



**Collaborative Valuation: Harnessing Collective Expertise for
Enhanced Practice**

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Response to Reviewers Comments

Manuscript ID: JPIF-10-2025-0168

Tittel: Collaborative Valuation: Harnessing Collective Expertise for Enhanced Practice

Dear Referees,

Thank you for your insightful comments, which have helped us improve the quality of the manuscript. Please find below, details of how the referees comments were addressed in the revised manuscripts. All revisions have been track-changed for ease of reference.

REFEREE: 1

Comments to the Author:

Referee Comment:

I recommend this paper for publication. The references ought to be re-sorted into alphabetical order.

Response:

Thank you very much for your comments. We have re-sorted the references into alphabetical order.

REFEREE: 2

Comments to the Author:

Referee Comment 1:

This is an interesting in a certain scope paper investigating how collaborative practices among commercial property valuers in Auckland, New Zealand, shape the valuation process and outcomes, using 17 semi-structured interviews and inductive thematic analysis to identify valuer-, process- and outcome-oriented benefits of collaboration, especially in expert–novice constellations.

Having carefully analyzed the paper I came to a conclusion that the strong elements of the paper predominately include: clear and relevant research focus, conceptually grounded motivation, appropriate qualitative design, useful conceptual synthesis, practice and policy relevance, however there is a number of issues that I would suggest authors to consider amending.

Response:

Thank you very much for your comments. We have taken all the suggestions on board and we believe this has improved the quality of the manuscript.

Referee Comment 2:

Although the literature review acknowledges potential downsides of group decision-making (e.g. dominance, suppressed dissent, anchoring in groups), the empirical analysis is almost entirely benefit-focused. There is little exploration of cases where collaboration may reduce quality (e.g. groupthink, diffusion of responsibility, over-confidence in jointly derived values). I would suggest explicitly asking in the findings/discussion: under what conditions might collaboration harm valuation quality? and using both data and literature to answer this.

Response:

We thank the reviewer for this insightful and constructive comment. In line with the objective of the study, the interview was designed to focus on benefits of collaboration. However, while respondents largely emphasised the benefits of collaboration in their responses, the interview data also reveal evidence of potential drawbacks of collaboration. The authors were mindful of the word count of the article, hence, the decision not to include that in the original manuscript. Nevertheless, to address the reviewer's concern and ensure a balanced discussion, we have introduced a new sub-section under the discussion section of the revised manuscript titled - **"Potential Downsides of Collaborative Valuation"**. Please see pages 22, line 30 to page 23 of the revised manuscript.

Referee Comment 3:

The study is clearly grounded in Auckland's commercial valuation context, yet the discussion occasionally moves towards broad claims about "valuers" and "valuation practice" in general. The authors should either justify why NZ practice is likely to be indicative of wider markets (e.g. structural similarities, regulatory environment) or more consistently frame the conclusions as context-bound but analytically generalisable propositions.

Response:

Thank you for this insightful comment. We agree that greater clarity was needed regarding the contextual scope of our findings. In response, we have revised the opening paragraph of the findings section to explicitly state that the results are derived from interviews with valuers practicing in Auckland, New Zealand, and should be interpreted within this specific context (page 7, line 15-22).

We also note that the methodology section clearly identifies Auckland as the study setting (page 5, from line 4). To ensure consistency throughout the manuscript, we have further refined the discussion to avoid over-generalisation and to frame our conclusions as context-bound.

Finally, we have explicitly acknowledged this contextual specificity as an opportunity for future research. This is contained in the concluding section of the revised manuscript (page 24, from line 37-45).

Referee Comment 4:

The paper's core constructs (reducing bias, improving valuation accuracy, enhancing quality) are inferred from valuers' self-reports; there is no independent examination of outputs or error/bias measures. Yet the language sometimes suggests actual performance improvements rather than perceived ones. I recommend (a) tightening the wording to "perceived improvements" unless

supported by objective evidence, and (b) explicitly flagging this perception–outcome gap as an avenue for future mixed-methods or experimental work.

Response:

Thank you for these insightful comments. We have revised the manuscript to clarify that the findings are based on perceptions of the research participants. We have also highlighted this gap as an opportunity for future research in the concluding section (see page 27, from line 21-36)

Referee Comment 5:

The choice of GQI is reasonable, but the rationale remains quite brief. It would strengthen the paper to (a) more clearly distinguish GQI from, for example, phenomenology or grounded theory, and (b) explain why an exploratory mapping of themes (rather than building a formal theory or focusing on lived experience alone) is the most appropriate goal.

Response:

We thank the reviewer for this constructive comment. In response, we have strengthened the methodological justification by more clearly distinguishing Generic Qualitative Inquiry (GQI) from other qualitative approaches and clarifying its suitability for the study's objectives. Please see page 4, lines 3-32 of the revised manuscript.

Referee Comment 6:

Purposive sampling combined with snowballing is appropriate for a specialised professional population, but the implications for sample composition and possible homophily (i.e. highly collaborative valuers nominating similarly minded peers) are not fully problematised. I suggest adding more detail on:

- How initial firms/participants were chosen;
- Whether any non-participants or refusals systematically differed;
- How the authors mitigated the risk that the sample represents particularly collaboration-positive networks.

Response:

We thank the reviewer for this important observation regarding the implications of the sampling strategy. In response, we have revised the methodology section to provide greater transparency on participant selection and to explicitly acknowledge potential limitations associated with purposive and snowball sampling, including the risk of homophily.

As explained in the revised manuscript, initial participants were identified through purposive sampling by reviewing the websites of valuation firms to locate senior valuers with demonstrable experience in commercial property valuation. Selection was based on publicly available professional profiles, ensuring that participants possessed relevant expertise and direct involvement in the valuation process. These individuals were then invited via email to participate in the study. Participants who agreed to take part subsequently assisted in identifying additional valuers within their teams through snowball sampling. This approach was adopted to capture multiple perspectives within valuation teams and to better understand how collaboration occurs across different roles within the decision-making process.

To enhance diversity in the sample, participants were drawn from seven valuation firms of varying sizes (large, medium, and small), reflecting differences in organisational structure, geographical coverage, and team composition. This helped to mitigate the concentration of perspectives within a single organisational or network context.

We acknowledge, however, that snowball sampling may introduce homophily, whereby participants refer peers with similar views—particularly those more positively disposed towards collaboration. While it was not possible to systematically capture data on non-participants or refusals, we believe that the inclusion of valuers across different firms and organisational settings, as well as varying levels of experience, provided some degree of variation in perspectives.

Please refer to pages 5, line 4 to page 6 line 30 of the revised manuscript.

Referee Comment 7:

The paper reports 17 interview but provides limited justification in terms of information power or saturation. A short paragraph clarifying when the authors judged that no substantially new themes were emerging, and whether this differed across experience levels or firm types, would improve methodological transparency.

Response:

Thank you for your suggestion. We have clarified how we determined data saturation on page 6 line 21-30.

Referee Comment 8:

The six steps from Braun & Clarke are reproduced, but the study-specific implementation is somewhat thin. For example, it is not clear:

- Whether coding was conducted by one or multiple researchers;
- How disagreements were resolved;
- Whether software (e.g., NVivo, Atlas.ti) was used;
- How reflexivity (researcher backgrounds, prior assumptions about collaboration) was addressed.

Providing brief details on these points would bolster credibility and dependability.

Response:

We thank the reviewer for this constructive comment. In response, we have revised the methodology (data analysis) section to provide greater transparency regarding the implementation of the thematic analysis. We have also clarified that the analysis was conducted without the use of qualitative data analysis software, and a brief statement on reflexivity has been included to acknowledge the researchers' interpretive role in the analytical process. Please refer to page 6, lines 32- page 7 line 10 of the revised manuscript.

Referee Comment 9:

Given the strong practical orientation of the topic, the authors could at least briefly justify why they did not triangulate with documents (e.g., internal quality manuals, peer review procedures), observations (e.g., of peer-review meetings) or quantitative indicators (e.g., variance in valuation pre/post collaborative reforms). Even a short reflection would strengthen the design discussion.

Response:

We thank the reviewer for this valuable suggestion. We acknowledge that incorporating additional data sources such as organisational documents, direct observation of valuation processes, or quantitative indicators could provide further insights into collaborative valuation practices. These were not incorporated in the present study

However, we have included a reflection in the concluding section of the paper to explicitly acknowledge the use of a single primary data source as a potential limitation. While in-depth interviews were appropriate for capturing valuers' experiences and interpretations of collaboration, the absence of methodological triangulation is recognised. We thus highlight this as an avenue for future research, noting that subsequent studies could incorporate additional data sources to further validate and extend the findings. Please see page 24, lines 27-36 of the revised manuscript.

Additional Questions	Reviewer's Comments	Response
Originality: Does the paper contain new and significant information adequate to justify publication?	The paper offers a original perspective by focusing on non-client collaboration and expert–novice dynamics.	Thank you for your comments.
Relationship to Literature: Does the paper demonstrate an adequate understanding of the relevant literature in the field and cite an appropriate range of literature sources? Is any significant work ignored?	The paper engages with key behavioural valuation literature but omits some important recent works.	Thank you for your comments. We have updated the literature to include recent studies such as Amidu et al., 2026a; Amidu et al., 2026b; Baur et al., 2023; Deppner et al., 2023 ; Kasim et al., 2025; Setijono, 2025; Sisman & Aydinoglu, 2022.
Methodology: Is the paper's argument built on an appropriate base of theory, concepts, or other ideas? Has the research or equivalent intellectual work on which the paper is based been well designed? Are the methods employed appropriate?	The qualitative approach is appropriate, but methodological reporting needs strengthening.	Thank you for your comments. The methodological reporting has been strengthened. Please refer to the methodology section of the revised manuscript.
Results: Are results presented clearly and analysed appropriately? Do the conclusions adequately tie	Results are clear, well-structured and well-supported by quotes, though some claims should be framed more	Thank you for your comments. We have revised the entire manuscript to clearly frame the results as participants'

together the other elements of the paper?	cautiously as perceptions rather than verified outcomes.	perceptions, rather than verified outcomes.
Implications for research, practice and/or society: Does the paper identify clearly any implications for research, practice and/or society? Does the paper bridge the gap between theory and practice? How can the research be used in practice (economic and commercial impact), in teaching, to influence public policy, in research (contributing to the body of knowledge)? What is the impact upon society (influencing public attitudes, affecting quality of life)? Are these implications consistent with the findings and conclusions of the paper?	Implications for practice are well identified, but societal and policy impacts could be discussed more explicitly. Overall, the recommendations align with the findings.	Thank you for your comments. We have incorporated societal and policy implications of the research into the concluding part of the paper on page 24, lines 18-26.
Quality of Communication: Does the paper clearly express its case, measured against the technical language of the field and the expected knowledge of the journal's readership? Has attention been paid to the clarity of expression and readability, such as sentence structure, jargon use, acronyms, etc.	The paper is generally clear but contains several minor language and editorial errors that should be corrected.	Thank you for your comments. We have carefully read through the paper to identify and correct these minor language and editorial errors.

Collaborative Valuation: Harnessing Collective Expertise for Enhanced Practice

Abstract

Purpose: Research has investigated the effects of a range of behavioural issues in property valuation with recent studies ~~concentrating-focusing~~ on various approaches to enhancing the quality of valuation decisions. This study explores valuers' opinions on how a collaborative approach enhances property valuation practice.

Design/methodology/approach: This study adopts a qualitative research design. Data for ~~theis~~ study was collected using semi-structured, in-depth interviews with 17 property valuers that carryout commercial property valuations in Auckland, New Zealand. The interview data was analysed using thematic analysis.

Findings: The study identified five major themes related to valuers' perception on how valuation practice ~~iscould be~~ enhanced through collaborative valuations. These themes revolve around benefits related either to valuers (~~through-i.e. increased-increasing~~ efficiency and managing personal bias), the valuation process (~~through-i.e.~~ broadening sources of market evidence and enabling-a more robust property inspections) or the outcome of the valuation (through improving the overall quality of valuation outcomes). Findings from the study further suggests that expert-novice collaboration provides complementary competencies that enable valuers to reason out their instincts within the valuation decision making process.

Implications: These findings call for policy reforms in valuation firms and professional institutions to foster collaborative learning environments that strengthen the credibility and integrity of valuation practice.

Originality/value: This study contributes to the limited literature on collaborative valuation by providing empirical evidence on how collaborative practices can influence valuation quality.

Keywords: Collaboration; property valuation; valuation quality; valuer behaviour; expert-novice interaction

INTRODUCTION

Reliable property valuations are key drivers of good governance and transparent business activities in property and financial markets. Accurate valuations facilitate the efficient operation of property markets (Baum et al., 2000) and the economy (Wilkinson et al., 2017). However, academic literature suggests that ~~that~~ valuations may not be accurate and reliable estimates of market prices (e.g., Baffour-Awuah & Gyambi-Yeboah, 2017; Brown et al., 1998; Cole et al., 1986; Crosby, 2000b; Crosby et al., 1998; Hager & Lord, 1985; Kok et al., 2017; Setijono, 2025) because they contain random and systematic errors or biases (Boyd & Irons, 2002; Levy & Schuck, 2005), which have implications on the overall quality of valuation decision outcomes. ~~Consequently,—rStudiesesearchers~~ have ~~sought—to exploreexamined~~ the role of valuer behaviour in the valuation process in order to understand the likely causes of valuation inaccuracies. These studies, which fall under the broad umbrella of behavioural valuation research show that valuers exhibit non-rational behaviours, and therefore employ heuristics to overcome inherent human limitations.

Although the use of heuristics can increase efficiency and save time, it can also result in biased valuation decision (Diaz, 1999). Thus, there is a wide recognition, in the valuation literature, of the need to continuously explore different ways of enhancing valuation decisions. Consequently, a number of technological and non-technological approaches have

been proposed in the literature (Liman, et al., 2025). While the adoption of digital technological tools in valuation has continued to gain traction as evident in recent studies (e.g., Amidu et al., 2026a; Baur et al., 2023; Deppner et al., 2023 ; Kasim et al., 2025; Sisman & Aydinoglu, 2022) the limitation of these tools in commercial property valuations underscores the need to continuously explore other approaches to improving the quality of valuation decisions (Liman et al., 2025). Another possible approach to improving valuation decisions is to explore the aggregation of judgements (i.e., collaboration) across individuals as proposed by Bylinski and Chow (1985). While this has not been properly investigated in the valuation literature, studies in ~~different-other~~ domains indicate that compared to other approaches, collaborative approach to decision making ~~usually-can~~ leads to higher quality decisions.

According to Kaats and Opheij (2014), collaborative relationships must yield benefits, and such benefits vary with the type of relationship and the parties involved. Research has identified several benefits that decision makers could gain when they make decisions collaboratively. For instance, Shaw (1932) reported through experiments that collaborative groups are more likely to correctly solve complex problems than individuals. The author attributed this to the ability of group members to check errors in the group and reject erroneous suggestions. Through deliberations, groups have better chances of identifying and correcting the errors of fellow group members (Kugler et al., 2012).

Additionally, in situations where the actual stage at which the first error was made can be ascertained, Shaw (1932) showed that collaborative groups commit errors much later than average individuals do. Other authors argue that improvement in collaborative, over individual decisions are subject to certain conditions. Callaway et al. (1985) and Bang and Frith (2017), for instance, maintain that the composition of group members can influence the quality of decisions reached by a group. In particular, the presence of highly dominant members in a group (i.e., people that can persuade and influence others to align with their thoughts) can lead groups to make decisions that are of higher quality (Callaway et al., 1985). This is probably because dominant people have the ability to provide support in the forms of leadership and guidance to other members of the group in making decisions (Edwards, 1954). Such support, which is usually found in cohesive groups, has the advantage of facilitating agreement among group members, but also possesses the drawback of suppressing inquiries that may be critical to the decision (Callaway et al., 1985).

Furthermore, one of the axioms of collaboration is that it avails participants with a larger pool of information through sharing unique information, which they might have held individually (Johnson & Johnson, 2017). In other words, collaboration can lead to an increase in the quantity and quality of information that is available to decision makers (Perry & Moffat, 2004). Thus, Robbins et al. (2009) maintain that collaborative groups can generate information and knowledge that are more complete than those generated by individuals. However, Xiao et al. (2016) stressed that an improvement in decision making only occurs when the information is equally distributed among the participants. Valuation researchers and professionals have also acknowledged the relevance of information in making good valuation decisions (see for instance Peto, 1997). It follows therefore, that collaboration could provide opportunity for valuers to share information, which can potentially improve the quality of the decisions they make.

Because decision makers have limited cognitive capacity to process information (Newell & Simon, 1972), access to more information alone may not lead to better decision if there is no

commensurate increase in processing capacity as this may result in cognitive overload (Schwartz, 2004). Thus, another advantage of collaboration in this regard is that it has the potential to increase decision makers' capacity to accurately process information when handling complex problems (Hocevar et al., 2004). This is because groups have been found to possess larger cognitive capacities when compared to individuals (Sasaki & Pratt, 2012). In addition to overcoming individual cognitive limitation, making decision in group has also been acknowledged to be a useful approach in addressing the problems of uncertainties and biases that are inherent in complex decision making processes. In particular, groups outperform individuals when making decisions in environments that are surrounded by uncertainties (Bang & Frith, 2017; Kugler et al., 2012).

In terms of biases, studies have shown that both individuals and groups are susceptible to different forms of biases, albeit at different degrees. Kerr et al. (1996) concluded that there are certain conditions under which individuals could be more or less biased than groups. However, while Kahneman (2003) argued that individuals may not be able to debias themselves, Bang and Frith (2017) highlighted the potential of group decision making to overcome biases. They argue that individuals are usually unconscious of their biases, but that such biases can easily be detected by others and can therefore be the subject of discussion if people engage in collaborative decisions. Moreover, Kugler et al. (2012) note that groups exhibit significantly lower biases both in the case of hindsight and overconfidence biases. On the other hand, de Wilde et al. (2018) reported that like individuals, groups are also prone to anchoring bias but suggested that this can be avoided by ensuring process accountability or providing competitive incentive. These ~~have described measures are known~~ as motivational strategies (Larrick, 2004).

Additionally, when people work in collaborative groups, they have better abilities to solve problems correctly, produce more accurate forecasts and accurately recall information (Tindale & Kluwe, 2015). This is because collaboration and group work bring about diversity and increase in availability of resources to team members, which can enhance their creativity in problem-solving and decision-making (Cook et al., 2001). Similarly, Robbins et al. (2009) argue that by pooling the resources of the several individuals involved in decision making, groups are not only able to bring more input, but also bring creativity and diversity of views into the decision making process than ~~will do~~ individuals, thereby providing an opportunity for more alternatives to be considered before a final decision is reached. Thus, there are several reasons to believe that more than individuals, groups conform to the assumption of rationality when making decisions (Kulger et al., 2012). Nevertheless, Larrick (2004) argues that improving decision-making through collaborative approach will, to a large extent, depend on the diversity of experiences and trainings of the group members, and the extent to which the group's discussion is guided towards exploiting such diversity. It thus follows that, if properly used, collaboration can be a veritable tool for enhancing decision-making.

In spite of the foregoing, the benefits of collaboration in the context of property valuation ~~has~~ have not been properly examined in the literature. Aside valuer-client interaction that has received significant research attention, current understanding of how non-client-related collaboration occurs and how it influences valuation quality is limited in the literature. Previous studies ~~within the valuation domain~~ have argued for investigations to explore the impact of collaborative approach on valuation decision making (Amidu, 2011; Amidu & Boyd, 2018). Therefore, this study aims to fill knowledge gap by exploring ~~the~~ valuers' perceived benefits of collaboration in valuation practice.

METHODOLOGY

Research paradigm

This study adopts a qualitative research approach. To gain insights into the benefits of collaboration in property valuation, the study employs a social constructionist perspective, which highlights the significance of context in qualitative inquiry. From this viewpoint, knowledge emerges through social interactions and shared experiences, making it an appropriate framework for examining how valuers collectively construct meaning and perceive the value of collaborative practices within the valuation process.

Researchers employ a wide range of qualitative research designs to generate new knowledge. However, the six most commonly used research designs in qualitative studies are grounded theory, phenomenology, ethnography, narrative analysis, case study, and generic qualitative inquiry (Creswell, 2009; Merriam & Tisdell, 2016). Although these designs share common characteristics, including in-depth engagement with participants (Creswell, 2014), they differ in their emphasis, particularly in how research questions are framed, how data are analysed, and how findings are presented (Merriam & Tisdell, 2016).

Grounded theory, which is a rigorously structured approach aimed at generating theory (Chenitz & Swanson, 1986), was considered but deemed unsuitable, as the objective of this research is not to develop a formal theory. Phenomenology focuses on exploring and interpreting lived experiences (Creswell, 2007), which does not fully align with the aim of examining collaborative practices in a professional context. The other qualitative designs were also considered. Narrative analysis, which centres on the construction of individual life stories (Savin-Baden & Major, 2013), and ethnography, which examines cultural groups over extended periods (Denscombe, 2010), were not appropriate given the focus of this study. Likewise, case study was not adopted, as the research is not concerned with an in-depth investigation of a bounded case or organisation (Walliman, 2011).

Accordingly, the research design adopted for this study is Generic Qualitative Inquiry (GQI), which explores the perspectives and worldviews of people (Merriam, 1998) by employing qualitative research procedures (Kostere & Kostere, 2022). This approach allows for an exploratory and flexible examination of participants' perspectives, with the aim of identifying and mapping key themes. GQI is well suited to studies seeking to generate an empirically grounded understanding of professional practices without the requirement to develop formal theory or focus exclusively on lived experience.

Method of data collection

This study utilised semi-structured interviews as the main method for collecting to gather in-depth insights into valuers' experiences and perceptions of collaborative practices in property valuation. Data were gathered through individual interviews with practising practicing commercial property valuers. Consistent with As noted by Creswell's (2014) recommendations, semi-structured interviews are particularly effective for exploring participants' perspectives, as they integrate the strengths of both structured and unstructured formats. With participants' written consent and adherence to the University of Auckland's ethical standards, all interviews were audio-recorded and transcribed verbatim to maintain data accuracy. The research also followed the guidelines of the University of Auckland Human Participants Ethics Committee (Approval No. UAHPEC1488) to ensure participants'

anonymity. Interviews were held at venues chosen by participants, allowing open and reflective discussions that enhanced the study’s credibility (Carson et al., 2001).

Participants recruitment

The study recruited valuers practicing property valuation and advisory services in Auckland, New Zealand. Purposive sampling was initially used to identify senior valuers with experience in commercial property valuation by reviewing the websites of valuation firms and their publicly available professional profiles. This ensured that the selected participants possessed relevant expertise, and are directly involved in the valuation process. Identified valuers were then invited to participate via email. Participants who agreed to take part were subsequently used to snowball the sample by identifying other valuers within their teams with whom they collaborate. This approach enabled the study to capture multiple perspectives within valuation teams and to develop a more comprehensive understanding of how collaboration occurs across different roles in the valuation decision-making process.

Table 1: Research participants

S/No.	Participants' Codes	Level of Experience	Company Type <u>(Size)</u>
1	R1-NV	Novice	Multi-disciplinary <u>property company (Large)</u>
2	R2-IV	Intermediate	
3	R3-EV	Experts	
4	R4-NV	Novice	Multi-disciplinary <u>property company (Large)</u>
5	R5-IV	Intermediate	
6	R6-EV	Experts	
7	R7-IV	Intermediate	Multi-disciplinary <u>property company (Large)</u>
8	R8-EV	Expert	
9	R9-EV	Experts	
10	R10-NV	Novice	Property Valuation & Advisory Services <u>(Medium)</u>
11	R11-EV	Experts	
12	R12-NV	Novice	Property Valuation & Advisory Services <u>(Medium)</u>
13	R13-EV	Experts	
14	R14-NV	Novice	Property Valuation & Advisory Services <u>(Small)</u>
15	R15-IV	Intermediate	
16	R16-EV	Experts	
17	R17-EV	Experts	Property Valuation & Advisory Services <u>(Small)</u>

To enhance diversity in the sample, participants were drawn from seven valuation firms of varying sizes, including large, medium, and small firms, reflecting differences in organisational structure, geographical coverage, and team composition. The final set of participants comprised 17 valuers with varying levels of experience (i.e., five novices, four intermediates and eight experts), as presented in Table 1. This selection ensured that participants could provide a more complete account of collaborative practices in commercial property valuation. While the combined use of purposive and snowball sampling facilitated access to a specialised professional population, it may also introduce the risk of homophily, whereby participants refer peers with similar perspectives. Although it was not possible to systematically document non-participants or refusals, the inclusion of valuers from firms of different sizes and organisational contexts, as well as varying levels of experience, helped to introduce diversity in the sample. These considerations are taken into account in interpreting the findings.

In this study, novice valuers are defined as unregistered valuers that were undergoing training under the tutelage of registered valuers in their respective firms at the time of conducting the interviews. Intermediate valuers are registered valuers with less than ten years of experience in property valuation and advisory services. The final category, experts, are registered valuers with more than 10 years' experience of professional valuation practice. Similar categorisation of valuers into three groups based on their levels of experience has been employed in previous valuation research (e.g., Abidoye et al., 2019; Amidu, 2016).

In line with the methodological approach of this research, sample size was determined based on the principle of "data saturation," which denotes that, "on the basis of the data that have been collected or analysed hitherto, further data collection and/or analysis are unnecessary" (Saunders et al., 2018, p.1893). Data collection and analysis were conducted iteratively, such that insights from earlier interviews informed subsequent data collection. As the study progressed, recurring patterns began to emerge across participants, and later interviews yielded limited substantially new information. At this stage, additional data collection was considered unlikely to significantly extend the analytical insights. Adopting this approach resulted in a final sample of 17 commercial property valuers with varying levels of experience.

Data analysis

In exploring valuers' opinion on how collaboration could enhance property valuation practice, the interview data collected for this study were analysed using an inductive process of thematic analysis. The use of inductive approach to data analysis enabled the understanding of the issue under investigation from the participants' lenses, rather than the investigators' (Cohen et al., 2013). Consequently, the study adopted a six-step thematic analytical process outlined by Braun and Clarke (2006). Although thematic analysis can be undertaken manually or with the aid of software (Saunders et al., 2009), a manual approach was adopted in this study. This approach enabled deeper engagement with the data and facilitated the identification and interpretation of meanings that may not be captured through software-assisted analysis (Wong, 2008). However, to support the process, the researchers used Microsoft Excel as an organizational tool to arrange the codes and themes prior to report writing.

The coding process was led by the first author and involved iterative reading and re-reading of the interview transcripts to identify patterns related to valuers' perceptions on the benefits of collaboration in the commercial property valuation process. Frequently expressed

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keywords were derived from the data and organised into initial codes, which were subsequently grouped into sub-themes and then refined into broader themes. These themes were continuously compared and contrasted (Patton, 1990) and refined until no further themes were emerging from the dataset (Patton, 2002).

To enhance the credibility of the analysis, the coding and thematic structure were reviewed by the co-authors. Differences in interpretation were discussed and resolved through iterative dialogue, leading to refinement of the themes where necessary. In addition, reflexivity was maintained throughout the analytical process, with the researchers remaining aware of their interpretive role and reflecting on how their perspectives and prior understanding of collaboration and the valuation process may influence the analysis.

By following these described steps, the researchers identified five major themes from the interview data. These themes form the basis for presenting the study’s findings as contained in the next section.

FINDINGS

This section presents findings derived from interviews with valuers practicing in Auckland, New Zealand, and should therefore be interpreted within this context. The results focus on the benefits arising from collaboration among valuers, as well as between valuers and other stakeholders during the valuation process. Analysis of the interview data indicates that collaboration is perceived to enhance not only the final valuation outcome but also the processes leading to that outcome. Furthermore, the findings highlight the ways in which valuers benefit from collaborative practices within the Auckland valuation environment. These benefits, summarised in Figure 1, are discussed in detail in this section.

Broadening Sources for Gathering Evidence

Access to adequate and reliable information is fundamental to producing credible valuation outcomes. The interview data revealed that collaboration enhances valuers’ access to broader information sources, thereby improving which can potentially improve the reliability of their analyses. As several participants emphasised, working collaboratively, both within and across firms, enables valuers to obtain evidence that might otherwise remain inaccessible. According to R15-IV, having a wider professional network “means there’s [access to] information that is not freely available.” The respondent further highlighted the value of professional interaction in expanding evidence sources, explaining that “the more you talk to others... every now and then there’ll be one additional bit that someone has for whatever reason that no-one else is aware of” (R15-IV). Such interactions not only broaden the scope of available market evidence but can also reduce the uncertainty associated with relying on limited or outdated data.

Firm size was found to influence the extent to which valuers benefit from collaborative information sharing. Participants from large corporate and multidisciplinary firms reported having greater access to in-house databases and cross-departmental collaboration with colleagues in research, leasing, and sales. As R1-NV explained, “being in a big company like XXXX, we definitely benefit from collaboration with, like, research teams, leasing agents, sales, brokers... it’s awesome in a big company ‘cause you’ve got that privilege of having people everywhere.” This view was supported by R16-EV, who stated that “the bigger the company the more you would probably get that collegial information in-house.” However,

R15-IV noted that valuers in such firms “don’t tend to talk much with other valuation firms,” suggesting that extensive internal resources can sometimes reduce external engagement.

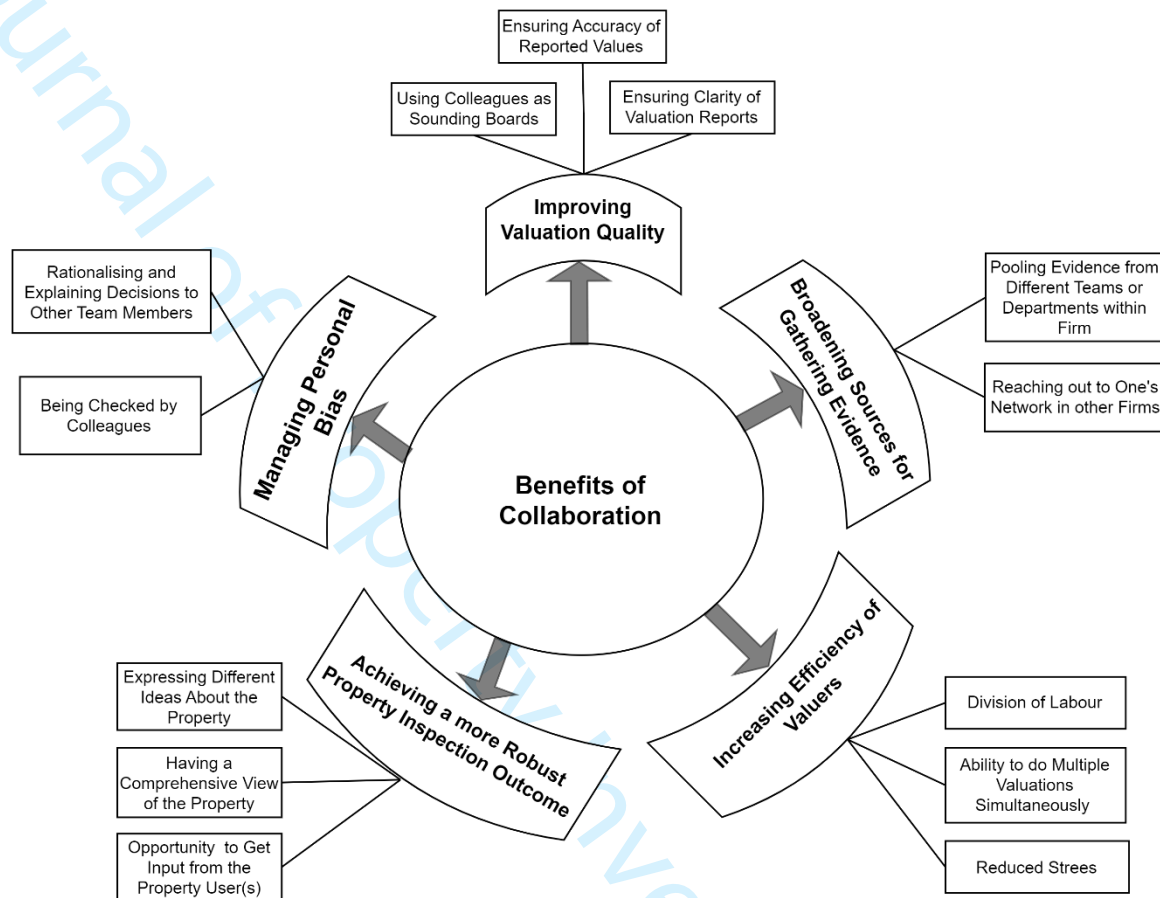


Figure 1: Themes representing the perceived benefits of collaboration in property valuation

Source: Authors' Construct

Respondents cautioned that exclusive reliance on in-house data could be limiting, as it may prevent valuers from recognising transactions occurring beyond their firm’s purview. As R1-NV observed, “it’s not just our evidence that’s important... there’s stuff going on that we have no idea about.” R4-NV similarly emphasised that collaboration across firms ensures access to “a lot of important shared information.” Conversely, valuers in smaller firms, who often lack extensive databases, described using teamwork and external networks to compensate for this limitation. For instance, R14-NV, who works in a small firm, explained that “after a few phone calls and emails, it’s usually pretty sorted,” underscoring the value of interpersonal collaboration in overcoming data constraints.

Networking emerged as a critical mechanism through which valuers broaden their evidence base. Participants reported drawing on professional connections formed during university, through social events, and within professional associations. R1-NV explained, “that’s why uni’s good because a lot of my friends became agents after uni, so I’m very comfortable giving them a call or flicking them an email.” Similarly, R13-EV described how participation in industry events facilitated network-building: “my networking as a graduate was actually done through PINZ [*Property Institute of New Zealand*]... and that’s where I established

those relationships with people in other firms that I could get evidence from.” These examples demonstrate how both formal and informal networks function as vital channels for gathering property market intelligence.

The data also point to the role of reciprocity and trust in sustaining collaborative exchanges. Participants noted that valuers tend to share information within trusted circles: “if I help you out, I know who I can help out that’ll help me out... when their agents are doing the next big deal, we would expect that to come back the other way” R3-EV. However, information sharing is not always equitable. As R6-EV observed, “there’s some outfits out there which we know will deliberately not give recent data... and there are other valuers who are bloody good [at sharing data].” R8-EV, who works in a large firm further explained that large firms are selective in their collaborations: “If they’re a firm that I don’t feel like I’m going to get information back... then there’s no benefit to me.” Consistent with this, R16-EV from a small firm remarked, “We’ve always found the flow [of evidence] from multinationals to be a lot less.”

Overall, the findings suggest that collaboration, whether through internal structures, professional networks, or inter-firm relationships broadens valuers’ access to market evidence ~~and enhances~~, which can contribute to the credibility of their outputs. While large firms benefit from structured internal systems, smaller firms rely more heavily on interpersonal and reciprocal networks. In both contexts, collaboration plays a critical role in reducing information asymmetry and ensuring that valuations more accurately reflect prevailing market conditions. As one respondent succinctly expressed, “the more evidence you have, the easier your job becomes” (R5-IV).

Increasing Efficiency of Valuers

Beyond access to information, participants also expressed the view that collaboration ~~was also found to~~ can improve the overall efficiency of valuers ~~in when~~ undertaking their professional tasks. Analysis of interview data indicates that valuers generally enjoy a higher level of productivity by collaborating with their colleagues. Although this perceived increase in efficiency is realisable in most forms of collaborations within the valuation process, it is ~~especially the case~~ particularly noticeable where senior valuers are working with their junior counterparts within the same team. This is because the senior valuers s can assign aspects of the valuation assignment to their juniors, which then gives the senior s the chance to get on with other jobs. Thus, participants ~~indicated~~ opined that collaboration provides a team of valuers with the opportunity to undertake multiple valuations at the same time. Some interviewees remarked that:

“[Collaboration] just makes things more efficient... You might have 10 jobs to get out in a week... if you can collaborate to get someone to do the legwork here and [XXXX] reviewing something while I’m working on a different job... we can always just be churning when we’re busy.” (R2-IV)

“...when you’re able to work in a team... with this staged approach, one person can prep something, get it ready and then leave it, you have the ability to do multiple things at once.” (R15-IV)

Expert valuers noted that collaborating with their younger colleagues provides them with more resources to execute valuations. When working as a team, each team member can be tasked to undertake different aspects of the valuation assignment, which makes the whole job

easier compared to when all the process is to be undertaken by a single valuer, which can be very overwhelming. Further explaining the benefit of collaboration, R17-EV noted that:

"[Collaboration] gives you more resource too. Like, when we get involved in, say, a supermarket arbitration... it's so easy to say to somebody, hey, can you get us the population data and we want [someone else] to get the wages for these people... If you're sitting down with all of that stuff to do yourself, and you've got clients ringing up, and you've got to go do everybody else's jobs, you're just getting torn about... You've got to collaborate." (R17-EV)

The respondent added that working in teams gives valuers a sense of reassurance by knowing that jobs are not stagnated:

"...the thing about working in a team is that you always feel like you're making progress... if you've got three people on a job, you don't get that sense of it's waiting on you to get done... there's always something happening that's moving our whole process along." (R17-EV)

However, respondents are of the opinion that this perceived benefit of increased productivity might not be very apparent when the junior members of the team are at the very early stage of their valuation career. The more experienced novices become, the more they are able to meaningfully contribute to the valuation process. Senior valuers interviewed ~~for in~~ this study argued that the duration of experience that is required for novices to make such meaningful contributions could range from six months up to three years. This is usually determined by the nature of training the novices are receiving and the type of assets they are specialising in. Thus, respondents noted that senior valuers that have fresh, unexperienced graduates as their team members would rather execute the whole job by themselves if they are working under time pressure to complete the valuation. ~~R6-EV said:~~

"A graduate is... beneficial, especially when they get closer to year three, because you can now let them do the majority of the work... At year one, it's time-consuming... I'm far better off doing a job by myself; I'll get a turnaround quicker" (R6-EV)

However, respondents noted that even in situations of time pressure, the fresh graduate may be involved in extracting evidence that the senior valuer could potentially use in the valuation.

Achieving a More Robust Property Inspection Outcome

As part of every valuation process, valuers usually inspect the subject property to assess its physical features and ascertain its state of repairs as at the date of valuation. Depending on the type of property being valuesvalued, inspections may be carried out by a single registered valuer or a group of valuers. However, respondents indicated that in recent times, the norm is for valuers to go for inspections in groups of at least a pair of valuers. Respondents admitted that there are some benefits associated with carrying out inspections by groups, rather than by individual valuers. R7-IV stated that group inspections avail valuers the opportunity to have different perspectives regarding the property being valued. He said:

"It's coming together with different ideas about the one property... each explaining the pros and cons in terms of location or quality based on what we notice on the

inspection... different people pick up on different things... it's quite good attacking the valuation from two different viewpoints." (R7-IV)

This multiplicity of perspectives provides valuers with a better understanding of the property, which needs to be properly reflected in their opinions of value. Interestingly, this benefit of group inspections abounds regardless of the level of experience of the team members that go out for the inspection. Thus, one novice described how he was able to point out something important while inspecting a property together with his senior ~~valuer~~:

"...about a month ago we were at a property... it was quite a disjointed industrial property... a panel beater workshop... there was a little mezzanine storage component... [XXXX] didn't actually notice it was there, so I pointed that out (laughter)... we had to go up and then measure and have a look at that." (R12-NV)

The data further indicates that valuers could meet with agents during an inspection. Respondents revealed that collaboration in this regard would be useful in terms of getting additional information about the subject property or other deals that can help valuers in their valuation decisions. R12-NV asserted that:

"We do meet agents on inspections sometimes... it's usually good to have a little chat about who's bought it, what's their intention with the property... sometimes there might be a land call, so the building's going to be knocked down and redeveloped... that's quite important for us to know... agents are generally quite knowledgeable... they know other trends in the area, other sales, what buyers are doing with their properties... agents generally have a good swing on that." (R12-NV)

Respondents also stated that they might meet with the property owners, property managers, or tenant representatives on-site, who would normally show the valuers around the subject property during the inspection.

"...generally it would be on average two people going on-site... meeting the external or internal property manager... they tend to be showing us round and saying, well, we've refurbished this... it's all that additional background stuff we're looking at... if it's a tenant rep, they generally show us where the leaks are... if you're getting shown around by a tenant, they're certainly not pointing out how great the building is... the landlords are pointing out how great the building is... they tend to forget to look at the view, not the leak, versus the leak." (R3-EV)

While meeting ~~this-these category-categories~~ of people during inspection offers opportunity for them to provide more details about the subject property, it is clear in the above excerpt from the interview data that there could be potential bias in the way valuers are shown around the property by the property owner/managers versus the tenant during inspections. Whereas landlords and property managers focus on the positive sides of the property to drive up the property's value, tenants are more likely to highlight any negative aspects of the property with the hope of driving down rents especially if the valuation is for the purpose of assessing rental value.

These findings suggest that collaboration among valuers, as well as between valuers and other stakeholders during property inspection provides valuers with a more robust understanding of the subject property ~~being valued~~. Valuers undertaking valuations can

1 incorporate such understanding into the valuation process to arrive at valuation decisions that
2 appropriately reflect the condition of the subject property.

3 **Managing Personal Bias**

4 The analysis of interview transcripts further revealed another dimension of benefit that arises
5 from collaboration within the valuation process. When valuers collaborate with their team
6 members, they have the potential to manage personal biases that may arise from working in
7 isolation. Although this form of benefit can be derived from collaboration between valuers
8 with any level experience, the interview data suggests that collaboration between an expert
9 and a novice valuer could be particularly useful in in this regard. The data shows that expert
10 valuers are heuristic-driven in their valuation approach. Because of their vast knowledge and
11 understanding of the property market, experts may potentially form valuation opinion without
12 initially going through the entire valuation process. For instance, R3-EV stated that: “...often
13 the dataset just shows you what the answer is” (R3-EV). This quote suggests that by merely
14 looking at the available data, the expert may take a position on what the value of the subject
15 property should be. This stance is further reinforced by R8-EV who asserted that an
16 experienced valuer could form an opinion of value prior to going through all the steps that a
17 valuer is normally expected to go through. In his opinion:

18 *Well, I guess what the experience allows you to do is look through a valuation at a*
19 *higher level and first of all see if things make sense at a higher level rather than*
20 *putting all of the pieces together to get the result. (R8-EV)*

21 On the other hand, novice valuers are heavily process-driven because they do not possess the
22 experience to take that ‘higher level’ view and form an opinion of value. Rather, they usually
23 rely on analysing available data and executing the valuation tasks sequentially, taking the
24 valuation process from one stage to the other until the final stage at which an opinion of value
25 is reached. This makes it unlikely for them to miss out important information or skip
26 important steps within the process. R2-IV said in respect of novices that: “...they [novices]
27 are very data process-driven, black and white. $A+B=C$ ” (R2-IV). Stressing the procedural
28 nature of novices, one of the novice valuers interviewed, ~~R1-NV~~ admitted that the only way
29 she can arrive at a valuation decision as a novice is by systematically going through the
30 valuation process. In her words: “We [novices] definitely break it [the valuation] down, so
31 that’s just obviously how we learn is to go through every single step to get to our final
32 answer” (R1-NV).

33 Furthermore, respondents disclosed that experts’ decisions may not completely conform with
34 the market evidence. One argument put forth by R4-NV is due to the fact that aside evidence,
35 experts also take other things into account when making a decision. According to the
36 respondent:

37 *“I mean at the end of the day they do make decisions that don’t fully comply with the*
38 *evidence that is there... valuations is wider than just the evidence... you have a*
39 *responsibility to take into account the market and where you see it possibly going...*
40 *there’s a whole wide range of things that you can’t concrete in your report because it*
41 *doesn’t comply with standards, but it gives you a wider picture of the market... they*
42 *may not be able to rationalise it in terms of just the evidence, but there’s a sort of*
43 *wider circle that they also take into account.” (R4-NV)*

1 In contrast, the respondent noted that novices can only rely on the available evidence to make
2 a decision and formulate value opinions:

3 *Well, I think a graduate, I myself, I don't have anything to go on apart from the*
4 *evidence, you know. Like I don't have that 10 years plus experience in doing this sort*
5 *of thing. So, we have to rely on that [evidence] (R4-NV)*

6 Similarly, respondent R14-NV noted that as a novice, she can only rely on the evidence
7 before her to come up with an opinion of value, but her seniors might anchor their valuations
8 on previous ones. She said: *"I think a lot of the times I look at, for now at least, I'm looking*
9 *more at the evidence I've collected, whereas [XXXX] and [XXXX] will look at [anchor to]*
10 *the past years"* (R14-NV).

11 Consequently, respondents noted that a combination of expert and novice within a valuation
12 team can help offset the shortcomings of one another. One interviewee who is a process-
13 driven person clearly demonstrated this when he described how he worked with his senior.
14 His words:

15 *I think having me wanting to go from process to process to process would've*
16 *absolutely helped him [i.e., the expert] with the smaller details rather than having*
17 *that one whole big picture. Ultimately, I suppose the little details of what makes up*
18 *the big picture, so having someone that's actively thinking about them is absolutely*
19 *helpful. (R10-NV)*

20 Another respondent indicated that novices and experts may make complementary
21 contributions into the valuation process. According to him, whereas he brings evidence-based
22 opinion to the valuation decision making process, his seniors bring forth their vast knowledge
23 of the property market and the valuation process when they are undertaking valuations. He
24 said: *I have an opinion which is an informed opinion [that is based on evidence], but they*
25 *have that level of experience which gives them more knowledge"* (R12-NV).

26 Within that collaborative work setting, valuers disclosed that they tend to discuss among
27 themselves especially at the stage of finalising the valuation, that is, when deciding on what
28 the actual valuation indices should be and where the outcome (i.e., final value~~r~~ opinion)
29 should sit. Interestingly, these sorts of discussions spur expert valuers to have deeper thinking
30 of how they have approached the valuation through the rationalisation of their thought~~t~~
31 processes to other team members. Expert valuers acknowledged that their inability to
32 rationalise their decisions to their team members in some cases can make them back off and
33 have a rethink of such decisions, which were made on the basis of intuition~~one~~~~ve~~, rather than as a
34 result of rational thinking. R3-EV who is an expert valuer described how discussion with
35 members of his team could make him rescind on an earlier position that he had taken about a
36 valuation they are undertaking together. He said:

37 *If she thinks I'm just being too aggressive on something, and she'll*
38 *challenge me based on rationale... So, if I can't provide the logic to what*
39 *I'm doing to her, then I've pretty much talked myself around. I think that's,*
40 *that's the good thing with that sort of communication. You can push each*
41 *other, and what you do is justify, while you're justifying somebody else. If it*
42 *doesn't sound right, you start to back out of the thing anyway. (R3-EV)*

The respondent further argues that “*unless you really can justify it to somebody, you’re thinking, well, I can’t justify it to myself*”, stressing that: “*that’s where that collaborative process is good*”. (R3-EV)

Another expert valuer disclosed that while discussing a valuation with his younger colleague, the colleague might come up with correct justification for a decision that may differ from what the expert would have settled for if he were to make the decision independently.

... there will be times where I say that doesn’t look right and, but, he’s come through with the right justification to stick with his decision originally. (R8-EV)

Similarly, when asked to explain some of the contributions that novices make into the valuation process, other expert valuers stated that being asked questions by other members of their team including the novices and having to answer such questions is a means through which experts test the soundness of their decisions. For instance, R2-IV stated that: “*So to have to talk something through and describe it to them [i.e., the novices] is a good test for you, as well. You can sort of, as you’re talking them through, you’re thinking to yourself, is this logical?*” (R2-IV). Similarly, R13-EV admitted that: “*..... that double checking and asking questions, making sure that we are justifying what we’re doing*” is a very important part of a collaboration with junior valuers. In other words, having to answer questions asked by their junior colleagues can be a good way for experts to check their decisions through explaining and rationalising such decisions, and where they are unable to rationalise, they may have to reconsider their decisions. Respondent R13-EV further described how interactions with junior colleagues help senior valuers in checking their decisions. According to him:

[XXXX] is very good at asking questions as to why things are a certain way. And it even makes me check myself and it’s like you say, it’s a gut thing. I know that that one’s better than that one, but and then having to actually explain it and the reasons why, it’s, yeah, it is, it is good for us senior valuers to reflect on that. (R13-EV)

The respondent recounted a particular instance in which his junior raised valid question while they were working together on the same valuation. He said:

“Recently, I was valuing a site with coastal frontage that hadn’t had its riparian margin taken off yet... my process is to always take the riparian margin off and give it zero dollar value... but on this site, the question was, why take it off since it’s still being used... that’s a fair point. So, we rejigged the calculations — in the medium term we’ll take the margin off when redeveloped, but right now it’s fair to include the entire site area... an example of being checked by juniors.” (R13-EV)

The above quote particularly demonstrates that the expert valuer made his decision based on his knowledge and experience in valuing similar properties. However, the procedural nature of the novice gave him the ability to detect an error in the expert’s decision, which he highlighted to the expert. The expert valuer reasoned with the considered the issue raised by the novice and took it into consideration in the valuation estimate. Similarly, respondent R15-EV also admitted that there is merit in novices being able to question the decisions made by their seniors. Asked if it helps him for novices to ask him question, he replied:

1 *Yep, well it will if it picks up something that she challenges me. And I go no, no, no*
 2 *I'm right... and she goes well I don't think so because. And then if I can't explain it*
 3 *back and then I have to think about it then maybe she's right. (R15-EV)*

4 Findings also indicate that younger valuers are equally conscious of the fact that they may be
 5 asked to explain their decisions to their seniors. For instance, respondent R7-IV stated that
 6 the fact that he needs to justify his decisions to the senior member of his team makes him
 7 more focused in his valuation in order to arrive at a more accurate decision. He said: *"I know*
 8 *it's going to get peer reviewed, so I want to have an answer as to why I decided to, you know,*
 9 *bump up the room rate or decrease costs or something."* (R7-IV)

10 It can therefore be understood from the foregoing that like their counterparts in other areas of
 11 professional judgment, expert valuers use heuristics in their decision making process to
 12 simplify the decision problem and increase their efficiencies. However, findings from this
 13 study have shown that collaboration among valuers can help them to make better, more
 14 rational valuation decisions, which is what valuers are expected to strive for. Specifically,
 15 expert-novice interaction has been identified in this study as a useful approach to managing
 16 individual biases. One of the major contributions of novices in this regard stems from their
 17 ability to take a step-by-step approach when undertaking valuations, which puts them in a
 18 position to raise issues that are pertinent ~~for to~~ the valuation, which the experts might not
 19 have properly considered in their prior decisions.

20 Improving Valuation Quality

21 Respondents unanimously agreed that collaborative approach to valuation has the potential to
 22 improve valuation process in a number of ways. ~~As earlier highlighted in section 5.5.4,~~ One
 23 of the motivations for which valuers collaborate is to comply with quality assurances
 24 procedures, which is achieved primarily through the peer-review process where valuers
 25 review the valuations undertaken by their colleagues. One interviewee commented with
 26 respect to the peer-review process, where he described it as a *"... good form of*
 27 *collaboration"* (R7-IV). Explaining further, the respondent argued that the peer reviewer
 28 serves as a second or third eye that may pick up on something that might have been missed
 29 by the valuer(s) that carried out the actual valuation. Other interviewees also revealed that
 30 such peer reviews can help them in terms of checking their process and identifying areas of
 31 improvement. The interview data shows that during the peer review process, the reviewer
 32 usually takes a critical look at the valuation report to search for any inconsistencies and
 33 identify aspects where he or she thinks the judgement isn't right, so that it can be improved.
 34 Respondents noted that through this process, while they may not be calling into question the
 35 evidence that was utilised, they are more concerned about the way the evidence is analysed,
 36 interpreted, and communicated, and whether such is properly reflected in the valuation
 37 conclusion. According to respondent R11-EV:

38 *"...just thinking about that collaboration with [XXXX] on Friday with my 11-million-*
 39 *dollar industrial property... [XXXX] looked through, made a couple of suggestions,*
 40 *and I went back and said, yeah, but I thought that. And he goes, oh okay, if you were*
 41 *thinking that, that's okay, but I'd still change that or do that... so there's quite a good*
 42 *collaboration through that peer review process... it's more for process."* (R11-EV)

43 The respondent noted that while the peer reviewers may not have inspected the property or be
 44 familiar with the location of the property and thus, may not be in a proper position to
 45 comment on some aspects of the valuation such as the building quality, they may still be able

to provide useful feedback on the process adopted by the valuer. R11-EV further clarified that even if he does not agree with the reviewer's opinion, he may still go back and have another look at the process he followed in undertaking the valuation. He added that:

I mean of course the person sitting in Wellington doesn't know particularly about the Herne Bay property, but they will still think the principles through and look at it as well and go through it, yeah. So there's that process as well. (R11-EV)

Another respondent also described the benefit of peer-review as a collaborative process of improving their approach to valuation when he stated that:

"The peer reviews will often end up being a bit of an open discussion as to how people are doing things... I'll take notes in each meeting, and if I think about something that's been mentioned in a past peer review, I've corrected a process just subconsciously... done something I'd ordinarily do and then thought, oh, wait, I got told this might be a better approach. Then you'll go back and potentially change what you've done based on that feedback." (R5-IV)

A different form of review described by the interviewees, which is also beneficial in terms of improving the valuation process, is the one that occurs post-sending a report to the client, where a report is picked at random and given to another valuer to review irrespective of their level of experience or specialisation. This type of review, which is basically an audit, also focuses on examining the process that a valuer followed when they were conducting the valuation. R11-EV explained how this form of peer review helps valuer in improving their processes, which can be reflected in future valuations they undertake:

"Someone's tasked to review it and there's a backup peer reviewer... it's not a blame process, it's a process where we work around the table and go, oh well I've peer-reviewed it and I think it's generally good but you could've done better by doing this, this and this. And everyone has a bit of an input." (R11-EV)

R10-NV also described how this audit has helped him in improving his understanding of the valuation process as a novice valuer that is undergoing training. He said:

"We've got our monthly meeting with all our valuers... each month there's a peer review with two reviewers, and the idea is not to criticise but to identify flaws or things of interest that help us all learn to report or do certain processes better." (R10-NV)

The respondent further explained the benefit of this form of collaboration in terms of improving the way they communicate in their reporting. He recounted an instance where the reviewer of their report was neither satisfied with the way they had communicated their conclusions nor the justifications they provided for the adopted input metrics. He added that it was good to have such feedback because:

"We're constantly working in our own little bubble... unless it's over a certain value level where peer review policies are triggered, we just send out reports we think are clear. But if that's not the case, we need to revisit how we're communicating to the client." (R10-NV)

In addition to improving their process, valuers also believe that collaborating with their colleagues could also help them to achieve better valuation outcomes. Describing his perception about the benefits of collaboration, respondent R16-EV asserted that by pooling expertise from different individuals, the collaborative approach to valuation can potentially lead to better valuation outcome. He said:

Only that the collaborative approach, it's, the output is more than the sum of the parts. So there's a juice or a something in there that is special intellectual knowledge that you extract by doing it and that's because it's people based... you extract more than the sum of the parts in a collaborative approach. (R16-EV)

Responses from other research participants also suggest that through internal and external collaborations, valuers are more likely able to deliver to their clients, in a timely manner, valuations that are better, more accurate and reflect pertinent market information.

I suppose it's important in order to be able to collaborate within your team to meet your deadlines, to provide a good product and to get the, get all the relevant market information. (R2-IV)

Buttressing the importance of intra-team collaboration in producing better quality valuations, a novice valuer described how collaborating with his director on the same valuation contributes to the valuation process. According to him, by both team members separately going through the process, it becomes less likely for all of them to miss out on inputs that are relevant to the valuation. He said:

And there's definitely a chance that I'll filter something out, but that, I think, goes back to our collaboration because [XXXX] would look through the same list. I think it'd be unlikely for us both to miss something. And there are times that I will pick up on something that he hasn't, he he'll pick up on something that I haven't (R10-NV).

This advantage is not restricted to intra-team collaboration, but also occurs through inter-team collaboration as evidenced in the following interview quote:

"It's great because you've got someone checking everything... internal checks, internal peer reviews, external peer reviews — sometimes four people have looked over a job before it goes out. It's about the accuracy of what everyone's reading." (R11-EV)

DISCUSSION

~~As argued by Kaats & Opheij (2014), the benefits of collaborative relationships vary with the type of relationship and the parties involved in the relationships.~~ The extant literature on collaborative decision-making shows that collaboration could be beneficial to decision makers especially in complex situations. The literature further indicates that these benefits are varied and may be contingent upon some conditions such as quality information (Straus, 2010), and the sharing of knowledge (Zarate, 2013), the type of relationship and the parties involved in the relationship (Kaats & Opheij, 2014). ~~It is noted that~~ The true benefit of collaboration is realised only if at the end of the collaborative process, something is achieved that could not have been achieved if the parties have acted individually (Huxham, 2003).

Furthermore, existing literature suggests that the benefits of collaboration cannot be easily quantified in some situations (Autio et al., 1996; Schmied, 1987). Nevertheless, by adopting a qualitative research approach, this study has uncovered the perceived benefits that are associated with collaboration among valuers and between valuers and other parties within the valuation process. These benefits were presented under five major themes based on the analysis of interview data collected for this study, ~~which was~~ presented in the previous section. For the purpose of building theoretical understanding, these five themes (i.e. benefits) are classified as either valuer orientated (i.e., increasing valuer efficiency and managing personal bias), process-oriented (i.e., undertaking a more robust property inspection and broadening sources of evidence) or outcome-oriented (i.e., improving the overall quality of valuations) as illustrated in Figure 2. This conception provides new insight that has not been previously reported in the literature.

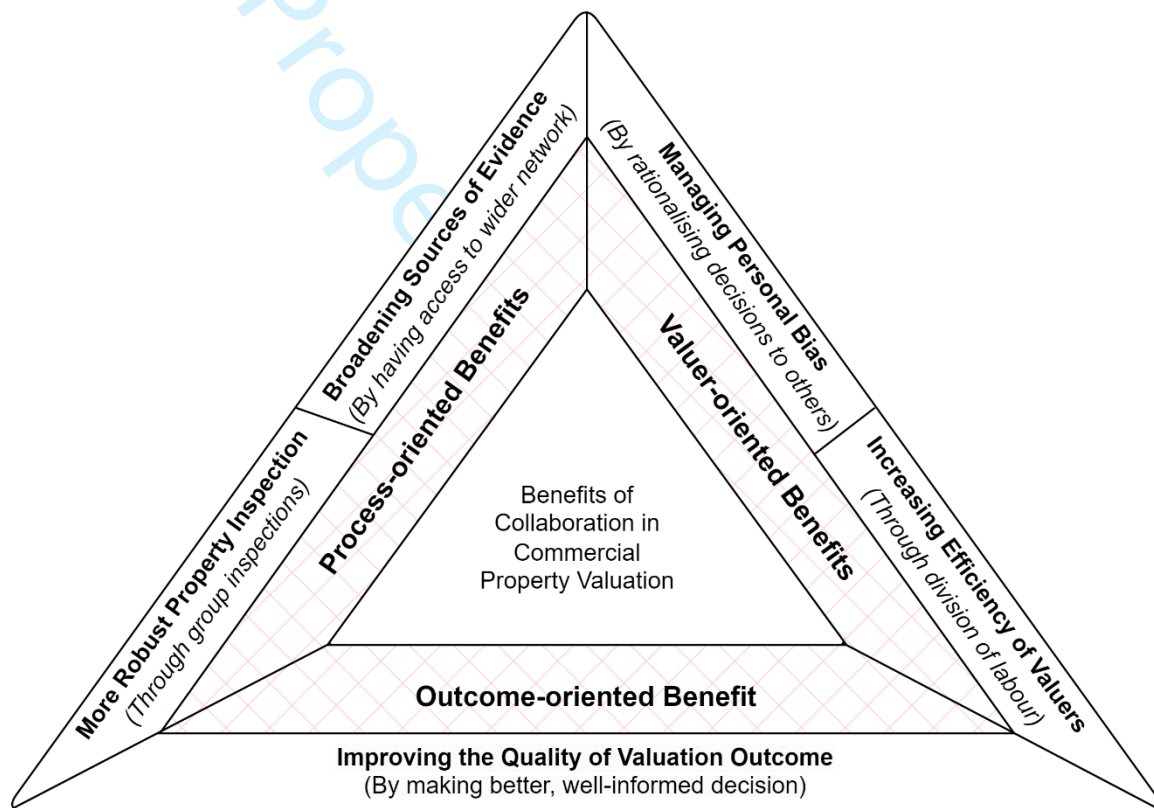


Figure 2: Benefits of collaboration in commercial property valuation process

Source: Authors' Construct

Valuer-oriented benefits

Managing personal bias

A large body of behavioural valuation literature had established the existence of both intra-personal and interpersonal bias in valuation decisions (Klamer et al., 2017). The decision-making literature has shown that biases can be reduced through technological and human intervention in the decision making process (Larrick, 2004). Attempts at addressing the problem of bias in valuation has largely focused on the use of technology in the form of

1 decision support systems (example Evans et al., 2019; Lausberg & Dust, 2017; Tidwell &
 2 Gallimore, 2014). However, the usefulness of human intervention in reducing valuation bias
 3 has not yet been well explored in the valuation literature. Studies in other areas showed that
 4 decision making groups may be able to debias themselves because the biasing behaviour
 5 exhibited by one group member can be detected by other members of the group and be made
 6 a subject of discussion (Bang & Frith, 2017). This study provides initial evidence of the
 7 ability of valuers undertaking complex commercial property valuations to debias themselves
 8 through collaborative valuation decision making approach. Findings show that this is possible
 9 as valuers working in teams are often required to justify their decisions to team members and
 10 where such decisions do not sound rational, they are usually revisited. Respondents recounted
 11 instances where their inability to justify some of their decisions to other group members
 12 make them have a rethink about such decisions, which were later changed based on facts that
 13 were highlighted by their peers.

14 An important finding from this study that relates to the potential of collaboration to reduce
 15 biased behaviour in valuation practice has to do with the interaction between experts and
 16 novices in the valuation decision making process. Variations in the behaviours between
 17 expert and novice valuers is well established in the literature including property valuation
 18 (e.g., Amidu & Boyd, 2018; Diaz, 1990; Diaz et al., 2002; Levy & Schuck, 1999). For
 19 instance, Levy & Schuck (1999) argued that experienced valuers tend to rely more on their
 20 'gut feeling' when making judgments, while younger valuers lean towards a more methodical
 21 approach. Thus, the application of heuristics (mental shortcuts) is an important distinguishing
 22 factor between the behaviour of experts and novices when making decisions (Hardin, 1997).
 23 Further, Diaz (1990) reported that when novices want to make judgment about the
 24 comparability of sales, they usually examine several sales evidence. On the other hand,
 25 experts, in their bid to reduce cognitive effort and increase efficiency, begin the selection
 26 process by choosing a few criterion sales, which will then be used to screen and select other
 27 sales to the extent that the selected sales are deemed adequate.

28 Findings from the present study confirm that while experts are heuristic-driven, relying on
 29 approximate rules of thumb in their valuation decision making approach, novices are process-
 30 driven, adhering rigidly to standard procedures without exercising much discretionary
 31 judgment. This efficiency-seeking expert behaviour is not peculiar to property valuers as it
 32 has been previously reported in other disciplines such as counselling (Etringer et al., 1995)
 33 and psychology (Hoffman, 1998). However, as noted by Diaz (1999), this expert approach to
 34 decision making could potentially result in sub-optimal or biased valuation estimates as
 35 expert appraisers may fail to examine certain important sales evidence. Similar findings on
 36 the use of heuristics and resulting biased decisions have been made in the domains of
 37 accountancy and auditing (e.g. Assere, 1992; Cassel et al., 2022).

38 Findings from the present study extends this current knowledge on valuer behaviour by
 39 providing insights that suggest that collaborations between expert and novice valuers could
 40 be beneficial in addressing the gaps between their approaches to valuation problem solving.
 41 Specifically, ~~the study provides evidence~~ participants in this study stated that during
 42 brainstorming sessions (such as when undertaking valuation analysis), due to experts'
 43 inability to rationalise some of their decisions to the novices in their teams, expert valuers
 44 could revisit such decisions which they made based on prior experience and instinct, rather
 45 than on rational thinking. This finding is consistent with the contention that a good decision
 46 is one in which the decision maker finds it "*easy to explain and easy to justify to themselves*
 47 *and others*" (Slovic, 1975). In other words, the inability of expert valuers to explain and

justify their decisions to ~~their~~ younger ~~ones~~ valuers may imply that such decisions are of poor quality. Thus, the presence of novices in teams of valuers provides avenues for the experts to test the rationale behind their decisions. The decision making literature suggests that groups exhibit more rationality than individuals because through deliberations, decision makers have better chances of recognising and correcting the errors of other group members (Kugler et al., 2012).

Increasing efficiency of valuers

A linkage between collaboration and efficiency has been widely acknowledged in the literature in both academic and professional services environments (Cooke, 1989; Hampton et al., 2011; Schuh, 2014). Participants in this study indicated ~~has shown~~ that ~~valuers' their~~ level of efficiency could be increased through collaborative decision making approach. One way through which valuers in this study reported achieving higher efficiency and productivity is the division of labour that collaboration affords, whereby different members of the valuation team will work on different aspects of a valuation. Although previous studies reported the practice of the delegation of tasks from the senior to the junior valuers (Havard, 2005), respondents in the present study stated that the use of ~~the strategy of~~ division of labour strategy not only facilitates a quicker completion of the valuation report, but also makes the valuation process less daunting and gives valuers the opportunity to carry out multiple valuations simultaneously. In addition, valuers working in teams reported deriving personal satisfaction by feeling that they are making better progress compared to when they work in isolation. Such pleasure can potentially lead to increased productivity.

Process-oriented benefits

Broadening Sources of Evidence

Property valuation is a function of information, and the quality of valuation output depends on the information that goes into the valuation process (Brown, 1992). According-As Peto (1997) argues, undertaking quality valuations depends ~~on the~~ access to market information and data. Valuers use a range of information sources when undertaking valuations including “own database; public institutions; professional colleagues; property owners; estate developers; estate agents; and the media” (Baffour-Awuah et al., 2017, p. 448). ~~The literature reviewed in Chapter 2 of this thesis has shown that~~ One of the maxims of collaboration is that more information is better (Ball et al., 2001). In other words, collaboration provides participants with a combined pool of unique information that can be used in the decision making process through the sharing of unique information (Johnson & Johnson, 2017; Perry & Moffat, 2004; Xiao et al., 2016), which can potentially lead to improved decision outcomes (Xiao, 2015). Findings from the present study support this contention in the context of property valuation. Participants indicated that collaborating with their colleagues can give them ~~by demonstrating that NZ valuers benefit from collaboration by having~~ access to wider network for gathering relevant market information. Valuers stated that when they fall short of market evidence to be used for a specific valuation, they often reach out to other valuers or stakeholders (such as agents) within their network to source for such information. Respondents noted that these networks are generally people that they have studied together, have worked with in the past, or those they have met through industry-based social events. The practice of employing collaborative approach as a means of widening data search was earlier reported by Amidu et al. (2018) in a study of UK valuers.

Furthermore, Klammer et al. (2018) reported that collaborations related to information gathering with external stakeholders are generally more prevalent in small and medium-sized firms, most of which do not maintain (robust) internal databases. Findings from the present study support this claim and further suggest that information flow among valuers is a function of firm size. Valuers in small-sized firms tend to find information flow from their large-multinational counterparts to be restricted. The large firms are hesitant to share with the small ones because they are not likely to get anything in return. This finding provides support for the principle of reciprocity that is established in the collaboration literature (e.g. Huxman & Vangen, 2000). Nevertheless, valuers from the smaller firms interviewed in this study reported leveraging on their collaborative networks to overcome challenges related to information gathering. In other words, small firms collaborate and exchange information among each other.

Robust property inspection

Another area that valuers can potentially benefit from collaboration when carrying out valuations is in the inspection of the property being valued. Although prescriptive guidelines (such as those provided in textbooks) suggest that property inspections should be undertaken by work teams (Morri & Benedetto, 2019), previous research in the UK indicates that inspections are mostly carried out by individuals (Havard, 2005). In contrast, respondents in the present study reported that they often carry out inspection of large and complex properties in teams that typically comprise a pair of valuers or more, depending on the size and complexity of the asset. This difference in behaviour is not surprising given that the literature has shown that compared to UK valuers, New Zealand valuers are more rigid in following prescribed normative valuation procedures due to the influence of stricter reporting requirements (Diaz et al., 2002). The present study highlights some advantages of conducting inspections by a team of valuers as against individuals. Specifically, results show that valuers are able to have a broader and more comprehensive understanding of the subject property when they collaborate ~~during on~~ inspections. Also, the possibility of overlooking important property details during inspection is highly reduced through the collaborative approach.

In addition to undertaking inspection in groups, findings show that valuers sometimes meet property owners on site during property inspections. This is consistent with the findings of Klammer et al. (2018, p. 217) who found that valuers may meet “*client at the subject property’s site and combine a property inspection with information retrieval*”. The results of the present study extend this finding by demonstrating that other non-valuers such as the property managers or tenants could also provide valuable information to the valuer at the time of property inspection. This study further identifies that a potential bias may arise as a result of collaborating with these other parties (property owners/managers vs. tenants ~~representatives~~) during inspections. Whereas the property owner/manager will generally be pointing out to the valuer the good side of the property, the tenants (or their representative) generally focus on the problematic aspect. It is thus argued that valuers should be conscious of these tendencies when carrying out inspections.

Outcome-oriented benefit

Improved valuation quality

~~Another important benefit that arises from collaboration in the valuation decision-making process is that the~~ Participants in this study further opine that a collaborative approach to valuation can generally lead to making more-informed, better quality valuation decisions.

According to Peto (1997, p. 412), “better valuation means more accurate pricing”. Findings from this research ~~have shown~~suggest that collaboration plays an important role ~~that collaboration plays~~ in both the data gathering and data analysis stages of the valuation process. This is consistent with the literature on collaboration, which posits that there exists a positive relationship between collaboration and quality as both increase in tandem (Cooke, 1989). ~~The valuation literature has argued for studies to be undertaken to understand how collaborative valuation approach contributes to the quality of valuations (Amidu & Boyd, 2018). This study has partly addressed this gap by revealing~~ Participants in this study are of the view that under certain circumstances, the quality of valuations can ~~indeed~~ be improved when the valuations are undertaken by teams of valuers rather than by individuals in isolation. Several avenues for improvement were highlighted in this study including the peer-review of valuations, bouncing of valuation opinions amongst colleagues, and using team members to validate valuation figures.

Findings from this study further support the notion earlier presented in the literature review that improving decision making is hinged on the diversity of group members and the extent to which such diversity is explored in the decision-making process (Larrick, 2004). This study further expands current knowledge on valuation quality control by identifying another dimension to it, that is, valuation audit. Specifically, ~~findings of this research revealed~~ participants highlighted an emerging trend in some firms to conduct post valuation audit, a process aimed at improving the overall quality of valuations produced by valuers in the firms. This practice appears to have professional grounding as the International Valuation Standards provide that firms may use external experts to scrutinise some of their valuations as a means of assessing their valuation controls (IVSC, 2022). ~~The results of this study pointed out that These Such~~ audits provide avenues for valuers to share their experiences on past valuation reports and learn how to do things better and report better in future valuation engagements, by reflecting on the past. Recent research also shows that clients now place emphasis on the existence of robust quality assurance processes as important indicators of valuation quality (Amidu et al., 2026b).

Potential Drawbacks of Collaborative Valuation

While respondents largely emphasised the benefits of collaboration, the interview data also reveals some constraints and tensions that may limit its effectiveness in enhancing valuation quality. Thus, findings from this study suggest that rather than being inherently beneficial, the impact of collaboration is contingent upon hierarchical dynamics, knowledge distribution, and the structure of interactions.

One issue relates to the structured and hierarchical nature of collaboration within valuation practice. Respondents indicated that collaborative roles are sometimes defined by seniority, with final judgement typically resting with the valuer responsible for signing off the report. As one participant explained, collaboration “depends upon seniority, who’s the principal valuer signing it off, [and] are you merely there to be a peer review[er]?”. This suggests that, while multiple actors may be involved, the extent to which diverse perspectives influence the final valuation may be constrained by organisational roles and authority structures. This observation aligns with research showing that hierarchical dynamics can limit the integration of diverse viewpoints, particularly where less experienced members defer to perceived experts. While senior or dominant members can provide valuable leadership and facilitate agreement (Callaway et al., 1985; Edwards, 1954), such dynamics may also suppress critical inquiry and reduce the diversity of perspectives considered (Callaway et al.,

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3 1 1985). In this context, collaboration may function less as collective deliberation and more as
4 2 a structured process of validation.
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7 3 Closely related to this is the tendency for early judgement formation, particularly among
8 4 experienced valuers. One respondent noted that “often the dataset just shows you what the
9 5 answer is”, implying that value conclusions may be formed relatively early in the process. In
10 6 collaborative settings, such early judgements, especially when expressed by senior
11 7 practitioners, may shape subsequent discussions and limit the extent of critical reassessment.
12 8 This finding is consistent with research on anchoring, which demonstrates how initial
13 9 judgements can structure subsequent deliberations and reduce the likelihood of substantial
14 10 revision (Tversky & Kahneman, 1974; Diaz, 1997). Although groups have been shown to
15 11 exhibit lower levels of certain biases compared to individuals (Kugler et al., 2012), they
16 12 remain susceptible to anchoring effects, particularly in the absence of strong process
17 13 accountability (de Wilde et al., 2018). As such, collaboration does not automatically
18 14 eliminate bias, but may instead redistribute or reinforce it under certain conditions.
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21 15 The findings also highlight limitations in peer review processes, particularly where reviewers
22 16 lack detailed contextual knowledge of the subject property. For example, one participant
23 17 observed that a reviewer “sitting in Wellington doesn’t know particularly about the...
24 18 [Auckland] property”. In such instances, collaboration may be oriented more towards
25 19 procedural validation than substantive interrogation of valuation assumptions, potentially
26 20 constraining its contribution to valuation quality. As one participant remarked, aspects of the
27 21 collaborative process are sometimes conducted “more for process”. Further, while
28 22 collaboration is often associated with access to a broader pool of information and enhanced
29 23 cognitive capacity for problem-solving (Hocevar et al., 2004; Sasaki & Pratt, 2012), its
30 24 effectiveness depends on the relevance and distribution of knowledge among participants.
31 25 Where knowledge is unevenly distributed, the potential benefits of collaboration may be
32 26 limited (Xiao et al., 2016).
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36 27 In addition, collaboration with external stakeholders during inspections introduces multiple,
37 28 and sometimes conflicting, perspectives. As respondents noted, landlords tend to emphasise
38 29 positive attributes of a property while tenants may highlight negative aspects. This suggests
39 30 that collaborative information gathering does not necessarily reduce bias, but may instead
40 31 expose valuers to competing narratives that require careful interpretation. Although
41 32 collaboration can help overcome individual biases by enabling others to detect errors (Shaw,
42 33 1932; Bang & Frith, 2017) and has been shown to improve problem-solving and forecast
43 34 accuracy (Tindale & Kluwe, 2015), these benefits are not automatic. They depend on
44 35 conditions such as diversity of experience, balanced participation, and structured interaction
45 36 that enables effective use of available information (Larrick, 2004; Robbins et al., 2009).
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48 37 Taken together, these findings suggest that while collaboration plays an important role in
49 38 valuation practice, its effectiveness is process-dependent rather than automatic. Collaboration
50 39 is most likely to enhance valuation quality where it is accompanied by conditions that support
51 40 critical engagement. Conversely, where collaboration is shaped by strong hierarchical
52 41 control, uneven knowledge distribution, or uncritical acceptance of inputs, its potential
53 42 benefits may be diminished. This reframing contributes to the literature by positioning
54 43 collaborative valuation not simply as a corrective to individual bias, but as a social process
55 44 whose outcomes depend on how interactional dynamics are structured and managed.
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CONCLUSION

This study investigated collaboration in the valuation process to understand valuers' opinions on how collaborative engagements enhance the quality of valuation practice. Adopting a qualitative research approach, insights were obtained from experienced valuers practising in the Auckland, New Zealand property market. The study contributes to the body of knowledge by identifying, through participants' opinions, the various dimensions through which collaboration can enhance professional valuation practice. The findings reveal that collaboration can potentially improve the efficiency and credibility of the valuation process.

Through division of labour and shared accountability, valuers are able to complete assignments more efficiently while mitigating heuristic-driven biases. Collaborative engagement also broadens access to market intelligence via professional and social networks, thereby enriching the evidence base for valuation decisions. Joint property inspections enhance the comprehensiveness of assessments by incorporating multiple professional perspectives, while mechanisms such as peer reviews and post-valuation audits strengthen the reliability and transparency of valuation outputs.

These findings suggest that embedding structured collaborative practices within valuation firms and professional standards can serve as a vital strategy for improving the integrity and consistency of valuation outcomes. Beyond practice-level implications, such improvements are also significant for the wider property market, where valuation outputs underpin investment decisions, lending activities, market stability, and public trust. Enhancing the transparency, consistency, and defensibility of valuations through collaborative processes may therefore contribute to strengthening confidence among clients, regulators, and other stakeholders in the valuation profession. At the same time, the identified constraints such as hierarchical dominance, uneven knowledge distribution, and procedural approaches to collaboration highlight the need for careful consideration of how collaborative practices should be embedded within professional and organisational frameworks.

While this study provides in-depth insights into collaborative valuation practices through interviews with valuers, it is based on a single primary data source. Although interviews are well suited to capturing participants' experiences and interpretations, the absence of methodological triangulation represents a potential limitation. Additional data sources, such as organisational documents (e.g. those used for internal review procedures), direct observation of valuation and peer-review processes, or quantitative indicators, could provide further insights into how collaboration influences valuation practice. Future research could therefore build on this study by incorporating such approaches to validate and extend the findings, as well as to examine collaborative valuation practices from multiple empirical perspectives.

Furthermore, this study is grounded in the commercial valuation context of Auckland, New Zealand, and the findings should be interpreted with this setting in mind. The structure of the valuation profession in New Zealand, characterised by formal professional standards, regulatory oversight, and established valuation methodologies provides a particular institutional environment within which collaborative practices are embedded. Rather than claiming universal generalisability, the contribution of this study lies in its analytical insights into the processes and dynamics of collaborative valuation. The patterns identified such as the role of hierarchy, knowledge distribution, and interactional dynamics may be relevant to other valuation contexts that share similar professional and organisational characteristics. In

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this sense, the findings could best be understood as analytically transferable propositions, which can inform both future research and practice in comparable settings.

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