Mobile valuations: The internet's impact on traditional valuation services

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ABSTRACT

Preparing valuations is a time consuming process involving site inspections, research and report formulation. The ease of access to the internet has changed how and where valuations may be undertaken. No longer is it necessary to return to the office to finalise reports, or leave your desk in order to undertake research. This enables more streamlined service delivery and is viewed as a positive. However, it is not without negative impacts. This paper seeks to inform practitioners of the work environment changes flowing from increased access to the internet. It identifies how increased accessibility to, and use of, technology and the internet has, and will continue to, impact upon valuation service provision into the future.

Key words valuation, internet, information technology, NBN, broadband

INTRODUCTION

The internet impacts upon how we use property now and how we will use it in the future. (Cradduck, 2012) It also impacts upon how and where we will work in the future. (Ruthven, 2012) For Australia, as the National Broadband Network ('NBN') is rolled out these impacts will trigger further changes to our working environment. One of the most obvious changes, perhaps, will be seen in the increased ability of workers to more easily telecommute. (Deloitte, 2011) A flow-on direct effect will be the reduced need for large offices. Indirect effects will arise as a consequence of the increasing ubiquity of mobile internet access. This access enables data to be received and sent from the comfort of your car (Kummerow & Chan Lun, 2005) or by a property valuer from the middle of a field. These effects clearly are more fundamental than merely using information technology ('IT') to assist in providing valuation reports to clients.

Property related IT practices clearly are no longer a mere duplication of real world practices. Since Wyatt (1996) observed the need for appropriate data access as a fundamental for the valuation process, increased access to public land data has been matched with exponential developments in IT. These developments in turn affect both service delivery by the public and private sectors, as well as the tools used to deliver those services. For the valuation profession IT has taken practice a further step. The profession now has at its fingers tips a variety of proprietary software packages for use in domestic and international valuations. (Parker & Robinson, 2002) These packages can enable more accurate analysis of data and more comprehensive valuations to be provided in a more timely and cost-effective manner. This is aided by the internet, which facilitates valuation research and provision. (Naude *et al,* 2011)

More recently, the increased use of mobile technologies – smart phones, smart devices and laptops – has changed the face of the working environment for a number of professions. (Bay, 2012) For the valuation profession this ubiquitous IT changes how work can be performed, the work space required and the work force necessary. A fixed office may rarely be used where there is IT available, which enables searches to be undertaken, data to be collected, and reports to be prepared, by use of a laptop or smart device while sitting in your car or at a client's property.

The ability to work from the field has both positive and negative attributes. The flexibility it provides can increase productivity and thus can impact positively upon a valuation firm's performance. However, the possibility of errors arising without formal review of a traditional hard copy form of report, or the ability to connect with colleagues in adjoining offices, could result in inaccuracies or incomplete data that would otherwise be identified. It may also lead to changes in office culture, (Maruyama & Tietze, 2012) which will not necessarily be changes for the betterment of individual valuations firms or the valuation profession.

This paper commences with an overview of current literature relevant to telecommuting and property related IT. It then moves to a consideration of how increased use of IT and access to the internet has changed work practices and valuation processes. It concludes by identifying issues requiring attention if IT and the internet are to be used to their full potential by, and for the benefit of, valuation firms. While security issues for *cloud computing* receives a brief mention, a consideration of the legal issues relevant to telecommuting (Swink, 2001) is beyond the scope of this paper.

Although this paper focuses on issues within the Australian context, the matters discussed and the concerns raised are relevant for any jurisdiction. This is particularly so for many Pacific Rim countries whose governments are proactively encouraging the adoption of IT by government departments and businesses for the purpose of enabling telecommuting in the future. (Mustafa & Zainuddin, 2012) The relevance of the research to professional valuers is evidenced by the ever increasing use and reliance by firms on specific property related IT. (Parker, Lockwood & Marano, 2012)

METHODOLOGY

The purpose of this paper is to investigate the impact of the internet on valuation service delivery. To achieve this purpose existing literature was reviewed and an anecdotal survey conducted of the technology experience/use of selected Sunshine Coast based registered valuers. Informal interviews were directed to the valuers' individual and firm experiences in using fixed and mobile valuation products. The Literature Review provides an overview of current research and, consistent with legal research, includes relevant research, as well as interviewee comments and recent Australian statistical data and therefore forms part of the research methodology.

Limitations

Interviews were conducted informally as opportunity for discussion arose. The valuers who were interviewed were chosen for their divergent levels of experience, ease of familiarity with technology, location and interest in the research. The interviewees represent principals, employees and government valuers. Although, due to the informal nature of the interviews, the pool of interviewees is restricted the responses are consistent with the matters/concerns identified in the literature and by this research.

LITERATURE REVIEW

A core method of valuation is by means of comparison of a property with like properties. Access to land data that is accurate, detailed and current therefore is essential for the performance of valuation services. Internationally, Nyarko and Lemmen (2008) observed the effectiveness of geo-information technology, such as State developed integrated geographic information systems ('GIS'), in streamlining service delivery and ensuring accuracy of data. Importantly for issues relevant to overcoming the digital divide (Cradduck, 2011) they noted the negative impact that a lack of such systems, and/or lack of ease of access to such systems, has in developing countries. Negative impacts of lack of access to data, however, are not reserved to developing countries. Wyatt (1996) previously noted the negative impacts to valuation service provision in the UK arising from the lack of timely access to reliable data in comparison with some European countries.

In the last two decades the land administration systems throughout Australia have undergone significant technological changes in administration and registry management. (Parker, Lockwood & Marano, 2012) In Queensland, and elsewhere in Australia, access to key land data such as tenure type, registered encumbrances, easements and planning permissions, was previously only available by physical request at the relevant State/Territory land registry or planning office (i.e. by ordering a search at the Titles Office and paying a fee). The total search process, including accessing relevant sales figures, would take several days to gather together and may be out of date when received. (Kummerow & Chan Lun, 2005) This information generally now is available via the internet with results being current as at the date of the search and with results, in most cases, delivered almost immediately. Use of GIS also has become more common. No longer is it a system only for the specialist. As part of the push for open government the data it provides is more accessible to all by means of on-line tools. (Salkin, 2010) Ease of access to data, however, is not the only impact on work processes. Workers can benefit from the flexibility that access to the internet via high-speed broadband brings. This is seen in the increased use of flexible working arrangements across all age groups of the Australian population. (ABS, 2010a)

Telecommuting is perhaps the most obvious of these types of work arrangements. Although not a new concept, with a small number of firms facilitating this practice as early as the 1970s (van Meel, 2011), it is now more commonly accepted and used. Telecommuting (referred to by some authors as 'teleworking') also has the ability to bridge the digital divide as it can be an aid to enabling the betterment of the poor, particularly those in third world countries. (Kanellopoulos, 2010) Telecommuting includes any work undertake by means of IT outside the 'normal' work environment. (ABS, 2010b) Research shows that telecommuting has positive impacts for employees, employers and society generally. (Deloitte, 2011) This impact can be seen in both traditional professions (such as law) and, more recently, for 'creative workers'. (Flew, 2012) For example, the large law offices, or the barristers' chambers of *Silk* or *Rumpole*, are no longer essential for the practice of law. (Bay, 2012)

Accommodation costs for both staff and related furniture and equipment are a significant item of business expenditure. (Kummerow & Chan Lun, 2005) Although computers no longer occupy rooms by themselves, businesses must make space allowances in order to house the associated equipment and server. However, by a connected use of IT, telecommuting and alternative means of storing data, businesses are able to reduce costs otherwise lost on rent and office equipment. (Anonymous, 2002) For example, use of computer servers as well as keeping hard copy files of data may soon be a thing of the past. *Cloud computing,* where analysis and storage of data is not dependent upon either the location of your computer server or the capacity of your hardware, enables a business to maximise turnover, minimise costs and thus increase profitability. (Armbrust *et al,* 2009) Whether anticipated spectrum allocations (ACMA, 2012a) will cope with projected Australian demand remains to be seen.

An important point to note is that, despite its many benefits, telecommuting is not a suitable work arrangement for all workers (Clark, Karau & Michalisin, 2012) or for all occupations. Some workers need interaction with others and are adversely impacted by this form of working. (Maruyama & Tietze, 2012) Also as Sias *et al* (2012) observe unless managed appropriately, i.e. by means of shared projects, telecommuting can lead to feelings of isolation. If allowed to develop, these feelings may adversely impact on productivity and change impact upon and change firm culture. (Maruyama & Tietze, 2012) Finally, while many services may now be delivered purely on line, some services (such as those provided by the author's favourite barista) clearly can only be performed in the 'real world'. Therefore, irrespective of the industry in which you are operating, careful consideration is required before moving to telecommuting. Dependent upon the nature of the particular position or project individual deliberation is required by the business as to whether telecommuting, or even the use of mobile technologies, is beneficial and/or warranted.

As Cradduck (2012) identified, telecommuting will have flow-on effects for property uses as the types of office spaces required change in order to accommodate changing work practices. Offices of the future may bear little resemblance to those of today. The more the employee telecommutes, the less a fixed office is required. Job sharing, office sharing and 'hot desking' are likely to increase. The increased focus on IT is one of the drivers for change in/development of a region's 'identity' that leads to a variety of increased economic and social opportunities. (Jansen, Cuthill & Hafner, 2012) Telecommuting enables individuals to remain more connected in the region where they live and to contribute more time to their community that previously was spent in travelling to and from their place of work. (Cradduck, 2011) Most recently Ruthven (2012) identified that the property related services industry was amongst the key growth areas of the digital age. Increased telecommuting and access to mobile property IT, in combination with non-property specific changes will change the manner of operation of the valuation firms of the future. With those changes there will come new challenges.

IMPACT FOR VALUATION PROCESSES

As Wyatt (1996) previously noted, the benefits that ease of access to complete and current information brings and the change it causes to valuation reporting is primarily that it facilitates a desire for more in-depth analysis as well as enabling report provision in a more timely (and cost effective) manner. Online searching, in combination with the use of GIS and global positioning system ('GPS') data, enable a complete picture of a property, and its comparators, to be formed much more quickly and accurately than previously possible. Ease of access to current and accurate data in turn has increased the daily output of the valuer, in some cases doubling it. (Kummerow & Chan Lun, 2005)

IT by itself cannot be relied upon to produce accurate valuation reports for all properties. (Lenk, Worzala & Silva, 1997) The idiosyncrasies of individual properties reinforce the need for individual assessment and consideration on a property by property basis. Therefore while some valuation purposes, such as mass appraisal for land tax purposes, may warrant an automated process; generally IT, and the internet, are tools for use by a valuer rather than a substitute for one. That IT and the internet impacts upon valuation processes, however, is clear. As one interviewee noted, the most recent versions of the available software facilitate greater accuracy, as data is required to be entered only once. (Personal communication C, 2012) The downside is in entering data only once there is no easy method of cross checking (i.e. when a different figure appears the second time) to ensure no errors.

The effects of increased telecommuting clearly impact upon the space required for workers in the traditional office environment. (Cradduck, 2012) Property related industries are amongst those with the greatest level of staff engaged in telecommuting. (Ruthven, 2012) For valuation services, this clearly would impact upon the size and layout of the 'main' office. Reduced space for staff is not the only impact. In addition to the changing work forces, the office space required for storage purposes has changed. As data can be sourced and saved electronically, limited real world space (if any) is required for storing of searches, reports and/or client files. (Kummerow & Chan Lun, 2005) By itself, this changes the requirements for office design and layout. However, IT's impact in combination with the ability to remotely access data via the internet has had the greatest impact.

A variety of software applications are available for use to assist in the generation of reports. (Parker & Robinson, 2002) Common packages currently used include *property pro, value pro, and Estate Master.* Some, including the current version of *value pro,* enable reports to be generated in the field without the need to return to the office. This software also enables data and reports to be stored in the *cloud.* Valuers using these packages are not dependent upon a fixed server for their system; nor do they incur the related costs of operation and maintenance. As well as other impacts upon property use (Cradduck, 2012) this means a firm needs less dead space for machines as opposed to live space for use by productive personnel.

CONCERNS

While mobile internet coverage across Australia is anticipated to increase (ACMA, 2012a) and although the regulator is looking to make better use of existing spectrum to further facilitate mobile broadband services, (ACMA, 2012b) currently, access to the internet is not uniform. Coverage and accessibility to the internet varies from region to region and can be adversely affected by issues of topography, as well as isolated populations. (Cradduck, 2011)

Some regional valuers, in comparison to their Brisbane colleagues, do not even attempt to finalise reports in the field and email them to their office due to inconsistency of mobile reception in regional areas. (Personal communication B, 2011) Also a minority still undertakes valuations the 'old way' by measuring building dimensions (albeit with laser devices) and then dictating their report to their PA to prepare. (Personal communication A, 2011)

Accuracy of data also to a great extent is dependent upon the accuracy of the input of data. Professional experience shows that it is possible for the search results to be inaccurate due to data entry issues at the search providers' end; or not current due to the late lodgement of documents by a clients' financier. Also, the issue of accuracy of data transfer is an issue at the valuer's end. While each of the systems themselves operates well, and some can be accessed in the field, the search, data analysis and valuation report production systems are not fully integrated. (Personal communication C, 2012) This raises the issue of the possibility of missing, or mis-entered, data, which would affect the accuracy of reports.

As part of any transition to use of the *cloud*, appropriate management of the security issues arising also must be identified and addressed (Ponemon Institute, 2011) as must other transition issues. As with the adoption of any new IT system, addressing these issues comes at a cost of adoption of hardware and software and training of employees. This cost, however, is often unthought-of and therefore unbudgeted for (Cradduck, Caelli & McCullagh, 2008) and as such may impact profitability.

Dedicated software may be a cost effective tool in the valuation process. However, as every software package has its own idiosyncrasies, and it is suggested with data accuracy a priority, it is essential that users require training in the use of the specific package. This will ensure appropriately skilled users as required for the valuation process. (Parker & Robinson, 2002) Thus training and, more importantly, the allocation of time for appropriate training to occur are vital to ensure maximization of any software/internet tool. It is this oft hidden after-cost that restricts technology take-up in the first place and which can impede its adoption thereafter. (Cradduck, Caelli & McCullagh, 2008)

In international jurisdictions mobile technology, specifically smart phones, are being considered as a cost effective mechanism for providing purchaser data to the land registry for updating of the register after sale. (Whittal, 2011) While understanding the need, particularly in developing countries, for keeping costs down, and to encourage provision of information to ensure the register is accurate, proposals such as this are inherently flawed and subject to potential abuse. Additionally, and similarly to any other telecommuter, there are concerns of privacy and confidentiality of client information that must be addressed. (Thornton, 2012) Passwords, and their appropriate use, combined with specific employee training will be crucial aspects of future valuation 'office' practices.

CONCLUSION

A ubiquitous internet, with access for and by all that enables home systems, customers and business to be truly connected will be expensive and potentially out of the reach of many. (Anderson & Raine, 2012). However, as the NBN is rolled out, and as governments and businesses become more financially (Deloitte, 2011) and environmentally (Fuhr & Pociask, 2011) conscious of the benefits of telecommuting, there is likely to be more support for this way of working. In turn this will lead to an increasingly decentralised and mobile workforce.

Reliance on manual systems in the production of valuation reports is costly, time consuming, and subject to errors. Therefore, with perhaps a better appreciate of value than most, it is expected more valuation firms will avail themselves of mobile valuation software and the ability for their employees to become telecommuters. Use of mobile technologies, in combination with utilising *cloud computing* for data and file storage, can be cost effective for business and beneficial for employees. Attractive as this may seem for ensuring outputs are timely, and overheads are reduced, use of the *cloud* in combination with telecommuting could mean that a firm's reports are all prepared in isolation.

The ease of access to data and mass-production of reports by electronic means is not a substitute for individual professional consideration of a particular property *and* the ability to seek immediate mentoring, guidance and/or suggestions from the person in the next office. Also, changing the dynamics of an organisation by rapidly increasing those who are telecommuting will change the culture of an organisation and not necessarily for the better. (Maruyama & Tietze, 2012) Irrespective of age, recent research shows that employee preferences are for more immediate connections with their co-workers, such as face-to-face engagement, telephone calls and emails. (Silas *et al,* 2012)

While facilitating service provision and report delivery, mobile technologies must be approached with caution. Not because they are flawed processes or systems but because, as they rely on human input, without due care and attention the end result may be flawed. Preparation of reports in isolation from others could lead to attention to detail being assumed rather than being a fact. Also, potential inaccuracies are likely to be exacerbated if members of the public, without the necessary knowledge, are able to update their own data on land systems. As with all technology it is best to remember valuation software packages, irrespective of whether these are installed on your desktop PC, laptop or other smart device, are but utilities which must be mastered to ensure accurate results and timely service delivery.

An additional risk to the professional practice of valuation firms may come from consumers' untrained use of free online valuation sites, which provide instant indicative property 'values'. However, while courts and financial institutions continue to insist upon professional valuations, this impact is likely to be minimal at worst. And finally, although perhaps it unnecessary to state this, however current and clear the pictures are from services such as Google Earth®, for land valuations there will always be the need for physical inspection of the property and consideration of its relative position. The internet, however ubiquitous it will become, will never obviate the need for following the basics of proper valuation processes.

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