Discussion Paper

In the zone: Is technology helping or hindering lawyers' decision making?

Frank McKenna Head of Product & Technology Strategy, LexisNexis Pacific

September 2013



In the zone: Is technology helping or hindering lawyers' decision making?

A lawyer's success could be said to rest on a bedrock of good decisions. Equally, a successful law firm is one that is adept at good decision making across all facets of its business, whether it is picking the right argument for a matter, selecting the right law to support an argument, choosing the correct precedent, recruiting a good team, providing clients with information which is useful, ensuring your client base is made up of profitable clients, or accepting profitable matters to work on.

When examining these facets, three essential decision making areas standout:

- The law;
- The lawyer's workload, that is, the matters that they are working across;
- The firm's clients.

Today, it is universally agreed that our world is becoming more complex, more dynamic and more demanding.¹ Technology, as we are frequently told, provides the key to navigating this complexity and dynamism by giving us better tools to make better decisions. ² The technology of the twenty-first century has given us innumerable buzzwords and technical wonders, engendering the birth of the internet, email, mobile computing, mobile applications, social media, instant messaging, online search, applications "in the cloud", push/pull communication, mashups, spatially aware computing, and big data. Instant data, instant communications, anytime, anywhere—the potential seems limitless.

In essence, there are five key steps to good decision making. Every decision made, whether about the law, a client or workload, passes through these steps. Inherently, the more complex the decision, the more explicit these steps become:

- 1. Identify your goal;
- 2. Gather information for weighing options;
- 3. Consider consequences;
- 4. Make your decision;
- 5. Evaluate.

This leads us to the question: has the great promise of these technological advancements actually delivered better decisions about the law and your clients?

Intuitively, the answer should be a resounding, yes! Surely, all that computing power and data at your fingertips – anywhere, anytime—should aid in every step in the decision making process. In reality, however, despite the clear benefits that technology has provided us, there is the emergence of strong indicators suggesting that perhaps all this technology is just exacerbating age-old problems rather than eliminating them.

² W Thompson, N Stolovitsky, "How IT can Help Companies Make Better, Faster Decisions", http://fm.sap.com/pdf/WPSUB_Nov/How%20IT%20 Can%20Help%20Companies%20Make%20Better%20Faster%20Decisions.pdf; Randy Bean, "Big Data's Holy Grail: Better, Faster Decisions", 2013, http://www.informationweek.com/big-data/commentary/big-data-analytics/big-datas-holy-grail-better-faster-de/240158328; F Hauge Fabian, dt Ogilvie, 2002, "Using Technology to Enhance Creative Actions in Decision Making", http://www.hicss.hawaii.edu/HICSS_35/HICSSpapers/ PDFdocuments/OSCIS01.pdf



¹ R McGrath, "The World Is More Complex than It Used to Be", 2011, http://blogs.hbr.org/hbr/mcgrath/2011/08/the-world-really-is-more-compl.html; B Lindsey, J Wai, "The Growing Complexity of Everyday Life", 2012, http://www.psychologytoday.com/blog/finding-the-next-einstein/201211/thegrowing-complexity-everyday-life; L S. Gottfredson, "The World Grows More Complex", 2012, http://www.nytimes.com/roomfordebate/2012/02/26/ are-people-getting-dumber/the-world-grows-more-complex

The Paradox of Technology

Among workplace research, there is a growing body of evidence suggesting that technology, in many cases, may actually be hindering our decision making capabilities, causing stress and leading to suboptimal outcomes.³ And while we have found that the legal profession has been quick to explore and adopt new technologies in their work practices, 44 per cent of lawyers said these technologies weren't making their working life any easier, according to a recent survey by Lawyers Weekly (August 2013).⁴

One of the paradoxes of technology is that "simplification complicates", that is, the more technology you throw at the problem in order to simplify it, the more complex it actually becomes.⁵

Fundamentally humans are both the strength and the weakness of technology. On one side of the equation, humans have an adaptability and cognitive reasoning that computers just can't match. On the other side, computers clearly have prodigious processing and data storage capabilities that humans simply can't compete with. When these elements are combined with skill, we are able to achieve impressive paradigm shifts, such as the internet and genome mapping. When not skilfully combined, it is all too common to encounter waste, failure and stress.

Specific to the legal industry, it is clear that while many law firms have successfully implemented technological solutions around areas of simple decision making, such as the automation of many transactional processes, when it comes to automating and improving complex decision processes, the application of effective technologies have a patchier record.

In particular, if we focus upon the aforementioned "five step process" for decision making as an underlying framework, law firms need to take two important questions into consideration when deliberating on how to apply technology in complex decision making:

- (1) Does the lawyer have the right content-in-context? Does the technology provide the lawyer with the most appropriate, comprehensive, accurate and relevant information to formulate and process options?
- (2) Is the lawyer making the decision "in the zone"? Is the lawyer being accorded the opportunity to be in the correct mental state to sift through the data, uncover and consider consequences, and make an informed, well-reasoned choice?

The Importance of Content-in-Context

There are numerous studies pointing to the negative effects of technology, and namely, the tendency for "information overload". This can result in a struggle to contain, triage, comprehend and act on the "fire hose" of information forced at us every day. It is apparent that many people use two main strategies to deal with this cavalcade of information:

- (1) Working longer hours to sift, process, and respond to it. The emergence of mobile technologies have meant that practitioners now attempt to triage and respond to the daily mountain of emails, industry news, judgments and legislative updates from the time they get out of bed (or even while still in it) until they turn out the light last thing at night. They are "always on" and even then, key information is often missed in the deluge of data.
- (2) Skim the surface or even ignore it, delete it, and hope it wasn't important.

⁵ D Norman, "Living with Complexity", 2010,; A Feenberg, "Ten paradoxes of technology", 2009; http://www.sfu.ca/~andrewf/paradoxes.pdf



³ N Kelk, G Luscombe, S Medlow and I Hickie, 'Courting the Blues: Attitudes towards depression in Australian law students and legal practitioners', Brain and Mind Research Institute, University of Sydney, 2009; J Riley, `Mental Health and Employment: Issues for Lawyers' (2007) University of New South Wales Faculty of Law Research Series; P Verkuil, M Seligman and T Kang, `Why Lawyers are Unhappy' (2005) Deakin Law Review.

⁴ http://www.lawyersweekly.com.au/opinion/fter-working-in-a-corporate-law-firm-for-only-a

Research indicates that neither of these strategies is working. An international 2010 LexisNexis study of workplace productivity indicated that:⁶

- 49 per cent of Australian professionals felt demoralised as they can't manage all the information coming their way;
- Australian workers were the most likely to agree that the quality of their work suffers at times because they can't sort through the information that they need fast enough (70 per cent);
- 81 per cent of legal workers say they've deleted or discarded work information without fully reading it;
- Almost a quarter (24 per cent) delivered incomplete documents, email or other communications because the necessary information or materials could not be found on time.

It is clear that this is a challenge too great for lawyers to solve by themselves. As the needs of the legal profession are unique, it is paramount for law firms and legal information and technology providers to continue to work together to look for ways to use technology smarter to provide relevant content-in-context for their lawyers and clients.

In the Zone: Fostering a climate for better decision making

The more complex a decision, the more important it is to focus all your cognitive ability on it. This echoes a concept within field of psychology called "the flow". It is also commonly known as, being "in the zone", "in the pocket" or "in the groove".

First proposed by Hungarian psychologist Mihaly Csikszentmihalyi in 1975, "flow" is described as a mental state of operation in which a person performing an activity is fully immersed and engaged. "The ego falls away. Time flies. Every action, movement, and thought follows inevitably from the previous one, like playing jazz. Your whole being is involved, and you're using your skills to the utmost."⁷ We have all been there: when you find yourself so involved in a task and you look up after what seems like a mere 10 minutes only to realise several hours have passed, darkness has fallen outside, and all of a sudden you discover physical feelings of hunger and thirst. That is being "in the flow".

There is a biological explanation for this—according to Csikszentmihalyi, our nervous system can process only about 110 bits of information per second. Hearing and understanding speech requires 60 bits per second, which is why you can't listen to more than two people talking to you at once. Being in flow tends to use up all processing power of the brain, such that physical sensations including thirst, hunger or pain, may go unnoticed. Performance becomes effortless.

This concept of being in the flow has been closely linked to better decision making, the ability to deal with complexity, increased performance, reduced stress and increased enjoyment. Conversely, not being able to achieve the flow leads to lesser performance and increased stress.⁸

⁸ The Science & Psychology of Music Performance: Creative Strategies for Teaching and Learning Book, 2002, R Parncutt, G McPherson, Gary E. Oxford University Press US;. "The psychophysiology of flow during piano playing". O de Manzano, T Theorell, L Harmat, F Ullén, psycARTICLES.; "The Zone: Evidence of a Universal Phenomenon for Athletes Across Sports". YJ A Young, M D Pain Michelle D., Athletic Insight.



⁶ LexisNexis Workplace Productivity Study 2010

⁷ Flow: The Psychology of Optimal Experience, 1990, Csikszentmihalyi, M. New York: Harper and Row

Usability expert Owen Schaffer (2013) has built upon Csikszentmihalyi's work, and outlined seven conditions required to get into the flow.⁹

- 1. Knowing what to do: Do you know what the objective is?
- 2. Knowing how to do it: Do you have the necessary skills?
- 3. Knowing how well you are doing: Immediate feedback
- 4. Knowing where to go: Do you know what the next steps are, from moment to moment?
- 5. High perceived challenge in the task
- 6. High perceived skills: Feeling capable of completing the task
- 7. Freedom from distractions

The impact and importance of flow has been incorporated across a range of fields, as an essential element of workplace design, team structure and even in guiding how you should live your life. In particular, its impact on workplace design and its effects on decision making is a fascinating body of work. Is the open plan office really the best design for knowledge workers? How can the physical environment be created to support the oft conflicting goals of collaboration, deep thought and efficiency? However, for purposes of this paper, we will focus on the concept on technological design and implementation, and how this can affect a lawyer's decision quality.

In can be said that the way in which technology is currently developed and implemented is often counterproductive to staying in the zone. Research by software engineers DeMarco and Lister (1999) indicates that getting into the zone is akin to a slow descent into a subject and takes at least 15 minutes to "lock in".¹⁰ Another study by Michigan State University (2012) has found that if a task is suddenly interrupted for just 2.8 seconds, your error rates doubles.¹¹ This doesn't bode well for the average lawyer's day, which by nature is full of incoming requests and urgent demands, all competing for attention. It also often means that a lawyer is constantly switching from one application to another (or even several others) to find information, then shifting gears to answer an email pop-up or that instant message, all activities which break the flow and increase error rates. And how many lawyers are afforded the luxury of 15 minutes of uninterrupted work to get back into the zone?

How do we maximise a lawyer's time within the flow? From a technological perspective, it is critical for lawyers, law firms, and especially IT departments within firms, to examine application workflows, work habits and application configurations. This may involve simple steps, such as configuring email pop-ups in Microsoft Outlook to "off" by default, to the more complex, such as conducting a comprehensive review of core legal processes.

Within this process, legal information and technology providers also have an important role in truly understanding the way lawyers work in order to design their software to maximise a lawyer's time in the zone.

Staying in the zone: Designing for focus

There are three fundamental elements that need to be considered when designing software solutions to assist lawyers in staying in the zone when making decisions:

- 1. **Ease of use**: User Experience design should focus on taking the complexity out of the software and making it intuitive to use.
- 2. **Putting content in context**: It is critical to ensure that the relevant information is brought to the lawyer. This not only increases efficiency but also means they do not have to leave the application and risk breaking the flow.
- 3. Built in guidance and instant feedback.

¹¹ E Altmann, "Brief interruptions spawn errors", 2013, http://msutoday.msu.edu/news/2013/brief-interruptions-spawn-errors/



⁹ Schaffer (2013) (http: humanfactors.com/funexperiences.asp)

¹⁰ T DeMarco and T Lister, PeopleWare: Productive Projects and Teams, 2nd Ed, Dorset House Publishing, New York, 1999

At LexisNexis, these design elements form the cornerstones of our product development and design processes.

For example, in examining how we could harness technology to assist lawyers in critical, everyday activities, such as reporting on a firms business performance or conducting business and property searches we spent a great deal of time observing how lawyers undertook these processes. This was a critical component in the development of our **Lexis® Affinity** integrated practice management solution.

Through our observations, we also identified other areas where an integrated practice management solution could benefit lawyers and enable them to stay 'in the zone' whilst making critical decisions or executing important daily activities.

- · Staying on top of important deadlines
- · Reducing costs and billing errors
- Recording more valuable billing time
- Reducing non-chargeable time
- Delivering superior client service

We also observed that lawyers who were able to stay 'in the zone' whilst working in these areas were more efficient and had fewer errors.

With this in mind we set about designing an integrated practice management system with features that focused on keeping lawyers 'in the zone' by providing tools that increased efficiency and confidence in important daily processes.

For example:

- Ease of use: Developing an intuitive, integrated system using intelligent workflow and easy navigation.
- **Content-in-context:** Enabling Lawyers and support staff to request and manage transactional searches, or conduct legal research, from within the matter itself.
- Interactive reporting tools: Enabling Partners and Lawyers to analyse performance dynamically, by drilling down into the underlying data to identify risks and issues and make timely decisions to improve.

At LexisNexis, we understand that by collaborating with experts and practitioners across the legal profession to develop and create smart, intuitive software solutions, we help lawyers to overcome the paradox of technology, maximise their time spent in the zone, allowing them to make better decisions and deliver better outcomes for their clients.

Lexis Affinity[™] is the trusted practice management solution for law firms – from small to very large organisations. Flexible and easy to use, it streamlines everyday work processes and provides accounting, matter and client management, precedents, automation workflow, client extranet, customisable reporting and integrated access to Searches. If you would I like to find out more visit www.lexisnexis.com.au/affinity or to talk to a solution specialist call 1800 772 772.

About LexisNexis Pacific

LexisNexis[®] Pacific is the leading provider of local and international news, business, tax and legal information, using leading-edge technology, tools and digital solutions. Both in Australia (www.lexisnexis.com.au) and New Zealand (www.lexisnexis.co.nz), LexisNexis Pacific works in close collaboration with its customers to provide content enabled-workflow systems for professionals in law firms, corporations, government, law enforcement, tax, accounting, academic institutions and compliance assessment.

