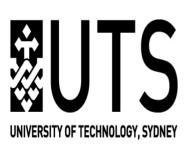
THE FUTURE OF THE VALUATION PROFESSION

Draft Final Report

prepared for

The Australian Property Institute

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EXECUTIVE SUMMARY

The valuation profession faces significant challenges as more and more valuation processes become automated, and the role of the Valuer becomes more one of data handling and information processing than an economic analysis (Wilkinson et al, 2017). With this, the role of the Valuer must change in order to respond to the industry's needs. In Australia, professionally qualified Valuers are members of the Australian Property Institute (API) who have completed tertiary educational course (typically an undergraduate or post graduate accredited degree) and a professional training period. Furthermore this membership is ageing, with the median age of members being early to mid 50s. With an ageing membership, it is vital to attract new talented individuals into the profession.

The aim of this research was to explore the future of the property profession generally and the role of the Valuer in particular, and how the profession could maintain and increase relevance and currency, and set an agenda to support employers in attracting and retaining a more diverse talent pool to run the businesses of the future. This report presents the findings of the research project that investigates extant literature on the issues and challenges faced by the current valuation profession.

The research aims were to:

- 1. Identify the current issues, threats and challenges faced by the profession and Valuers;
- 2. Identify the potential solutions to the threats and challenges;
- 3. Identify new knowledge and skills needed for the future;
- 4. Identify important emerging trends and practices; and
- 5. Identify the role of the professional body, industry and educators to meet the future challenges.

The research design comprised a qualitative approach that sought to ascertain members' views and perceptions about their profession and the future (Silverman, 2013). Given that projecting into the future is somewhat subjective, focus groups were facilitated to allow a dynamic debate on key issues identified in the literature (Denzin and Lincoln, 2000). This approach allowed the researchers to determine the strength of feeling and amount of consensus that existed on various issues and challenges.

Key findings

The twelve key issues, threats and challenges faced by the profession were found to be (not in order of importance):

- 1. Increasing use of automated valuation models (AVMs) for low risk residential valuations.
- 2. Valuers are unable to protect themselves against the banks which dictate terms.
- 3. Valuers losing control of the data and valuations.

- 4. Aging membership and difficulty to attract new talented entrants to the profession.
- 5. Fragmented representation due to lack of support from professional bodies.
- 6. Government regulations / practices are not uniform nationally and governments does not focus on the benefits of the profession.
- 7. Fee levels Valuers are asked to do more for less and less specialised fees.
- 8. Lack of market acceptance regarding the valuation opinions provided.
- 9. Valuation has become compliance driven, and not value, quality and accuracy driven.
- 10. Some lenders encourage Valuers to deviate from API standards.
- 11. Job-hopping staff.
- 12. Pressure from other professions; such as accountants.

There are twelve knowledge and skills required in the future were found to be that (not in order of importance) Valuers / graduates need:

- 1. Greater knowledge of the fundamentals required in a valuation and to better understand the methodology principles.
- 2. To develop more inter-disciplinary skills.
- 3. To be able to value large property portfolios and acquire a good understanding of the management of large portfolios.
- 4. To develop knowledge in understanding 'business strategy' and soft skills.
- 5. To develop more market forecasting skills and a stronger awareness of property cycles and forecasting trends.
- 6. To develop advanced data analysis techniques.
- 7. To develop more skills in the use of advanced technology and to understand the basic input methodology mechanisms behind each program.
- 8. To be able to work with mobile software.
- 9. To specialise in more than one area of valuation.
- 10. To be able to collect data in a much wider range of sources for valuations.
- 11. To develop new knowledge and skills in aged care, pubs and large complex residential development projects
- 12. To develop standard terminology and valuation reports.

There are ten important emerging trends and practices, found to be (not in order of importance):

- 1. Globalisation of practice.
- 2. Increased collaboration.
- 3. Increased employee diversity.
- 4. Strong leadership.
- 5. A united approach is necessary.
- 6. Better marketing strategies for the profession.
- 7. Being multi-disciplined.
- 8. Need for well thought-out fee scales.
- 9. Strong quality assurance (QA) procedures.
- 10. Strategies to protect small firms.

The roles of the professional body the API, industry/employers and educators to meet these future challenges have been identified in the study and are shown in Table 8.

Recommendations

The key recommendations are to validate the findings of the sample of practitioners in this study in a survey of the whole API membership. Following analysis of this data, the findings will be consolidated into a final manifesto for the future.

A working manifesto for the future has been established in Section 5.1 with strategies identified for the short (0-2 years), medium (3-5 years) and long term (6 years +) to ensure all the measures and actions identified can be addressed by all the stakeholders. Some strategies appear within more than one time frame. In the short-term six strategies were identified;

- 1. Data optimisation strategies.
- 2. Establishment of risk reduction and risk management processes including, mandatory self-audit functions.
- 3. Development of international data standards and systems of data sharing.
- 4. Global perspective and internationalisation of services.
- 5. Different professional bodies to unite behind common standards for education, behaviour, service delivery, monitoring and regulations to mitigate the risks arising from the lack of clear identity for the profession.
- 6. Horizon scanning for changes in the environment.

In the medium term five strategies were identified as follows;

- 1. Lobby for introduction of uniform legislation and procedures relating to valuation throughout the various jurisdictions in Australia.
- 2. Develop specialisation and true expertise.
- 3. Develop big data analysis skills (e.g. data sourcing, data handling, data manipulation and data presentation).
- 4. Develop alternative valuation products such as broad market analysis, accurate value predictions, and risk pricing.
- 5. Develop a flexible suite of professional qualifications and educational programs.

Finally two strategies were identified for the longer term as follows;

- 1. Ongoing development of big data analysis skills; and
- 2. Development of a flexible suite of professional qualifications and educational programs.

1.0 INTRODUCTION

Real estate markets have a leading role to play in a country's economy, society and the environment. The valuation industry plays a vital role in establishing market values for properties and Valuers are major part of restoring normalcy and trust to real estate markets (Coester, 2015a). Like most knowledge based professional services and industries, the valuation profession is experiencing a more competitive environment. As a result of a combined effect of market conditions, state and federal regulations, investor overlays, and market perception issues, the industry has experienced unprecedented attrition in the recent years. Facing an identity crisis, the valuation industry is trying to figure out how to effectively serve the property market while navigating the increasingly complex market environments and technology advancements (Coester, 2015b). To understand how the valuation industry arrived at this point, it is necessary to establish where the profession is going, where it is now, and future strategic planning required for the profession at both the profession and corporate level (Elliot and Warren, 2005).

The valuation profession is facing significant challenges as more valuation processes become automated, and the role of the Valuer evolves to become more of data handling and information processing than of economic analysis (Elliott and Warren, 2005). With this reality, it appears the role of the Valuer inevitably must change in order to respond to changing technologies and evolving industry needs. In Australia there is, moreover, an ageing membership with the main professional body, the Australian Property Institute (API). As its members retire and subscriptions are lost, the API will lose its ability to lobby, and to promote its members and their services and so it is vital to attract new talented individuals into the profession. It is not surprising that Valuers have been preoccupied with the future of the profession considering the rapidly changing business environments with the focus on cost minimisation (Elliot and Warren, 2005). Clients will not pay for services that do not add value to their function and as a result Valuers are being forced to re-evaluate their business models in order to provide more cost effective services that meet client requirements.

Instructions were received on the 27th July 2016 from the API to investigate and explore the future of the Australian property profession and the role of the Valuer in particular. The aim of this research is to determine how the profession could maintain and increase relevance and currency, and set an agenda to support employers in attracting and retaining a more diverse talent pool to run the businesses of the future.

In particular, the objectives of this research were to;

- 1. Identify the current issues, threats and challenges faced by the profession and Valuers;
- 2. Identify the potential solutions to the threats and challenges;
- 3. Identify new knowledge and skills needed for the future;
- 4. Identify important emerging trends and practices; and
- 5. Identify the role of the professional body, industry and educators to meet the future challenges.

The API is a national body for property professionals with over 8,000 members who are professionally involved in the areas of valuation of real property, business and plant and machinery,

property and funds management, property or land development, property finance, property law, property transactions, property within government, and property education. The institute has eight divisions including the National Office that are generally determined by the state and territory boundaries of Australia. The API sets and maintains the standards of professional practice, education, ethics and professional conduct for its members, advocates for its members with a range of stakeholders, and provides professional recognition for its members. Membership entry to the API is based upon tertiary educations standards accompanied by recognised practical experience. Over 80% of its members are property practitioners while 2% are retired members and 3% are non-practicing members. The membership is largely dominated by males with less than 20% of female members. More than 80% of members are based in the 3 main states, New South Wales (37%), Victoria (25%) and Queensland (19%). It is estimated that about 33% of the members are over the age of 50 with the future consequence of more members expected to retire than will be replaced by graduates seeking careers in property.

API is not alone in having concerns about the future of their profession given the changing nature of work and the impact of digital technologies. It is said we are undergoing a period of immense change in terms of technology and emergence of artificial intelligence (AI) and that this is having a great impact on professionals (RICS, 2015). Other professional groups such as Lawyers have already realised that their members are finding changes in the requirements of the services they provide for clients, with many services being provided by off shore providers at lower costs (Susskind and Susskind, 2015). In a study partly examining the scope and state of education in the legal profession, they concluded that we "are training young lawyers to become 20th century lawyers and not 21st century lawyers" (Susskind and Susskind, 2015), the question is – *can the same be said for the property profession?*

1.1 Outline of the report structure

This report commences with a review of the literature identifying the issues and challenges facing the valuation profession, from a changing role, competition from other groups and technologies, changing membership demographics, to market acceptance and a perceived fragmentation of the profession. Insights and suggestions are identified at the conclusion of the literature review. The research design is explained and described in section three, before an analysis and interpretation of the focus group data is presented in section four. Possible solutions to the perceived threats and challenges are described, and new knowledge fields and skills needed for the future are identified. Emerging fields of practice are described and the role of the professional body and other key stakeholders, such as educators and industry is identified. Out of the data analysis, overall conclusions and recommendation are presented in section five. The final part of the report sets out a manifesto for the future in the short, medium and long term for API and its members.

1.2 Limitations

All research has limitations, and in this case the key limitations are listed below;

- The timing for the literature review was short, from September 2016 and compressed by the need to provide an initial report to the API and collect and analyse data for a colloquium in early December 2016.
- Focus group participants were from Melbourne and Sydney only and therefore focus is NSW and Victoria centric.
- Only focused on Melbourne and Sydney markets.
- Underrepresentation of rural Valuers.
- Underrepresentation of small valuation firms.
- Underrepresentation of young, recently joined or qualified Valuers. And:
- Underrepresentation of women members.

2.0 ISSUES AND CHALLENGES FACED BY THE VALUATION PROFESSION

It is said we are undergoing a period of immense change in terms of technology and emergence of artificial intelligence (AI) and that this is having a great impact on professionals (RICS, 2015). In the past, the availability of data was a critical aspect of valuation and the Valuers' main strength was the data they held, or the contacts they could use, to gather publicly unavailable information required in valuations (Motta and Endsley, 2003). However the globalisation of business, as well as the rapid growth in information and communication technology (ICT), mean that more and more information is available from different sources to more and more people. As a result, the business environment has become more competitive for most knowledge based professional services (Elliot and Warren, 2005). For example, in the UK the legal profession is being undermined with large numbers of people seeking and using internet based solutions rather than appointing legal advisers to resolve disputes (Susskind and Susskind, 2015). Similarly, digital technologies and artificial intelligence (AI) pose significant threats to the existing valuation practice. It is no longer the availability of data and market knowledge that differentiate Valuers, it is in fact what they do with the data that differentiates them from their counterparts. Therefore, the role of the Valuer is increasingly moving towards being an information analyst from being an information gatherer.

In order to understand how the valuation profession should be changed to not only survive, but thrive, in the new century, there is a clear need to understand the main issues and challenges faced by the profession. Once the issues and causes are identified, it is possible to more rapidly predict the future and then plan for the success of the profession. Therefore as the first part of the study, this section of the report, incorporates an extensive review of the literature that;

- 1. explores and maps the changing role of the Valuer,
- 2. explores the issues and challenges faced by the profession,
- 3. identifies insights and suggestions; and
- 4. sets outs some suggestions on a way forward for the profession.

2.1 The changing role of the Valuer

The fundamental nature of property markets has changed over the last few decades and this has significant implications on the valuation profession. Client demand for property valuations have moved from providing single valuation opinions and increasingly moving towards providing broad market analysis, accurate value predictions, and risk pricing which require Valuers to broaden their knowledge and expertise (Motta and Endsley, 2003). Furthermore, the growth of property trusts, and similar investment opportunities in the property sector, together with changes in the size and complexity of development projects around the globe, have meant that a Valuer needs to have a totally different skill-set in order to undertake valuations on such properties and portfolios (Elliot and Warren, 2005). Changes in the financial market with the emergence of commercial mortgage backed securities (CMBSs), and other securitisation instruments have also put a great pressure on Valuers to review their valuation models (Motta and Endsley, 2003). A consequence of any secondary market is that it leads to a standardisation of data available in electronic format with a corresponding increase in the use of automated valuation models (AVMs) (Grover, 2016). With the increased availability of freely available data, the mortgage industry is moving to the 'science of valuation' and the valuation

profession 'is caught in the middle' (Schneider, 2016). Furthermore, as property markets are increasingly internationalising with cross-broader investment and financial activities, Valuers need to be familiarised with the internationally agreed valuation standards and guidance (Gilbertson and Preston, 2005).

All practicing Valuers should be conscious of the changing business environment and the need to strengthen their skills and must be forward-thinking to survive in this new era of globalisation. However, it is suggested that some Australasian Valuers remain parochial and resistant to change in the face of the challenges of internationalisation and doing business in the global economy (Bond, 2003). Particularly, solo practitioners and small valuation firms are at the risk of not being able to adapt to the changes in the business environment. Concerns have been expressed that the pace of change threatens the livelihood of many Valuers who are unable to meet the challenges, and as a result, the larger firms will get larger while many smaller firms will be forced out of business (Bond, 2003).

2.2 Competition

One of the main challenges to the valuation profession today has been the growth of competition between firms on price rather than quality. There is no room for inefficiency and clients will not pay for services that do not add value to their function (Elliot and Warren, 2005). Furthermore, internationalisation and standardisation of property and financial services will continue to allow other organisations such as financial institutions, banks, management consultants and accountants to make major inroads into the valuation profession (Gibson, 1987). Due to their economies of scale and the expertise in the financial market, these organisations are in a position to provide more complete, cost effective services that meet clients' objectives in more aggressive manner. Particularly, for residential mortgage valuations some lenders are already looking at the possibility of using non-inspection valuation products such as broker price opinions, electronic valuations and non-appraisal desktop valuations for lending purposes (Coester, 2015b). In Australia, there is a move for the banks to change the contracts with Valuers so that the banks own the intellectual property associated with the valuation which would eventually allow banks to develop their own databases in order to generate their own valuations for mortgage purposes (Blass, 2016). To survive in this competition, Valuers need to move away from specialising on particular skill set and develop speciality in different areas in valuation. Even though considered to be minor, other barriers to entry to the valuation profession can be summarised as government policy through regulation and licensing of professionals, the costs of professional indemnity insurance and customer loyalty (Elliot and Warren, 2005). Although within Australia licensing requirements vary for each jurisdiction; for instance in New South Wales the government regulator, Office of Fair Trading NSW, in 2016 announced that it was no longer necessary for Valuers to obtain a license. Therefore, it is observed that whilst the fundamental skills of Valuers are likely to remain relevant, the nature of the future work that they are likely to undertake will be significantly different (Hefferan and Ross, 2010; Hefferan, 2011).

2.3 Changing technology and technical knowledge and skills

Due to the enhancement of technology and increasingly freely available market evidence, many of the steps in the valuation process – data collection, data analysis, and data formatting – are performed by

computerised models and the valuation profession is seeing a progressive shift towards automated processes (Grover, 2016). Particularly, automated valuations have become a significant challenge as such computer driven reports without the objective inputs of the Valuer are seen as acceptable 'valuation reports' by clients (Gilbertson and Preston, 2005). In the Australian context, companies such as CoreLogic, APM Price Finder and Monitor are already offering computer generated valuation reports on a subscription service. Specifically, computer generated automated valuation models (AVMs) which have been developed to allow for rapid, cost-effective valuation outputs are being widely used after the GFC and their potential applications are much wider than simply for mortgage valuations (RICS, 2016). They use one or more mathematical models – such as regression, adaptive estimation, neural networks or an artificial intelligence program – to estimate the value of a property or series of properties (RICS, 2016). It is surprising and disconcerting that in an industry in which trillions of dollars are involved, the conventional valuation methods have not paid much emphasis on checking the math and statistical accuracy of property valuations (Silva, 2014). Therefore typical Valuers may struggle with the use of these models which require sound knowledge in statistics. For example, in the future, the mortgage industry will need Valuers who are 'supported by analytics' (Schneider, 2016).

The use of blockchain technology which develops continuously growing list of data records that are organised into a series of blocks, each containing a batch of records of transactions, has been moving beyond banking and financial services applications (Taft, 2016). The banking sector is already exploring the application of blockchain for their mortgage valuation system. So far, Bank of China in Hong Kong has led tests on a property valuation system for home loans based on blockchain technology and the bank plans to go live with it in December 2016 (Weinland, 2016). They aim to use blockchain to create a decentralised network of banks and Valuers through which the latest valuations are listed, verified and shared in a matter of seconds. HSBC bank also recently announced plans to use blockchain to speed up mortgage applications by keeping a register of property valuations. It is suggested that banks are focusing on integrating a blockchain into their mortgage valuations as there is less regulatory concern for this (Weinland, 2016). With a database of property valuation, it is hoped that property purchases can be streamlined, with much less reliance on mortgage valuations from Valuers. Kumar (2016) predicts that impact of blockchain technology will be overestimated in the short term but underestimated in the five to ten year period. In fact, there are predictions that residential valuations may not be even in existence 10 years from now. Over the next few years, as the lenders discover the advantages of these new valuation products with their statistical reliability and unparalleled market analysis, the industry will transform from the art of appraising to the science of appraising (Bradford, 2014). With the availability of advanced visual technology that is being developed, it is not too far-fetched to consider a time when a property inspector streams live video to the Valuer and a full valuation is completed in a few hours with increased speed and accuracy (Bradford, 2014). Similar concerns have been raised about the future of the residential mortgage Valuers by the Australian Property Institute Chief Executive Mike Zissler (2016b), who suggests that Valuers could soon be extinct unless they rapidly change their business model as their data are gobbled up by major data crunching firms. The possibility of developing accurate and efficient property databases in Australia is significantly high given the fact that an average home in Australia is valued at a rate of about 3 times in every 10 years.

It is suggested that the challenges that technology brings to the profession must be embraced as strategic partners and thus should be viewed as a positive addition to the profession rather than a

threat (Robson and Downey, 2010). However, disruptive innovation – technology that does not support, sustain and enhance the way the professions have worked in the past – will continue to change the way existing industries operate (Susskind and Susskind, 2015). The use of advanced technologies also has a significant effect on current and future employment. Even though they offer major cost, time and efficiency savings, it eliminates the need for young people starting out in the professional world looking for experience and employment opportunities. Also, the varying digital skills and approach to technology between the younger and older valuation professionals at workplaces may create a daily issue for many companies. Therefore, the challenge for the profession will be learning how to embrace new technology into the practice and how to maximise the use of the technology where it is appropriate by maximising the reliability of valuations.

2.4 Changing membership demographics

The decreasing number of Valuers is a major challenge for the long-term health of the valuation profession. For example, in the US, the number of Valuers has steadily declined; as of June 2015, there were 78,500 appraisers practicing, 3% fewer than in 2014 and a 20% decrease from 2007 (Murphy, 2016; Coyle, 2015). Similarly in Australia, it is well-known that it has an ageing workforce and that a large percentage of labour market growth in the future will come from older workers. There is a demographic time bomb in the valuation profession which means that a large number of property Valuers who are members of valuation professional bodies such as the Australian Property Institute (API) and the Royal Institution of Chartered Surveyors (RICS) will retire in the next ten years raising questions as to where the next generation will come from. This may be softened slightly if members choose to continue working beyond what has been a typical retirement age of 65 years. This has huge implications, both for the way the profession defines, educates and markets itself and also in terms of client perception (Hannah, 2006; Vandell, 2007). This is also a particular problem within academia, where an aging teaching profession is a visible barrier in attracting young people into property valuation programs at the tertiary sector (Baxter, 2007). Furthermore, different age groups at workplaces will have different social and economic needs, therefore long-term planning is imperative in order to create balance and equality at workplaces (RICS, 2015).

This problem is further increased by the lack of new entrants entering the profession. Employers need support in attracting and retaining a more diverse talent pool and, coupled with an ageing membership, it is vital to attract new talented individuals into the profession. In the US, it is claimed that the valuation profession may not attract many young people as higher profile careers as many accredited universities do not offer valuation related degree programs or they are a relatively new phenomenon (Coyle, 2015). Increasing licencing requirements, lower remuneration compared to other professions, increased pressure on the job, additional valuation related underwriting requirements and client pressure have been the main reasons for lack of new younger individuals joining the profession (Murphy, 2016). Therefore, while it is in the industry's best interests to condense the upfront educational requirements needed to enter the valuation field, it should be compensated by strengthening and lengthening the amount of ongoing education training of Valuers (Beane, 2016). Even the universities that offer valuation education are under increased pressure as small, niche programs such as valuation are struggling for their survival since universities have been looking carefully at their own cost management (Baxter, 2007).

Currently in Australia, 14 universities offer property degrees (face-to-face and/or online) which are housed in business schools or built environment schools, however some universities are already facing the risk of downgrading of status of those programs within universities or shutting down the program completely. Furthermore, there are no property programs in the Northern Territory, the Australian Capital Territory or Tasmania. Attracting property graduates into valuation has also been a challenge as not all property programs feature valuation concentration degrees and also many graduates opt to work in other areas in property such as property financing and portfolio management. The lack of interest in the field of valuation among graduates may be related to the lack of public profile associated with the valuation profession. Therefore, in order to keep property and valuation as a recognised discipline within the university sector stakeholder groups need to work far more closely with each other, mutually responding to needs as circumstances and situations change (Baxter, 2007). In addition, recruitments need to be more focused and professional associations need to respond by ensuring that the very best students are attracted to professional membership (Coyle, 2015).

2.5 Market acceptance issues

The future of the valuation profession has been a subject of discussion, particularly after the global property market crash in 2008. Back in 1994, McHolland expressed fears over the future of the valuation profession in the US suggesting that 'the appraisal industry is being left with clients who really do not care about what we can do' (McHolland, 1994: 638). The valuation industry has not done its job in proving its importance to the market, some investors look at the entire valuation process as nothing more than an investor requirement rather than a risk-mitigation tool that is valuable to all parties involved in the transaction (Coester, 2015b). Over the years, it is clear that clients have come to expect little from Valuers and are not willing to pay much for valuation services (Elliot and Warren, 2005). Lance Coyle, The President of the Appraisal Institute (2015) suggests that Valuers' income and their business models have been affected by the process of commoditisation, where valuation advice and reports have become simple commodities in the eyes of the clients. As a result, the pricing power of Valuers has weakened and the quality of valuation products has decreased. This has happened in the banking and financing industry in the residential mortgage lending valuation space. Therefore, Valuers working in the highly-regulated mortgage lending environment must consider how to adapt their business models to the effects of commoditisation (Coyle, 2015).

The same concerns were raised in the Australian context by the Australian Property Institute Chief Executive Mike Zissler (2016a), who suggests that valuation companies have been "pitted off against each other over pricing, and prices have been forced back to 1980's rates, yet so much more work and prescription is now required". The fee paid to a Valuer for the valuation undertaking normally is a very small percentage compared with the risk that a Valuer is exposed to, economically, when undertaking valuations (Levine, 2015). Valuers may find that they are involved in expensive lawsuits related to their valuations, but with a fee that was very small in comparison to the amount in dispute. Given this situation, it is apparent why some insurance providers elect not to insure property Valuers for professional liability (Levine, 2015). In order to survive in the pricing competition, many valuation firms have opted to cut their margins to sub-cost pricing to be competitive in tender processes. In the long run, many small valuation firms would be forced out of business which might lead to a monopoly in mortgage valuations. Mergers and acquisition activities might be good in theory for the smaller firms looking at it as a possible option if they are concerned they won't be able to survive alone, but it can only be successful with a highly calculated approach (Beane, 2016).

Furthermore, Valuers are increasingly questioned with automated valuation models (AVMs) and free or subscribed online valuation sites. Particularly in the US context some loan programs require just an AVM or automated tool and the valuation is sidestepped completely (Coester, 2015b). In the US context, various valuation-review programs such as Collateral Underwriter and Redstone are now available to examine the reliability and weaknesses of various valuations submitted by Valuers to banks based on comparing the valuation against an extensive database of property and market data. The availability of such valuation review programs will change forever the way valuations are perceived as well as the way quality control is managed. The days of Valuers just having different opinions will be over as valuations will have an instant contextual comparison and their competency will be accounted for (Coester, 2015b). Furthermore, with the availability of big data, it is feared that eventually valuations will be ordered less and less frequently with the trend leading to eliminate them altogether in the mortgage financing process (Coester, 2015a). It is also suggested that the valuation outcomes produced by Valuers are increasingly influenced by the major banks as they have grown much more conservative about their lending positions. Zissler (2016a) further emphasises that the valuation industry "must change if the valuation profession is to continue to remain an independent, objective an authoritative provider of valuation services to the Australian banking and financing industry".

2.6 Fragmentation of the profession

Given the spread of asset and business types that require valuation, there is a huge diversity in the standards that govern the valuation process (Fernandez, 2014). It has been difficult for the valuation industry to have a cohesive voice and to move in one direction (Coester, 2015b). Particularly, different countries have different rules and regulations set by different financial regulators when it comes to valuations for financing reporting purposes (Gilbertson and Preston, 2005; Shah, 2015). According to International Valuation Standards Council (IVSC), the independent body that sets global standards for valuation, one of the main challenges faced is the fragmentation of the valuation profession globally. As a consequence it is difficult to engage politicians and financial regulators with a single voice to organise the profession more effectively (Thorne, 2012). Particularly, Valuers are frustrated with lack of clearly defined professional identity when providing valuations for financial reporting purposes (Zyla, 2015). It is interesting to observe in Australia that legislation affecting the valuation profession is becoming more relaxed and deregulated; for example, several States no longer require the banks to use 'State registered' Valuers. This will allow other financing and banking professions to make inroads into the valuation profession. Another major potential challenge is the structural vulnerability issues the banking sector faces from other forms of lenders such as peer-topeer lenders. They are new-age, internet-based lenders such as Zopa, Ratesetter and Funding Circle which bring individual borrowers and lenders together, bypassing traditional banks. These transactions are almost free from any serious regulatory oversight and if borrowers use these new lenders they have a whole new set of rules and regulations to meet which may not include professional services such as property Valuers.

Another challenge faced by the profession is that various professional bodies use different criteria to measure the eligibility of Valuers to obtain membership in their professional bodies. The need of those organisations to unite behind common standards for education, behaviour, service delivery, monitoring and regulation have been emphasised in order to mitigate the risks arising from a lack of a

clear identity for the profession as a whole (Thorne, 2012). Such harmonisation of international valuation standards and practice would enhance the market confidence in the profession and broaden the scope for Valuers by allowing cross-border valuations (Shah, 2015).

As discussed, the future of the valuation profession is not altogether clear and Valuers will have to negotiate their way through these challenges and conflicts. It can be speculated that automated valuations will fulfil the demands of many clients in the residential mortgage business in the future. Therefore Valuers that are involved in residential work will continue operating in increasingly competitive business environments compared to Valuers in other property sectors. Failing to address these issues will damage the perceptions of the valuation profession and leave Valuers underequipped to deal with changes in their business environment. Table 1 summarises the key characteristics of the past and those of the future for Valuers.

Table 1: Key characteristics of the past and the future for Valuers

Past characteristics	Future characteristics
Availability of data was critical.	More information is available from different sources to more people via web – may seek online solutions.
Possessed individually / company owned data.	Have access to large databases on property transactions (big data).
Vast majority of property sold via Real Estate agents.	Selling property online via websites such as Gumtree outside of Real Estate.
Valuers made an appraisal or judgement of value.	Artificial Intelligence (AI) and Automated Valuation Models (AVMs) value.
Move from providing single valuation opinions.	Clients require broad market analysis, accurate value predictions, and risk pricing.
Valuations of individual properties.	Valuations of portfolios.
Focus on the valuations for the present.	Focus on the valuations for the present as well as the future and the past.
Valuations for primary markets.	Commercial mortgage backed securities require robust valuation models.
National market and valuations.	Trans-national market requires knowledge and development of internationally agreed valuation standards and guidance.
National markets dominate.	Globalised markets.

(Source: Authors).

Individually these challenges would not have completely devastated the valuation profession, however, all together, these challenges can cripple the profession, mainly the ageing segment that is fighting to maintain its place within the changing business world (Coester, 2016b). Therefore it is the responsibility of the practitioners, professional bodies and educators to embrace changes that market and technological advances bring to the profession and lift the professionalism of the practice so that the valuation industry will continue playing a vital role in the economy.

2.7 Insights And Suggestions

In this part of the report some key skills and qualities that will be needed, as well as emerging future and existing knowledge fields and specialisms are highlighted and discussed. There is a discussion on some ideas for a way forward to plug gaps in knowledge and skills. Table 2 summarises the key challenges facing the profession and opportunities that are created by those challenges for the valuation industry as identified in the literature.

Table 2: Summary of key challenges and opportunities for Valuers

Challenges	Opportunities		
Some markets are parochial.	Strengthen their profession and have a more global focus by keeping pace with change in the market at national and international level.		
	To survive in this competition, Valuers need to move away from specialising on a particular skill set and develop speciality in different areas in valuation.		
Small firms may not be able to adapt to changed business	Joint venturing with other firms to explore business opportunities.		
environment and are forced out of business by larger firms.	Intervention of government and professional bodies by introducing stricter legislation related to the profession.		
Competition on fees based on price from larger firms.	Valuers develop specialisation in different and emerging areas.		
	Valuers to diversify their coverage of valuation types. Non-residential valuation industry will remain a fruitful business because of the diversity in commercial assets.		
Issues with the ownership of valuation reports.	Seek legislation on strong intellectual property and copyright requirements for valuation reports.		
Technology.	Industry and tech providers to develop and push out new technology to make the valuation workforce more efficient and make their opinions more bulletproof.		
Increasing use of automated valuation models (AVMs).	The continued use of automated valuations could be supplemented with consulting-based products such as comprehensive property valuation, risk analysis, portfolio evaluation and risk mitigation.		

	Professional bodies to loosen valuation guidelines to allow for specific valuations for mortgage purposes with a more limited scope of work and less comprehensive file requirements.		
Government policy through licensing and regulations.	Thorough legislative processes to protect the independent nature of the profession.		
Costs of professional indemnity insurance.	More insurance companies offering professional indemnity for Valuers.		
	Seek legislation to limit the level of risk exposure (e.g. implement ceilings for the maximum liability one will face in litigation).		
	Provide contractual agreements between the Valuer and the client as to the maximum exposure for the Valuer.		
	Obtain indemnities from other third parties as to the work by the Valuer.		
	Set legal precedents that allow for similar awards to litigants with other international jurisdictions.		
	Consider other alternatives that allow the Valuer to remain as an active Valuer, but to reduce the amount of risk exposure.		
Customer loyalty.	Offer more specialised services and undertake a range of specialised work for clients.		
Many Valuers are specialised in one main area of valuation.	Skills are relevant though future work differs.		
Knowledge of statistics needed for understanding AVMs.	Education provision needs amending.		
Mismatch between digital skills and knowledge of younger people compared to senior staff.	Companies need to embrace new technology to maximise reliability of valuations.		
Ageing membership.	Recruit and attract new entrants with potential to fast track to senior positions.		
Ageing academia.	Major firms offer PhD scholarships to ensure age profile of academia matches practice and also drives forward new approaches, knowledge fields and skills.		
Difficulty of attracting talented new entrants.	Creating enough revenue for individual Valuers by introducing a minimum customary and reasonable fee. Industry to consider actively recruiting talented entrants and establishing training funds for them.		
Niche programs like valuations struggle in new business driven university sector.	Establish more formalised teaching and research agenda to the mutual benefit of universities, the profession and users of valuation services.		

	Programs moved to generalist undergraduate programs, with add-on specialist post-graduate programs aimed at valuation professional outcomes.
Lack of public profile of valuation professionals.	Engage politicians, financial regulators and general public with a single voice to organise the valuation profession more effectively.
Within the school leavers category, lack of profile of valuation professionals.	Attract school leavers into the profession, by promoting the valuation profession at careers days held in high school. Encourage employers to participate in the work experience placements for students in high school. These students generally seek 5 days of unpaid industry experience to obtain a better understanding of the work involved for the profession.
Market does not value Valuers and pricing power has diminished along with quality of valuations.	Increase the profession's influence and business potential nationwide with a united approach.
Many have cut profit margins to sub-cost pricing for valuations.	The professional bodies can introduce recommended fee scales.
Wide diversity in the standards that govern the valuation process and fragmentation of the valuation profession globally.	Developing more political clout with a united approach by all property related professional bodies such as the Australian Property Institute, the Australian Securities Institute, the Property Council of Australia, the Real Estate Institute of Australia and the Royal Institution of Chartered Surveyors.
Valuers have been left on the outside of an interconnected marketplace due to the independent nature of their work.	Developing inclusive committees with market participants to work together on issues that affect all parties.
Various professional bodies use different criteria to measure the eligibility of Valuers to obtain membership.	Potential to unite behind common standards for education, behaviour, service delivery, monitoring and regulation.

(Source: Authors).

From the literature it is clear that most work, including that of Valuers, will become more technology dependent and as a profession Valuers need to embrace computer literacy not only to ensure they remain abreast of the changes, but also to pre-empt and influence change (Elliot and Warren, 2005). There is a need to offer more specialised services and undertake more specialised work for clients. Employees, in general, and including Valuers, will need to embrace change and become more entrepreneurial, and there is scope and potential for these entrepreneurial skills to be included in education programmes. Research predicts that the workforce will have more freelancers or contracted

staff who work for multiple employers. This indicates the valuation professions may need to move from honing one particular narrow skill set and develop a broader, adaptable and flexible skill set (Susskind and Susskind, 2015). In some sectors social entrepreneurship and projects involving social good will become increasingly important and redefine employment opportunities and there may be opportunities available for some Valuers.

So some skills and knowledge are fading in importance and are declining; it is necessary to identify which knowledge fields and skills are in decline. In terms of skills, it is said that today professionals need to be outcome focused, with good oral and digital communication skills. Furthermore advanced problem solving skills are required, as the problems we face have far greater complexity, and are sometimes known as 'WICKED problems' (Bright et al, 2016), because no simple solution exists. Some of these WICKED problems require the value to be determined and there is a role for Valuers to play. Problem solving skills should be embedded within our education programmes and need to be developed to much more advanced levels. The solutions for these complex problems are likely to involve inter-disciplinary working and also trans-disciplinary working. Alongside the inter-disciplinary and trans-disciplinary approaches it will be necessary to develop skills associated with a collaborative approach. Other skills focus on advisory services and being able to determine the optimum course of action clients should take; this require the ability to evaluate all possible options and to select the best course of action. Finally professionals need to have an advanced understanding of technology and its applications.

As for practices on the rise, it appears that data management capabilities need to be built among the professions, including valuation and this should be done partially in the workplace and through the provision of continuing professional development (CPD) offered through the professional bodies such as the Australian Property Institute (API) and the Royal Institution of Chartered Surveyors (RICS). The building of data management skills should also be delivered through the education system at TAFE and University level. Education and industry providers should be mindful to ensure compatibility and awareness of the systems and use of new technology is embedded across the built environment sector. Concurrent with this, there is potential to generate new avenues for value creation from the vast amounts of data now available from real estate.

When we consider the knowledge fields Valuers need in the future, growth areas include sustainability and how this impacts on value. Risk management is another important knowledge area which Valuers need to master. Existing skills of data analysis need developing in the context of digital technologies and artificial intelligence. With up to four generations now in the workforce, professionals need greater leadership skills to ensure optimum productivity and quality of outputs.

Finally there is a need, as professionals to adopt ethical behaviour. Professionals, corporations and professional institutions must embrace ethics and collective social responsibility, admit information gaps, and commit themselves to continuous learning, organisational improvement and pushing the barriers of the body of knowledge. Education has a vital role in the way forward and 'the relationship between the professional bodies and universities, government and other stakeholders is, therefore critical if the professions are to emerge as reflective as well as responsive to the issues and expectations of the 21st Century' (Hughes and Hughes, 2013).

3.0 RESEARCH DESIGN AND METHODOLOGY

The research methodology was designed to ensure the research aims were met. Clearly, from the outline of the nature of the research problem and the research aims identified above, this research embodies the characteristics associated with qualitative research (Silverman, 2013). The main features of qualitative research are a preference for qualitative data with the analysis of words and images rather than numbers, featuring observation rather than experiment, and unstructured rather than structured interviews. This type of research has a preference for meaning rather than behaviour, a rejection of natural science as a model and, finally, a preference for inductive, hypothesis generating research (Silverman 2013).

To identify the main information types used by the different property stakeholders the research design was based on the Delphi method (Dalkey and Helmer 1963). The value of Delphi is demonstrated in a wide range of applications on complex, interdisciplinary and technology based issues using a method for structuring group communication processes (Linstone and Turoff, 1975). The research design employed a series of focus group workshops with industry experts followed by feedback reporting. As such the research used an inductive approach to qualitative data analysis (Silverman, 2013).

This research involved the analysis of words. The research examined the research population's current views and perceptions with regards to the practice of valuation and future threats, issues and challenges. The research population's perceptions and the reasons why they exist and why they may or may not be overcome were examined.

The rationale for the research has been discussed above. Each research aim and data collection technique is illustrated in table 3 below.

Table 3: Research aims and data collection techniques adopted.

RESEARCH AIMS	DATA COLLECTION TECHNIQUE
Identify the current issues, threats and challenges faced by the profession and Valuers;	Desktop study / literature review and focus group
Identify the potential solutions to the threats and challenges;	Desktop study / literature review and focus group
Identify new knowledge and skills needed for the future;	Desktop study / literature review and focus group
Identify important emerging trends and practices;	Desktop study / literature review and focus group
Identify the role of the professional body, industry and educators to meet the future challenges.	Desktop study / literature review and focus group

(Source: Authors).

The focus group materials and questions were derived from research discussed in the literature review. The focus groups aimed to canvass as much opinion as possible from the parties most closely involved in the practice of valuation; i.e. API members. To gather as large a number of views as possible, at a deep and rich level and in a short space of time, meant that focus groups were the most cost effective and expedient means of gathering data (Marsh, 1982; Robson, 1993). Using this method of data collection had a number of advantages (Coomber, 1997).

A significant advantage is the ability to generate data and discuss consensus directly with a relatively large group of practitioners. The technique enables the researchers to sample larger research populations compared to a semi structured interview approach. The researchers designed the focus group questions to explore a wide range of issues and threats perceived by individuals.

The perceived drawbacks with focus groups are bias in the sample from self-selection in respondents who responded to the call for participation and choose to attend the sessions in Melbourne and Sydney. However where bias issues were perceived they were dealt with in the focus group by exploring the amount of consensus on issues by all participants (Denzin & Loncoln, 2000).

The protocols for question design were followed, for example, open questions to encourage a broad range of responses. The focus groups questions comprised of five parts. The questions were initially fairly easy to answer, factual questions encouraging respondents to contribute. The first section asked participants to identify issues, threats and challenges they were aware of and related to aim one. The second part of the focus group questions required respondents to think about possible solutions for the issues, threats and challenges identified earlier in their responses for question one, and related to aim two. In other parts of the focus group the participants were asked to identify new areas of professional knowledge and skills for the future; aim three. Following on from this the focus groups, focussed on emerging trends and practices for the profession; aim four. The final part of the focus group session examined the role of various stakeholders; the professional body, educators and industry, in meeting the challenges identified; aim five.

The focus group questions and format had been piloted by the researchers to identify any areas of confusion, terms that might be misinterpreted and so on, according to best practice (Moser & Kalton, 1971). The focus group format was designed in four sections and a copy of the questions is provided in the Appendices.

The focus group workshops were convened at the University of Technology Sydney (UTS), and the Royal Melbourne Institute of technology (RMIT) in October 2016. The focus group workshops were facilitated by academics who are API members and/or Valuers.

In Melbourne and Sydney the focus groups were convened over a 2-3 hour period. The participants were divided into five groups in Melbourne and five groups in Sydney. At the commencement of the sessions in Melbourne and Sydney a presentation by the facilitators to frame and introduce the exercises was undertaken, followed by individual brainstorming tasks, group break-out sessions, and finally a full workshop discussion.

The initial results were reported on December 7th 2016 at the API Colloquium held in Melbourne for further discussion and deliberation to a wider audience of around 80 API members and officials.

3.1 The research sample

The API announced the research via an email and newsletter to all members. Members were invited to contact the researchers if they wished to participate in the study. Following expressions of interest participants were invited to attend the focus group sessions hosted in Melbourne, Victoria and Sydney, NSW. API has over 8000 members currently, some of whom are Certified Practicing Valuers (CPVs). A total of 25 API members attended the focus groups.

To address the research objectives, property professionals / practitioners working for different companies in Australia were invited to participate in the focus groups. Practitioners had to be professional qualified members of API as the findings should reflect contemporary business practice and the sentiments of API members and Valuers as closely as possible. The company types of invited participants included: Development and Asset Management, Property Management and Valuation, Design and Construction, and Transactions Management, Accounting and Business valuation firms such as E&Y, Government Valuation Department such as the Valuer General Victoria, and a retired API president. The participants were industry experts who were content matter experts within their respective fields and regularly engaged in providing professional property services including valuations to clients.

4.0 DATA ANALYSIS & INTERPRETATION

4.1 Focus groups Melbourne & Sydney

Two focus group discussions investigated the perceptions and experiences of property Valuers toward the future of the valuation profession in Australia.

Fourteen property Valuers and, Michael McAllum representing the API, attended the Melbourne focus group. The participants were chosen on the basis of their speciality area in valuation, length and type of experience of valuing different property types, nature of the organisation they worked for and their seniority within the organisation. All interviewees held senior managerial level positions within their respective organisations and had extensive property valuation experience. Their titles in their organisations ranged from the Chief Executive Officer to a senior Valuer. Table 4a profiles the participants and their organisations.

Table 4a: Profiles of the Melbourne focus group participants

Participant	Job title	Base of organisation	Speciality area in valuation	Length of experience (years)	Location of practice	Level of membership of API
1	Director	International	Specialist properties	30	Urban/rural	Fellow

2	Managing Director	National	Commercial	35	Urban	Fellow
3	National Residential Manager	National	Residential	32	Urban/rural	Fellow
4	Director	National	Commercial	31	Urban	Fellow
5	Director	National	Government and asset valuations	24	Urban/rural	Associate
6	Managing Director	National	Commercial	24	Urban	Fellow
7	Consultant valuer	National	Commercial, residential and rural	30	Urban/rural	Associate
8	CBRE / Retired VIC API President	International	Commercial and residential valuations	47	Urban/rural	Fellow
9	Deputy Valuer General VIC	National	Government and asset valuations	41	Urban/rural	Fellow
10	Partner	International	Commercial and asset valuations	24	Urban	Associate
11	Chief Executive Officer	International	Commercial, residential and rural valuations	18	Urban/rural	Fellow
12	National Quality & Compliance Manager	International	Commercial and residential valuations	30	Urban/rural	Associate
13	Head of Tangible Asset Valuations	National	Asset / Plant and machinery valuations	33	Urban/rural	Fellow
14	Director	International	Residential	22	Urban/rural	Associate
15	API representative					

(Source: Authors).

As shown in Table 4a, the Melbourne focus group consisted of Valuers specialised in various areas in property valuation and who had experience in valuing both rural and urban properties. All participants have at least eighteen years' experience in their respective areas of valuation. Six of the participants worked for large international multi-disciplinary real estate companies, whilst seven worked for large national independent valuation and property consultancy companies. The Deputy Valuer General, representing the government valuations, also attended the Melbourne focus group discussion.

Ten valuers representing the API attended the Sydney focus group. Below in table 4b is a summary of the profiles for the Sydney group participants. The majority of participants averaged over 30 years of API membership with two participants each having approximately under 10 years membership. Some of the participants included their student membership within their years of membership level. As a guide, the years of membership within API is usually the years of experience as a valuer, less 2-3 years as a student member. Although it is also acknowledged that some students will be working part time under the direct supervision of a registered valuer. It would be very rare for a valuer to be employed as a valuer, and not have the appropriate membership.

Table 4b: Profiles of the Sydney focus group participants

Participant	Job title	Base of organisation	Speciality area in valuation	Length of API membership (years)	Location of practice	Level of membership of API
1	Director	National	Property Valuation/ Education	41	Rural / urban	Fellow
2	Executive Director	National	Property/ Commercia	Over 25	Urban	unknown
3	Senior Valuer	National	Property Valuation	Under 10	Urban	Associate
4	Director/ Senior Valuer	National	Business/ Commercia	30	Urban	Fellow
5	Senior Valuer	National	Property Valuation	Under 10	Urban	Associate
6	Valuer & Educator	National	Property Valuation	30	Urban	Associate
7	Valuer & Educator	National	Property Valuation	30	Urban	Associate
8	National Manager Property Risk	National	Property Valuation	Over 30	Urban	Fellow
9	Head of Valuation	National	Property Valuation	27	Rural/urb an	Associate

(Source: Authors)

4.2 Current Issues, Threats, Challenges and Possible Solutions

In order to understand how the valuation profession should be changed to meet the changing demands on the profession, the first and second sessions of focus group discussions aimed at exploring the issues and challenges faced by the industry today and the possible solutions from the perspectives of Valuers, professional bodies and federal//state governments. The findings are summarised in Table 5 below.

Table 5: Current issues, threats, challenges and possible solutions

	Possible solutions and perspective				
Main issue identified	Valuers	Professional bodies	Governments		
Increasing use of automated valuation models (AVMs) for low risk residential valuations.	AVMs could be supplemented with consulting-based products such as broad market analysis, accurate value predictions and risk analysis. Valuers need to be able to conduct more speedy valuations within a shorter period of time. Develop more specialised skills on technology and advanced data analysis techniques.	Relax valuation guidelines for mortgage valuations to allow limited scope of work and less comprehensive filing requirements. Arrange workshops / programmes to teach how to make technology work to enhance Valuers' skills.			
Valuers are unable to protect themselves against the banks. "4 banks dictate terms; government is mindful of reducing mortgage loan costs and the impact is passed on"	Create new opportunities / avenues rather than accepting what is offered. Develop skills to perform valuations at cheaper costs by using technology, entrance data and data analysis techniques.	Have proper mechanisms to take on the lending industry and data providers (e.g. CoreLogic). "Profession has the knowledge, but data providers do not" Provide collective bargaining power in	Australian Prudential Regulation Authority (APRA)'s continual involvement to scrutinize banks' practices, regulations and standards.		

Government	-	Professional bodies to	Common legislation
		the 'guardian' of the profession and members' professional safety". Develop more specific perceived measures as the profession expands.	
representation due to lack of support from professional bodies.	to influence API to be more involved with the industry. Form a peak body that lobbies industry and government.	than being a leader at the moment". API is lacking national collective decisionmaking process to influence the practice. API needs to develop go forward strategies rather than focusing on historical views. "API needs to act as	acknowledge such a peak body.
Fragmented	the expertise in valuation. Have a united approach	positions. Attract school leavers into the profession by promoting the profession at careers days held in high schools. Continue encouraging and coordinating learning centres (e.g. universities, TAFEs). Women participation should be promoted and encouraged. "API is reactive rather	property at university and TAFE levels. Endorse or
Aging membership and difficulty to attract new talented entrants to the	Continue professional development. Continue diversifying	Recruit and attract new entrants with potential to fast track to senior	Provide more funding assistance to niche programmes such as
Valuers losing control of the data and valuations.	Be very cautious with the terms in Valuation Panel Service Agreements Better management of data and valuations.	Seek legislation on strong intellectual property, confidentiality and privacy issues related to valuations.	Introduce strong legislation relating to intellectual property rights relating to valuations.
	Form a peak body to influence banks.	the face of encouraged competition through proper regulations.	

regulations / practices are not uniform nationally and governments does not focus on the benefits of the profession.		lobby government to better legislate to protect government assets and public interest.	should be introduced to unify relevant legislation (e.g. rating and taxing, valuation of land Acts). APRA to recognise the risks of non-valuation of assets.
Fee levels. Valuers are asked to do more for less. Less specialised fees.	Better product differentiation Move into allied (adjacent) spheres.	API needs to develop more specialised fee scales for different valuations. Decline the application of capped/ fixed fees.	Develop rules and regulations to isolate/minimise the influence of individual companies and banks.
Lack of market acceptance regarding the valuation opinions provided.	More self-promotion and highlight the duties and responsibilities of the profession to the market / clients. Use more advanced interpretation methods with the report presentation. Valuers need to have strategies to make sure quality remains in valuations while enhancing productivity.	Organise public campaigns to promote the concept of valuation principles and the role of the Valuer as opposed to real estate agents and appraisers	Better definition in legislation as to who does what.
Valuation industry has become compliance driven, not value, quality and accuracy driven. "Some lenders encourage Valuers to deviate from API standards".	Remain within the guidelines developed by professional bodies (API, RICS, Accounting standards). Strengthen their data sources, reliability of data used and data interpretation skills. Continue diversifying the expertise in valuation. Valuation firms needs to have an agreement on the valuation process, requirements, reports etc.	API needs to develop and enforce standards in terms of the design and implementation of robust and mandatory self-audit functions.	Introduce more regulated legislation affecting the valuation profession.

Job hopping.	Need to stay in a good company for enough period of time to gain strong skills. Employers need to have carefully thoughtout strategies to retain experienced, specialised Valuers within their company.	Identify clearly defined career pathways and strategies to retain and promote Valuers. Provide more emphasis on specialisation within the industry.	
Pressure from other professions such as accountants.	Organisations such as CoreLogic collect data and produce valuation reports. "These reports will become 'new valuations'". Valuers need to learn how to do valuations more cost effectively within a shorter period of time.	Clearly define the appropriateness of business valuations for particular professionals such as accountants, investment analysts.	

(Source: Authors).

All focus group participants shared a common view that property valuation as a profession is caught up in the rapidly changing business environment. Even though the vast majority of valuation firms work diligently to do their best work and run successful businesses, the industry is facing significant threats and challenges that need to be addressed. The findings presented in Table 5 above indicate that many of the challenges confronting the valuation profession in Australia are interrelated. The rapid growth in automated valuations, client pressure mainly from the lending sector, aging of the valuation profession, difficulty in attracting and retaining new talent and competition from related professions have been identified as the main challenges faced by the profession. There are enormous pressures for Valuers to produce a greater level of detail in valuations under constrained time and competitive fee structures while meeting complex and stringent standards of professional practice. While under fee and time pressure Valuers, in an attempt to increase turnover volume, are pushed at an increasing pace resulting in greater risks of producing lower grade work. As a result, the valuation industry has developed into a particularly litigious profession, which requires careful risk management. The participants suggested that the low-risk, residential valuation industry will continue facing increased risks and uncertainty and "the future of the valuation industry will most likely be in commercial and specialised property valuations, except for very high end residential valuations". These findings collaborate generalisations from earlier research conducted in other countries such as the USA with regards to this topic (Coester, 2015a; Coester, 2015b; Grover, 2016; Beane, 2016; Kumar, 2016).

Focus group participants further emphasised that Valuers, professional bodies and educators need to embrace changes that technology and economic advances bring to the valuation profession. As shown in Table 5, they identified possible solutions for the challenges confronting the profession from the perspectives of property Valuers, professional bodies and the federal and state governments. It was

strongly suggested that Valuers, professional bodies and educators collectively need to advance the professionalism of the valuation practice. In other words, to more than simply being 'point in time experts' and to a service which the market and clients perceive as adding value to the business process and for which they are prepared to pay a fee worthy of the expertise of the valuation professional.

4.3 New knowledge and skills needed for the future

The aim of this section for the focus groups was to gain an understanding of the key elements which could be identified as an essential need for the future of the profession. The scope was fairly broad and participants covered themes such as educational requirements, specialised knowledge base, technology and the requirement for other industries to be aware of the exact nature and purpose of a valuation report.

Whilst there is emphasis for Valuers to adopt new knowledge and skills, the focus group participants were consistent with highlighting the need for graduates to implement the fundamental skills required for a full "speaking" valuation report. There appears to be very clearly defined paths for educational outcomes, where the university sector provides the knowledge but has limited scope to introduce practical work experience. Employers readily stated that graduates should be given opportunities to incorporate both.

Diversity of knowledge and skills was noted as being very important for the future of the profession. For instance, the underpinning knowledge for property management, such as centre lease management, and retail leasing were mentioned as an example. Other specialist areas such as aged care and retirement living were highlighted as emerging trends, particularly given the expected forecasting of the aging population over the next 20 years. Business strategy training on the core business skills, and economic theory were cited as necessary for Valuers who undertake highest and best use valuation concepts and the capitalisation method. This also led to the suggestion to learn computer technology which incorporates statistical skills, discounted cash flows (DCFs) and regression analysis, as these methods were very important for feasibility reports and mass valuations concepts.

However, apart from these mathematical technical skills, adaptation of software and hardware such as mobile software devices, GIS, and location mapping were identified as core requirements. Interestingly, 20 years ago, graduates were taught the use of computers for word documents to aid the preparation of the valuation reports, with the need gradually declining as students acquired this knowledge from their high school education. Therefore, introducing an awareness of advanced software and hardware at an early stage of the Valuers career is an ideal approach. But it must also be emphasised that the valuer should have an understanding of how the software derives the result and so computer technology is not a substitute for applied basic valuation methods.

The focus group participants also acknowledged that industry should be more involved with the education sector, and to promote the valuation profession to the students. There would be many benefits with this approach, such as mentoring students and providing guidance on best career paths for the individual. A summary of these suggested skills and knowledge is provided below in Table 6.

Table 6: New knowledge and skills needed for the future

Knowledge and skills required in the future	Reasons.
Valuers / graduates need a greater knowledge of the fundamentals required in a valuation and to better understand the methodology principles.	Universities provide very little focus with regards to the practical approach of valuations and the preparation of valuation reports. Graduates need to be taught how to do a 'speaking valuation'.
Develop more inter-disciplinary skills.	Universities limit the scope to meet the needs of the API. However, at a university level, students can learn from other disciplines' various problem solving skills.
To be able to value large property portfolios and acquire a good understanding of the management of large portfolios.	The current educational curriculum for new Valuers does not consider adequately the property management knowledge area. For example, students studying engineering have the opportunity to diversify
Knowledge and skills for Valuers in understanding 'business strategy' and some soft skills which are lacking.	Better training on core business, economic principles, advocacy, marketing and 'people skills'.
Develop more market forecasting skills and a better awareness of property cycles and forecasting trends.	Valuers need to develop more market forecasting skills with the use of advanced technology.
Develop advanced data analysis techniques.	In rating and some residential valuations, Valuers need to use regression and other statistical analyses more frequently.
Develop more skills in the use of advanced technology and to understand the basic input methodology mechanisms behind each program.	E.g. Use of GIS with mapping and location analysis. However it is also important for the valuer to understand HOW the program computes the result.
To be able to work with mobile software.	Some Valuers are technology agnostic. They need to develop the skill of being able to use mobile software more effectively.
Specialisation in more than one area of valuation.	Over-specialisation in only one area causes potential damage to Valuers' capacity and employment opportunities.

To be able to collect data in a much wider range of sources for valuations.	Data are currently being provided by data industry. Valuers receive what is currently available which is not necessarily what they want.
Need to develop new skills in aged care, pubs and large complex residential development projects	The property market is changing and these skills are emerging as a necessity
Standard terminology and valuation reports.	There is confusion such as the difference between equated versus equivalent yield throughout associated industries such as legal, accounting and financial sectors

(Source: Authors).

During the last two decades the dynamical shift with computer technology and the constant requirement to update knowledge is generally accepted as the norm, however it is also important to identify that not all problems are readily solved from learned knowledge within educational courses or on the job training. This point was reiterated in recent research (Bright et al. 2016), who observed that further advanced problem solving skills are required, as the problems in some situations contain far greater complexity and therefore a simple solution does not exist. This thought is also listed above in table 6, where it is observed that Universities limit their curriculum scope to meet the needs of the professional associations for accreditation purposes.

The focus groups also identified that the skills and knowledge should not be restricted to only the valuation profession. For instance the valuation reports are used in the banking sector, accountancy and legal profession, however these professionals have very little formal training or knowledge in understanding the key components and terminology used in the valuation reports and rely on their acquired knowledge during their career. This in turn causes confusion and wrong interpretation of key elements such as highest and best use, returns on rentals and yields, equated versus equivalent yield, net rent versus gross rent, inclusions and exclusion of outgoings and so on. So whilst there has been much empathises on knowledge and skill requirements for the valuer moving into the future, it is also important to link this requirement to all other industries who are involved in the use of the valuation reports. Therefore, targeting other industries by way of short courses and incorporating these key elements would be of great benefit for the valuation industry. Additionally if the API were to forge a CPD relationship with key professional bodies within the banking, accountancy and legal professional there would be an opportunity for all professions to mutually benefit with this specialised knowledge.

4.4 Important and significant emerging trends and practices

In order to understand how the valuation profession should evolve to meet the changing demands on the profession, one session of the focus group discussions aimed at identifying and exploring the important and significant trends facing the industry and the possible solutions from the perspectives of Valuers, professional bodies and federal/state governments. The findings are summarised into ten key areas set out in Table 7 below.

Table 7: Important and significant emerging trends and practices.

Most important and significant emerging trends and practices	Reasons.
Globalisation of the practice.	Are we currently practicing the world's best practice? This discussion should be led by the API.
Increased collaboration.	E.g. accountants, town planners, economists, market analysts, technology providers, demographers.
Increased employee diversity.	More female participation required.
Strong leadership.	API needs leaders.
United approach is necessary.	API needs to develop national standards which are applicable to both API and RICS. Australia is too small for 2 professional bodies.
Better marketing strategies for the profession.	The API undertakes very little advertising and promotion of the valuation profession. The consumer is unaware of the true contribution a valuer provides towards the valuation report.
Be multi-disciplined.	Valuers are often overlooked as just 'point in time' experts.
Well thought-out fee scales.	Fee scales in some areas in valuation are at a point where there is no profit margin left. Where to from here?
Strong quality assurance (QA) procedures.	To minimise litigation risks and improve market acceptance.
Strategies to protect small firms.	E.g.: niche players such as rural agricultural valuation firms. API should take necessary actions to protect them.

(Source: Authors).

One issue raised by all participants and in the literature (Elliot & Warren, 2005) was globalisation, and the impacts on practice. It was strongly felt that API should lead this discussion within the profession. There was concern about whether members were adopting current best practices and this was a responsibility of the professional body to ensure members were advised about changes and practices outside of Australia. API should also ensure global standards and best practices for cash flow estimations, business valuations and specialised property valuations were known and that members should benefit from global knowledge. This was identified as very important due to the

diversity of REITS and other property investments globally. Finally, Valuers need to have a global focus and to keep pace with changes in national and international markets.

An emerging trend is to increase collaboration, to work with different disciplines such as planning, economists and demographers for example. It was considered that alliances and collaboration would strengthen the ability to survive in a changing market.

The issue of diversity in the workplace was raised as important. The drop out rate of females in the profession represents a loss of talent and knowledge. The culture of some parts of professional practice can be confrontation and aggressive which was seen as unattractive especially to females and encouraged some to change career paths. This finding is consistent with the RICS report (2015), which found it imperative to encourage a diverse membership reflective of the broader community, and to proactively attract the best and most talented individuals to pursue property careers. It is also argued that the profession should also encourage entrants from all minority groups be it based on gender, disability or ethnicity.

The need for effective and strong leadership was identified as essential in order to manage change effectively and to maintain and enhance further the reputation of the profession. API should provide that leadership. RICS in their report from 2015 'Our Future: Lets be Ready' (RICS, 2015), have shown leadership in this respect and this research project for the property industry is evidence that API is taking a leadership role. Aligned with this was the need to adopt a united approach with other built environment professional bodies such as RICS and REIV. Some felt that Australia was a too small—market for two professional bodies and greater collaboration would be beneficial. This is beginning to occur. Further important trend is to encourage and advocate for national standards as different State practices and requirements are problematic for members. These trends echo findings in (Gilbertson and Preston, 2005: Shah, 2015).

Marketing is vital to advertise the knowledge, expertise and range of professional services API members can provide for clients. Participants felt API should do more marketing for existing members and also in schools and careers fairs to attract the best entrants to the profession. Part of this is the perception that Valuers are specialists in valuations only, whereas they are able to undertake other professional services and many wish to perform more diverse tasks.

Participants felt that standardised fee scales would help prevent a slide in standards. In some areas fees were so low that little or no profit margin was left, a view echoed in Elliot and Warren (2005). If this continues there is a danger many Valuers will leave the profession. However the advent of AVMs is undermining fee scales and where some practices have access to digital technologies they are able to offer valuations at comparatively lower process. Unless clients understand the differences between a computerised valuation and a professional valuation they are likely to adopt the cheaper option. It is likely the AVMs will increase market share and therefore diversification of the professional services might be a better way of maintaining reasonable fee levels for client services.

The issue of risk was discussed, risks for example in respect of valuations and how members manage known and unknown risks. The use of good Best Practice standards and guidance is a good way of a professional body communicating risks to members to enable them to manage and minimise those risks. Strong quality assurance (QA) procedures were perceived as a way of protecting members and minimising their risks. In the literature, Levine (2015) questioned whether current fee levels for valuations warranted the risks for Valuers in the US.

Finally an important practice should be to protect the smaller firms such as the rural and agricultural valuation practices. API should take actions as necessary. One solution might be to consider merging of companies, and or exploration of new business ventures to ensure small firms are able to survive. This trend has been picked up in early 2000's by Bond (2003) and later by (Beane, 2016) who noted merger might be a good survival strategy in some cases. API should be involved in identifying potential new opportunities.

4.5 Role of professional body, industry & educators to meet future challenges

The earlier sections of this report discussed the current issues, new knowledge and skills required for the future, and the significant and emerging trends. However, these items discussed above cannot be solved in isolation and require a unified approach from both the professional bodies and the educational institutions; and a deeper awareness from industries interlinking with the property professional. It is also not possible to prioritise which area needs to be addressed first, as all are equally important, however there would appear to be main threads emerging and are discussed later in this section.

Below in Table 8 is a summary of the feedback received from the Melbourne and Sydney focus groups, where both groups were very unified with regards to the role of the professional body, industry and educators.

Table 8: Role of professional body, industry & educators to meet future challenges.

New knowledge and skills competency	What can industry do to ensure these skills are adopted in practice	What can educators do to ensure these skills are taught
Plant and machinery valuations.	API should introduce pathways to qualification in Australia.	Include plant and machinery courses in to property degrees.
More emphasis on rural valuations.	Offer educational / training sessions.	More courses on this should be taught.
More practical experience before graduating.	Offer more work replacements and then rotate them through different disciplines.	Courses should be more practical focused. Remove regulatory barriers that discourage students from working part time.

Data / big data analysis.	Train staff in the use and application of data and big data.	Introduce courses on advanced data analysis techniques on valuation.
Advisory skills.	In house training aligned with career paths.	Offer short training courses focusing on these.
Practice management & business development skills.	In house training aligned with career paths.	Offer short training courses focusing on these.
Specialisation in few areas in valuation than just one area.	Develop a better connection with universities and students.	Should provide more emphasis on different specialist areas (rural, plant and machinery, business, aged care and retirement living, REITs).
Valuation advice should be beyond just 'point estimates'.	API and educators should broaden the current approach. This is an opportunity for the industry to grow.	Introduce sensitivity analysis, scenario analysis and statistical inferences into valuations.
Consistency in the content covered in property degrees.	Nothing.	University of Melbourne, RMIT and Deakin offer different courses, course duration and learning outcomes to achieve the same end. Similarly in NSW, UTS and Western Sydney University and Sydney Institute of technology (S.I.T), offer different courses but with similar end qualifications.

(Source: Authors).

It is interesting to examine the repeating of various themes emerging from within the focus groups, and the very clear requirement for the professional bodies to apply a unified approach which could then be streamlined to the educational providers. For instance, there has been great emphasis on the shortage of skilled knowledge in specialised areas such as plant and machinery; rural; aged care and retirement living; property management incorporating REITS; and commercial property. In conflict with this skills shortage is the current educational curriculums which do not offer clear pathways for graduates to specialise (or to undertake a "sub-major" as part of their undergraduate degree), and the very obvious varying property courses offered nationally, but with the same end result qualification and recognition from the API. The professional bodies need to assist the educational providers to source practitioners with these specialised skills who would be able to help prepare resource notes, guidance with assessment tasks, and undertake lectures as required. Many of the specialised topics are not offered at University level due to the shortage of locating available people who are suitably qualified and skilled to undertake the role.

Another major theme emerging is the lack of applied practical skills with the theoretical context delivered at Universities. So whilst the majority of Universities aim to produce "job ready" graduates, the professional bodies could provide assistance with industry involvement. Computer technology incorporating the latest software and hardware has also surfaced consistently within the focus groups. The professional bodies could develop training programs for the students and forge industry partnerships with providers of computer technology in conjunction with the universities. This would provide a meaningful outcome where the universities can set assessment tasks centred on the use of the computer technology, but with the professional bodies and industry taking the responsibility for the initial training.

In conclusion, whilst the universities offer a set curriculum that adheres to the accreditation requirements of the professional bodies, there is also the need to incorporate specialised knowledge and skills with set pathways. This would provide a very good defined career approach for the future of the property professional. For this to happen, it is necessary for the professional bodies to forge industry partnerships and provide assistance to the educators. The assistance would include access to resources and skilled people who are able to become involved in the development and delivery of specialised topics, plus opportunities for graduates to obtain practical experience.

4.6 Discussion

The initial part of the focus groups brainstormed the main current issues, threats, challenges and possible solutions. It is possible to categorise the issues, threats and challenges raised in terms of whether they are primarily economic, environmental, legal, political, social or technological issues. Not surprisingly many were economics based, for example, the reduction in fee levels for valuations and the structural changes in the market with banks dictating terms for valuations. Competition from professional groups producing valuations was another economic issue. Legal issues also featured significantly, particularly the variation in regulations in different States and Territories, increasingly compliance driven requirements affecting services, and valuation panel service agreements. Clearly the resolution of these issues requires action at different tiers of government from State to Federal levels and advocacy at professional body level is required on behalf of members. The issues that were social based include the increasing age of the membership, the lack of coherent responses from the different professional groups in the sector and the culture of job hopping within the industry leading to loss of knowledge and skills from employers. These issues can be tackled at various levels from the individual employers taking steps to encourage staff retention and loyalty. At the professional body level API can take a leading role in encouraging collaboration with other professional groups to lobby collectively. With the ageing membership, individual members and the professional body can work more proactively with schools and universities to encourage new entrants to the profession. Widening diversity is a good way of attracting new entrants into the profession. In a market that increasingly offers little job security to workers, property firms could make themselves more attractive to bright school leavers and graduates by offering secure employment with career development. Finally the technological issues which arose were focussed on new technologies, such as AI and AVMs, and a lack of understanding and knowledge of these technologies. Again solutions are possible at a number of levels from education providers from both the secondary and tertiary sectors; from employers offering in house training and support for staff to undertake external short courses and formal postgraduate qualifications to expand knowledge and understanding and to develop new skills.

With respect to the delivery of education of new knowledge and skills, it is apparent that these are broadly technological skills such as knowledge of and ability to use software such as GIS, BIM and other digital software. Knowledge fields need updating within the professional bodies competency areas required for members and also within the universities courses. Knowledge required and understanding relates to big data and how to use it for professional services, to advanced statistical analysis, to new systems and technologies such as Blockchain. Students and API members need to be cognisant of the difference between knowledge and skills and the notion of skills that are transferable. That is that can be utilised and applied in different and new contexts. For example, computing, literacy and numeracy are skills that can be applied in numerous activities using different knowledge fields. Both knowledge and skills need updating and expanding continuously.

Finally the emerging trends and practices, along with the issues threats and challenges revealed distinct roles and actions for the four groups: the API, individuals, educators and employers. The API, as the professional body needs to be aware of the issues arising and faced by members and highlighted above. It needs to engage in discussion and debate with existing members and to consult with regards to taking action be it through lobbying for changes in legislation, alignment of State and Territory practices and on behalf of niche areas such as rural valuations. Strength is in numbers and the API should seek collaboration and alliances with other professional bodies in the sector, to add weight to their lobbying actions. Encouraging diversity in membership and also diversity in members' knowledge fields and skills will strengthen the API. Offering members short courses and CPD to develop new knowledge and skills, especially the emerging digital technologies is essential to broaden the scope of the professional services the members can offer their clients. Individuals can take responsibility for their career planning and development by taking advantage of opportunities offered by the API to develop new knowledge and skills. Educators also have a major role to play here, firstly by being aware of the new emerging knowledge fields and practices affecting the profession. Course content and assessments should be amended accordingly to ensure graduate enter the profession with a good grounding in the core knowledge fields and a good set of transferable skills. Universities and TAFEs need to recruit staff with the requisite knowledge and skills and understanding of practice. Particularly students need to have knowledge of and understanding of advanced statistics. The need for students to have practical experience was apparent and the possibility of undertaking placements with some assessment that could be credited as part of the degree is a possibility, and; a model adopted extensively in other countries such as the UK. Finally the role of the employers is to ensure staff get access to in house training, where possible, and to external CPD to up-skill their workforce with regards to emerging technologies and new knowledge fields. With all stakeholders, it is necessary to learn about the changes faced and to take effective action to ensure they evolve and remain relevant in the changing world.

5.0 CONCLUSIONS & RECOMMENDATIONS

The period of immense change in terms of technology is underway. Other professional groups have realised that their members are finding change in the services they provide for clients. The property profession has to educate and up-skill members of its' professional bodies to become 21st century professionals. This paper has shown that the valuation profession is facing major challenges as more processes are digitised and automated, and the role of the Valuer becomes more of data handling and information processing than of economic analysis (Elliott and Warren, 2005). The role of the Valuer must change to respond to changing technologies and evolving industry needs; the question is; what does it change to? In Australia the ageing membership within the main professional body, the Australian Property Institute (API) may compound problems as members retire, subscriptions are lost and it will lose its ability to lobby, and to promote its members and their services. Attracting talented individuals into the profession is vital and should be achieved in concert with the API, firms and members engaging with secondary and tertiary education providers. They should not underestimate the value of site visits or work placements for young people so that they may see and experience what diversity a career in property can offer.

This study explored the future of the Australian property profession and the role of the Valuer in particular. This report has explored the changing role of the Valuer and described the valuation profession in Australia. It has identified the issues and challenges faced by the profession and presented some insights and suggestions; and finally set out some suggestions on a way forward for the profession in the manifesto for the future. Some of the gaps in knowledge and skills that the profession faces are now known, and the way forward is to conduct a broad and on-going discussion with membership about the services and knowledge fields they believe are on the rise and those in decline so that an agenda for change can be modified over time.

The focus groups held with practitioners based in Melbourne and Victoria, and Sydney and NSW ascertained their experiences and views with regards to the state of the profession, and what they perceived the future holds for them and their profession.

The research aims were to;

- 1. Identify the current issues, threats and challenges faced by the profession and Valuers;
- 2. Identify the potential solutions to the threats and challenges
- 3. Identify new knowledge and skills needed for the future;
- 4. Identify important emerging trends and practices;
- 5. Identify the role of the professional body, industry and educators to meet the future challenges.

These aims have been achieved and are set out in section 4 above. A recommendation is that these findings are now tested across the entire API membership through a member survey. The sample, although comprising of experienced and senior members, was small in number; and it is essential to engage the whole membership in this debate about the future in order to maximise buy in from members with regards to any proposed changes. Further recommendations are set out in section 5 below in terms of a manifesto for the future.

5.1 A manifesto for the future

In this section of the report a manifesto for the future in the short, medium and long term is set out. This is based on the current conditions prevailing in the profession. For each suggestion the stakeholder or stakeholders who should implement the action or policy is identified. Some feature in more than one category that acknowledges that the strategy needs to be implemented on an ongoing basis. Clearly these strategies should be reviewed regularly, as this is an area experiencing continuous change. The membership survey would be useful to reflect on and validate the categorisation of the short, medium and long-term strategies. Furthermore focus group reviews every two years would ensure the manifesto is still contemporary and valid.

The short term includes items that can be introduced immediately and do not have a major impact on governance and embedded rules. For example changes in the educational curriculum, work experience and engagement with industry. The medium term is usually centred on governance, rules and the changes that require planning and a longer lead in time to execute. However these changes cannot be implemented unless the short-term strategies are being implements to deliver change. The long term includes ongoing self-review and adopting changing practices that are successful from a global perspective, and in many ways this includes enhancing the strategies from the short and medium term categories.

Short term -0-2 years

The strategies illustrated in Table 9 should be considered in the short term; that is initiated in the coming 2 years and where appropriate beyond.

Table 9: Short-term strategies for future of the profession and their implementation

Short-term strategy	Who should implement it
Data optimisation strategies.	Valuers need to learn how to optimise the big data governed by Blockchain technologies. Employers and professional bodies need to provide training to Valuers on the optimal use of large databases. Current CPD/ education programmes should be focused on up skilling big data management and analysis techniques. University degrees should include courses that focus on advanced data analysis techniques related to valuation.
Establishment of risk reduction and risk management processes including, mandatory self-audit functions.	Professional bodies should introduce and enforce mandating of such functions in order to enhance the quality of the profession and to minimise litigation risks.

Development of international data standards and systems of data sharing.	Valuers should learn how to use big data provided by Blockchain technologies Professional bodies should develop regulations in terms of their use and application.
Global perspective and internationalisation of services.	Valuers to strengthen their profession and have a more global focus by keeping pace with change in the market at national and international level. Professional bodies to introduce and enforce internationally uniform valuation standards relating to methodology and reporting.
Different professional bodies to unite behind common standards for education, behaviour, service delivery, monitoring and regulations to mitigate the risks arising from the lack of clear identity for the profession.	All property related professional bodies such as Australian Property Institute (API), Australian Securities Institute, Property Council of Australia (PCA), Real Estate Institute of Australia (REIV) and the Royal Institution of Chartered Surveyors (RICS) should develop more political clout with a united approach.
Horizon scanning for changes in the environment.	Valuers need to develop the skills to leverage technology for forecast, horizon scanning and insights that others can't easily access. Professional bodies to assist members with horizon scanning. Educators to teach skills required for forecasting and horizon scanning for future changes in property markets.

(Source: Authors).

$Medium\ term-3-5\ years$

The strategies illustrated in Table 10 should be considered in the medium term; that is initiated in 3 to 5 years and where appropriate beyond.

Table 10: Medium-term strategies for future of the profession and their implementation

Medium-term strategy	Who should implement it
Introduction of uniform legislation and procedures relating to valuations within the various jurisdictions in Australia.	Federal and state governments. Professional bodies to provide appropriate requests and suggestions.
Specialisation and true	Valuers need to specialise in more than one area of

expertise.	valuation rather than being over-specialised in one area. Professional bodies should provide more emphasis on specialisation within the industry.
Big data analysis skills (e.g. data sourcing, data handling, data manipulation and data presentation).	Professional bodies and valuation firms should train staff in the use and application of data and big data (e.g. value of an asset in a portfolio vs. as a standalone asset, securitised assets).
Alternative valuation products such as broad market analysis, accurate value predictions, and risk pricing.	Valuers need to broaden their skills than just providing "a point estimate". Professional bodies should provide encouragement and guidance with the development of these new skills.
Development of a flexible suite of qualifications and programs.	More flexible degree programmes and delivery structures allowing students to gain work experience.

(Source: Authors).

Long term - 6 years plus

The client of tomorrow will be more interested in market analysis, accurate value predictions, and risk pricing than receiving single value opinions. The move from providing single value opinions to this kind of broad market analysis will take time and an adaptation of the Valuer's skill set. Therefore in the long run, which is in the next 6 to 10 years, it is clear that the role and professional expectations of the Valuer would be much broader than their current role. The way forward for the profession in the long run in Australia is open to speculation but appears to be pivotal on the following moves identified in Table 11.

Table 11: Long-term strategies for future of the profession and their implementation

Long-term strategy	Who should implement it
Big data analysis skills (e.g. data sourcing, data handling, data manipulation and data presentation).	Professional bodies and valuation firms should train staff in the use and application of data and big data (e.g. value of an asset in a portfolio vs. as a standalone asset, securitized assets).
Development of a flexible suite of qualifications and programs.	More flexible degree programmes and delivery structures allowing students to gain work experience.

(Source: Authors).

Until such short-term, medium-term and long-term strategies are instigated and implemented the future of the valuation profession will remain in doubt. There are opportunities to develop new

professional services with added value for clients and these should not be missed. The professional body should work with industry and membership to ensure these opportunities are recognised and seized.

APPENDICES

Appendix 1: Participant information sheet



INFORMATION SHEET

The Future of the Property Profession in Australia

WHO IS DOING THE RESEARCH?

My name is Associate Professor Sara J Wilkinson and I am an academic at UTS. I am joined by my RMIT colleague Dr Dulani Halvitigala.

WHAT IS THIS RESEARCH ABOUT?

This research is to find out about The Future of the Property Profession in Australia.

IF I SAY YES, WHAT WILL IT INVOLVE?

We will ask you to be part of a focus group on one occasion. The focus group will;

- explore and map the changing skills profile of API property professionals,
- ascertain the key skills and qualities that will be needed, as well as emerging future and existing knowledge fields and specialisms,
- identify practices in decline and those on the rise within API members,
- investigate the ways the profession can link with employers and educators to better understand variables affecting supply and demand for new entrants and the new skills firms are seeking.

ARE THERE ANY RISKS/INCONVENIENCE?

There are very few, if any, risks because the research has been carefully designed. However, it is possible that the research will take up a total of 3 hours of your time and will involve travel to either

RMIT Melbourne or DAB UTS Harris Street on one occasion as above.

WHY HAVE I BEEN ASKED?

You are able to give me the information we need to find out about the The Future of the Property Profession in Australia.

DO I HAVE TO SAY YES?

You do not have to say yes.

WHAT WILL HAPPEN IF I SAY NO?

Nothing. I will thank you for your time so far and won't contact you about this research again.

IF I SAY YES, CAN I CHANGE MY MIND LATER?

You can change your mind at any time and you don't have to say why. I will thank you for your time

so far and won't contact you about this research again.

WHAT IF I HAVE CONCERNS OR A COMPLAINT?

If you have concerns about the research that you think I can help you with, please feel free to contact me on 02 9514 8631.

If you would like to talk to someone who is not connected with the research, you may contact the

Research Ethics Officer on 02 9514 9772, and quote this number (UTS HREC ETH 16-0738)



CONSENT FORM

I understand that the purpose of this study is to explore the future of the property profession in Australia.

I understand that I have been asked to participate in this research because of my professional knowledge, expertise and experience in Valuation, Facility, Asset or Investment Funds Management, Development, or Lending in connection with property and construction projects and that my participation in this research will involve attendance and participation in one 3 hour long focus group to be held at either RMIT Melbourne or DAB UTS in Harris Street, Ultimo in October 2016. This is a low risk project, which seeks professional opinions and views only and does not ask any personal questions of participants beyond the length of time spent in the industry and the nature of their expertise.

I am aware that I can contact Associate Professor Sara J Wilkinson if I have any concerns about the research. I also understand that I am free to withdraw my participation from this research project at any time I wish, without consequences, and without giving a reason.

I agree that Associate Professor Sara J Wilkinson, and Dr Dulani Halvitigala have answered all my questions fully and clearly.

I agree that the research data gathered from not identify me in any way.	n this project may	be published in a form that does
	/	_/
Signature (participant)		
	/	_/
Signature (researcher or delegate)		

NOTE:

This study has been approved by the University of Technology, Sydney Human Research Ethics Committee. If you have any complaints or reservations about any aspect of your participation in this research which you cannot resolve with the researcher, you may contact the Ethics Committee through the Research Ethics Officer (ph: +61 2 9514 9772; Research.Ethics@uts.edu.au), and quote the UTS HREC reference number. Any complaint you make will be treated in confidence and investigated fully and you will be informed of the outcome.

Appendix 3: Melbourne focus group participants

Name	Organisation	nisation Position	
Sam Murphy	Knight Frank	Director	
Milton Cations	Property dynamics	Managing Director	
Stuart Bridgman	Opteon Property Group	National Residential Manager	
Craig Veljkovic	HTW	Director	
Nick Haines	Matheson Stephen Valuations	Director	
Tony Kelly	HTW	Managing Director	
Jim Dennis	Hay Property Consultants	Consultant Valuer	
Geoff Guyett	CBRE	Retired Vic President API	
Graeme Balfour	Valuer General Victoria	Deputy valuer general	
Richard Bowman	E&Y	Partner	
Greg Sugars	PRP	National Director & CEO	
Andrew Calnin	PRP	National Quality & Compliance Manager	
Robert van Raay	Pitcher Partners	Head of Tangible Asset Valuations	
David Way	Knight Frank	Director	
Michael McAllum		Director, Centre for the Future Academy of Scholars	

Appendix 4: Sydney focus group participants

Name	Organisation	Position	
Peter Chuck	Peter Chuck (Valuations) Pty Ltd	Director and Principal Valuer	
Anthony DeFrancesco	IPD-MSCI	Executive Director	
Martin Fisher	Burgess Rawson		
Lauren Graham	LandMark White Senior Valuer		
David Hayward	Macquarie Bell Pty Ltd	Director/Senior Valuer	
Catherine Huynh	LandMark White	Senior Valuer	
Vince Mangioni	University of Technology Sydney	Valuer and Educator	
Kenneth Rayner	S.I.T.	Valuer and Educator	
Alan Richard	St George Bank	National Manager Property Risk	
Tony St Leon	McGees Property (NSW) Pty Ltd	Head of Valuation	
Mark Willers	LandMark White	Director/Senior Valuer	

Appendix 5: Melbourne focus group programme (4th October 2016)

8.00	Registration		Breakfast, tea and coffee
8:15	Welcome Introduction	&	Dr Dulani Halvitigala / Hera Antoniades
8:20	Session A Introduction	า	Dr Dulani Halvitigala / Hera Antoniades
8.25	Session A Roundtable	•	Discuss the issues faced by the valuation profession and possible solutions
			Workshop participants will explore and identify the current issues faced by the industry and the ways and means of addressing them.
8.45			Session A ends
8.50 8.55	Session B Introduction Session B Roundtable		Dr Dulani Halvitigala / Hera Antoniades
			Ascertain the key skills and qualities that will be needed, emerging future knowledge fields and specialisms
			Workshop participants will explore and identify skills and qualities essential to their core activities relative to property for valuation in the future.
9:15			Session B ends
9.20	Session C Introduction	1	Dr Dulani Halvitigala / Hera Antoniades
9:25	Session C Roundtable	•	Identify practices on the rise Workshop participants will explore and identify practices on those on
			the rise in their core activities relative to property valuation.
9.45			Session C ends
0.50	Cassia a D lates de ation	_	Dr. D. Jani Hall Himalay / Harry Archania das
9.50	Session D Introduction	1	Dr Dulani Halvitigala / Hera Antoniades
9.55	Session D Roundtable	•	Linking employers and educators to meet the demand for the acquisition of new knowledge and skills
			Workshop participants will explore the ways in which the profession can link with employers and educators to ensure the new knowledge areas and skills can be embedded, taught and adopted.
10:15			Session D ends
10:15	Focus Group Wrap up	•	Dr Dulani Halvitigala / Hera Antoniades

Appendix 6: Sydney focus group programme (11th October 2016)

8.00	Registration	Breakfast, tea and coffee
8:15	Welcome &	Hera Antoniades
	Introduction	Director, Applied Research in the Built Environment
8.20	Session A Introduction	Hera Antoniades
8.25	Session A Roundtable	Discuss the issues faced by the valuation profession and possible solutions
		Workshop participants will explore and identify the current issues faced by the industry and the ways and means of addressing them.
8.45		Session A ends
8.50	Session B Introduction	Hera Antoniades
8.55	Session B Roundtable	Ascertain the key skills and qualities that will be needed, emerging future knowledge fields and specialisms
		Workshop participants will explore and identify skills and qualities essential to their core activities relative to property for valuation in the future.
9:15		Session B ends
9.20	Session C Introduction	Hera Antoniades
		Identify practices on the rise
9:25	Session C Roundtable	Workshop participants will explore and identify practices on those on the rise in their core activities relative to property valuation.
9.45		Session C ends
9.50	Session D Introduction	Hera Antoniades
9.55	Session D Roundtable	Linking employers and educators to meet the demand for the acquisition of new knowledge and skills
		Workshop participants will explore the ways in which the

		profession can link with employers and educators to ensure the new knowledge areas and skills can be embedded, taught and adopted.
10.15		Session D ends
10:15	Focus Group Wrap up	Hera Antoniades

Appendix 7: Focus group task 1

Focus Group Task 1 – Discussion of the current issues faced by the profession and possible solutions

Identifying the main issues faced by the valuation profession

In order to understand how the valuation profession should be changed to not only survive, but thrive, in the new century, there is a clear need to understand the main issues and challenges faced by the profession. Within the group please discuss the main issues and challenges faced by the profession. Please come up with the key issues and challenges you face in practice, but followings are some hints to get you thinking. Also discuss how significant the issues identified are.

- i. Changing nature of the valuer's role
- ii. Changing technology, technical knowledge and skills
- iii. Changing demographics of the profession
- iv. Client pressure etc

Discussion of the possible solutions for the above identified issues

Once the issues are identified, the next step should be to establish an analytical framework upon which these issues can be evaluated in order to plan for the profession's success in the future. Now please discuss what solutions you suggest for the issues you have identified. Please discuss solutions in terms of:

- 1. What valuers should be doing to overcome these issues
- 2. What professional bodies (e.g. API, Property Council of Australia) should be doing to address these issues
- 3. What the federal / state governments should be doing to address these issues
- 4. What the educators should be doing to address these issues
- 5. Any other solutions

Appendix 8: Task 1 answer sheet

	Solutions				
Issue identified	What valuers can do	What professional bodies can do	What the federal/local governments can do	Other (E.g. Educators)	
(1)					
(2)					
(3)					
(4)					
(5)					
(6)					
(7)					
(8)					
(9)					
(10)					

Appendix 9: Focus group task 2

Focus Group Task 2 – New knowledge and skills needed in the future to 2030

For this task, please select one area of practice (i.e. property valuation, business valuation, plant and machinery or other) for your group. Now within the group, please discuss the new knowledge and skills that you think the profession needs to acquire or further develop in order to meet the changing demands on the profession. Please come up with your own ideas from your experience as a valuer, but followings are some hints to get you thinking. Please provide reasons for your thinking.

- i. Market forecasting skills
- ii. Computerised valuation models
- iii. Good understanding of mathematical models etc

Appendix 10: Task 2 answer sheet

Property valuation area selected	New Knowledge and Skills that required to acquire or further develop	Please provide reasons
	(1)	
	(2)	
	(3)	
	(4)	
	(5)	
	(6)	
	(7)	
	(8)	
	(9)	
	(10)	

Appendix 11: Focus group task 3

Focus Group Task 3 – Practices that should be on the rise to 2030

As the next step, please discuss and identify the main practices that should be on the rise within the profession, so it could meet the challenges faced by the practicing valuers. Followings are some hints to get you thinking. Please provide reasons why they are important in your opinion. Please summarise your views.

- i. Global focus
- ii. Resource productivity
- iii. Leadership etc

Appendix 12: Task 3 answer sheet

Most important practices that should be on the rise within the profession in order to meet challenges in the future	Why are they important? Please provide reasons for your opinion
(1)	
(2)	
(3)	
(4)	
(5)	
(6)	
(7)	
(8)	
(9)	
(10)	

Appendix 13: Focus group task 4

Focus Group Task 4: Linking employers and educators to meet the demand for the acquisition of new knowledge and skills

Having identified new knowledge and skills required for the profession, please take a couple of minutes to think about the different ways in which the profession can link with employers and educators to ensure the new knowledge areas and skills can be embedded, taught and adopted.

Appendix 14: Task 4 answer sheet

Having identified new knowledge and skills on the rise, please take a couple of minutes to think about the different ways in which the profession can link with employers and educators to ensure the new knowledge areas and skills can be embedded, taught and adopted.

New knowledge and skills competency	What can employers do to ensure these new knowledge and skill are embedded and adopted in practice	What can educators do to ensure these new knowledge and skill are taught in their programs
(1)		
(2)		
(3)		
(4)		
(5)		
(6)		
(7)		
(8)		
(9)		
(10)		

Appendix 15 API conference Panel Session 17th January 2017 PRRES Conference

Future of the professions debate

Simon Gilks Valuer General NSW

John Preece Head of Occupier Solutions, Knight Frank.

Dr Andrew Wilson Chief Economist Domain Group

John Jannaway Director Capstone Recruitment

The panel discussion covered the following topics;

- 1. Digital disruption
- 2. Consolidation
- 3. Globalisation
- 4. Career paths and specialisation
- 5. Monitoring change
- 6. Audience Q&A

The notes summarise the key points raised by panellists.

1. Digital disruption

The Holy Grail is a set of valuations that are wholly consistent. Digital disruption is an opportunity with AVMs to understand, to manipulate data and to get good results. But AVMs currently not able to stand on their own and be supported by evidence and be contested, but over coming years it will become more feasible.

Look at Domain, which has gone from being a paper based supplement that advertised property to a digital database, which has been evolving to become a digital listing site and other things. Domain is holding lots of data, based on individual profiles of the people who visit the sitedomain.com.au. Digital resources are being used for valuations – whereas once Valuers used to pay VG for data to produce house price reports. New role in organisation of 'data scientist' – digital tools are mechanisms for measuring data – however there is always a place for judgement. Access to digital resources is better than ever before but we need an expert judgement too. This is why the valuer should always have the expert insight – the role was once a knowledge manager – now it should be applying intelligence and knowledge to data and information. Possibly the next generation is to look at opportunities to use digital resource to use wisdom to interpret the data / information.

There is a scare factor – Four Corners programme on future careers.

Impact on jobs and skill sets – does digital disruption signal greater skills needs? Do they need more skills? In funds analysis / investment analysis there is a need for people to know Cougar v8, ARGUS & Estate Master software and how to apply it. Talent needs technical skills with digital software but don't under estimate the human element to interpret that analysis and make sound judgement. Another issue was would LinkedIn replace recruiters? But this hasn't happened. What has happened is that through LinkedIn recruiters can reach more people and execute placement on a shorter timescale – so what was seen as a threat initially – is actually a benefit.

2. Consolidation

The merging of firms – does this call for broader non technical skill sets – what is effect?

Merging and fragmenting of businesses comes and goes in cycles – bigger firms consolidate and then fragment. The cycle at the moment is for people to set up smaller companies and break away. We are seeing a re-profiling of the workforce; 30% of the Australian workforce is free lance. Facilitated by

the digital disruption we spoke about. Lot of graduates are working with smaller creative entrepreneurial groups; Freelancer. There is a shift in the work force and people want more flexibility. 40% of Fortune 500 won't exist in 10 years time. The really big companies worry that they will not be flexible enough to change. Turnball and Sydney are pushing for 'Start Up's' to energise the economy. We need to arm students with technical skills – we need to arm them with business skills – do they know how to run a business.

We see on a more regular basis with current students and early career people – there s a difference in culture - between larger corporates and smaller businesses. Those employed in small businesses get more exposure to a variety of things, hands on learning experience, whereas those in bigger companies tend to undertake one role more. They may need to change jobs to get broader experience. Is there a difference in their personality? Start ups and those working in SMEs tend to have more business skills.

There is an interesting cultural aspect. There is a difference in Brisbane and Sydney. In Melbourne there is a different culture – the '1 stop shop' doesn't work there – there is a preference smaller business rather than big firms. Local knowledge is important.

3. Globalisation

Greater numbers of overseas clients and opportunities for work. International standards and opportunities.

There is a lot of individualisation in the property market – what happens in UK, EU, US doesn't necessarily happen here. Not sure globalisation affects residential sector but the commercial sector is different.

From a commercial perspective globalisation is paramount – customer of commercial RE is the occupier – who are increasingly global occupiers of commercial space. 90% dealing with overseas companies – we are asked often 'what's the difference between Sydney and Melbourne?' Corporates are consumers and investors are increasingly global too. Just look at property as an asset. Investors are following global occupiers.

There are two waves of globalisation – one from owners and one from occupiers. For example, sustainability ratings are a sign of harmonisation in standards. How do we rationalise the skills of employees in the sector? Looking at non cognate backgrounds accountancy, law etc barriers to entry in Australia in RE are so low.

There are cultural shifts, from overseas investment in Australian property. There is also a local lag – big companies get it – but local small firms less so. Think of the huge wave of Chinese investors in the residential sector. Chinese developers would be very different in their approach and procedures – some subtle anomalies.

International standards is the biggest impact. International standards have accelerated over last 10 years and will continue.

4. Career paths and specialisms

There is an emergence of sub sectors in the market - e.g. student accommodation as a sub sector. With valuations - there are lots of young people who are not wanting to remain as valuers. Its seen as essential to learn ropes but then they want to move to other sectors. Its also a peer to peer thing - where glamour seen in other sectors.

The key point is adaptability – in a career where you may start as a trainee valuer but do lots of other things during a long career, you need good base level of knowledge, to understand the principles. Valuation was taught previously as a trade, because it followed a routine. Key skills that are useful are the broader thinking skills, (problem solving skills – soft skills).

Another change is that Domain is starting its own training academy – to provide short courses, such as 'Marketing for RE agents' and produce guides such as 'A guide to the Australian Housing Market'.

A couple of quotes – one from Andrew Carnegie - 85% skills are related to human engineering, and 15% of effectiveness relates to knowledge. In the 1800s, Darwin said it was not the strongest, nor most intelligent who would survive but those most responsive to change. We will probably see more change in next 5 years than we've seen in the last 30 years.

5. Monitoring change

RICS & API are both working on futures research. For example Mike McAllum paper and a paper tomorrow morning cover this topic.

How might we better collaborate in the future?

Domain has a lot of data, and is now moving into education, it is seeking partnerships with API, RICS and the big end of town. For example they may develop coursework to work with universities.

How can we collaborate? Doesn't have to be a grand scheme. We do need standards based organisations.

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