



LOW CARBON LIVING
CRC

RP3021 Report Media/Home Renovations 'I'd just Google it': media and home renovation practices in Australia



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Date	October 2015
Title	RP3021: Report Media/Home Renovations 'I'd just Google it': media and home renovation practices in Australia
ISBN	
Format	
Keywords	Home renovation, communication, media, social media, energy efficiency
Editor	
Publisher	CRC for Low Carbon Living
Series	
ISSN	
Preferred citation	



Australian Government
Department of Industry,
Innovation and Science

Business
Cooperative Research
Centres Programme

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ACKNOWLEDGEMENTS

The authors would like to acknowledge the CRC for Low Carbon Living, in particular, Dr Stephen White (CSIRO) for his support and guidance, and the industry partners for this project: Sustainability Victoria, Master Builders Australia, Housing Industry Association, BlueScope Steel, and CSR.

We would particularly like to thank Sara Fiess (Sustainability Victoria) for her support for the project including as chair of the steering committee (to July 2015 when she went on leave) and the other committee members; Kristin Brookfield (Senior Executive Director Building, Development & Environment, Housing Industry Association); Rob Enker (Victorian Building Authority); Dr Phillip Alviano (Sustainable Building Advisor, Master Builders Australia); Rachel Cable (BlueScope Steel); Peter Ruz (CSR) Lynette Day (Manager Community Energy Services, Government of South Australia).

We would also like to thank other project supporters and collaborators, Deborah Wright (CEO of NBN); Donna Luckman (CEO of Alternative Technology Association); Amy Willett and Sally Moxham (Sustainability Victoria); Euan Williamson (City of Yarra), Arpad Maksay (City of Melbourne); Fiona Stevenson (City of Maribyrnong); and Kate Bell (Joint CEO of the Building Designers Association of Victoria). We appreciate assistance provided by Athena Prib and Julie Wheway at the CRC for Low Carbon Living.

We acknowledge also the two Swinburne PhD students for this project, Shae Hunter and Aggeliki Aggeli, who participated in focus groups and observed 'speed dating' sessions between renovators and design/building professionals.

Finally, we would like to thank the home renovators and building practitioners who discussed their experiences of renovation in the focus groups as well as to those who contributed to the online survey.

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EXECUTIVE SUMMARY

About the Report

This is the first Report of a project examining ways of making energy efficient home renovations mainstream rather than a niche activity as is currently the case.

Homes are a major contributor to carbon dioxide emissions in Australia; most emanating from the 98 per cent of established homes rather than the less than 2 per cent of new homes built each year. We know from government and industry research that the Australian home renovation sector is very fragmented with many small-scale participants.

This is the first Australian study to explore in detail ways in which media is used to influence and communicate home renovation practices involving a large number of small-scale home renovators and design and building practitioners.

Key findings

1. Motivations for renovation involve a complex interplay between pragmatic and emotional factors.

Whilst often expressed as 'modernising', home renovators' motivations are complex and overlapping, involving the interplay of pragmatic factors such as time and money (particularly resale value) and emotional factors that revolve around creating a family home and an close attachment to place. Most renovators juggle both sets of factors to some degree.

2. It's their renovation, their ideas and their money but renovators differ in their skills and expertise, time, resources, and desire for in depth involvement.

Renovators see themselves in the driving seat: it is their renovation; their ideas, their money. The research found a distinction between renovation as an ongoing process and as a renovation project. The former often involved a DIY renovator who researches and learns how to carry out improvements as they go along, bringing in trades to assist as necessary or required (e.g. electricians). In contrast, a renovation project is often planned using some professional design input and managed by a building or project manager.

3. Pictures inspire renovators and give them ideas for their renovations

Visual media are very important in the early stages of a renovation; in getting ideas and inspiration, as well as insight into how other people are approaching their renovations. Renovators want to see design, layouts, features, appliances and colours, rather than reading text. The Internet and social media are widely used as a means of accessing and sharing pictures of renovations:

- On-line platforms and social media (including Houzz, Pinterest and Instagram) and, in particular, apps

which can be used on a variety of mobile devices, enable renovators to visualise what they want their renovation to look like.

- Renovators regularly use Internet and social networking platforms to access magazine pictures, either using search engines or accessing digital versions of magazines.
- #### 4. Renovators respond to human stories, both aspirational and down to earth, which they can consider in the context of their own dreams, desires and circumstances.

Exhortations to consider more sustainable renovations to protect the environment are not particularly effective (*it's their renovation*). Instead, people respond to stories which are conveyed and shared by media of various types. The cultural landscape around renovation is heavily dependent on TV shows, print media (digital and analogue), Internet and mobile applications (apps). In particular:

- Mainstream media use storytelling to great effect. This is evidenced by the high level of awareness of TV home renovation, lifestyle and property shows and their role in representing many aspects of home-making to broad audiences.
 - Social media extend the storytelling and communication function, allowing people to share messages, links and content via peer-to-peer and social networks.
- #### 5. Renovators rely on personal networks and recommendations to access trusted people (designers and building practitioners) and reliable information.

As most renovators have never renovated before, or have done so only occasionally, renovators trust people who are recommended by people in their own personal network.

- Renovators without personal contacts search the Internet either using general search terms or via sites which provide practitioner lists (e.g. industry associations) rather than a business phone directory/Yellow Pages; local papers are still sometimes used. Internet and social media searches are important in enabling renovators to learn some of the language of renovation and to know what sort of questions to ask.
 - Renovators seek information on sustainable features and products via the Internet, although they find it hard to obtain trusted information and compare products. Building practitioners rely on their associations and suppliers' reps for trusted information on new and sustainable products, supplemented by Internet searches.
- #### 6. Renovators share pictures but not financial and technical information.

Renovators generally keep some sort of pictorial record of their renovations and some financial spreadsheets and drawings/sketches. They share pictures through their personal and social networks (e.g. using Facebook)

but not financial information or more technical information such as sketches/plans which they may have paid for. There is little public sharing of this information. Many renovators find it hard to get 'ball park' figures on costs which they need when planning their renovation.

Implications

1. Messages about improving energy efficiency have to appeal not only financially (e.g. cost calculators, payback periods) but also emotionally, in particular, to respond to ideas about a comfortable family home.
2. It is as important to communicate the benefits of improved energy efficiency within the scope of DIY renovators as to provide education and training for design professionals and building practitioners who advise clients commissioning renovation projects.
3. Storytelling about sustainable renovations is important; i.e. presenting such renovations as a positive way to live and which add value to the home. Mainstream media provide ideal means of storytelling based on people's experiences but there are also some very 'low tech' options.
4. Visualisation is essential particularly when renovators are looking for ideas and inspiration. Media are an ideal vehicle for visual communication (rather than text) and can be used to present positive images of comfortable energy efficient homes.
5. There is a potential to leverage online and social media's networking mechanisms to enable better access to reviews and recommendations about practitioners and features/products which improve energy efficiency (TripAdvisor-style sites used in many fields). These sites could help link renovators and practitioners, allowing people to share and rate their experiences. In part, online forums are already used for such exchange.
6. Intermediaries (e.g. suppliers and retailers), professional/industry associations and (local, state, etc.) can fill some of the gaps left by informal social communication and exchanges taking place, especially around potential costs, installation requirements and user-friendly technical information about products, which can be easily accessed online.

INTRODUCTION

The energy that Australians use in their homes is an important contributor to our carbon dioxide emissions. Energy is used in the course of daily living, in particular through heating and cooling our homes, heating water, food storage and cooking, lighting, and use of an increasing array of electronic equipment². This type of energy use in the home (or *direct energy consumption*) produces an estimated 11 per cent of Australia's carbon dioxide emissions (DCCEE 2011). This figure does not include transport to and from the home nor indirect energy embodied in the *production* of goods and services for the home such as building materials, fixtures, fittings and appliances (Monahan and Powell 2011).

Much work has been done on designing and building *new* homes which are more sustainable³ and facilitate increased energy efficiency, although whether this is achieved in practice will depend on how residents use their home. However, most of the energy directly consumed in the home, and resulting carbon dioxide emissions, is produced by households living in *existing* housing built over many decades rather than new build which adds less than 2 per cent to the housing stock in any one year (NHSC 2013).

Energy use in the home is a combination of two factors: whether buildings themselves are energy efficient and residents' practices as they go about their daily lives. **What has been called 'Australia's obsession with renovations' (Allon 2008) provides an important opportunity for reducing carbon emissions associated with established dwellings through improving the energy efficiency of dwellings and enabling residents to live in greater comfort and reduce their energy bills.** Renovation is also a large, relatively untapped market for design, techniques, products and appliances which facilitate improved energy efficiency.

This is the first report of a project that seeks to develop media and communication strategies that will be effective in increasing household adoption of home renovations that lead to greater energy efficiency (and reduced carbon emissions) as *mainstream* rather than a niche green/sustainable market segment. The report seeks to understand in depth home renovation practices and, in particular, the role and potential of media in shaping renovation practices in a rapidly changing media landscape.

It is in three parts:

- **PART 1:** outlines the issues and our approach to investigating media and home renovation practices.
- **PART 2:** details the findings from this research.
- **PART 3:** considers the implications of the research findings for media and communication strategies which encourage home renovations which enable greater energy efficiency and lower carbon emissions.

² The major contributors to domestic energy consumption are space heating/cooling (40 per cent); appliances and equipment - including refrigeration and cooking (33 per cent); water heating (21 per cent) and lighting (6 per cent) (EES 2008)

³ Energy efficiency in this context refers to using less energy in running a home. Sustainability is broader and also includes other measures to reduce consumption, such as water efficient appliances and recycling water.



PART 1: MEDIA AND HOME RENOVATION PRACTICES

Formal strategies to encourage large-scale promotion of more energy efficient home renovations have had only partial success in Australia. There has been a focus on the technical (better technologies) and the economic (financial incentives) with a relatively 'top down' view about education on sustainable living which has gained limited traction amongst renovators. This project investigates other approaches to what has been described as the dominant preoccupation with policy instruments, formal education and official information strategies (Karvonen, 2013).

In particular, we argue that the social and cultural domain of media and communications offers a critical *complementary* contribution to promoting more energy efficient renovations in Australia as it connects directly with people's everyday practices and experiences. The now ubiquitous media play an unrivalled role in how people connect, communicate, learn, interact, and fashion their taste, aspirations and lifestyles (e.g. Hartley, 1993; 1999; Lewis, 2008). From viewing DIY (Do It Yourself) videos on You Tube, posting on renovation forums, sharing pictures of home transformations or watching *Grand Designs* for inspiration, consumers are increasingly passionate about communication. It is critical, therefore, to understand the role of media in home renovations.

This part briefly outlines:

- An understanding of media as an influencer and communicator of home renovation practices (section 1.1)
- The potential role of media in influencing the home renovation market in Australia (section 1.2)

Media as an influence and communicator of home renovation practices

The conceptual framework is based on an understanding of i) home renovation (rather than retrofit); ii) home renovation as social practice; and iii) media as an influencer and communicator of home renovation practices. We discuss each of these below.

Home renovation rather than retrofit

Several, often overlapping, terms are used to describe work done to improve the performance of existing buildings. They fall into two main categories:

- Building-focused terms – eg retrofit, retro-commission and building 'tune up'
- People-focused terms – eg refurbishment and renovation (City of Melbourne 2015).

Of the building-focused terms, retrofit is the most widely used and refers to upgrading an existing building to meet contemporary norms and standards or to prepare for future conditions (Karvonen 2013: 564). The motivations

for retrofit of existing commercial buildings are relatively straightforward in that improving the building performance has a financial payoff. Retrofit makes financial sense in that it reduces operating costs rendering the building a more lettable proposition and in so doing increases the asset value.

In the residential building sector, the motivations for retrofit are much more complex. Resident home owners do not typically think about building performance and ongoing costs in the same way as in the commercial sector. The motivations for retrofit may include many social and cultural factors in addition to financial ones (Shove 2010; Long et al 2015).

Australian governments have predominantly applied a retrofit approach to decreasing energy consumption in the home through policies aimed at improving the building performance. These include development of technology (e.g. photovoltaic cells which convert solar power into electricity); regulation (e.g. application of the NatHERS⁴ star rating system); financial incentives (e.g. state government incentives to install solar panels); and improved training/education and advocacy on improving energy efficiency (e.g. state government education strategies).

Research into retrofit of domestic buildings suggests that the slow take-up of strategies to improve energy efficiency is not only a technological or financial issue, but can be explained by cultural and institutional factors. These include householders' interests, professional practices in the construction industry and limited government regulation (Dalton et al 2008: 23). Sustainable design and products need to be normalised within basic notions of 'comfort, lifestyle, homeliness and belonging' (Crabtree and Hess 2009: 208). In other words, people may improve their homes for a wide variety of reasons including comfort, convenience, aesthetics, social signalling ('keeping up with the Jones') as well as reducing running costs and improving the value of their home.

For these reasons, we use the term *renovation*, a taken-for-granted term that is in broad popular use and covers a broad range of activities from maintenance/repairs to internal remodelling to large projects which extend the building outwards or upwards. As a people-focused (rather than building focused) term, it recognises the ways in which home owners voluntarily seek to improve

⁴ National House Energy Rating Scheme (NatHERS) with Home Energy was developed by the CSIRO in the 1980s and now rates houses from 0 to 10 stars. It refers to thermal comfort (need for heating and cooling of the building not energy efficiency in terms of hot water systems, appliances and lighting. <http://www.nathers.gov.au/accredited-software/how-nathers-software-works/star-rating-scale> last accessed 29 September 2015

their homes, and their experiences of living there, through making changes to the building they live in (or in some cases own but do not live in).

Home renovation as social practice

Many strategies to improve energy efficiency and reduce carbon emissions through home renovations have proved relatively ineffective because of underlying assumptions about rational individual decision-making and 'behaviour change' in response to external interventions such as energy pricing or information provision. 'Top down' policies, information and education do not connect with the ways in which people live in their houses and change them over time (Karvonen 2013: 568). Whilst models of individual decision-making and behaviour change have yielded some important insights, such as an apparent discrepancy between holding 'green values' and energy consumption (Fielding et al 2010), they are insufficient to understand why people undertake home renovations, what they are trying to achieve, how they go about improving their homes.

There is growing evidence that among several explanations of the domestic carbon footprint, domestic social practices (routine, everyday habits) are highly influential (Newton and Meyer 2013). Rather than seeing consumption as behavioural responses by the individual as a rational decision-maker, this approach emphasises daily and taken for granted activities such as turning the heating on, storing food, cooking and washing, which have implications for energy use. It is an approach that has been used in some recent Australasian studies of home renovations (e.g. Maller and Horne, 2011; Maller, Horne, Dalton, 2011; Perkins et al. 2012).

Whilst renovation is not in itself a routine, everyday activity, it is an attempt to improve the environment for such activities. Renovation is associated with significant moments of household change eg buying a house, having a child, moving house, retiring. These are 'windows of opportunity to reconfigure the dynamic and complex relations between residents and the built environment' (Karnoven 2013: 569).

While there is a growing interest in a deeper understanding of renovations from the perspective of social practice (Maller et al. 2011; Maller et al. 2012; Karvonen 2013), the specific role of media and communications remains outside the purview of these studies. This is a significant gap in that media plays an important role in shaping the ways in which people form their perceptions, communicate values, learn about the world, and build communities. For example, what are the messages conveyed, and taken up, from the vast array of home renovation TV shows, magazines, web sites and social media platforms? There is a rich history of media studies that we draw on to address these questions.

To gain traction for more energy efficient home renovations, this project combines sociological and media studies expertise to investigate what people do, how they do it, and how media feature in their everyday practices – using a 'bottom up' not 'top down' approach.

Media and home renovation

Media is important as a means of communication and social engagement through stories and story-telling (Hartley 1993; 1999; 2012). Understanding the cultural and social role of media is important since it appears that people relate to 'narratives rather than data' (Gardner in ARUP 2010: 4).

There are many types of narrative-driven media. They include traditional media such as TV and print but also new types of media in a rapidly changing and diversifying media landscape in which there is good deal of convergence of technology, eg smart TV that enables internet searching. The rise of the Internet and low-cost digital media, means that ordinary people can now produce and share stories, advice and opinions beyond the realm of expert knowledge (institutions and professionals) (e.g. Gauntlett 2011; Burgess and Green 2009).

Cultural studies of consumption do recognise the importance of media but there have been surprisingly few attempts to investigate media in respect of home renovations. The analysis is either brief (e.g. Allon 2008: 30-36 on Channel 9 TV series *The Block*; or Allon 2011 on *Grand Designs*), genre-specific (e.g. Lewis 2008 on life-style TV that touches on sustainability; or Rosenberg 2009 on home make-over shows), or focuses on individual case studies (e.g. Rosenberg 2011 on *Our House DIY Club*). There is, however, no systematic and up to date account of home renovators' use of media, and the ways in which media inform renovation projects.

Opportunities for media use to influence the home renovation market in Australia

There have been a variety of policy responses at federal, state and local government levels to encourage a more sustainable housing sector. These include: regulation, taxation, transfers, grants, pricing policy, capital expenditure, education and advocacy (Burke and Ralston 2015: 5). Governments, industry and not for profit organisations around Australia have an interest in learning about the effectiveness of current policies to encourage home renovations which improve energy efficiency and decrease carbon emissions.

To be effective, these policies have to take into account key features of the home renovation market in Australia. In this section, we briefly review: i) the size and structure of the home renovation market in Australia; ii) findings from market research which raise questions about the influence of media; and iii) a brief outline of our research approach.

The size and structure of the home renovation market in Australia

To give context to the research, it is important to consider the nature of the home renovation market in Australia. There were 7.7 million occupied private dwellings in Australia in 2011; three quarters (76 per cent) of which were single detached houses (ABS 2011). Home renovation is mainly undertaken by home owners, with 88 per cent of owner occupiers in Australia living in

single detached dwellings. Most knowledge about home renovation is focused on home owners but the investor share of housing markets has increased to about a quarter of all occupied dwellings in 2011 (Hulse et al 2015). Investors lack awareness of ways to improving energy efficiency and there are financial barriers to them making improvements since they are unlikely to benefit directly via increased rents, unlike the commercial sector (Gabriel and Watson 2012).

Expenditure on home renovations in 2014 was estimated at \$28.16 billion for work of all sizes (HIA 2015). Spending on home renovations has at times been as much as half of all residential construction expenditure (e.g. in 2009-10) but in 2014 was about 37 per cent of all such expenditure due to an increase in new construction and a dip in renovations (HIA 2015).

Most renovation work is on detached houses. The most common work involves repairs/maintenance and improving bathrooms and kitchens (Maller and Horne 2011: 67). It also appears that living/family rooms, guest and master bedrooms and laundry rooms are also frequently renovated (Houzz 2015). Just over half are small renovation jobs of \$70K or less; more than a third of renovators also engage in new building work (HIA 2015). Many Australian renovators also make upgrades to outdoor spaces and structures (Houzz 2015).

There are many, usually small scale, actors involved in home renovation:

- Renovators are a mixed group ranging from those who do DIY work to those who use professionals for design and construction and many hybrids in between (Maller and Horne 2011: 61).
- The renovation industry comprises a large number of small operators, each of which has a small share of the home renovation market. Four in five employ five people or less and there is an important role of sub-contract labour. A quarter of the market is lone traders. The trades most commonly used in renovations are electricians and plumbers followed by plasterers, painters and carpenters (HIA 2015).
- A range of intermediaries also play critical roles in renovations including product manufacturer, installers, local councils, building suppliers, retailers, etc (see also Karvonen 2013).

In summary, the home renovation market is a very large one but comprises many small players with different levels of knowledge about energy efficiency, and sustainability more broadly, in a domestic setting. This creates a fragmented and complex environment and explains some of the difficulty in communicating messages about improving energy efficiency and reducing carbon in a top-down educative manner. On the other hand, developments in media discussed in section 1.1 enable communication between multiple, small-scale players.

Market research and the potential influence of media

Most Australian jurisdictions have commissioned market research to assess the effectiveness of their policies to

improve energy efficiency in the home. These produce somewhat similar results.

Research conducted for Sustainability Victoria (SV)⁵, for example, found that most renovators were home owners renovating single detached dwellings with 3 or 4 bedrooms. Half were couples with children and a further quarter couples without children. There was a spread of age groups with two thirds between 35 and 60 years. Most renovated within the existing shell but touched external elements such as doors and windows; ground floor extensions are common but upper storey extensions considerably less so. About six in ten plan to live in their renovated house indefinitely; with a further quarter planning to live in the renovated home for a defined period and then sell.

Important findings which are directly relevant for this research were that:

- In terms of values, most renovators considered at least 'fairly important' 'sustainability' (81%) and energy efficiency (89%).
- Renovators believe their 'own ideas and choices' and 'internet searches' are the most important sources of advice on renovating and on energy efficiency, followed by builders/trades and discussions with family and friends.
- There was a gap, however, between energy efficiency considerations considered as part of renovations and the measures that renovators decided to implement. For the most part, renovators included those measures which were least costly and simpler to install such as more energy efficient lighting, water saving showerheads, gas cooking appliances and draught proofing. They considered but did not include insulation (ceiling, wall and floor) or double glazing to the same extent.
- Renovators were not convinced that the cost of installing some energy efficiency measures was justified by either saving money on future energy bills and/or a long term return on their investment, suggesting that financial reasons are important but a other reasons included doubts about the technology and aesthetic concerns.

Whilst this (and other similar research) highlights the important role of the Internet and social networks, there is little detail on the ways in which renovators use the Internet and other digital media and how these media help renovators develop their 'own ideas and choices'.

Research approach

The aim of the first stage of the research (and the subject of this first Report) was to map and analyse in detail multiple socio-cultural and material factors that bear on renovation practices. The research focused on ways in which home renovators develop inspiration and

⁵ The original market research data was kindly made available to the Swinburne research team by Sustainability Victoria.

ideas for their renovations, develop plans for their renovations and move to carry out renovation activities.

Special attention was placed on meanings of 'home' and informal dynamics to determine the little understood role of media, social communication and networks in the renovation process. Prior research has identified these as critical factors to be further examined and analysed in detail (e.g. Maller and Horne 2011; Willand et al. 2012).

Specific research methods (detailed in Appendix A) included:

- On-line survey of home renovators for this project (156 responses)
- Focus groups of renovators (5) and building practitioners (2) for this project
- Elements of ethnographic research, observing sessions organised by Alternative Technology Association with renovators and sustainability experts⁶.
- Customised re-analysis of SV market research data (telephone survey of 1,026 people and 8 focus groups)
- Review of market research data from a variety of sources, including housing industry, government departments, and web site on-line surveys.

This is exploratory, qualitative research since, as discussed earlier; there is very little research into the role of media into home renovation practices. The contribution of the research is in opening up new ways of thinking about different approaches to help mainstream sustainable home renovations through the focus on media and communication.

In the analysis that follows, we compared new data generated for this project with the SV data and other survey data available to us. However, for ethical reasons, we only cite verbatim responses from the new material generated for this project.

⁶ <http://sdse.ata.org.au/>.

PART 2: RESEARCH FINDINGS

Six main themes emerged from our investigation of media and home renovation practices which are discussed in this Part of the Report:

- A mixture of pragmatic and emotional factors
- Renovation as an ongoing activity and a project
- Visual communication in getting ideas about renovation
- The importance of media in storytelling
- Searching for trusted professionals/practitioners and information and advice on sustainable design, features and products
- Documenting renovations and sharing ideas.

A mixture of pragmatic and emotional factors

Much of the research on home renovation is based on a model of rational decision-making which identifies why households decide to renovate. In this vein, when asked to nominate the single most important factor, the most frequent response by on-line survey respondents was not surprisingly 'to modernise or update'. As shown in Figure 1, very few respondents nominated either upgrading energy and water efficiency or minimising ongoing costs as the most important reason for their decision to renovate.

The focus group discussions, however, indicated that motivations for renovation were more complex than this, as we discuss next.

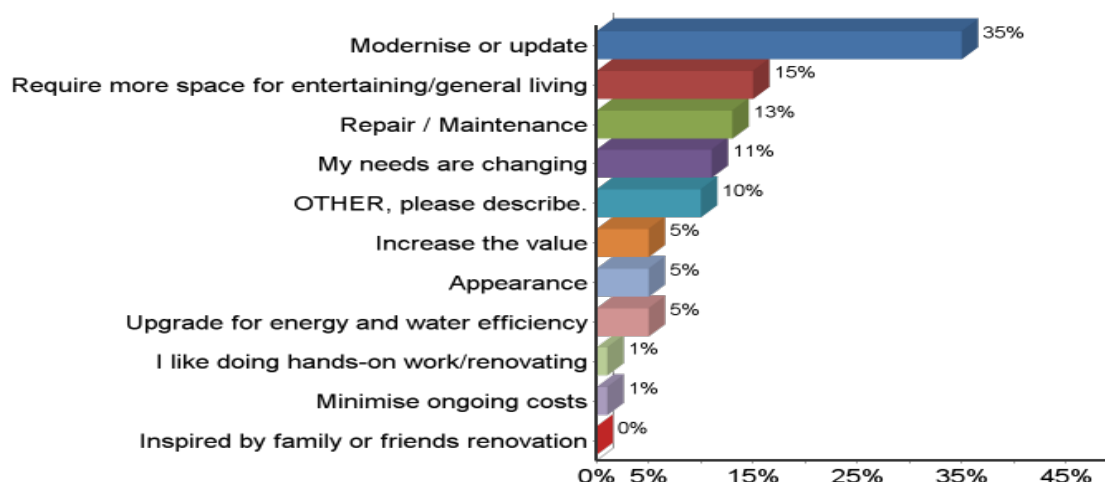


Figure 1: The single most important reason for renovating

Source: online survey of home renovators; n=151

Pragmatic factors: modernisation and resale value

Renovation typically addressed problems with the physical fabric of the building and its performance. Many renovators talked about a desire to modernise an older style property that was often seen as too dark and too cold. This was the main way in which renovators talked about the on-going costs of living in a house, both reducing maintenance costs and improving energy efficiency. It is notable that the focus groups were conducted in Melbourne in the coldest winter in 26 years and keeping warm was foremost on many people's minds.

We were part of the inside out movement, where you want the back of the house open because it's a 50s house, and it was very dark and we just wanted it to be opened up so that we could actually see the backyard because we're on a quarter acre in the northern suburbs, and it's beautiful, and it's nice to be

able to see out. We had to get our roof redone because we had concrete tiles and they were leaking quite badly. (renovator focus group 5)

Most renovators had at least an eye on how expenditure on renovation would increase the resale value of their home. For some, this was a very important reason for renovating.

There's also economic motivations as well, I think everybody would be kidding themselves if you want to add value to the property that you're living in or working on, whether you intend to live there in the short term, long term, sell it, rent it, whatever, there's always an economic factor if you want to improve it. (renovator focus group 4)

Improving energy efficiency was not, on the whole, seen as a 'sure-fire' way of improving resale value. In particular, where properties were considered as an investment, there was little incentive to pay extra for

items that improved energy efficiency for a future tenant but did not add to either rents or resale value for the property owner.

And it's more important for us then [renovating to live in the property] that we look at the actual quality of the materials and things and how sustainable they are and what the energy use is. Whereas when it's for an investment, that is the thing that you let slip. So if it costs an extra \$1000 on the appliance to go from a three to a four star, you're not putting in a four star (renovator focus group 4)

Emotional factors: family and lifestyle

Renovators are also concerned about the type of home that would fit their household/family circumstances and their desired lifestyle. Creating a more desirable home often, but not exclusively, centres on creating a more desirable home for family. It can be precipitated by family change, for example when a child is born and with the arrival of subsequent children. People who have 'outgrown' their current homes can move somewhere else which is bigger and more suitable or renovate their current house. The focus group participants in this research had chosen the latter, often because they really liked living in the house and felt connected to their neighbourhood. This was encapsulated in terms such as having a 'forever house'.

So, space is starting to become a bit of an issue. As I said, I really love the area. We've been there for ten years. We don't want to move anywhere else so the idea of renovating has been on the cards for a long time but we've never really been game enough to take that first step and so it's finally bubbled to the

point where queues for the bathroom and everything like that are just—(renovator focus group 1).

The desire to create a space where people socialise with family and friends is also a powerful motivator for home renovations. Creating a good social impression is also a contributing factor for some renovators who want to create a space to accommodate their lifestyle, or one they aspire to.

It was social reasons for us to get the outdoor area done, because we have big bunches of friends, particularly my son's primary school friends' families, so they bring over these whole bunch of kids. And if we can have an outdoor area all done, we can all sit out there nicely and drink our wine and the kids can play outside. They don't have to be inside trashing my house. And also for the family, it's nice to be able to sit out there, especially in summer, to have breakfast outside and get away from the telly. (renovator focus group 5)

A 'comfortable home'

So far, we have discussed 'push factor's'; the main pragmatic and emotional reasons why people are dissatisfied with their current home and want to change it. Looked at from a different perspective, what are the 'pull factors'; what do they want to achieve through their renovation?

Respondents to the on-line survey identified liveability/comfort as the most frequently mentioned factor, followed by appearance and the overall price of the renovation, as illustrated in Figure 2.

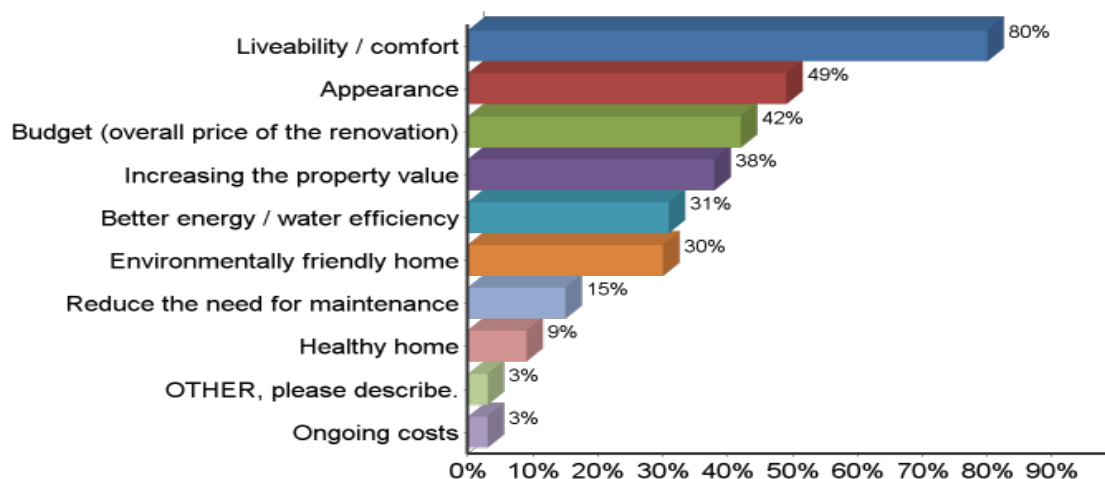


Figure 2: The three most important factors in planning a renovation

Source: online survey of home renovators; n=151

During the focus group discussions, renovators talked about wanting to have a comfortable home; *comfort* embodied not just physical characteristics (ambient

temperature, lack of draughts) but an emotional sense of 'being at home'. Renovators did not talk about liveability

(an academic/bureaucratic term) or appearance or water/energy efficiency.

Well when she gets home she's at peace, it's as simple as that. It's totally inherent in her and me feeling comfortable in that space and if we're not we'll sell it and move on (renovator focus group 4)

Some renovators made an explicit connection between a comfortable home and one that was more energy efficient and cheaper to run. The idea that more sustainable home renovations can produce a more comfortable home has been used in some state government strategies, for example, SV's campaign is around 'improve comfort, save money and avoid renovation regret'⁷. This and other campaigns focus on thermal comfort which, as seen above, is important for renovators.

Recap

It is clear from the detailed qualitative research that home renovators' motivations are complex and overlapping, involving the interplay of pragmatic factors such as time and money and emotional factors which revolve around family and home. Whilst there are extremes (buying a home to renovate purely to make a profit and the renovators of a 'forever home', most renovators have to deal with the interplay between these two sets of factors. For example, renovators wanting to sell (at a profit) often live in the property in the short-medium term and even those who have found the home they want to live in for the foreseeable future must consider their budget and often the possible effect on resale value. There is scope to use the idea of *comfort* more broadly to encompass both pragmatic and emotional drivers of renovations.

Renovation as an ongoing activity or a project

There is a wide spectrum of renovation activities ranging from DIY renovations carried out over time to large, time-limited projects involving ground floor and upper storey additions. Many renovations being carried out by respondents to the on-line survey involve internal changes i.e. within the existing footprint of the building. These can be relatively minor, using the existing layout, or more major works involving changing the internal layout, for example, knocking down walls or moving the location of rooms such as bathrooms. Other renovations added more space either through ground floor extensions or, less commonly, upper storey extensions.

Three quarters of the on-line survey respondents were renovating detached houses (74%) or semi-detached,

row, townhouses or villa units (15%). This is broadly in line with other research⁸.

Whilst a third of respondents to the on-line survey described themselves as DIY renovators, there was extensive use of trades (e.g. electrician, plumber, carpenter) and almost half of renovations required construction professionals (e.g. builder, project manager), as shown in Figure 3. About four in ten used professionals for design.

The focus groups provided richer insight into two main patterns of renovating.

⁷ Sustainability Victoria (2014) Your guide to a Smarter Renovation, <http://www.sustainability.vic.gov.au/smarter-renovations> last accessed 6 October 2015

⁸ In the SV market research, 89% of dwellings renovated were detached houses and 9% townhouses, terraces or units. There were no apartment renovations. The greater percentage of detached houses in the SV research can in part be explained by targeting non-metropolitan regions in which the percentage of detached houses is higher.

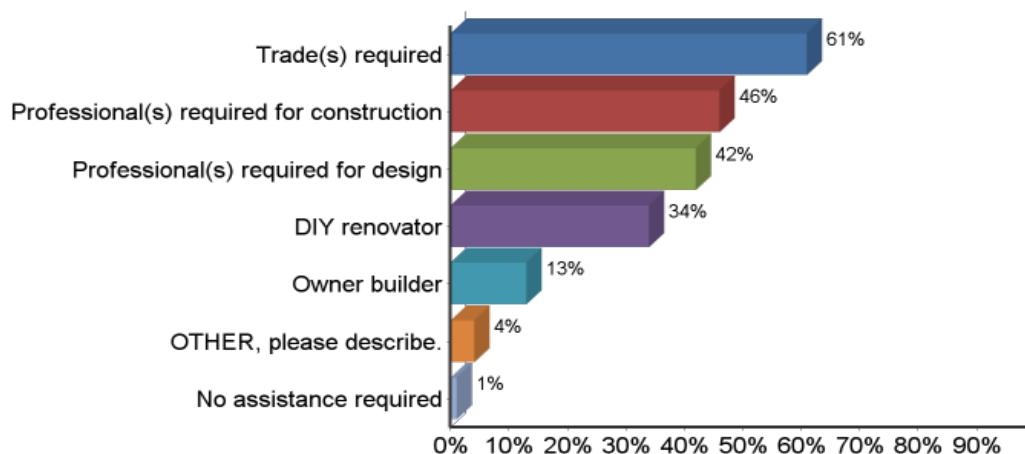


Figure 3: Means of carryout a renovation

Source: online survey of home renovators; n=156

Renovation as an ongoing process

One pattern is progressive renovation over time. This typically involves the kitchen and bathroom as well as some other work. Renovation is done in smaller stages as time and resources allow rather than a big renovation project. Often this involves a combination of DIY and use of trades such as electricians, plumbers and carpenters.

I have finished a stage of the renovation I was doing, I knocked out a wall and put in some flooring, took out the old flooring. Had some asbestos cement sheeting removed and the bathroom re-tiled. If I keep the house I will be redoing the bathroom at some point (renovator focus group 4)

Whilst a lot of progressive renovation is about repair and modernisation, some focus group participants attempted to improve energy efficiency in the process, for example, through improving the insulating qualities of flooring and searching for more sustainable materials.

In the process of progressive renovation, problems with the existing building were discovered which involved unanticipated expenditure on items such as re-stumping, rewiring and adequate drainage.

So the stage that we're at now is the inside is done, the stuff that we planned, but now we're trying to fix the outside because along the process or along the way, we realised all the other issues that went along with it; problems with stormwater, and we had to re-stump as well. (renovator focus group 2)

Renovation as a project

Other renovations are undertaken as a defined project (or sometimes more than one project after a gap of some years), usually involving design and building professionals. Often this type of renovation has been under consideration for some time and there had been a

lot of research and planning. Typically a renovation project involved some demolition and extension to the building footprint. Building practitioners indicated that people are doing kitchens, bathrooms and extensions, with a focus on projects in areas up to 10-15kms from the city (practitioners' focus group 1)

The plan is to keep the first three rooms of the house, which will be the three bedrooms and then the back half of the house will be demolished and the renovation will happen to the back half of the house, which will be the bathroom, kitchen and lounge area and then upstairs will be a bedroom and a small bathroom. (renovator focus group 1)

There was opportunity in 'doing a renovation' to consider improving energy efficiency, which was taken up by some of the renovators.

We firstly renovated the back of our house, mainly just the kitchen and the bathroom, we just knocked the back out. We didn't make it any larger than the actual footprint. We have added a deck and a pergola, and we've also had the solar panels, and we've had our front yard done as well. (renovator focus group 5)

Occasionally, renovators had specifically focused on a sustainable renovation project. For example, one renovator interviewed for the project had included solar tubes for better natural lighting, replacement of all light fittings to LED, new kitchen (including new appliances), installation of solar panels and external changes (removing trees) to improve natural lighting and heat gain in the house.

Recap

It is clear from the research that renovators want to be in control of their renovation, it's their ideas and their

money. Whilst the renovation market is often categorised in terms of dollar value of work, as discussed earlier in this report, the research found that there were two different renovating patterns: a process of ongoing renovation and a renovation project. In the former, typically an amateur DIY renovator researches and learns how to carry out improvements as they go along, and bringing in trades to assist as needed or as required by law (e.g. electricians). In the latter, renovation is a project, carefully planned (often using some professional design input) and managed by a builder or project manager. There is a clear start and end point to the building work, although the project may have been in planning for quite some time. The difference is not necessarily only a matter of available funds and time, but the extent to which the renovator wishes to be involved in the renovation to develop their own skills and gain sense of personal achievement.

Visual communication: the role of the internet and social media

As a part of the control, discussed above, renovators feel that their own ideas and choices are the most important driver. How then are these ideas developed? Respondents to the on-line survey when asked to nominate the single most important source of ideas early in the renovation planning stage nominated mainstream media, intermediaries (e.g. design professionals, builders and tradespeople, salespeople and manufacturers); and on-line and social media, as shown in Figure 4.

In this section and the next (2.4), we examine media in more detail, whilst section 2.5 examines how renovators access intermediaries via networks and recommendations.

Types of media used by home renovators

When asked *which* types of media they used most for renovation ideas and inspiration, almost two thirds of respondents to the on-line survey nominated the internet, with one in five nominating print media, as shown in Figure 5. This emphasis on the internet corresponds with other research.

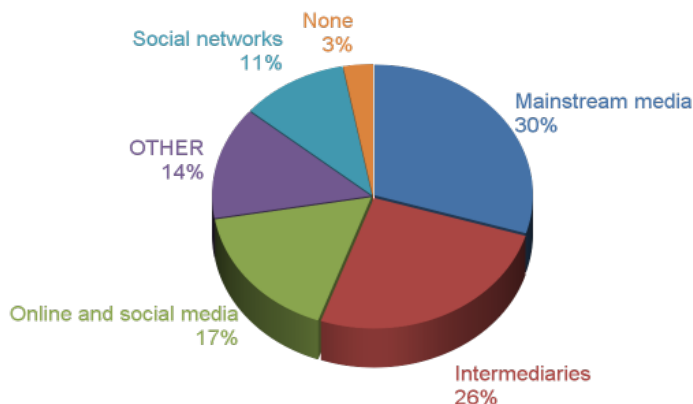


Figure 4: The most important source of ideas early in renovation planning

Source: online survey of home renovators; n=151

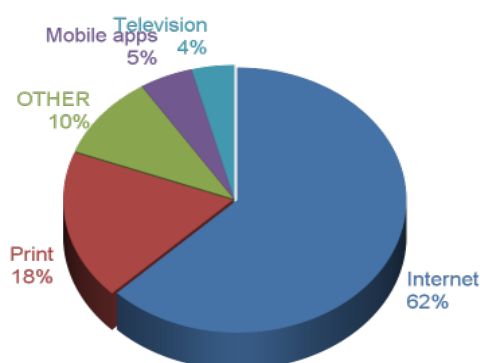


Figure 5: The most used media source of inspiration and ideas for renovation

Source: online survey of home renovators; n=146

It was apparent in discussion in the focus groups that visual media was very important in getting inspiration and ideas, rather than text-based types of communication. Renovators wanted to see how houses could be renovated and what this looked like in some detail. The main sources of visual media raised in the on-line survey and discussed in the focus groups were:

- Web sites/mobile applications with a focus on accessing, uploading, storing and sharing pictures of renovations primarily via mobile devices (laptop, tablets and smart phones);
- Print media with pictures (such as magazines and retailer catalogues) increasingly viewed online or accessed via social media on tablets and smartphones; and
- TV shows of different types viewed on digital TVs and associated online and social media platforms viewed through personal computers and mobile devices (discussed in section 2.4)

Online platforms and apps for sharing visual content

Renovators turned to a variety of online sources for inspiration and ideas. There was an emphasis on the visual, either accessing pictures and/or sharing pictures. Three sites particular were discussed in the focus groups in this context: Houzz, Pinterest and Instagram.

Houzz (launched in 2009 in California) is an on-line site with mobile apps (applications). It is aimed specifically at people interested in and/or undertaking interior and landscape design and home improvement. Initially operating in the US, it has had an office and a manager in Australia since January 2014.⁹ Houzz is ranked in the top 200 of US websites, attracting 25 million visitors each month.¹⁰ A central resource for inspiration, the most popular search terms people use to find the site are 'kitchen design' and 'bathroom ideas'.¹¹ Houzz operates on a registration basis and gives those registered free access to photos (for example of kitchens and bathroom) as well as contact details of practitioners and products. A key feature is that the photos are organised by rooms, then users can click on pictures to access information on practitioner and products. The site (and apps) do not specifically mention sustainability. It is one of the first five sites that come up if a renovator searches for 'home renovation Australia' or similar. Registered users then get regular e-mails with updates.

With that Houzz as well, if you click on 'kitchen' and then you can ask if you want wood benchtops. So, you just pick out what

⁹ <http://www.forbes.com/sites/jlim/2014/08/26/houzz-launches-a-localized-version-to-renovate-australias-home-design-market/>

¹⁰

<http://www.forbes.com/sites/georgeanders/2014/10/15/houzz-founders-have-become-techs-newest-power-couple/>

¹¹ <http://www.alexandria.com/siteinfo/houzz.com>

you want and then it will pull together obviously things that are featured on their site, so if it's a kitchen it might have all stainless steel benchtops. A kitchen that has LED lighting and things like that, so it can pull together a lot of different things to get some ideas that way as well. (renovator focus group 1)

Pinterest (launched 2010 also in California) is more specifically a photo-sharing site. Ranked in the top 15 worldwide websites, it receives over 54 million visitors per month.¹² Pinterest is aimed at people who want to view, sort and share visual media such as photos, videos and artwork. Users can 'pin' items to their personal board to create a customised collection of visual images. Pinterest users world-wide are predominantly female.¹³ Like Houzz, it operates on a registration basis and is free to use and includes provision for buying products. It is being used by some renovators in Australia as a source of inspiration and ideas.

But yeah, like I spent a lot of time on Pinterest and on Houzz as well, to get inspiration. (renovator focus group 2)

Like Pinterest and stuff and going through and having a look at people's pictures of bathrooms for instance.(focus group 3 Thornbury)

Pinterest can be seen as part of online sharing practices but this approach did not appeal to all renovators in the focus groups.

No oh no I don't want to share my ideas with anyone, oh gosh [referring to Pinterest] (renovator focus group 4)

Finally, some renovators used Instagram to get inspiration and ideas. Like Houzz and Pinterest, Instagram was developed in California (launched in 2010) and is a means of sharing photos and other visual material. It is an app that can be downloaded for free on mobile devices, particularly most types of smart phones. Instagram was bought by Facebook in 2012 and is currently ranked in the top 25 most popular websites worldwide.¹⁴ Two thirds of Instagram users worldwide are said to be female¹⁵

Instagram is more inspirational, a quick photo, and this is what I'm doing. So I follow a number of designers on that, but also just

¹² <https://www.quantcast.com/pinterest.com>

¹³ <http://sproutsocial.com/insights/pinterest-statistics/>

¹⁴ <http://www.alexandria.com/siteinfo/instagram.com>

¹⁵ <http://www.marketingcharts.com/wp/online/the-demographics-of-instagram-and-snapchat-users-37745/>

people that I know that have undertaken this work, so Instagram is very current. (renovator focus group 5)

Print media and associated online platforms: visual is key

Print media was also important for ideas and inspiration insofar as it provided pictures showing what could be achieved through renovation and in highlighting particular 'looks', features and finishes. Examples given included: House and Garden, Vogue Living, Inside Out and The Block magazine. Examples of magazines mentioned by renovators which promoted sustainable options were Sanctuary, Green, and Habitus. Renovators did not necessarily buy hard copies, being given/loaned magazines by friends or reading them in waiting rooms and other places. There were elements of collecting and sharing about the use of print media.

I flicked through a lot of magazines for ideas and stuff, like magazines, internet and all that kind of thing.... (renovator focus group 2 Yarra)

Renovators also used retailers' catalogues for ideas, if they were well presented and highly visual. Underscoring how media is understood widely and how it is often put to surprising uses, the finding about Ikea is instructional. Here Ikea catalogues were particularly mentioned as presenting pictures of products themed stylishly by rooms. This was of particular benefit to those renovating kitchens (which along with bathrooms) was frequently the focus of renovation.

[the IKEA catalogue] was inspiring, because we could get pretty much all we wanted in the same place, and we have it all delivered and we put it in ourselves. (renovator focus group 5)

That's where, I think, Sanctuary and Green magazine are good because they provide case studies of people's experience that generally is really relevant. Habitus is great for that as well. (renovator focus group 5)

Whilst hard copy magazines and retailers' catalogues provided some inspiration at the early stages, there was a move to digital versions. This occurred for two reasons: first that renovators like other Australians have increasingly adopted mobile technology - laptops, tablets and smart phones - for their information needs and second that it is easier to store and search for information using online rather than print versions of magazines and other information sources. For example, magazines like Inside Out (mentioned in focus groups) with a focus on renovations, has highly visual content which can be accessed by PC, laptop, tablet and smartphone.

I did have a subscription to Handyman. That's about the only one that I kind of have any regularity with. It's interesting, cause about 10, 15 years ago I used those magazines like bibles. The internet wasn't as prolific, I don't think Google existed then. So it was me more likely to go ok I'm going to renovate a kitchen, so I'll have this one and this one and this one, but I didn't have regular subscriptions. It was more the project's come up, I need to get some resource material. Now I probably would never do it, I just Google something and then Pinterest or whatever. (renovator focus group 4)

Some renovators participate in Facebook groups and access magazine content via their Facebook feed.

Yeah, broadly, anything, so if they're in my Facebook feed, so Landscape Architects Network, I'm a landscape designer, so I look at that sort of stuff, Guardian magazine. My preference now is entirely PDF or electronic; I don't buy anything paper version because I've got boxes of magazines. (renovator focus group 5)

Recap

Using the Internet is very important in the early stages of renovation: in getting ideas and inspiration, as well as insight into how people are approaching their renovations projects in different circumstances and scenarios. Visual media are all important; renovators want to see design layouts, features, appliance, colours, etc. rather than read text. Online platforms and apps for sharing visual content are increasingly important in the early stages, with Houzz, Pinterest and Instagram being particularly mentioned. Print media also play a role, mainly for their pictures, although there has been a move away from hard copy and toward digital versions either accessed directly or through social media.

Inspiration and ideas about renovation: the importance of story-telling via the media

The single most important source of ideas in the early planning of renovations was mainstream media (as shown in Figure 4). There is something of a paradox in while almost two thirds of respondents to the online survey said that they got inspiration and ideas from the Internet, few said that TV shows had such a role (Figure 5). However, when asked specifically, four in five respondents said they watched renovation, lifestyle and property TV shows, as shown in Figure 6.

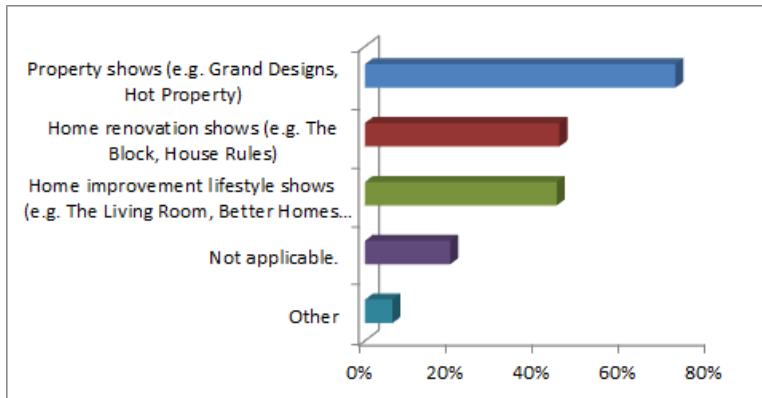


Figure 6: All types of TV shows watched

Source: online survey of home renovators; n of respondents =146; no of responses =266. Multiple responses were allowed.

The focus groups provide some insight into this apparent paradox. Some renovators were initially reluctant to talk about the influence of these shows but once someone 'broke the ice', they generated considerable discussion.

Stories about renovations: TV shows and related on-line media

Eight in ten respondents to the online survey said that they watched home renovation/property/lifestyle TV shows, although only a small percentage of respondents in the on-line survey said they got ideas and inspiration from TV shows specifically. The most frequently nominated shows were property shows such as Grand Designs and Hot Property, as shown in Figure 6.

The discussions with home renovators highlighted how important reality/property/lifestyle TV shows are for renovators as a part of their everyday media consumption. In the focus groups participants reported a large range of TV shows they watch¹⁶. Many watched UK-produced shows, accessed through both free to air and pay TV channels.

Many of the renovators recognised the nature of the reality TV genre with its compressed timelines and some renovators saw their value primarily in terms of entertainment.

It's trashy. I love it, I get to see people having fights on TV, I love that. (renovator focus group 4)

I know one of the girls on it [The Block], so that's why I watch it. (renovator focus group 4)

Of particular note, however, is that most debate in the renovator and practitioner focus groups centred on just

two of the TV shows: The Block (Australia, channel 9) and Grand Designs (UK version channel 2), as we discuss below.

The main direct influence on renovators from watching The Block appeared to generating ideas about styling, referring to design ideas, use of materials, colour schemes and finishes.

Yeah. I think the builder's side and structural stuff aside, I mean I sort of took charge of the interior stuff, the fixtures and fittings, and I kind of was pretty persuaded by The Block and what's popular at the moment, colour schemes (renovator focus group 2)

And I think that happened when the finals were happening. We made the decision to put in the double shower and that was a direct result of seeing that everyone had a double shower. We were like, well we want a double shower. We've got the space. Why not? (renovator focus group 2)

As a result, some of the renovators followed up by accessing The Block online site to look for particular products.

Yeah, if somebody had done something cool, I would like go and see where they got their stuff from [referring to The Block web site (renovator focus group 2)

However, there was some scepticism about product placement and endorsement in TV shows, magazines and home renovation web sites:

I see it as they're all advertorials, every single one of them, they're selling a product and I see through it, and it's not the best product all the time, it's just the product that they have paid for. (renovator focus group 5)

Building practitioners were aware of the influence of these types of programs and expressed concern that

¹⁶ The Block (Channel 9); Reno Rumble (Channel 7); House Rules (Channel 7); The Living Room (Channel 10); Grand Designs (Channel 2); Selling Houses (Foxtel); Location, Location, Location (Foxtel); Homes under the Hammer (Foxtel); Cowboy Builders (Foxtel); Restoration Home (Channel 2); Escape to the Country (Channel 72).

some that although reality renovation shows were a source of ideas, they give renovators unreal expectations about how long it takes to do a renovation

Definitely. I know I get it all the time, especially with design-wise, "Oh I saw this, they did this on 'The Block.'" Yeah okay, that's fine. They're taking inspiration from these shows. (practitioner focus group 1)

Grand Designs was also discussed at length in the renovator and practitioner focus groups, even though many of the episodes cover new builds rather than renovations. Renovators made a distinction between Grand Designs and home renovation and lifestyle TV shows.

Well Grand Designs I don't put in the category of the stuff [referring to reality entertainment shows] (renovator focus group 4).

Grand Designs (UK version) was seen as inspirational, even though the houses were in another country, were highly aspirational, and for most of the participants in a price range beyond their means.

Inspiration perhaps is the best word for it. I would love to have my own grand design one day. Don't know if I have the skillset for that, but the ideas...(renovator focus group 4)

Drilling down further, renovators liked the emphasis on innovation, the problem-solving approach to achieving a particular result and technical expertise.

And I feel like rightly or wrongly it's more factual [than other home renovation shows]. It's more about they get the experts in and the engineering reports and it's more about can this physically be done, how do we do it, ok let's start seeing the progress as opposed to the couples bickering about yellow versus red. (renovator focus group 4)

A few had watched the Australian version of Grand Designs as well as the UK version and queried whether innovation and problem-solving was possible in Australia in a smaller and less mature renovation market

It's the same story rehashed 500 times; if I see another English couple that's got five million pounds and they're particular about their, yeah. I think the Australian one was good but it ran out of steam pretty quickly because we just don't have the depth of product. (renovator focus group 5)

The question for this research is whether watching Grand Designs inspired renovators to think about sustainable design, features and appliances. There was acknowledgement that Grand Designs did address issues of sustainability which may have contributed to general thinking about ways of improving sustainability,

although not necessarily practical solutions for their own renovations.

Yeah, it is. I think that when Grand Designs have done their specials on social housing and those sorts of things, when Kevin McLeod did that stuff on it, I think that's been relevant, and fantastic. And low cost stuff, their sustainable stuff, but their high end is at a market that's different to my expectations. (renovator focus group 5)

Building practitioners saw Grand Designs as being both more inspirational *and* more realistic in reflecting the difficulties that arise in implementing designs and delays in construction for many reasons including the weather and renovators running out money during construction.

And then they might specialise in something where it is like a green building or they're using some specific material that's not in the market before that no one's used, so that's where I guess the information is good for our side of things. (practitioner focus group 1).

There is considerable convergence between what can be termed as 'traditional' versus 'new' digital media. For example, TV shows have online presence (e.g. their own specific websites, Facebook and Twitter accounts), and also designated print magazines (e.g. *The Block Magazine*).

Recap

TV shows are clearly a highly visual and narrative medium and are both part of the cultural landscape in which we understand and talk about renovations and appear to have some influence on inspiration and ideas when renovators are imagining their renovations. Of the two most discussed programs, *The Block* was valued for its entertainment value and ideas about styling; in contrast, *Grand Designs* was seen by renovators and building practitioners as being more about problem-solving and more realistic.

The narrative dimension of these shows, with the focus on human relationships, emotions and experiences is important as a bridge over to what people can relate to on a basic level. How people document their renovation journey and how they engage in the trials and tribulations of other people's projects is central to the opportunities offered by media in this space. Property TV tells stories of transformation and aspiration that can often motivate people when other more traditional educational strategies do not.

A question of trust: the role of media in access to professionals/practitioners

We saw in Figure 4 above that whilst almost a half of online survey respondents saw various types of media as the most important for renovation ideas, more than a third cited intermediaries (e.g. architects/designers and builders/tradespeople) as *the* most important source of

ideas. Most renovators responding to the online survey, however, either have never done a renovation before (47%) or are occasional renovators (50%). Whilst some have good contacts in design and/or building, many do not have a regular network that they can draw on for advice and expertise.

The focus groups explored how they used media in more detail. What is noteworthy is that both renovators and practitioners' focus groups talked a lot about *trust*, and the relationships between people, even though this was not specifically raised by the researchers.

Accessing trusted professionals: using media in lieu of personal and social networks

Renovators typically start by talking to people that they know and trust in their personal networks, repeating the findings of other research¹⁷. They talk to family members, friends and work colleagues, using the knowledge of each of these directly but also as a conduit to others with more expert knowledge of renovations. Some of these were very close to home, such as partners or fathers, although they often offered help with construction rather than design ideas. Others were accessed via family members or friends

*Lots of my friends are tradies so I had a lot of... I asked them a lot of questions and which way worked best or would work best, so a lot of my friends *0:18:37 do it without friends actually (renovator focus group 3)*

Yeah call them or even people at work and say hey we're doing a kitchen reno, has anyone got a good cabinet maker or things like that. And 99% of the time someone says oh yeah we did ours and they were great and I'll get the details. But yeah it's really super unlikely that we'll Google a tradie. (renovator focus group 4)

Just over four in ten respondents to the on-line survey said that they needed to use design professionals. This too proved difficult unless they knew people and renovators often turned to friends and neighbours to identify designers.

We talked to friends mostly and just asked them who they could recommend for architects and ideas. In our street we've got lots of friends and they've all, I think four of us have all renovated and all done it very differently. (renovator focus group 2).

For those without family and friends with connections to the design and building sectors, planning a renovation could be daunting. It appears that renovators no longer

use the business phone directory or Yellow Pages (although a few mentioned local papers). Most commonly, they search the Internet either using general search terms or via through sites such as Houzz which provide lists of practitioners. Some access information via industry organisations such as Archicentre for design professionals and the HIA or MBA for builders. Renovators often lacked confidence in internet searching in this way as a means of accessing the right people. It did, however, enable them to learn some of the language of renovation and to know what sort of questions to ask.

I felt like we spent a long time on the internet preliminary, you know, at the early stages as well kind of just working out like what a lot of things meant. You know, my partner and I are very new, sort of like where do we even start. So we ended up I think just calling in builders that we'd seen like their car driving around the area, and getting them to come in, and also contacted some people that we knew had brothers that were builders and got them to come around and have a look at the job. (renovator focus group 2 Yarra)

It was difficult for renovators to check the experience of designers accessed through the internet and to compare designers and design approaches.

Perhaps unexpectedly, there appeared to be limited use of Facebook to access recommendations on design/building professionals. Whilst renovators used digital social networks for ideas and inspiration and (as we shall see later for communicating about the results of their renovations), there was little discussion in the focus groups of using social networking sites to access designers/builders/tradespeople.

I've used forums, like forums and stuff like that - renovator forums - but not blogs. (renovator focus group 2)

Another dimension to finding a trusted building practitioner was in being able to access *their* network as well. If things went well, the renovator was able to access other trusted people to assist with their renovation.

Well, we had my eldest son's best friend's dad was our builder. So he had to do a good job because family connections. And so everybody he recommended we would take on. So we used his roofer, we used his plasterer, we used his networks, because we trusted him therefore we trusted his network. (renovator focus group 5)

Sometimes, however, there could be obstacles in these relationships as in issues of gender between female renovators and male builder/trades

¹⁷ In particular, recent market research conducted for i) Sustainability Victoria and ii) the NSW Office of Environment and Heritage

Yeah so much variation. But being female I must admit I feel like half the time I get taken for a ride on quotes and not having some sort of source to go to and go wait a second, would just be good? (renovator focus group 4)

Practitioners also experienced difficulties with clients. They tried to get a feel from their clients as to how long they will stay and whether the cost of sustainable products is justified. They find that commercial clients are more interested in measures to reduce running costs than home renovators. They considered that clients asked more about types of materials and finished, such as benchtops in kitchens, rather than new products to improve their health or the sustainability of the dwelling.

And I reckon that despite; you talked about trust and who's got the influence in things like this, I don't know what it is but I - it depends on the client but they are really reticent a lot of the time to take your advice. I don't know if they feel as though we're trying to sell them the Commodore when they want the Mercedes or vice versa, I just don't really know what it is but often it falls on deaf ears. I guess it depends on who is more influential in their sphere, whether it's the builder, the designer etcetera so they get a bit pushed and pulled and I get that (practitioner focus group 2)

Practitioners were of the view that good communication on renovations is highly visual. They emphasised the importance of pictures for clients to convey what they are talking about – or what is included in a quote. They will often send a link to the product so that the client can see this for themselves.

From a client's perspective I find when I talk to a new client and I don't know what they want because they've got a bit of an idea but they haven't got a design, I ask them to bring a magazine or a picture they've seen, if there's something they're aiming for that also helps me give me a bit of a direction of what they're wanting to do. (practitioner focus group 2)

On the other hand, building practitioners mentioned some barriers to innovation in that they might need special training to install new products correctly and have to provide a warranty on something untested which might be costly. The building practitioners re-iterated the importance of trusting other intermediaries such as suppliers and contractors.

A lot of the time I trust certain people. There might be a builder that you've heard of that has used a product and that might give you confidence in the product. That's purely a trust thing, or a rep that you've used for ten years and they recommend the top timber to you, it's a trust thing, you have confidence in that.(practitioner focus group 1)

Searching for trusted information on more sustainable design, features and products

Although a wealth of information was available, respondents to the on-line survey wanted more information about some specific items, with the most frequent being insulation, lighting, windows, heating and running/operational costs, and cooling, as shown in Figure 7. Each of these has a direct bearing on improving the energy efficiency and sustainability of the home.

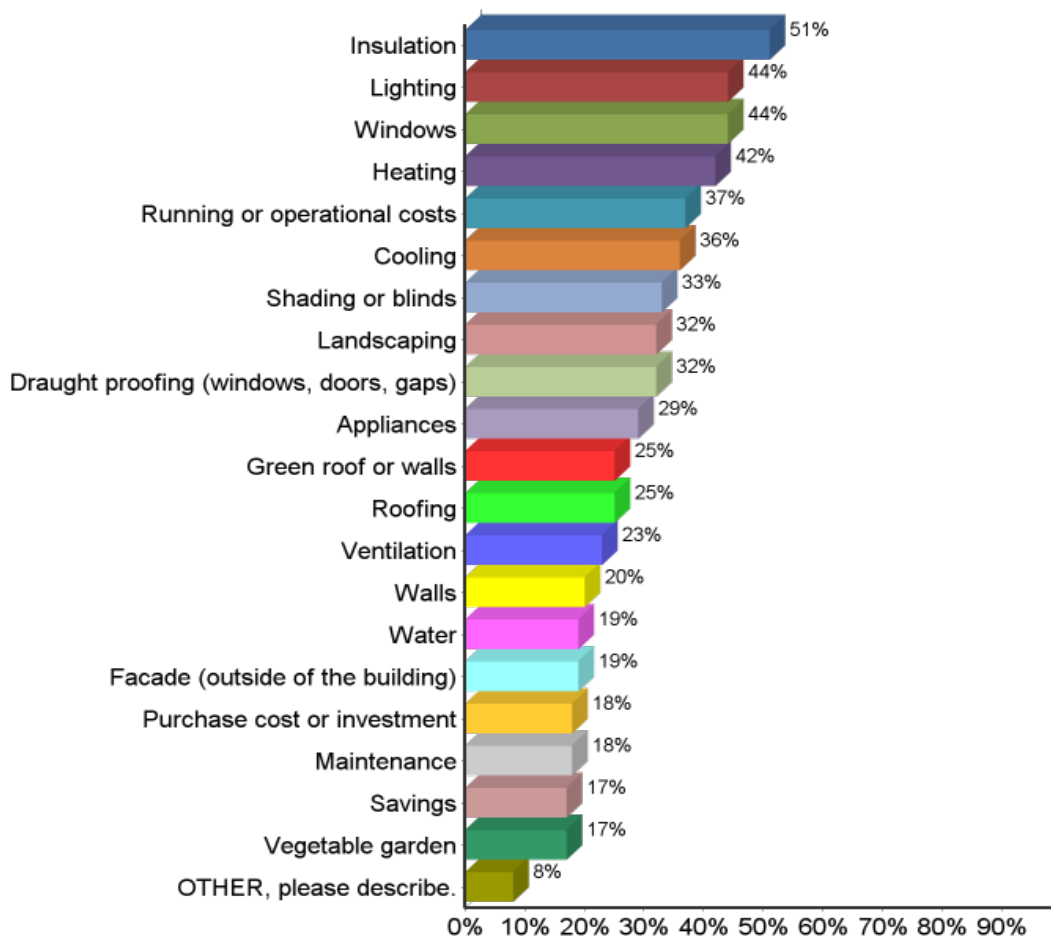


Figure 7: Items that renovators would like to have more information about in the planning stage

Source: online survey of home renovators; n=129

These are less visual items (with the possible exception of lighting) and material on web sites was often too technical for renovators, although some did want to find technical information that enabled them to *compare* products. Insulation is interesting in this respect: the Sustainability Victoria research (discussed earlier) found that ceiling and wall insulation were among the most frequently mentioned energy efficient measures that renovators considered but were not in the top five of energy efficient items installed.

Online searching for information features and products

Renovators use a wide variety of on-line platform when searching for information about particular designs, features and products. The most frequent sources mentioned by respondents in the on-line survey were retailer websites, and on-line discussion forums, with just under a third using social media and online regulatory information, as shown in Figure 8.

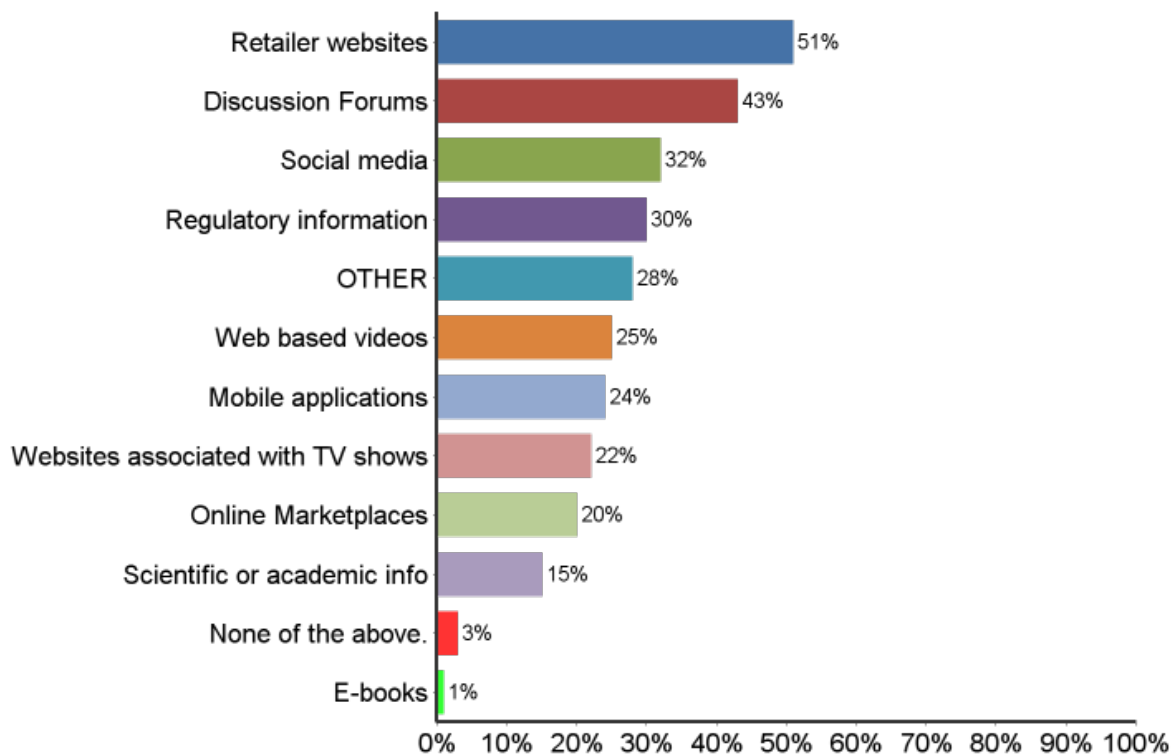


Figure 8: Most frequently used sources of information/advice when planning or renovating

Source: online survey of home renovators; n=146

When asked what type of information helped most in making decisions, survey respondents nominated product reviews or recommendations, discussion/exchange of ideas, finding a 'trusted professional' and expert advice as the most useful. This issue was explored in the focus group in terms of decisions on products used in renovations.

It was more difficult to get information on product performance and installation in the form that made sense to the renovator than for ideas about styling. Some tried hard to find the information about products themselves but found the process quite overwhelming, as there was so much information although not necessarily about energy efficient features or products and they did not know how to evaluate the credibility of the information they found:

But I feel like there's not that much information that's really out there in regards to sustainable products. Like styling is in your face, you know, whereas to actually find out about this stuff you actually need to actively seek it. (renovator focus group 2)

Some found it useful to scroll through product lines from a retailer online to give them a good idea what is available, either before or after seeing the product at a retailer's:

Unless I know if it's not a problem, if it's a product, I might try and find it at a couple of

places first before I then go to Google. (renovator focus group 4)

Bearing in mind that it is *their* renovation, and they want to have ownership of the process (as discussed earlier), renovators want to cross check the information they access from retailer web sites, manufacturers' web sites, etc. There are various ways of checking including using personal networks where they know people involved in building and through social networks, e.g. through on-line discussion forums (noting that these were used for products but not to access intermediaries).

Renovators often find difficulty in finding trusted sources of information on products which is provided mainly by manufacturers, suppliers and retailers. Some use online forums to find user reviews.

One of the things that I go to on the trust side of things is if I've found a product that I want some information on, is I look at Whirlpool forums, and I check that out because I found that they're very good because you get a mix of users (renovator focus group 5)

Building practitioners' access to information on sustainable products: an opportunity for leverage

Building practitioners get information about new products, including sustainable products, from their industry bodies and regulatory authorities. Much of this

information is now available in digital form rather than in hard copy. This type of information is supplemented by access to industry-related magazines online and Google searches

A second major source of information for building practitioners was product representatives (reps). The reps talk about products and generally leave practitioners with brochures and leaflets.

I find, that when reps come in, they're quite present and then so they will promote, obviously, what's trendy in the industry, maybe design-wise or something like that, so you rely a little bit on that which pushes you even further to investigate if you're interested in their product or something. (practitioner focus group 1)

If the client has an idea about anything innovative and different, building practitioners will check it out and provide advice on how to install it. They would also give advice about sustainable products, emphasising that they had to use products that met Australian standards. The bottom line for practitioners is that they would not use products that did not meet Australian standards; this is the reference point. They trust the reps to give them quality information about new products, with an understanding that ongoing relationships are founded on trust.

'I wouldn't typically use a product that I wasn't [familiar with] I wouldn't use something that I'd never heard of or anything like that, to be honest. It's more like reps would recommend something and you trust your rep because they obviously want your business and they want you to keep using them.' (practitioner focus group 1)

If a client wants to use a sustainable product that they are not familiar with, they check that it comes from an Australian web site and then follow up with the rep or supplier. As with renovators, visualising products is particularly important rather than reading about them.

Displays as well, like physical displays. If you go into a supplier and you see something that you think might help you or could be an option in the future, a new technology might make the job a little bit easier, something like that. It's not often, like you research. (practitioner focus group 1)

Building practitioners are aware that new products are coming in which are more sustainable from their industry associations and reps. A major concern is whether the products are coming on to the market at a price which is affordable to their clients.

One issue discussed in the focus groups was the effect of competition within the industry with regard to new products. Practitioners are aware of current and evolving

products through industry networks and sometimes web sites such as LinkedIn. Practitioners, however, may not want to share information about new sustainable products that might give them a competitive advantage. This may work against growing the market for such products.

One problem is that the information on sustainable products is not in one place and, despite the efforts of industry bodies in this area and industry trade nights, practitioners said that they have to search for it.

There are also different levels of engagement with online platforms and social media, in part related to age and time in the industry. Web sites are considered too hard to maintain compared to Facebook; focus group participants have Facebook pages for their businesses. They think that it is particularly important to post pictures.

You get them to like it, obviously to like the photo and then obviously it goes to all of their contacts. If you've got your business on it, like I said within five minutes of somebody grabbing a nail I'll pick up the phone and try and put in on the internet. Websites are too hard and too expensive to manage. Facebook's free, take a photo of a job, get your client to like it and then all of a sudden they've got us through their whole phone, everyone who is their friend gets a photo of their new renovation and it's free (practitioner focus group 2)

Recap

The search for a trusted designer/builder/tradesperson was critical but renovators often lacked adequate information based on validated expertise or reputation, particularly if they wanted to find a practitioner that was interested, and had expertise in, more sustainable renovations. They used recommendations of people in their personal network, supplemented by Internet searching if they did not have such people in their network. There appeared to be little use of social media (Facebook, Twitter, etc.) to access this type of assistance.

Renovators who are very actively involved in their renovation often want to do their own research but find it difficult to find information that they trust on the internet. They glean information from a variety of sources including online searches: specific searches of retailer and supplier websites, visiting retail outlets/suppliers and asking questions; and online discussion forums to seek the views of others. They are sceptical about product placement in TV shows and online renovation forums.

Building practitioners, on the other hand, routinely rely on their industry associations and regulatory authorities for information. Suppliers' representatives provide information on new products (including sustainable ones), supplemented by some on-line searching of their own. A high level of competition in the industry with a large number of relatively small players, as discussed

earlier, means that sharing of information on sustainable products may be difficult.

Recording and sharing renovation ideas

In considering how sustainable renovations could become mainstream, it is important to understand how

renovators record their renovation experiences and communicate this to others. Nearly all of the respondents to the online survey kept a record of their renovation, with the most frequent means being photos, spreadsheets, electronic drawings and sketches, as shown in Figure 9.

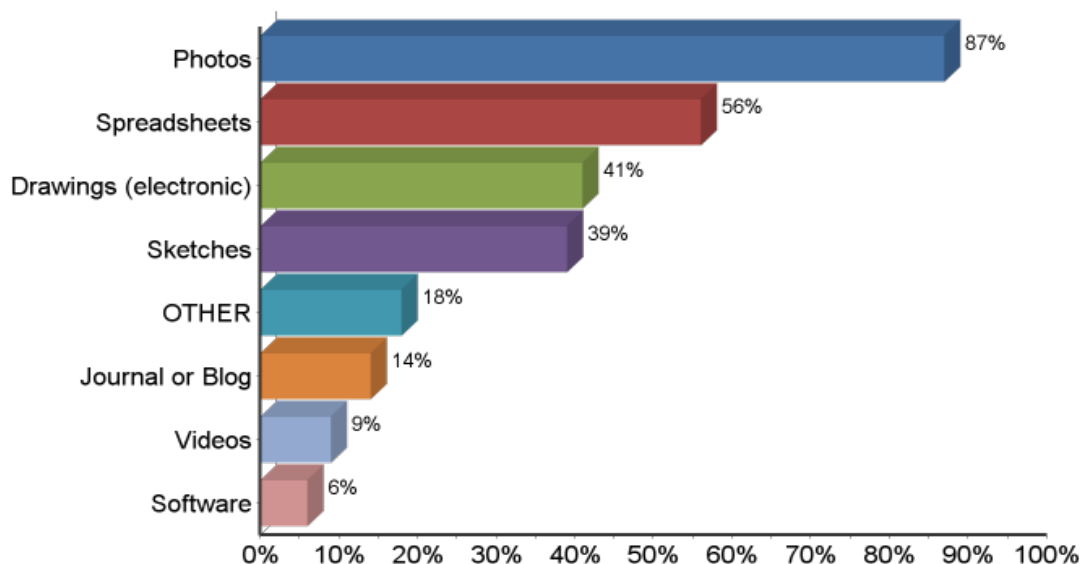


Figure 9: Methods most often used by renovators to keep a record of their renovations

Source: on-line survey of renovators, n=142

Keeping a record of renovation primarily for own use

Most renovators keep some sort of record of their renovation. Often this takes the form of photos, plans and spreadsheets which they keep for their own records. Sometimes, these are kept on devices such as mobile phones which can be shared with members of their personal network, on request.

I've had people that are interested and they've scrolled through them [renovation photos], but it's rare that I'd ever sit, unless I'm trying to find something for someone, which was handy as well, they might want to know where I've bought something and I can scroll through and have a look (renovator focus group 3)

Spreadsheets were usually kept and maintained for renovators' records. Indeed, it was difficult for renovators to find information on costs because such information was not usually shared.

Being more perhaps across the finer detail and finances of things, rather than just going along with whatever the spreadsheet says and not being too engaged in that side of the process, that's probably... (renovator focus group 4)

Sharing renovation experiences with others

One way in which sustainable renovations could become mainstream is if renovators share their experiences with others, where they have attempted to improve energy efficiency as one means of having a 'comfortable' home. Reinforcing the importance of visual communication and human stories, discussed above in relation to popular TV shows, some renovators share their renovation photos through Pinterest and Instagram. In both mainstream media and social media, there is an emphasis on personal accounts of renovations.

The most frequent means of sharing photos within a personal or social network appeared to be through Facebook and Instagram

Just through photographs and I shared them on Facebook. (renovator focus group 3)

Instagram is more inspirational, a quick photo, and this is what I'm doing. So I follow a number of designers on that, but also just people that I know that have undertaken this work, so Instagram is very current. (renovator focus group 5)

Others collect photos of their home either before or after their renovation because they hope to be successful in participating in TV shows.

No. The only thing I shared were some photos to the Living Room [Channel 10], hoping to get a renovation out of it (renovator focus group 2)

Occasionally renovators were motivated to provide detailed photos and cost information about sustainable features of their renovation.

I did, yeah, I did purely from a professional standpoint as well so I took lots and lots of photos, lots and lots of research, had it all bundled up. I actually went through the process with my colleagues at work, and

showed them, these are the costs of putting in sustainable flooring and so on. Ended up being cheaper than half the clients in our office were paying for it. And they were just paying for thin veneer floors, tongue and groove floors, crappy floors. (renovator focus group 5)

When asked specifically about use of on-line forums, about a third of respondents used these, mainly to read others' reviews and opinions, although some people did post about their own experiences and opinion, as shown in Figure 10.

■ Always ■ Sometimes ■ Never

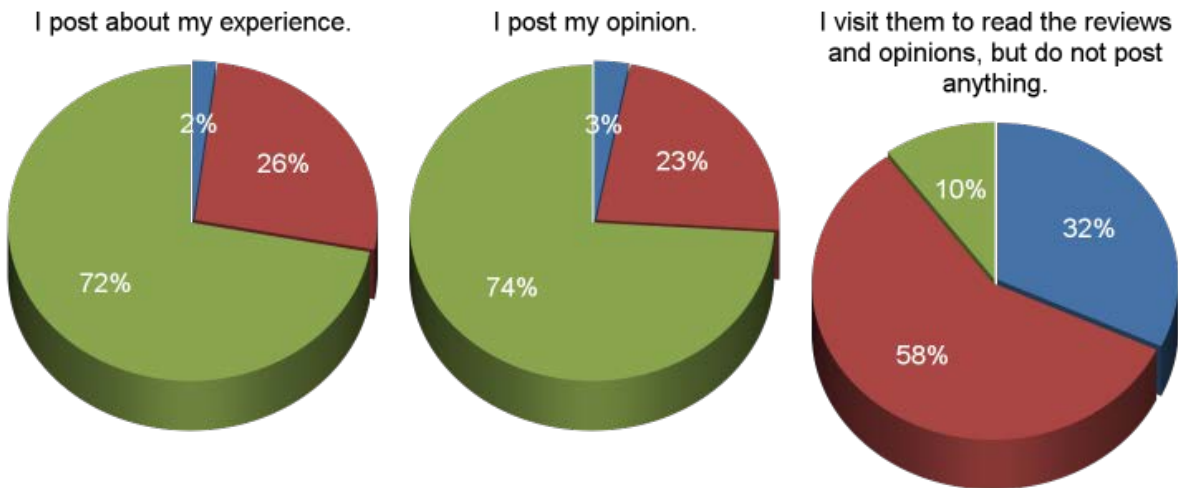


Figure 10: Frequency and type of use of on-line forums

Source: online survey of home renovators, n=114

Making a blog on a renovation or using social media such as Twitter accounts appears to be more likely for those who see their renovation as an ongoing process rather than a defined project, as discussed earlier. It is part of their personal involvement in the renovation process.

Posting pictures and so on, and my partner and I, we made a blog with the process as well, so as a way to sort of share our experiences with our friends. (renovator focus group 2)

Whilst many renovators visit on-line forums to read other people's reviews and opinions, only about one in four in the online survey post about their experiences of their opinions. Developing on-line opportunities for exchange (e.g. forums) which include, but are not restricted to, sustainable renovations is important if these types of renovations are to become mainstream.

Recap

Most renovators keep some sort of record of their renovations: mainly photos, spreadsheets and drawing/sketches. Some are willing to share photos, particularly photos and stories, via either their personal network and/or a social network through Facebook, Instagram and the like. Others want to keep photos to themselves. There is little sharing of financial and technical information, which limits opportunities for new renovators to have an idea how much particular features and products cost, particularly sustainable ones.

PART 3: IMPLICATIONS

This section summarises some of the learning from this exploration of the role of media in home renovations.

Communications about energy efficient renovations have to appeal both financially *and* emotionally.

It is important to work with, rather than against, the many and often overlapping reasons why people renovate.

- It is important that messages about the benefits of energy efficient renovations conveyed via media are able to tap into the idea of 'comfortable home'. This includes thermal comfort but has a broader social and affective meaning of making a (family) home.
- Most renovators also want to tap into some pragmatic issues particularly around resale value. The LJ Hooker work on 'The 17 Things'¹⁸ is one approach to this, having identified 17 'things'¹⁸ which improve energy efficiency that could be marketed as positive features of a property. This is part of a training program for real estate professionals and is being extended to renovations.

It's their renovation: communicate with engaged DIY renovators as well as those involved in renovation projects

Renovators want to be in control of their renovation: it's their renovation, their ideas and their money. Some renovations are an ongoing process whilst others are time-limited renovation projects.

- In reducing carbon emissions from existing housing stock, it is important to communicate the benefits of making small changes within the scope of DIY renovators who want to understand what is available, cost and performance. Many small changes can have a large cumulative effect on improving sustainability.
- This is in addition to educating design professionals and training building practitioners on the qualities, cost and installation requirements of energy efficient features and products in bigger renovation projects.

Pictures rather than just words

Getting inspiration and ideas is a highly visual process through a number of different media, in a rapidly changing media landscape. The cultural landscape around renovation is heavily dependent on TV shows, digital and analogue versions of print media, internet and mobile apps.

- Web sites and social media which can be accessed on a variety of mobile devices are an important means of enabling renovators to visualise what they

want their renovation to look like and could be used more extensively to visualise energy efficient renovations. These include platforms such as Houzz, Pinterest and Instagram.

- Magazines which make extensive use of pictures could also be used to showcase energy efficient renovations, bearing in mind that many of these are now accessed via digital versions. But old-fashion retail catalogues are used as well.

Stories not lectures

Exhortations to be more sustainable for the collective good and future of the planet are not particularly effective in the renovation area. People respond to human stories (both down-to-earth and aspirational) which they can consider in the context of their own aspirations and preferences. The implication for this project is to take media seriously in their diversity, and to build on newer ways of accessing and generating ideas, considering how to inspire renovators through a range of storytelling techniques and communication points in a highly accessible, personalised and relevant way.

- Mainstream media use storytelling to great effect. This is evidenced by the high level of awareness of TV home renovation, lifestyle and property shows and their role in representing many aspects of home-making to broad audiences. These could feature more sustainable renovations (and some have);
- It is also important to use online platforms and social media to extend story telling beyond formal media organisations, allowing people to share messages, links and content via peer-to-peer and social networks;
- Communication via sharing stories is not always media-based or high tech. The Sustainable House Day¹⁹ run by the Alternative Technology Association (ATA) that provides a good example of how this can be done with renovators able to visit homes, talk to renovators and practitioners face-to-face, and learn about examples of more sustainable homes in different sites. These conversations are then shared with others, including online.

Portals for finding a trusted designer and/or builder/tradesperson and easily accessible and trusted information

Personal networks and word of mouth are very important in finding design/building/trades skills and expertise. Renovators, who do not have such people in their personal networks, try to find recommendations and, if all else fails, search on the internet.

- Social media such as Facebook have not been reported as popular for identifying a trusted professional or practitioner that renovators can work with although building practitioners viewed Facebook

¹⁸ The 17 Things are in 5 categories: location; floorplan and layout; key building structure elements; important energy and water saving inclusions, and energy rating – see <http://www.ljhooker.com.au/17things> accessed 15 Sept 2015.

¹⁹ Sustainable House Day <http://sustainablehouseday.com/> last accessed 7 October 2015

as a cheap and effective means of promoting their business.

- It would be valuable to develop a trusted source of information on designers/builders/tradespeople with expertise in sustainable renovations, which is easily accessible and can be matched to renovators' requirements.
- Developments in other sectors reliant on reviews and recommendations as part of the so-called reputation economy potentially provide examples of how this could be done, including TripAdvisor type site, for both practitioners and features/products (properly moderated), in which renovators could share their experiences.

Private and public sharing of information

Renovators are often proud of their improvements and share photos with their immediate social circle. Some want to have a more public sharing but this is less common, which broadly corresponds to other research (e.g. DecarboNet²⁰).

- There is scope for providing publicly available information on costs of more energy efficient renovations since our research demonstrates that people are unwilling to share cost information and technical details with each other.
- Intermediaries and formal players such as professional associations or governments (local, state, etc.) could fill the gap in communicating technical and sensitive information left by informal communication and exchanges. However, such information, as noted earlier, needs to be communicated in an accessible and user-friendly way.

Ongoing research

This is the first Report of an ongoing research project. Research which is continuing will be reported in the next output from the project:

- Further social research includes a focus group with designers being arranged for late October 2015 and the research team cooperated with the Alternative Technology Association in developing a survey with the participants of the Sustainable House Day event in September 2015. This elicited more than 300 responses prior to the Day and around 500 responses afterwards which are currently being analysed.
- We are continuing to drill down into the role of media in respect of home renovations through media mapping and several case studies.
- We have also been involved in training sessions to be able to use TriSMA as part of the media mapping

research. TriSMA is a technical infrastructure for the analysis of public communication by Australian social media users, with Swinburne University as one of the partners within the managing consortium.

²⁰ DecarboNet is a program funded by the European Commission <http://www.decarbonet.eu/> last accessed 13 October 2013.

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APPENDIX: DETAIL ON RESEARCH METHODS

Details of research methods used in this project are as follows:

- i. An on-line survey of home renovators which investigated types of renovation and means of carrying them out; motivations for renovating; sources of inspirations and ideas for renovating; renovation planning, technology and media use at different stages of the renovation; and information sources and requirements. The survey had 156 responses.
- ii. Five focus groups with renovators in Melbourne to explore household renovation practices, to elicit key sources of information and advice, the types of intermediaries which are influential in renovation projects, and types of media used. Participants were recruited from primarily from inner and middle ring suburbs in Melbourne which according to industry sources are the main loci for home renovations in Victoria. The focus groups were electronically recorded (with consent) and professionally transcribed prior to analysis.
- iii. Customised re-analysis of data from market research into home renovation practices with permission from Sustainability Victoria - 1,026 completed phone surveys and 8 focus groups - to identify key demographics and themes.
- iv. Two focus groups with building practitioners organised with the assistance of Master Builders Australia (Victorian Branch). These focus groups explored the extent to which more sustainable products and practices are considered by them in making recommendations to clients, and the perceived outcome of such renovations as well as their use of technology and media. As with the renovator focus groups, they were electronically recorded (with consent) and professionally transcribed prior to analysis.
- v. Some ethnographic research which centred on observation of 'speed dating' sessions in which designers and builders met with renovators, organised by Alternative Technology Association, Melbourne, July and August 2015.²¹

There are a number of observations about the research methods. **Home renovators are a 'hard to contact' group** as they are busy with work, family (in many cases) and planning or doing a renovation which leaves them with little time for anything else.

- Renovators were invited to participate in the on-line survey through the CRC for Low Carbon Living, project partners (such as industry associations, other CRC projects, architecture firms, renovator blogs and

²¹ <http://sdse.ata.org.au/>.

on-line communities, Facebook, Twitter, etc. This was very time consuming and the final response rate was 156 responses. These responses are not statistically representative of the broader population of renovators²². The responses achieved can be compared with similar recruitment methods by DecarboNet (funded by the European Commission) which had 212 participants from on-line survey in September/October 2014.

- The renovator focus group participants were recruited through a number of means but particularly through local councils and their networks. We focused on areas within 15 kms of the Melbourne CBD which was, according to industry sources, the main locus of renovations in Victoria. However, this this was able to be complemented by the transcripts of four focus groups conducted for SV in regional Victoria as well as 4 in metropolitan Melbourne.

²² The demographic characteristics of respondents and the type of renovations undertaken were, however, very similar to the profile reported in surveys with higher number of respondents. For example, the Houzz survey of 11,329 homeowners using its website (included both renovators and those building a new home).