

Universal Design Within The Home Building Industry

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March 2000

This project was carried out with the assistance of a financial contribution from Canada Mortgage and Housing Corporation under the terms of the External Research Program. The views expressed are those of the author and do not represent the official views of CMHC.

Abstract

A survey was sent to all development and construction companies within the Manitoba Home Builders Association with a 35% return rate. This survey focused on collecting information on the attitudes and knowledge of universal design, the influences that effect change in marketing and conventional construction, and the factors that are involved in developing and disseminating effective instructional materials.

The results indicated:

- a lack of information and confusion about the term “universal design”;
- while people with disabilities were considered, human functioning issues were not;
- there is a desire for more information on human functioning and the principles of universal design;
- informational materials should be focused on the industry and in both interactive and print formats; and
- materials should be sent directly to individual members of the industry by their Association, and secondarily by CHMC.

The following is a summary of the recommendation developed from the results of this survey:

The term universal design should become the recognized term in describing inclusive construction and buildings. It is important that the inherent value free language of universal design be used in marketing and education. A common language would be useful to both the industry and consumers.

Focused education to improve knowledge about universal design and its benefits is needed within the home building industry. Information prepared must include details on human functioning and principles of universal design.

Public education is needed to enhance consumer awareness about universal design.

A combination of interactive workshops, lectures, and demonstration projects with print materials (articles, pamphlets, and manuals) are important to disseminate information within the industry.

Materials should be targeted directly to individual home builders.

The Manitoba Home Builders Association and Canada Mortgage and Housing Corporation should take an active role in designing, producing, and disseminating appropriate informational materials for the industry.

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Executive Summary

A survey was sent to development and construction members of the Manitoba Home Builders Association (57 companies). This survey focused on collecting information on the attitudes and knowledge of universal design, the influences that effect change in marketing and conventional construction, and the factors that are involved in developing and disseminating effective instructional materials. Twenty surveys were returned (a rate of 35%).

The results indicated:

- a lack of information and confusion about the term “universal design” in the industry and by consumers;
- while the housing needs of people with disabilities were considered, human functioning issues were not;
- there is a desire for more information on human functioning and the principles of universal design;
- informational materials should be both interactive and print;
- these materials should be focused on the industry;
- materials should be sent directly to individual members of the industry; and,
- materials should be provided by their Association, and secondarily by CHMC.

The following is a summary of the recommendations developed from the results of this survey:

Recommendation 1A: The term universal design should become the recognized term in describing inclusive construction and buildings.

Recommendation 1B: It is important that the inherent value free terminology of universal design be used in marketing and education.

Recommendation 1C: A common terminology would be useful to both the industry and consumers.

Recommendation 2A: Focused education to improve knowledge about universal design and its benefits is needed within the home building industry.

Recommendation 2B: Information prepared must include details on human functioning and principles of universal design.

Recommendation 3: Public education is needed to enhance consumer awareness of the benefits of universal design.

Recommendation 4A: Interactive workshops, lectures, and demonstration projects are important to disseminate information within the industry.

Recommendation 4B: A combination of print materials (articles, pamphlets, and manuals) is important to disseminate information within the industry.

Recommendation 5: Informational and educational materials should be targeted directly to individual home builders.

Recommendation 6A: The Manitoba Home Builders Association should take an active role in designing, producing, and disseminating appropriate informational materials for their membership and the industry.

Recommendation 6B: Canada Mortgage and Housing Corporation should take an active role in designing, producing, and disseminating appropriate informational materials on universal design for both the industry and consumers.

Résumé

Une enquête a été menée auprès des membres des secteurs de l'aménagement et de la construction (57 entreprises) de l'Association des constructeurs d'habitations du Manitoba (Manitoba Home Builders' Association). L'enquête visait à recueillir de l'information sur les connaissances et les perceptions à l'égard de la conception universelle, sur les influences qui amènent des changements sur le plan du marketing et des méthodes de construction traditionnelles, ainsi que sur les facteurs qui jouent un rôle dans l'élaboration et la diffusion de matériel didactique efficace. Vingt questionnaires ont été retournés (soit un taux de réponse de 35 %).

L'enquête a permis de constater ce qui suit :

- il existe un manque d'information et de la confusion au sujet de la signification du terme « conception universelle » au sein des entreprises et des consommateurs;
- bien qu'on ait tenu compte des besoins de logement des personnes handicapées, on a laissé de côté les questions liées aux activités humaines;
- il existe une volonté d'obtenir plus d'information sur les activités humaines et sur les principes de la conception universelle;
- le matériel d'information devrait être présenté à la fois sur support interactif et sur papier;
- le matériel d'information devrait être axé sur les entreprises du secteur;
- le matériel d'information devrait être envoyé directement aux entreprises du secteur;
- le matériel d'information devrait d'abord provenir de l'Association, et ensuite de la SCHL.

On retrouve ci-dessous le sommaire des recommandations élaborées à la lumière des résultats de l'enquête :

Recommandation 1A : l'appellation « conception universelle » devrait devenir le terme reconnu pour désigner les types de construction et de bâtiment qui tiennent compte des besoins de tous les occupants éventuels.

Recommandation 1B : il est important que la terminologie, objective par essence, de la conception universelle soit utilisée dans le cadre des activités de marketing et d'éducation.

Recommandation 1C : une terminologie commune servirait à la fois les intérêts des entreprises et des consommateurs.

Recommandation 2A : une éducation ciblée destinée à accroître la connaissance de la conception universelle et de ses avantages au sein du secteur de la construction domiciliaire est nécessaire.

Recommandation 2B : l'information transmise doit comprendre des détails sur les activités humaines et sur les principes de la conception universelle.

Recommandation 3 : l'éducation du public est nécessaire afin de sensibiliser davantage les consommateurs aux avantages de la conception universelle.

Recommandation 4A : il est important de réaliser des ateliers interactifs, des conférences et des projets de démonstration afin de diffuser l'information auprès des membres du secteur.

Recommandation 4B : il est important de produire toute une gamme de documents (articles, dépliants et manuels) pour diffuser l'information auprès des membres du secteur.

Recommandation 5 : le matériel d'information et de formation devrait viser les constructeurs eux-mêmes.

Recommandation 6A : l'Association des constructeurs d'habitations du Manitoba devrait jouer un rôle actif dans la conception, la production et la diffusion, auprès des membres de l'Association et du secteur en général, de matériel d'information pertinent.

Recommandation 6B : la Société canadienne d'hypothèques et de logement devrait jouer un rôle actif dans la conception, la production et la diffusion, auprès des membres du secteur et des consommateurs, de matériel d'information sur la conception universelle.



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Introduction

The questions addressed in this research were:

- What is known about universal design and its principles in the housing industry;
- What are the influences that effect change in marketing and conventional construction in the housing industry; and,
- What are the factors involved in the development and distribution of effective informational materials.

In order to promote universal design practice, first barriers and opportunities within the marketplace must be identified. Even though the usefulness of universal design becomes clear to advocates and researchers, the application of its principles in the marketplace has not followed. Universal design provides opportunities for industry to broaden their markets at a time when there is knowledge and agreement that the aging population, changes in traditional family structure and community living are significant and important elements. The housing industry should offer an opportunity to examine this issue.

It is thought that the barriers to broad acceptance of universal design by builders, designers, and manufacturers relates to limited information and the perception that universal design is radically different, and that universal design is a major innovation (Steinfeld, 1996). Innovation theory suggests that there is reluctance to accept new ways of doing things because of assumed risk and higher costs. Though universal design is new, its implementation does not necessarily incur marketplace risk and cost escalation. Diffusion theory identifies processes that impede acceptance of innovation (Utterback, 1974) and can be used to develop effective strategies to promote new ideas.

Rogers' Diffusion of Innovation Model (1995) provides an outline of how change is accepted. The idea or invention must have positively perceived attributes including relative advantage, compatibility with conventional practices and limited complexity. These attributes must work through communication channels including mass media, interpersonal communication and diffusion networks.

White (1998) cites a study done by the National Association of Home Builders Research Center, USA, which concluded that "economic trends and the industry's structure have been adverse to innovation." This report also concluded that more research into barriers to change (refer to above) in this industry should be completed. The residential building industry includes a varied set of players. The Manitoba Home Builders Association includes a membership of builders, renovators and suppliers in the industry, providing a base to reach those involved in residential construction.

The question arises: what are the barriers to implementing universal design? Furthermore, if information were developed to address this question, how should it be prepared and distributed to maximize usefulness and effectiveness.

It is anticipated that the information collected by the survey will lead to a process for working collaboratively with the industry. Our new understanding of the industry's concerns and needs will direct the Manitoba Homebuilders to a more practical approach to effectively meet the educational needs of their members about universal design. This would be developed to specifically improve their marketability and would incrementally address upgrading the standards of universal design in construction. This approach would be working in concert with the housing industry, rather than as adversaries. The industry wish to sell their product and the consumers must have effective tools to have a product that responds to their needs.

Background

1. Barrier-free: Disability specific design solutions

In the past two decades much progress has been made in defining accessibility and standards responding to the functional requirements of persons with disabilities. This was done to eliminate the physical barriers in the built environment so that persons with disabilities have access to housing, education, employment, leisure etc. in the same measure as the rest of the population. Thus the concept of "barrier-free design" was born. Several shortcomings have been identified in this process:

- First, the only disability group generally addressed were people using wheelchairs, while the greater number of persons with less visible disabilities were not included for consideration.
- Second, the process was usually accomplished on an ad-hoc basis, responding to evident perceived needs, but based neither on a conceptual framework nor on a comprehensive analysis of the many factors that make the environment accessible, functional and safe for all citizens.
- Third, many different government agencies (at the municipal, provincial and federal levels), in an effort to respond to the needs expressed by the varied constituencies, defined standards for housing, public buildings, education buildings, transportation, etc. resulting in differing standards and regulations causing confusion about the correct information for implementation.

We find in Canada, and on the international scale a plethora of design codes, standards and regulations. Despite their good intentions, they do not address in a comprehensive or coordinated manner all the design or accessibility issues. In the past five years, initiatives to redress this rather haphazard situation have emerged.

2. Flex Housing: Developed by Canada Mortgage and Housing Corporation that includes accessible, adaptable, and affordable features.

Flex-Housing is a Canadian response to developing more inclusive housing. In some ways it is very similar to the information following on universal design, with the exception of the focus on accessibility. Flex-housing is not a term used commonly outside of Canada.

3. Universal design: Design solutions that respond to the range of the population to the greatest extent possible.

Universal design is an international movement that does not require new technologies or challenging new design forms. It is rather a new way to think through the design of environments and products to ensure usability. It accepts that people are not “norms” but rather individuals with differing abilities, strengths, shapes, etc.

Universal design is thus a concept - the global, all-encompassing effort to remove any and all barriers from the environment and to create accessible, comfortable, responsive spaces for the most extensive population possible.

Universal design is also a philosophy - the commitment to uncovering and resolving problems during the development process, ensuring that the final solution meets the broadest spectrum of needs.

Universal design is common sense - the realization that all people have varying degrees of ability...and disability, an acknowledgement that we are imperfect beings living in an imperfect world.

Universal design is a method - it is a thoughtful, analytical approach to creative design solutions that accommodates us all.

(from: Guideline for Barrier-Free Office Fit-up - Preliminary Draft, November 1994.)

The principles of universal design move from focusing on people with disabilities to the population at large. In keeping with this scope, it becomes destigmatizing and value free. The principles include marketability, flexibility, uncomplicated and understandable, safe, easy to access and use, and environmentally sensitive design features (Finkel & Gold, 1999). They are not a list of dimensions, but rather a call for consideration of each principle.

Universal design principles imply an understanding that the population has a range of functioning. Many standards are set by norms, rather than the range. Using the “norm” approach, people with disabilities are always outside the norm and their needs are viewed as special circumstances. They are not the only group viewed as different, such as the needs of seniors, short people, tall people, children, etc. By accepting differences as a norm, we can address population needs and eliminate classification.

Furthermore, in the research by Finkel and Gold (1999) it was found that process is a vital component to implementing universal design principles. It was also evident that the partnership of consumer and producer through a defined process benefited both.

Methods

This project focused on how universal design is perceived and how changes occur in the housing industry. The housing industry is defined as those who build new residential construction, renovators and their suppliers. These classifications are included in the Manitoba Home Builders Association's (MHBA) membership. Most of those are in Winnipeg and serve the city and its environs and do the majority of the construction.

It was intended to send this survey to 200 members of the MHBA, as well as the Saskatchewan equivalent. The sample size had to be reduced after Saskatchewan declined to participate and the MBHA's membership was focused on builders and developers.

In partnership with the Manitoba Home Builders Association (MHBA), a survey was developed (see Appendix for a sample survey). The survey focused on collecting data about the attitudes and knowledge of the concept and principles of universal design; the influences that effect change in marketing and conventional construction; and, the factors that are involved in the development and distribution of effective informational materials for their industry.

Prior to the survey being developed an article appeared in the MHBA newsletter (see Appendix).

Survey Respondents

Fifty-seven surveys were sent to the members of the Manitoba Home Builders Association (MHBA). Twenty surveys were returned for a return rate of 35%.

Eighteen males, one female and one identifying as a bi-sexual, with an average age of 44.6 years filled out the surveys. Education levels included five high school graduates, 3 completing technical training, 8 community college, and 6 university graduates.

Of the twenty who replied, 14 identified themselves as either President or Owner of the company. Eighteen of the twenty described themselves as builders or custom builders or both. Most of the respondents have worked in the business for more than 11 years, with 9 more than 20 years, 2 between 16 and 20 years and 7 between 11 – 15 years (Figure 1).

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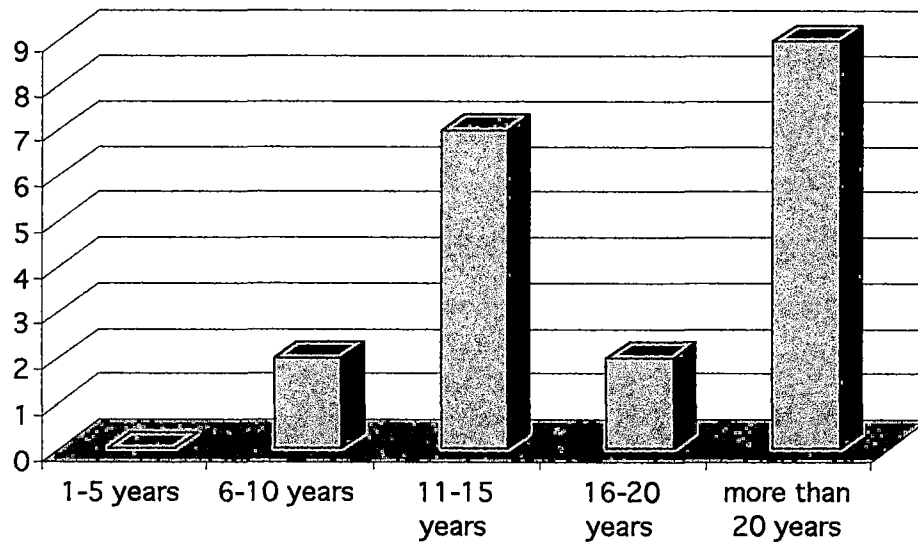


Figure 1: Years in Industry

Three companies stated that they only worked in rural locations, six only worked in urban sites. The remainder, 11 (55%), work in both rural and urban locations.

Comparing the number of units built in 1998 and the number of employees (Figure 2) by those answering these questions show a general relationship. The range was quite varied in this sample. The range of units built range from 0 to 250, with an average of 42.2. The range of the numbers of employees was 0 to 50, with an average of 10.8.

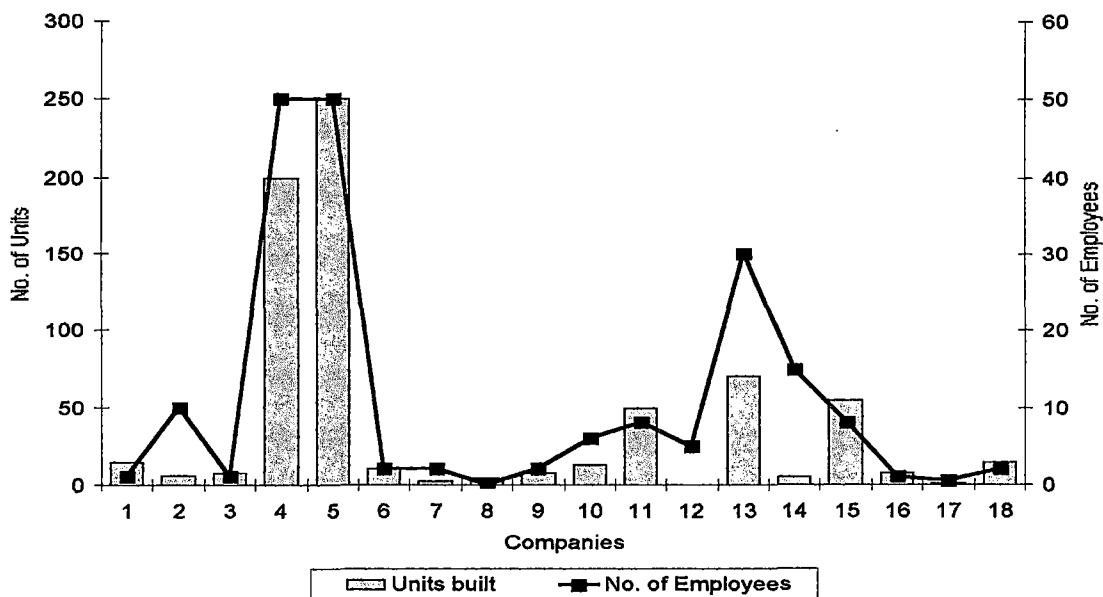


Figure 2: Number of units built in 1998 compared to number of employees

Results

Marketing Strategy

When asked whether the company has a marketing strategy, seventeen respondents replied yes, two no and one yes and no.

The target markets were described as young families (90% of respondents), professionals without children (80%), empty nesters (75%), seniors (70%), and first time home buyers (45%). The data shows little difference between these groups with the exception of first time home buyers. See Figure 3.

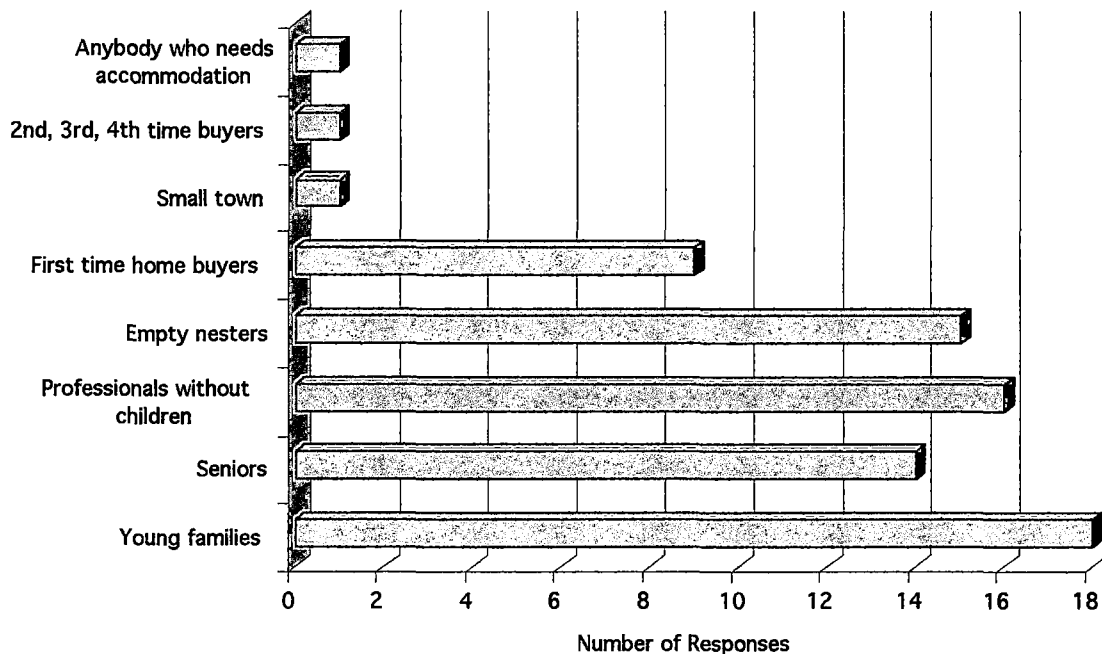


Figure 3: Target Market

Respondents were asked whether they consider people with disabilities in marketing. 55% replied yes, 35% replied no, and 10% said yes and no. Further questioning to detail what aspects of functioning they consider when marketing is illustrated in Figure 4. Changing life span needs are considered far more than any other aspect (65% of the respondents). There was a sharp decrease for the other areas, with 15% considering vision, 10% hearing, 30% stature, 25% balance, 20% cognition, 15% lower body strength, 15% upper body strength, 25% communication, and 20% dexterity.

A follow up question to document if more information is wanted on issues of functioning is also illustrated in Figure 4.

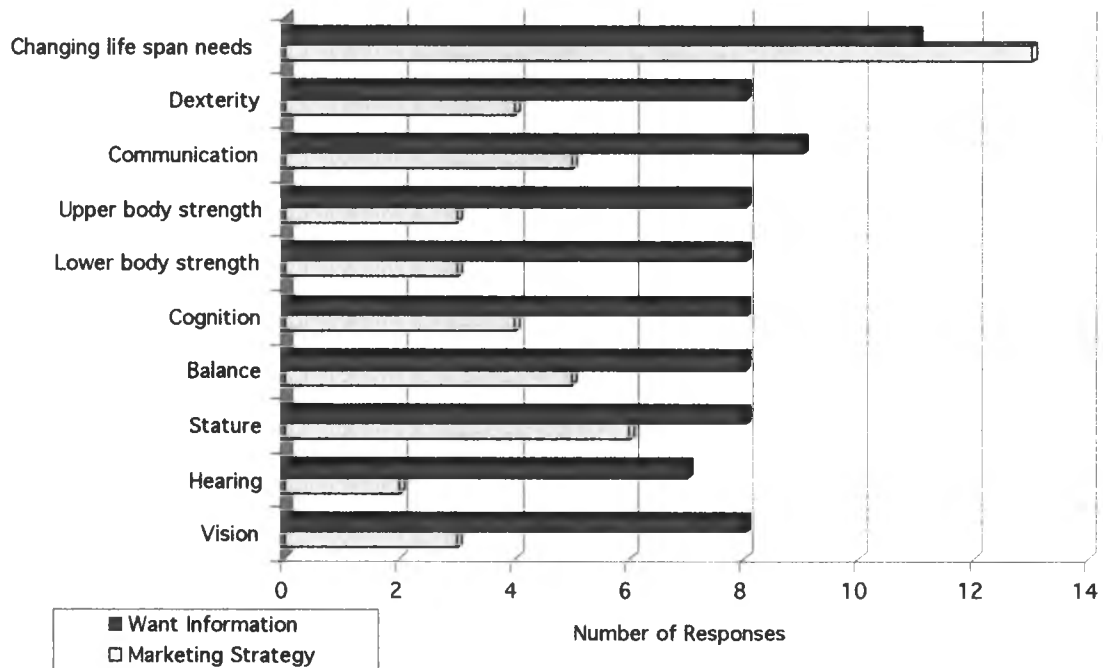


Figure 4: Aspects of functioning: Comparing inclusion in marketing strategy to interest in more information

While the respondents may not currently consider aspects of functioning, they did want more information on the topic (from 35% on hearing to 55% for changing life span needs). Changing life span needs was the most often mentioned aspect of functioning that was considered in marketing.

Note:

- This is the only area that showed a comparable decrease in interest for more material.
- At the same time, changing life span needs is the area of highest interest for information.

Respondents were asked whether they considered a number of topics as part of a marketing strategy. These results are illustrated in Figure 5 along with the results of requests for more information on these same topics.

The topics represented principles of universal design with the addition of the term barrier-free. The principles of universal design (safety, efficient and comfortable, ease of maintenance, flexible, sensitivity to materials, and easy to use spaces) were specified by 50% to 75% of the respondents as issues considered in marketing strategy. Barrier-free was only mentioned by 5 out of the 20 respondents (25%).

40% to 50% of the people wanted information on these. While only 5 people incorporated barrier-free into their marketing, nine wanted more information. This is unlike the comparison of strategy with requests for information on functioning where information exceeded strategy. Though these numbers do represent about the same percentages wanting more information as in the human functioning question.

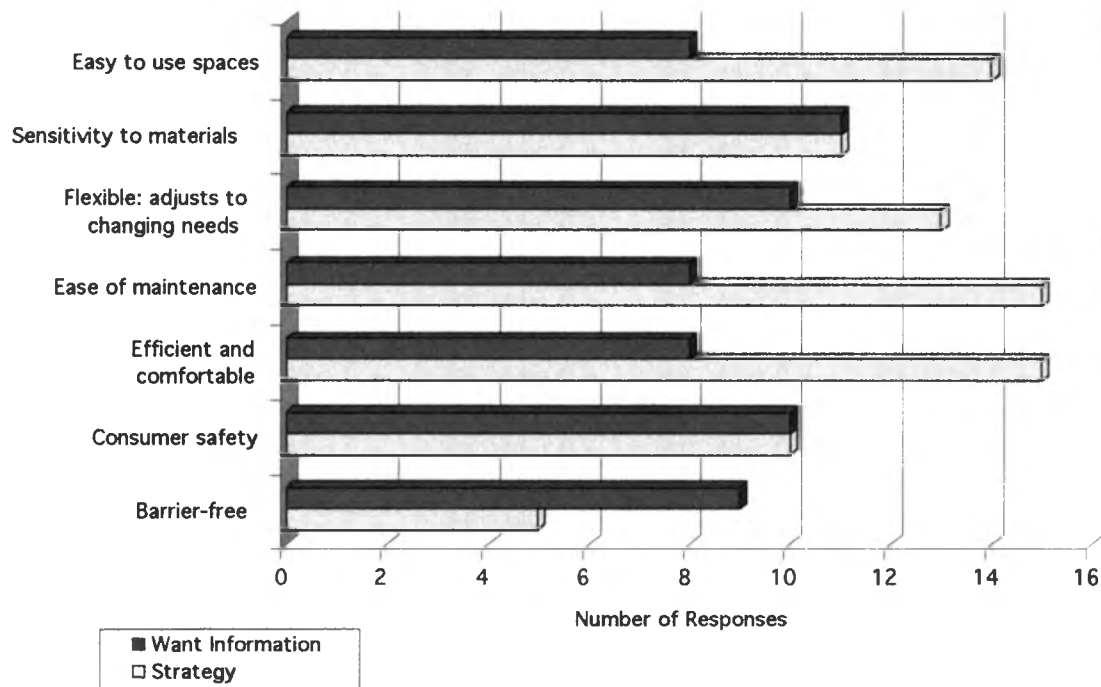


Figure 5: Design principles: Comparing inclusion in marketing strategy to requests for more information

Universal Design

When respondents were asked whether they had heard of universal design, 5 replied yes and 15 replied no. No customers had asked about or demanded

universal design. Most felt that the marketplace would be receptive to universal design with 65% answering yes or possibly. The remainder answered that they did not know.

When asked to define universal design, most responses chose either “design for all people” or “adaptable/flex housing” (see Figure 6). “Barrier-free/accessible design” was the third choice with “meeting the needs of seniors” well behind. When asked which definition is most marketable the order of answers was the same, but the difference between the first two choices and the last two was more evident.

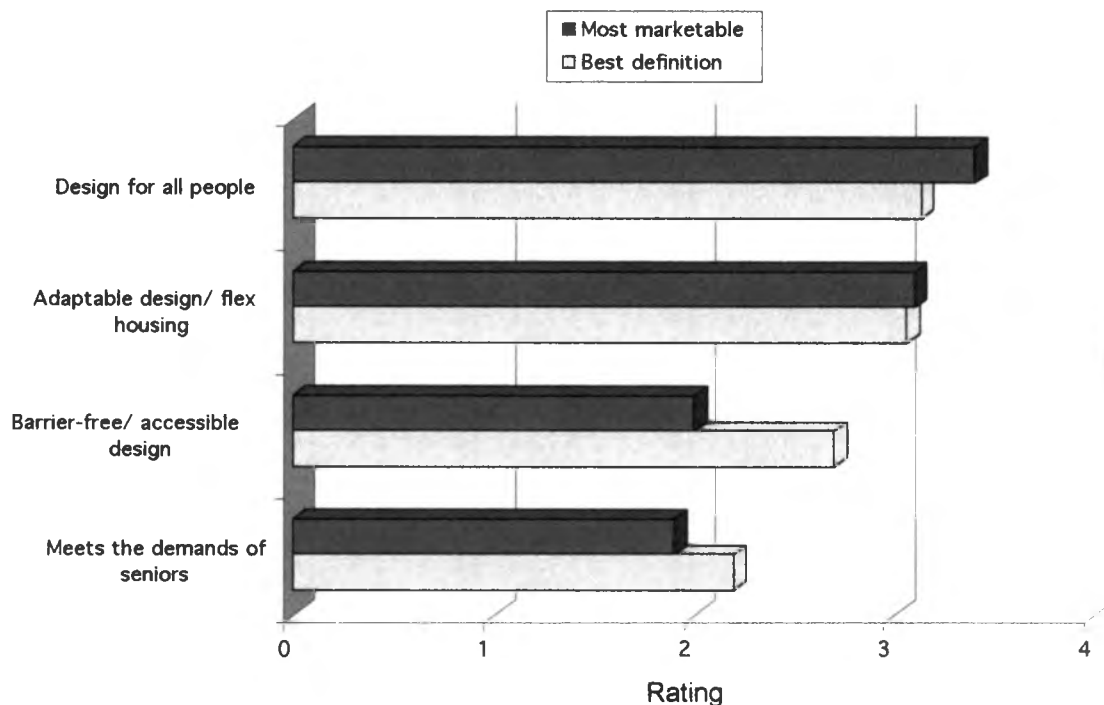


Figure 6: Describing universal design: Graphing with 4 as the best score

When asked whether universal design would influence the cost of their product 80% felt that it definitely or possible would. 5% said it would not influence cost and 15% did not know. The respondents did feel that universal design would require a different type of marketing with 85% answering yes or possibly and 15% did not know.

Informational Materials

The survey asked how the participants preferred to receive informational materials (Figure 7). Workshops and print materials were favored most with manuals, pamphlets, lectures, demonstration projects, and articles following.

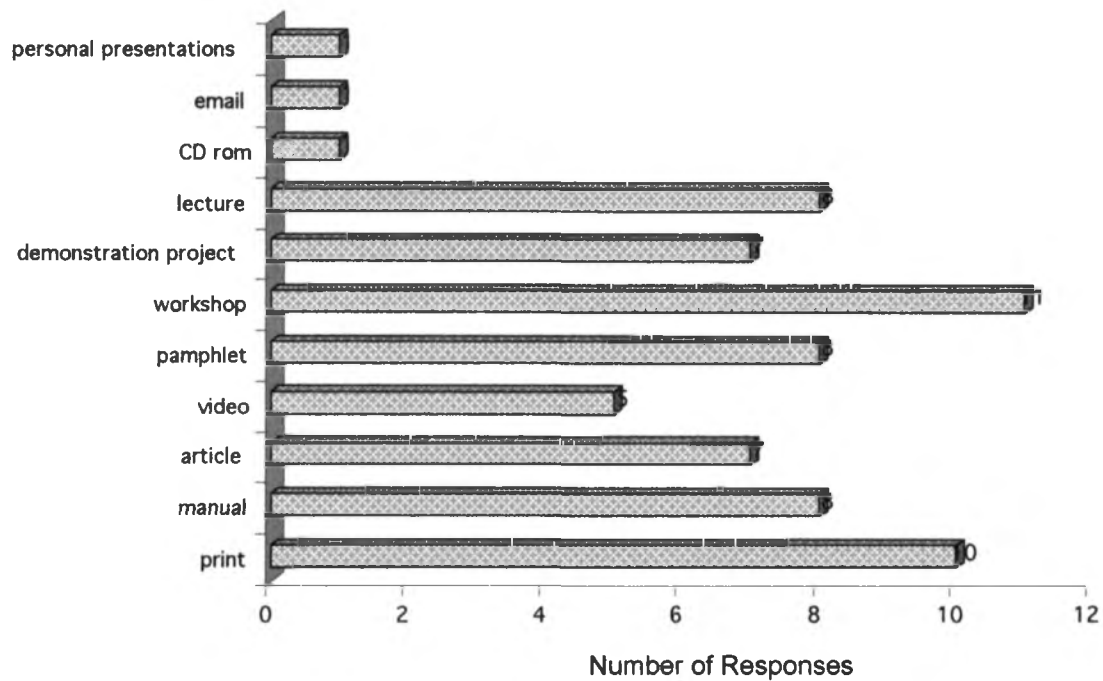


Figure 7: Type of informational materials

The participants' felt that informational materials should be distributed through direct mail (65% of respondents), newsletters and fax (55%), magazine articles (35%), followed by email (30%). See Figure 8.

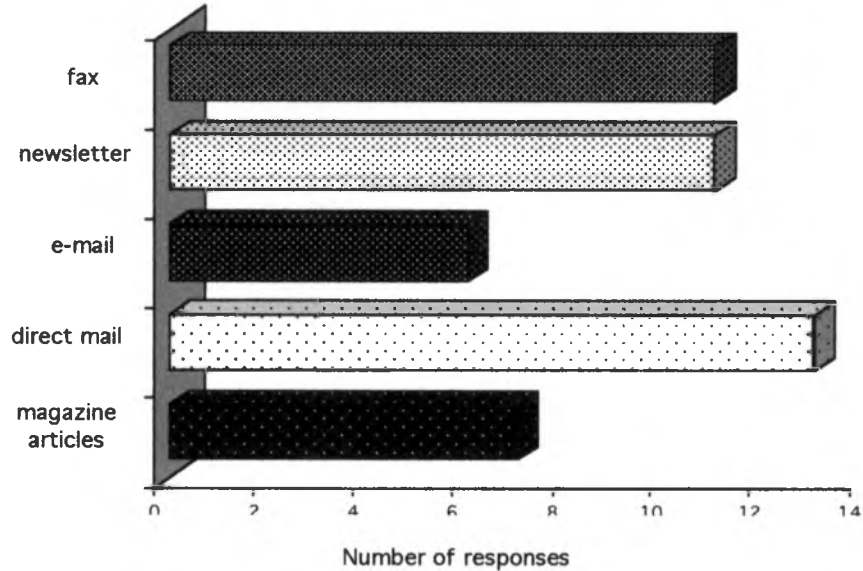


Figure 8: Distribution preference for informational materials

When asked who should prepare and distribute materials, the Home Builders' Association (90%) received the most positive response. Canada Mortgage and Housing Corporation (60%) received the second most positive responses. The other responses fell off sharply with 30.5% for the provincial building authorities, 21% for the municipal building authorities, and 5% each for consumer focus groups, warranty programs, and manufacturers. See Figure 9.

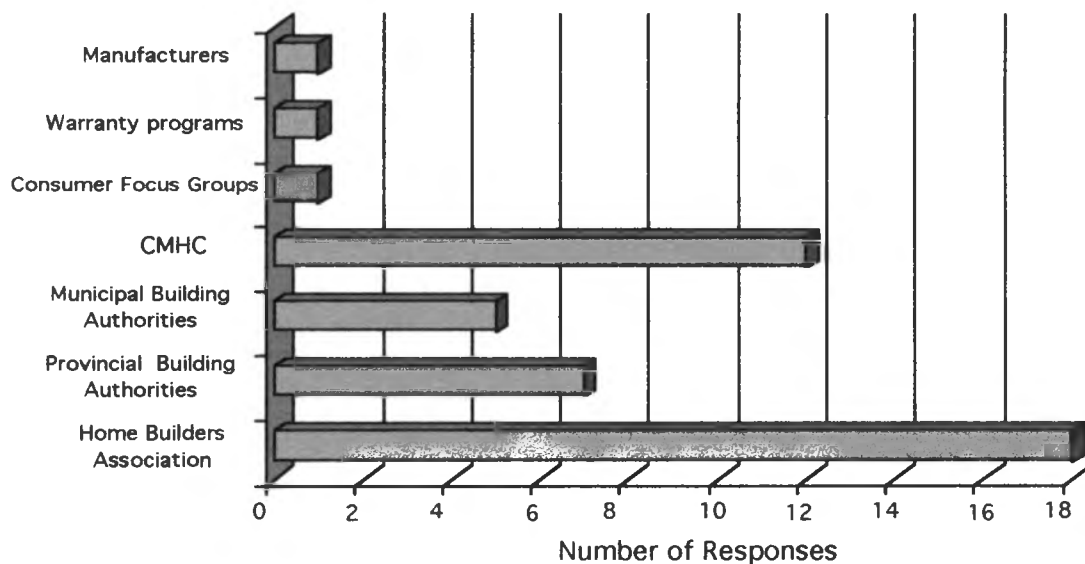


Figure 9: Who should prepare and distribute informational materials

Discussion and Recommendations

I. Knowledge of Universal Design

- Role of language

When asked about the principles of universal design, more than half the respondents answered affirmatively to including these issues in their marketing strategy. The quantitative numbers requesting information was from approximately 40% – 55% dependent on the topic. For aspects of human functioning, the numbers were much lower for including in their strategy, as low as 10%, while 35% – 55% of the respondents requested information dependent on the topic. Describing people in terms of functioning appears less comfortable than language describing design approaches.

The marketability of universal design, based on the best wording for a definition of universal design, is clearly dependent on value free language. The profusion of terms has created some confusion. Definitions without reference to specific groups (disability or seniors) offer the most useful approach.

Recommendation 1A: The term universal design should become the recognized term in describing inclusive construction and buildings.

Recommendation 1B: It is important that the inherent value free terminology of universal design be used in marketing and education.

Recommendation 1C: A common terminology would be useful to both the industry and consumers.

- Changing perceptions

The results show a lack of knowledge about universal design. Though most of the respondents say they consider people with disabilities, the lack of accessible housing in the marketplace does not validate this response. The positive responses for more information on human functioning requirements are a clear expression of need for more education.

Recommendation 2A: Focused education to improve knowledge about universal design and its benefits is needed within the home building industry.

Recommendation 2B: Information prepared must include details on human functioning and principles of universal design.

- Role of consumers

The fact that no consumers have asked the respondents about or for universal design features is an interesting result. Construction implies a partnership between the industry and the consumer. Therefore, it would benefit the industry to have an educated consumer.

Recommendation 3: Public education is needed to enhance consumer awareness of the benefits of universal design.

II. Informational Materials

- Type of materials

The responses as to what types of materials are useful can be grouped into two main areas. The combination of workshops, lectures, and demonstration projects indicate a need for face to face learning opportunities. The combination of responses on printed materials (articles, pamphlet, manual, or print) indicated the traditional and comfortable method of receiving material is still viable.

Recommendation 4A: Interactive workshops, lectures, and demonstration projects is important to disseminate information within the industry.

Recommendation 4B: A combination of print materials (articles, pamphlets, and manuals) is important to disseminate information within the industry.

- Distribution

The survey informs us that direct mail, newsletters, and faxes are used most effectively by the industry.

Recommendation 5: Informational and educational materials should be targeted directly to individual home builders.

- Responsibility

The survey indicates that the industry is most comfortable with their Association providing appropriate materials. They secondarily look to Canada Mortgage and Housing Corporation for further information or to corroborate information.

Recommendation 6A: The Manitoba Home Builders Association should take an active role in designing, producing, and disseminating appropriate informational materials for their membership and the industry.

Recommendation 6B: Canada Mortgage and Housing Corporation should take an active role in designing, producing, and disseminating appropriate informational materials on universal design for both the industry and consumers.

Appendices

Bibliographies

Finkel, G. & Gold, Y. (Winter 1999). Actualizing Universal Design. Journal of Leisureability, 26 (1), 25-30.

Rogers, E.M. (1995). Diffusion of innovation (4th ed). New York: Free Press.

Steinfeld, E. (1996). Universal design as innovation. Buffalo: NY: Centre for Inclusive Design and Analysis.

Utterback, J.M. (1974). Innovation in industry and the diffusion of technology. Science, 183.

White, B.J. (1998). Lessons learned from diffusion research on residential universal design features. Conference Proceedings: Designing for the 21st Century, June 17-21, 1998, Hofstra University. Raleigh, NC: The Center for Universal design.

Home Building Industry SURVEY

Please take a few moments and fill out this survey.

Manitoba Home Builders Association is doing a research project, *Universal Design and the Home Building Industry*, to gather information on what you may want to know about Universal Design. The results will be available in the Spring of 2000.

Universal Design looks at the range of people and their needs. People come in many sizes, shapes, and strengths. People age and their needs change. They may need some of the features of accessibility, but they really want just good design not special design.

The aging boomer will be the buyer. Their demands will include ease of use, flexibility, safety, simplicity, and comfort. These good design features create simple and inexpensive changes in the design of:

- Door openings and hardware
- Lighting levels and switches
- Using colour for information
- Backing for grab bars, but not necessarily grab bars
- Window heights and types
- Using non allergenic materials

Be part of determining what is needed to ensure you are “hot” and “marketable” by answering the following questions. This survey has been designed to find out:

- How you describe your marketing;
- How that links to universal design; and
- The best way to get you information about universal design.

This survey will take you 5 – 10 minutes to complete.

1. Do you have a marketing strategy?

Yes _____ No _____

2. If yes, which of the following describes your marketing strategy? Check as many as are appropriate.

- | | |
|-------------------------------------------|--------------------------------|
| _____ Barrier-free | _____ Consumer safety |
| _____ Efficient and comfortable | _____ Ease of maintenance |
| _____ Flexible: adjusts to changing needs | _____ Sensitivity to materials |
| _____ Easy to use spaces | |
| _____ Other, please specify _____ | |

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3. Do you want more information on any or all of the following:

- | | |
|--------------------------------------------------------------|---------------------------------------------------|
| <input type="checkbox"/> Barrier-free | <input type="checkbox"/> Consumer safety |
| <input type="checkbox"/> Efficient and comfortable | <input type="checkbox"/> Ease of maintenance |
| <input type="checkbox"/> Flexible: adjusts to changing needs | <input type="checkbox"/> Sensitivity to materials |
| <input type="checkbox"/> Easy to use spaces | |
| <input type="checkbox"/> Other, please specify _____ | |

4. Who is your target market? Please check any or all that are appropriate.

- ☐ Young families
☐ Seniors
☐ Professionals without children
☐ Empty nesters
☐ First time home buyers
☐ Other, please specify _____

5. When you are marketing, do you consider whether the buyer has disabilities?

- ☐ Yes ☐ No

6. To provide more detail to question #5, do you consider any of the following aspects of the buyer? Check as many as are appropriate.

- | | |
|-------------------------------------------|---------------------------------------------------|
| <input type="checkbox"/> range of vision | <input type="checkbox"/> lower body strength |
| <input type="checkbox"/> range of hearing | <input type="checkbox"/> upper body strength |
| <input type="checkbox"/> stature | <input type="checkbox"/> communication |
| <input type="checkbox"/> balance | <input type="checkbox"/> range of dexterity |
| <input type="checkbox"/> cognition | <input type="checkbox"/> changing life span needs |

7. Do you want more information on any of these aspects of buyers? Check as many as are appropriate.

- | | |
|-------------------------------------------|---------------------------------------------------|
| <input type="checkbox"/> range of vision | <input type="checkbox"/> lower body strength |
| <input type="checkbox"/> range of hearing | <input type="checkbox"/> upper body strength |
| <input type="checkbox"/> stature | <input type="checkbox"/> communication |
| <input type="checkbox"/> balance | <input type="checkbox"/> range of dexterity |
| <input type="checkbox"/> cognition | <input type="checkbox"/> changing life span needs |

8. Have you heard about Universal Design before this survey?

- ☐ Yes ☐ No

9. Which of the following do you think best describes Universal Design? Please rate by numbering the following, with 1 being the best.

- | | |
|------------------------------------------------------------|---------------------------------------------------------------|
| <input type="checkbox"/> a. Barrier-free/accessible design | <input type="checkbox"/> c. Adaptable design e.g. Flexhousing |
| <input type="checkbox"/> b. Meets the demands of seniors | <input type="checkbox"/> d. Design for all people |

Universal Design Within the Home Building Industry

10. Which of the definitions is most marketable? Please rate by numbering the following (1 is the most).

- ☐ a. Barrier-free/accessible design ☐ c. Adaptable design e.g. Flexhousing
☐ b. Meets the demands of seniors ☐ d. Design for all people

11. Has any of your customers asked about or requested Universal Design?

☐ Yes ☐ No

12. Do you think your future market will be receptive to Universal Design?

☐ Possibly ☐ Yes ☐ No ☐ Don't know

13. Do you think Universal Design will influence the cost of your product?

☐ Possibly ☐ Yes ☐ No ☐ Don't know

14. Do you think Universal Design will need a different type of marketing?

☐ Possibly ☐ Yes ☐ No ☐ Don't know

15. What do you consider is the best format to receive information on new developments in your field? Check as many as are appropriate.

| | | |
|------------------------------------------------------|-----------------------------------|-----------------------------------|
| <input type="checkbox"/> print | <input type="checkbox"/> manual | <input type="checkbox"/> article |
| <input type="checkbox"/> video | <input type="checkbox"/> pamphlet | <input type="checkbox"/> workshop |
| <input type="checkbox"/> demonstration project | <input type="checkbox"/> lecture | |
| <input type="checkbox"/> other, please specify _____ | | |

16. How should information be distributed to you? Check as many as are appropriate.

| | | |
|--------------------------------------------|--------------------------------------|---------------------------------|
| <input type="checkbox"/> magazine articles | <input type="checkbox"/> direct mail | <input type="checkbox"/> e-mail |
| <input type="checkbox"/> newsletter | <input type="checkbox"/> fax | |

17. Who should prepare and distribute this information to you? Check as many as are appropriate.

| | |
|------------------------------------------------------|----------------------------------------------------------|
| <input type="checkbox"/> Home Builders Association | <input type="checkbox"/> Provincial building authorities |
| <input type="checkbox"/> CMHC | <input type="checkbox"/> Municipal building authorities |
| <input type="checkbox"/> other, please specify _____ | |

Demographic Information (Please do not give your name.)

18. Position/Title _____

19. Occupation

| | | |
|------------------------------------------------------|-----------------------------------------|------------------------------------|
| <input type="checkbox"/> Builder | <input type="checkbox"/> Custom Builder | <input type="checkbox"/> Developer |
| <input type="checkbox"/> Designer | <input type="checkbox"/> Distributor | |
| <input type="checkbox"/> Other, please specify _____ | | |

Universal Design Within the Home Building Industry

20. Business Locations

_____ Rural

_____ Urban

_____ North

21. How many years have you been in business?

_____ 1-5 years

_____ 6-10 years

_____ 11-15 years

_____ 16-20 years

_____ more than 20 years

22. How many units did you build in 1998? _____

23. How many people do you employ? _____

24. Age _____

25. Male _____

Female _____

26. Education

High School _____

Technical _____

Community College _____

University _____

Thank you.

Article

Universal Design – Hot Trend for 2000

Sales and Marketing Ideas, January- February 1999, listed Universal Design as one of the hot items as we move to the year 2000. As demographics and the demands of the marketplace change, the building industry must respond. This will be reflected in products, building, and residences.

This new standard the industry will be expected to meet is called Universal Design or Design for All. Universal Design reflects the "boomer transition to varying shades of gray." It accommodates families, businesses, seniors, children, the tall and the short, singles and couples.

Universal Design looks at the range of people and their needs. People come in many sizes, shapes, and strengths. Accessible or barrier-free design focused on people with disabilities alone, but universal design looks at the needs of all. As people age their needs change, but do not see themselves as disabled. They may need some of the features of accessibility, but they really want just good design not special design.

Statistics show the aging boomer will be the buyer. Their demands will include ease of use, flexibility, safety, simplicity, and comfort as their needs change. These features of good design create simple and inexpensive changes in the design of:

- Door openings and hardware
- Lighting levels and switches
- Using colour for information
- Backing for grab bars, but not necessary grab bars
- Window heights and types
- Using non allergenic materials

If you want to be on the edge of change to meet the new market demands, Universal Design is for you.

Manitoba Home Builders Association is involved in a project, *Universal Design and the Home Building Industry*, to gather information on what you want to know about Universal design. A survey will be sent out in the Fall. The results will be available in the Spring of 2000. Be part of determining what is needed to ensure you are "hot" and "marketable."