware (servers), and installing its own

software on these servers and employing a team of highly-trained technologists to implement and monitor and optimize this system, isn't it easier and more economical to access the desired functionality provided by a specialized provider 'in the cloud', which delivers these applications over the Internet? ... The answer is emphatically YES. "

Just as the invention of alternating current made the grid possible, so too cloud computing will allow affordable access to the desired functionality provided by specialists on the internet. On this basis, lawyers would become specialists on the internet in the cloud.

In Hinssen's Chapter 8, technology strategy for the New Normal builds on re-thinking, re-positioning and re-creating technology. Cloud services replace in-house systems and the services that were managed by IT departments. With many users, cloud providers can secure services with highly developed monitoring systems 24/7. The costs of improvements in service and security can be shared between customers. Further, scalability allows customers to ramp up or down their cloud capacity as required.

In the New Normal, cloud computing has a multi-tenanted architecture that creates new opportunities for cloud community innovations and flexibility. For instance, an association of lawyers may establish an international cloud with national components.

Even if legal services do not move into the cloud, the New Normal will remain the context of the business world in which legal practices are located. Perhaps large legal practices will be able to develop their websites as private clouds. In any event, the social changes of the New Normal will prevail and require adjustments.

In the New Normal, business leaders have technical backgrounds but focus on innovating, not implementing, technology. Strategy will be crafted to drive technology-enabled innovation.

Susskind (2000, p.45) suggests that, if legal practice is deconstructed according to the proposals of Evans and Wuster (2000), then its business model can be adapted to the new legal economy and the commercial legal marketplace. Lawyers are intermediaries and if they cease to add value, they will be disintermediated. Reintermediaries (Tapscott, 1999) create new value between producers and consumers using the Net.

The new business model depends on leveraging knowledge, not lawyers (Susskind, 2000, p.12). This captures, reuses and gives value to the collective knowledge and experience of a firm. Online services could be designed to capture and combine best expert pragmatism, nous and legal insight. Law firms could also

provide training services, risk management services, legal strategy advice and compliance audits.

6. Cloud warnings

Although Hinssen observes that cloud-based services have the capacity to deliver new levels of efficiency and lower cost of IT processes through their multi-tenancy architecture where users pay only for use as an 'on demand' resource, he does not consider the issues of cloud computing pointed out in this Journal in December 2009 by John Gray and Vinod Sharma and in January 2011 by Mark Vincent and Nick Hart: for firms who move into the cloud, how will data protection and security, performance and functionality be ensured? Gray and Sharma (2009) ask what cloud service arrangements will be in place to provide support, for transition-out, and for intellectual property? Also, they consider jurisdictional concerns that might arise, depending upon the geographical location of the technology infrastructure supporting the cloud, and any changes in the host jurisdiction. There is also the concern raised by Vincent and Hart (2011) of how cloud computing will affect escrow arrangements.

Vincent and Hart (2011) identify nine possible issues and recommend eleven questions, with a further five, that need to be asked to address these issues. This matching of many issues and questions indicates the complexity of the risks that are raised by cloud technology. Of great concern are the contractual rules that limit the rights and duties under a contract to the parties to the contract. Third parties are not bound by a contract, yet the cloud technology may involve a stack of third parties in the provision of the service.

The notion of chains of legal risk arises with cloud technology. Vincent and Hart ((2011, p.4) explain one such chain as follows:

"Of course, in terms of risk management, users of cloud services are letting go of control when they use the cloud – and, for example, if there is an outage or a security breach, a user of cloud services could be in breach of its own contract with its own customers or of applicable laws, even if this is caused by the provider of cloud services. This element of risk is brought into sharp focus when you consider that providers of IT services often tend to offer their services 'as is', without assuming any risk – and with an exclusion for all liability where permitted by law."

Gray and Sharma, and Vincent and Hart did not evaluate the pros and cons of the cloud solution in broader terms; 24 hours/7days surveillance of websites in a cloud, with precise monitoring technology, could provide for many

businesses, better security and lower cost than a single business might afford. They did acknowledge that a use-based charge might remove the costs of a continuous licence and maintenance of operating environments; their concern was more to ensure that contractual arrangements with cloud service providers dealt with the issues.

Vincent and Hart (2011) raise another major concern of the development of 'intercloud' standards and protocols that is comparable to the situation in 1973 when networks could not talk to each other. Intracloud standards and protocols might be added to this problem. The new information banks in the cloud may require a clearing house in the cloud."

Irrespective of the cloud, investment in generating significant future value through innovation, will change the 'rules of the game' and provide a competitive advantage. Another warning given by Hinssen is:

The waves of technological advancement will not decrease in the New Normal. On the contrary, the speed of technological revolutions will only increase. And therefore, velocity and agility become the cornerstones of your technological capacity. (p.186)

With the advent of cloud services, in-house systems and servers are becoming a thing of the past, and ever-improving user interfaces and implementation processes make IT technicians an endangered species. (p.187)

This requires extreme leadership on behalf of the CIO to dare to rethink his own organization. Only the bold and brave CIO will survive; those leaders who question the fundamentals of their own organization and then move a step further, to burn down their old IT department and see a Phoenix arise from the ashes, more powerful than ever before.(p.187)

The 'deep integration of digital into our businesses' in the New Normal, suggests Hinssen (p.187), will require 'a new dynamic of thinking about and working with technology'. It is time for innovators to convert 'raw information into organizational knowledge' so that the business can respond to 'customer demands in a personalized and consistent way across a number of channels'.

Susskind also warns the legal profession that the latent legal market might be accommodated by online legal expert systems provided by non-law businesses such as accountants. If the expertise of specialist partners of law firms is not captured, even in their retirement, knowledge capital of the law firm will be lost; the construction and maintenance by retiree specialists of legal expert systems

might provide a gradual cessation of practice that is beneficial.

7. Legal practice in the fishbowl

Hinssen observes that the New Normal is producing a fishbowl society where privacy is replaced by transparency. A world of complete transparency and connectedness, where employment has gone from long-term engagement to short term project-oriented interactions, makes the management and security of information difficult. The development of online legal information systems does not require client confidentiality, although they may allow various points for the user to opt in to further confidential services for a fee above the freemium online service.

If a legal expert system allows a user to save a consultation, as eGanges does, it does not need to be saved in the user's name, and it may be deleted.

In the New Normal, companies become dynamic not static. With a fluctuating economy, companies shift, merge and acquire. Thus bottom-up behaviour of the online community, with good-enough technology such as Wikipedia, thrives. Technology brings new rules to the business world and requires new solutions and strategies.

At the project level where several organisations work together, a confluence of staff will produce a continuum of services and ensure deals that are win-win. The consequences of bottom-up thinking (Wikipedia) and network thinking (Facebook) of the New Normal will outmode top-down absolute control. In an increasingly fluctuating economy, career paths will be a matter of flowing from one project to the next engagement, with the accumulation of knowledge and experience. Wikipedia has knowledge built by the community, with peer reviews rather than bosses. A Lawpedia may arise in a similar cooperative way, to allow unemployed lawyers to sustain and develop their skills.

In the New Normal, control shifts from humans to machines. Hinssen (p.62) states the new reality succinctly:

"... technology will allow us to work autonomously, independently and intelligently. Those are big steps to take."

Dependence on digital produces zero tolerance for its failure. Where cheap, convenient, simple, portable and mobile is good enough, perfection is obsolete. Accountability comes with transparency. As mass marketing moves to interactive, engaging and personalised dialogues online, customization will bring accountability. Real-time monitoring of customization as data is captured, stored and recalled, produces instant feedback and supports accountability. It is much harder

to hide bad work. With this expansion of accountability, there will be a trend toward partnering, rather than contracting, and toward joint accountability.

In the New Normal legal practice, online accountability becomes more a matter of intelligence and customization. For Hinssen, the limit of intelligence in the New Normal is a 'real time' issue. Increasingly, there will be instant use of intelligence and information. The speed of intelligence will be 'right now' (Hinssen, p.43). Products will be positioned accordingly.

As traditional rules of price-to-earnings ratios and profitability are supplanted after the technology bubble has burst, a golden age of technology, with synergy and slow growth to maturity will provide the real pay-off for organisations that have positioned themselves strategically. Deployment of technology innovation will

bring businesses closer to their consumers who want to be 'special' (Hinssen, p.76) through interaction. Thus marketing increases in complexity in a noisy environment. Enhancement of the customer experience is now the focus of the New Normal; digital interactions must be faster, seamless, interesting, simple, enjoyable and more convenient for the customer. Hinssen (p.81) captures the new reality in a quote from founder and CEO of Amazon, Jeff Bezos:

"We see our customers as invited guests to a party, and we are the hosts."

Susskind (2000, p.50) refers to the study by Hagel and Singer (1999), who coined the term infomediaries, of how the markets are reshaping when customers make the rules.

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