

Chapter 9

Universal Design – Innovations for All Ages

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Abstract Demographics require companies to abandon the concept of solely targeting young customers. They need to create new products that are attractive to both younger and older customers. The key to success is Universal Design. Products that follow the principles of Universal Design don't separate but integrate customer groups, and they substantially increase a company's target markets. This chapter not only highlights the economic potential of Universal Design, it also shows how Universal Design can be implemented within any corporation. A successful implementation needs: (a) to define a suitable Universal Design strategy, (b) to establish adequate processes within the firm, (c) to design the products right, and (d) to market the products appropriately to customers. The chapter concludes by illustrating attractive areas for universally designed innovations.

Introduction: Opening New Markets by Integrating Young and Old Customers

The demographic time bomb is ticking: The society in most Western economies is getting older every day. However, while the "Generation 50+" turns out to be one of the most attractive target groups for many companies, the term "aging" itself is controversially discussed. It is still fairly prevalent that everybody will become old, but no one wants to be old. But this antiquated perception of age has become outdated itself. The "new" elderly generation is much more vital, has a higher purchasing power and increasingly loves to experiment with new products compared to "older" elderly generations. This is not very surprising if it is considered that today's 50+ generation grew up under totally different circumstances than the traditionally known "older generation." Today's 50- to 65-year-olds grew up in a cultural environment with Rock 'n' Roll, Elvis Presley, and The Beatles. They identify themselves with people such as Tina Turner, Robert Redford, Sean Connery, or Mick Jagger. It is simple but true: someone who was 26 years old in 1968 is 65 years old today.

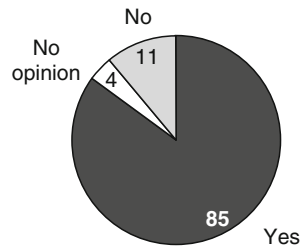
Despite this development, many companies still haven't launched appropriate initiatives that intentionally include this fairly new and fast-growing market segment of people over 50 years of age into product planning and development activities. Research by the Arizona State University has shown that only 12 out of 125 Fortune 500 companies mention on their websites that they proactively consider the specific needs of the elderly in their product strategy. Upon request, only two of these companies were able to provide more detailed information about these initiatives.

Our explorative study in 2003 with 105 companies in 11 different industries showed similar results. Eighty-five percent of companies considered it important to align product offerings with demographic developments. However, only 29% of respondents have proactively thought about opportunities to launch the respective initiatives. Only around 20% of companies have conducted or even read market research reports discussing the potential of demographic change. This negligence has fatal consequences because companies miss out on real opportunities. The survey asked companies who already offered age-friendly products about the products' performance. Seventy percent of the respondents confirmed that they are very satisfied with this type of product diversification and that these products are successful on the market. Fifty-nine percent of all companies expect that age-friendly products will lead to at least average if not above-average growth. Only 2% believed that age-friendly products will lead to growth rates below average (see Fig. 9.1). This study is of explorative character and needs further research with larger samples in different regions.

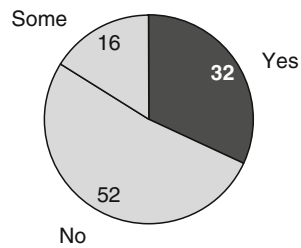
In addition to the lack of awareness among companies, the amount of research on the economic potential of demographic change is fairly limited as well. The only available studies relate to customer segmentation approaches and defining the needs and special demands of older consumers [2, 10, 18]. Hupp [8] observed the decision making of older people, whereas Trocchia and Janda [24] analyzed Internet usage of senior users. Szmigin and Carrigan [23] looked at the societal construction of aging and the resulting self-perception of the elderly. Wolfe [26] has taken this approach a step further and analyzed the thought structures of the elderly. Silvers [22] did research about marketing-relevant events for people of older age, and Bristol [1] analyzed the impact of the "endorser age" on the value of brands. All authors collectively came to the conclusion that a focus on only younger customer generations is wrong [4, 8, 12, 14, 16]. Some other researchers analyzed advertising and sales concepts targeting the elderly as well as the role of older customers in advertising and commercials [3, 14, 19]. In addition, there are some studies available that analyze the consumer behavior of older customers. Lazer [13] was one of the first researchers who observed the purchasing power and consumer acceptance of seniors. Hock and Bader [7] have built upon this approach and analyzed the purchasing and consumer behavior of the 55+ generation.

Most companies are still overwhelmed with the opportunities and corresponding challenges of the demographic development. Some companies have tried to address older customers by offering products that are particularly declared and promoted as products for the elderly. However, developing products especially for seniors hasn't shown to be effective in addressing these customers. As most of the people over 50

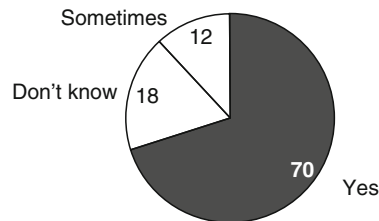
Do you think that demographics should be considered during product planning?
(all numbers in percentage)



Do your current products consider the specific needs of the elderly?



If yes, has this product differentiation proven to be successful?



How would you assess the growth potential for these products compared to your other products?

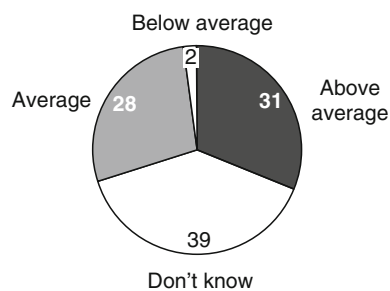


Fig. 9.1 Many companies consider demographic developments to be important for their product offerings, but only a few companies have launched corresponding initiatives: The potential of age-friendly products seems to be significant

are still physically fit and vital, they prefer to buy their products in the same locations where younger generations prefer to shop. They do not want to be separated from younger and healthier generations by shopping for products that have a connotation “for seniors.”

This leaves companies with no other choice than developing products and services independent of the customers’ age. These products and services need to combine the product requirements (logic, complexity, dimensions, functions, handling) with the special capabilities of the elderly (sensory and cognitive capabilities, mental agility, physical condition, technical experience). Successful innovations

follow the motto: “Creating products for younger generations excludes the elderly. Creating products for all ages, however, includes all generations – young and old.”

The Potential of Universal Design

In this context, innovation management has recently started to become engaged with the new paradigm of “Universal Design.” Universally designed products are attractive to all customers, independent of their age. Universal Design integrates. It doesn’t differentiate between disabled, normal, old, and young. Universal products take into account the needs and requirements of all possible users and customers. Therefore, Universal Design conceptually represents a standard, not an exception. Universal Design intentionally avoids highlighting the users’ and customers’ different capabilities. A 30-year-old won’t buy a car that has been developed for a 60-year-old. However, the 60-year-old won’t buy this car either. By offering products that are independent of their users’ age, companies can eventually maximize their possible target customers.

The Center for Universal Design at North Carolina State University in the United States is one of the pioneers in promoting Universal Design as a product standard. The Center has come up with principles for universally designed products. These principles have found broad acceptance in product development around the world. Table 9.1 provides a brief overview of the seven Universal Design Principles. The application of all principles ensures a universal product design that is truly independent of the customers’ age.

The origins of Universal Design date back to the early 1950s. Because of the high number of veterans of World War II, the public has slowly developed an interest in the needs of disabled people and people who cannot live a normal, regular life due to physical impairments. Many people were either directly affected by disability or knew someone in their immediate social environment who was disabled due to the consequences of the war. It was during these times that efforts were made to develop products that were motivated to take disabled people’s needs into account. However, those products were usually designed and declared as “products for the disabled.” Besides a lack of aesthetics in design, the prices were comparatively high as well.

It took another couple of years (it was only after the end of the Vietnam War in the mid-1970s) till the first laws came into effect that constituted favoring situations and environments for people with disabilities. The USA introduced in the 1990 the “American Disability Act,” and the UK passed in 1995 the “Disability Discrimination Act.” Only in 1998 did the first real tangible benefits for people who were physically challenged become eminent with the introduction of “Section 508” of the “Workforce Investment Act.” This section describes that public contracts may only be issued to companies that design their products in a way that they can be also used by disabled customers. The advantage of this act was that it left a lot of freedom to the companies to decide what actions they prefer to take in order to achieve this goal – and if they intend to achieve it at all.

Table 9.1 The seven Universal Design principles (source: The Center for Universal Design)

Principle	Explanation
1. Equitable use	<p>The design is useful and marketable to people with diverse abilities</p> <p><i>Guidelines</i></p> <ul style="list-style-type: none"> (a) Provide the same means of use for all users: identical whenever possible; equivalent when not (b) Avoid segregating or stigmatizing any users (c) Provisions for privacy, security, and safety should be equally available to all users (d) Make the design appealing to all users
2. Flexibility in use	<p>The design accommodates a wide range of individual preferences and abilities</p> <p><i>Guidelines</i></p> <ul style="list-style-type: none"> (a) Provide choice in methods of use (b) Accommodate right- or left-handed access and use (c) Facilitate the user's accuracy and precision (d) Provide adaptability to the user's pace
3. Simple and intuitive use	<p>Use of the design is easy to understand, regardless of the user's experience, knowledge, language skills, or current concentration level</p> <p><i>Guidelines</i></p> <ul style="list-style-type: none"> (a) Eliminate unnecessary complexity (b) Be consistent with user expectations and intuition (c) Accommodate a wide range of literacy and language skills (d) Arrange information consistent with its importance (e) Provide effective prompting and feedback during and after task completion
4. Perceptible information	<p>The design communicates necessary information effectively to the user, regardless of ambient conditions or the user's sensory abilities</p> <p><i>Guidelines</i></p> <ul style="list-style-type: none"> (a) Use different modes (pictorial, verbal, tactile) for redundant presentation of essential information (b) Provide adequate contrast between essential information and its surroundings (c) Maximize "legibility" of essential information (d) Differentiate elements in ways that can be described (i.e., make it easy to give instructions or directions) (e) Provide compatibility with a variety of techniques or devices used by people with sensory limitations

(continued)

Table 9.1 (continued)

Principle	Explanation
5. Tolerance for error	The design minimizes hazards and the adverse consequences of accidental or unintended actions <i>Guidelines</i> (a) Arrange elements to minimize hazards and errors: most used elements, most accessible; hazardous elements eliminated, isolated, or shielded (b) Provide warnings of hazards and errors (c) Provide fail-safe features (d) Discourage unconscious action in tasks that require vigilance
6. Low physical effort	The design can be used efficiently and comfortably and with a minimum of fatigue <i>Guidelines</i> (a) Allow user to maintain a neutral body position (b) Use reasonable operating forces (c) Minimize repetitive actions (d) Minimize sustained physical effort
7. Size/space for approach/use	Appropriate size and space is provided for approach, reach, manipulation, and use regardless of user's body size, posture, or mobility <i>Guidelines</i> (a) Provide a clear line of sight to important elements for any seated or standing user (b) Make reach to all components comfortable for any seated or standing user (c) Accommodate variations in hand and grip size (d) Provide adequate space for the use of assistive devices or personal assistance

Many countries in Europe have adopted the thought of caring about people with disabilities as well. For example, the European Union declared the year 2003 as the "Year of People with Disabilities." In this context, the EU launched a big initiative to fund research projects focusing on issues related to Universal Design.

Despite the clear governmental mandate, industry, however, still has little experience when it comes to Universal Design. The tasks and costs are frequently considered to be still unknown, and many companies have not yet responded to this trend. Only a few examples exist that show the real tangible benefits of Universal Design, but this number is growing. Sometimes, other notations are used for the concept of age-independent design, such as transgenerational design. However, the idea behind all those initiatives remains the same – to create products and applications that can be used by all customers, independent of their age or physical and mental conditions.

It doesn't always take a lot of effort and energy to come up with a universally designed pathway to impact. The company Whirlpool, for example, might serve as

a good case in this context. Whirlpool (one of the world's leaders in appliances, especially washing machines) received a few years ago an unusual amount of letters and complaints from their customer indicating that the company's products are hard to understand and use. As a response, Whirlpool conducted a few smaller modifications, such as placing an easily understandable manual with large letters right underneath the cover of the machine. While the older customers didn't send any complaints to Whirlpool any more, the younger customers have not complained either. In addition, the younger customers were indifferent towards the new design. Thus, Whirlpool was able to make only small adjustments to its current product, but was able to increase the group of satisfied customers quite substantially which is right at the heart of the meaning of the concept of Universal Design.

Implementing Universal Design Within the Corporation

Define a Suitable Strategy

Anchoring the concept of Universal Design in the product strategy is the first step towards a successful implementation of Universal Design. Top management has to make clear how strategic initiatives should be conceptualized and implemented. The following questions need to be addressed:

- Should Universal Design be implemented within the entire company, certain business units, or only some selected product lines or groups?
- What resources and competencies are necessary, and how can the company's own core competencies best be leveraged?
- What are the potential applications and what is their market potential?

A successfully implemented Universal Design strategy defines how the company intends to position itself towards its stakeholders, what message the company wants to promulgate, and what products and services it should offer. Every company can rely upon three generic strategies to define its degree of implementation of Universal Design (see Fig. 9.2):

1. *Marketing existing products customized for seniors*: This strategy simply relies upon redirecting the company's marketing concept. The yet-neglected target group of the elderly will intentionally be integrated into the marketing of existing products and services. However, the existing products and services are usually not adapted accordingly. The company only changes its way of communicating and addressing the possibly new customers in order to attract older customers.
2. *Adapting existing offerings according to the customers' age*: This strategy systematically analyzes all existing products and services and determines if they fulfill the Universal Design requirements. If some products or services do not meet these criteria, the company can try to come up with possible adaptations in order to make the products and services more attractive for the elderly.

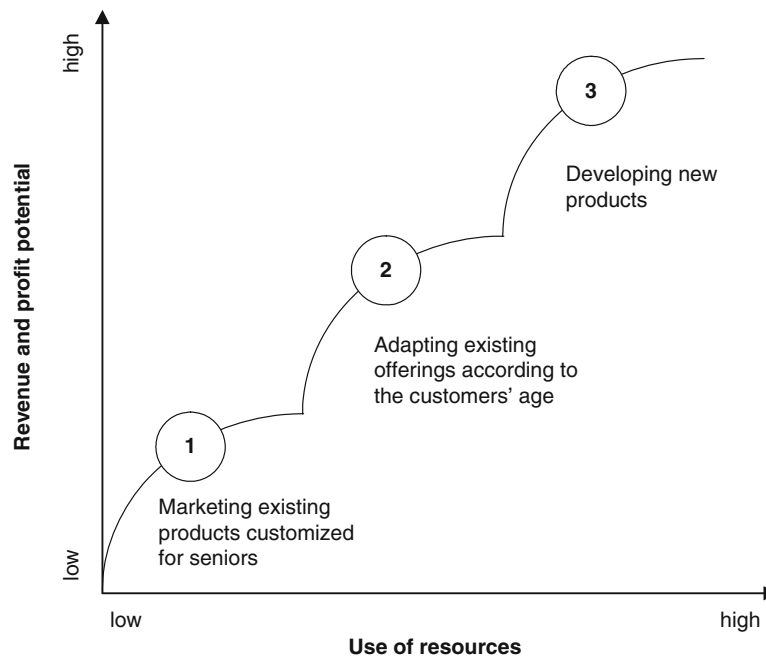


Fig. 9.2 Universal Design can be implemented in the corporate strategy in multiple ways and can have different scopes [5]

3. *Developing new products*: This strategy includes the development of entirely new products and services that strictly follow all Universal Design principles, from ideation to market introduction. The elderly are proactively included during product development phases in order to ensure adherence to Universal Design standards.

The first strategy entails fairly low market risks. Small changes in product marketing may lead to comparatively quick market success. The strategy's implications on sales and profit may be limited though.

The second strategy requires more resources. The higher effort, however, will most likely lead to greater leaps in revenues and profits because this strategy indeed offers more attractive products and services for the older generation, in addition to an age-friendly marketing. The increased attractiveness of the products and services is usually based upon an improved design of the interfaces between the product and the user (i.e., the technology and the older customer). Good examples are telephones with enlarged number keys as well as high-resolution and high-contrast digital displays.

The third strategy is characterized by the highest development and market risks. It also requires the largest amount of resources. Due to comparatively longer lead times in development, this strategy will usually increase sales and profits with a slight delay. By contrast, these products and services are most appropriately suited to

include satisfying the needs of the elderly as they proactively include their opinions and perspectives.

All three strategies are not exclusive. They can be applied in parallel, and they are applicable in a broad range of industries ranging from high-tech to consumer goods. The textile and fashion company Betty Barclay, for example, has broadened its product offering – purposely including the elderly – and has achieved great success since then. While most textile and fashion companies in Germany have posted declining revenues and profits, Betty Barclay, however, was able to present an increase of sales in 2003 of 1.6%. The average Betty Barclay customer is 39 years of age or older.

Another example of a company that has radically shifted its strategy a couple of years ago, and now primarily, but not exclusively, offers products that target the market of the elderly is the Swiss company Synthes-Stratec. Initially, the company produced high-quality Swiss watches. The company's engineers were experimenting with new materials, with the objective of discovering non-magnetic alloys that are resistant to shocks and corrosion. Today, these alloys are still used in well-known brands such as Rolex or IWC. The company's management recognized that these new alloys were not only applicable in watches but in a couple of other market segments that were characterized by high growth rates. Because of that, the company engaged in cooperation with the Association for Osteosynthesis. This cooperation represented the company's entrance into prosthetics, a market segment that primarily, but not exclusively, includes older customers. In the following years, Synthes-Stratec has substantially changed gears, and now focuses on prosthetics. Today, the company is world leader in osteosynthesis and generates revenues of more than CHF 1.5 billion.

In most instances, small changes in the company's product strategy are sufficient to make products and services attractive and applicable to users of all ages. While all age groups will benefit from these adjustments, it is most often the group of the elderly that benefits the most. Whereas younger users are usually able to adapt to new circumstances and new situations, older users usually don't have these capabilities. That is the reason why they appreciate universally designed products the most.

Establish Adequate Processes

In order to identify and define processes that allow implementing Universal Design strategies, a closer look at the older customers' specific capabilities and abilities has proven to be a very effective first step. Physical and mental capabilities usually worsen with old age. Many age-related medical conditions lead to the fact that sensory capabilities and velocity-related activities decline. Vision usually starts to deteriorate at an age of around 40. The eye's abilities relating to contrast and colors are usually impaired by then. Starting at around 60 years of age, more severe constraints frequently occur. Hearing impairment usually starts at an age of around 60, the same age where the muscular strength usually starts declining as well. For example, a 60-year-old has on average 15–35% less muscular strength than a

20-year-old. In addition, problems of the joints usually occur. Taking all these factors into account, many researchers in gerontology came to the general belief that people beyond their mid-60s face considerable multi-morbidity issues [10, 11, 17]. However, studies have shown that substantial losses of physical fitness only correlate for people with an average age of over 85.

Besides physical capabilities, the mental capabilities of older customers also face significant challenges. For example, older people tend to overly rely on their previous experiences. Due to their life experience, older people usually have accumulated highly specific knowledge systems. The part of their intelligence that is based on experience is usually fairly high. This has led to the situation that older people tend to assign new information to familiar schemes and thinking [6, 20]. Therefore, the ability to understand novel technologies and functional principles usually declines with increasing age. However, this should not be confused with generally lower intelligence. Only the “fluid” intelligence, i.e., the intelligence that is used to process new and complex information (also referred to as comprehensive power), is lower for people with older age [27]. The “crystallized” intelligence, by contrast, which contains factual knowledge and relies on capabilities acquired during the course of a person’s lifetime, rarely declines with old age. Moreover, the crystallized intelligence can even partly compensate for the declining fluid intelligence in older people.

Considering the situation of many older people, the main problem of product development becomes eminent: In many cases, fairly young engineers, designers, and marketing experts are creating products that are expected to be purchased by the elderly. Simply because of the difference in age, they have never been exposed to the special physical and mental challenges that most of their customers are facing. They usually know the perspectives and opinions of younger customer generations quite well, but they mostly lack the knowledge and empathy to grasp and understand the special capabilities and needs of older customer generations. A successful implementation of Universal Design therefore always requires merging of both the innovative products’ features with the special capabilities and abilities of the older consumers (see Fig. 9.3).

In order to make it happen that both the product’s requirements and features as well as the customers physical and mental capabilities match, three generally accepted strategies can be applied to address this challenge:

1. *Checklists for product features*: Multiple groups of researchers (including the Center for Universal Design in the USA) have already developed guidelines that describe the characteristics of age-friendly products and services. Companies can use these guidelines to identify potentials for improvement of their current product and service offerings. However, they should keep in mind that concrete design implications can usually not be generalized. Every product or service design needs to be handled as an individual case.
2. *Deficit simulation*: Besides theoretically elaborating the needs and capabilities of older customers, physically experiencing these challenges is an even more powerful tool for really understanding the special issues related to serving the elderly. The company Meyer-Hentschel Management Consulting has developed an “Age

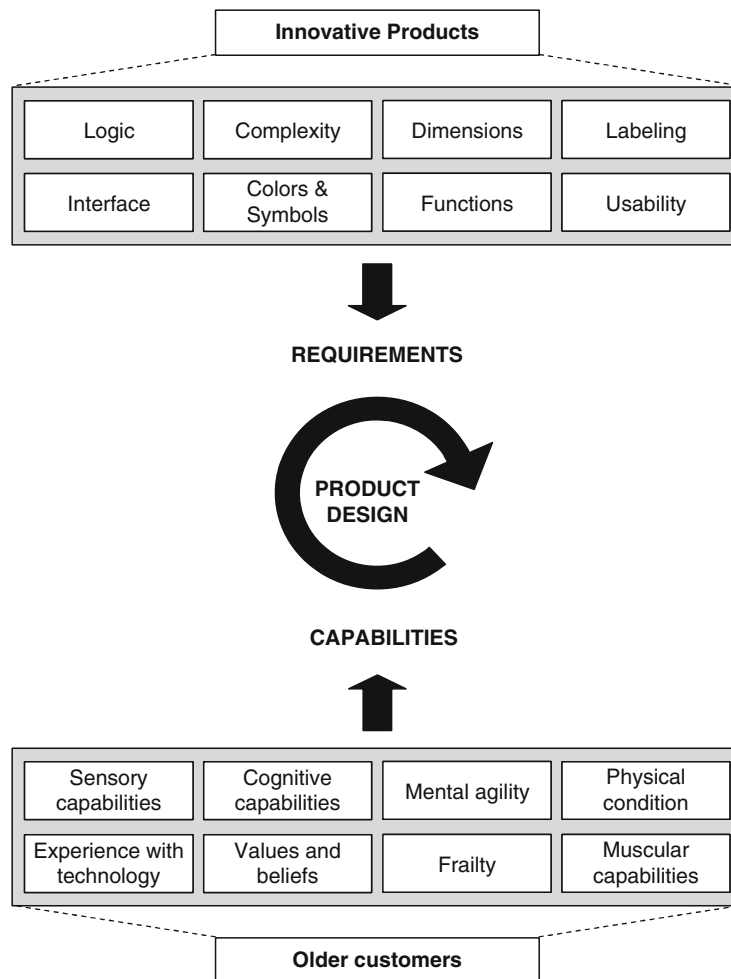


Fig. 9.3 Successful product development under the Universal Design paradigm matches the requirements of the innovative products with the abilities of older customers

Explorer” that uses glasses, headsets, weights, and other tools to simulate the physical and cognitive capabilities of older people. If a younger designer or engineer uses the “Age Explorer,” his or her own capabilities are literally reduced, and the “Age Explorer” allows them to have the same experience using products and services that the older customers would have. That way, the deficits of old age can be made recognizable and experience-able.

3. *Participative design*: Participative design describes a method that directly includes elderly customers in product development activities, ideally from idea generation to final market testing. This allows giving a voice to older customers and lets them articulate their needs and expectations. In addition, the

designers also get a much closer understanding of the older people's opinions and perspectives. Companies could proactively employ older people in their R&D departments in order to allow for participative design. A well-balanced mix of young and old designers and engineers seems to be a promising approach to a successful implementation of Universal Design product strategies.

The needs and requirements of customers can only be appropriately considered during the product development process if the customers that actually use the product are included in the products' development process. In addition, the capabilities of the users need to comply with the requirements of the product. Only under this constellation, will innovations be adopted and actually used. Products fulfill the requirements of Universal Design if all of these aspects are taken into account and, simultaneously, the younger customer groups are not excluded or scared away by the products' design. If these conditions are met, the product has the best prerequisites for becoming a market success.

Design the Products Right

The product's design and interface to the user is becoming particularly important. If a customer uses a product for the first time, this usage should be a success. Particularly, studies among the elderly have shown that the first-time use is highly predictive of a product's success [9]. While the technology adoption and implementation theory of Rogers [21] came to the conclusion that early adopters are usually neither older nor younger than late adopters, the fact that age has no relevance on technology adoption has been critically discussed by many researchers. Rogers [21] himself has noted in this context that there is inconsistent evidence about the relationship of age and innovativeness. Martinez et al. [15] have come to the conclusion that the likelihood of customers being among the early adopters of certain household appliances declines with increasing age.

However, Wahl and Mollenkopf [25] have shown that there is converging evidence that older adults are neither "enemies" of technology nor uncritical users of technological innovations. The authors suggest two dimensions of attitudes among the elderly:

- Cognitive–rational aspects of technology (e.g., "technological progress is necessary and therefore one has to accept some inevitable disadvantages")
- Emotional–affective aspects of technology (e.g., "technology is more a threat than a benefit to people")

The combination of these attitudes resulted in four types of older people's relation to technology, namely:

1. Positive advocates
2. Rationally adapting
3. Skeptical and ambivalent
4. Critical and reserved

A survey among 1417 older people has shown that all four types are distributed roughly equally among the sample (see Fig. 9.4). It is interesting to note that the study revealed that there were no significant gender differences within the four types of older people.

Market the Products Appropriately

After developing and designing a new product that follows Universal Design principles, companies need to introduce the product to the market appropriately. The field of “senior marketing” has found fairly broad resonance in research so far. Most experts usually differentiate between two marketing concepts:

- Integration marketing: Target younger and older customers comprehensively; however, explicitly take older customer’s needs into account
- Modern senior marketing: Target only the elderly specifically with a specially designed marketing program

In the context of Universal Design, both approaches are acceptable. Although the actual product development has been done universally, marketing the products doesn’t necessarily have to follow the same comprehensive approach. A targeted marketing approach might work better in some industries or environments to sell universally designed products. This segmented approach might even allow increasing the overall number of targeted customers.

However, differentiating the elderly into “young” and “old” elderly should be avoided. Successful marketing for seniors uses a high level of individualization. For example, a 50-year-old has other needs and a totally different purchasing behavior to a 75-year-old. In particular, the new group of elderly stemming from the Babyboomer generation is expected to be very demanding when it comes to individualized and customized products and services.

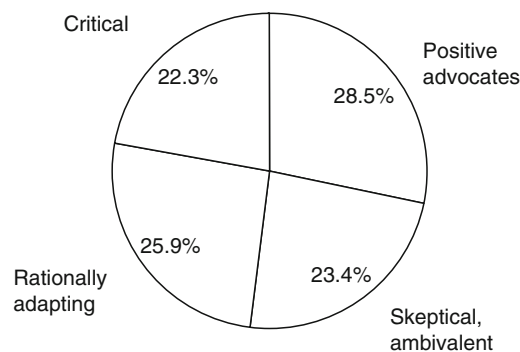


Fig. 9.4 Different types of technology acceptance [25]

In addition, every Universal Design strategy should take into consideration that older customers expect both an intensive and competent consultation while they make their purchase decision, as well as fast customer service after they have made the purchasing decision and in case there are additional questions of shortcomings of the product. Experienced sales support and consultation is therefore critical to success. Older customers will only become loyal long-term customers if they find both.

Thus, while necessary, it is not sufficient to simply sell age-friendly or age-adjusted products. The products' application by the customer needs to be accompanied by the company as well, and therefore should be included in the company's marketing approach. In particular, a well structured and aligned after-sales approach may allow success to be achieved quickly. A simple phone call to check if the older customer is happy with the product, if it meets his or her expectations, and/or if it may cause any problems during usage could significantly increase customer satisfaction.

After-sales service also allows for substantial improvements in customer loyalty as older customers seem to value this type of service. Even if this type of consultation is time-consuming, it is a key success factor in selling a product to an older customer, and it is oftentimes regarded as a requirement for a successful sale. The right design of an innovative product for an older customer always depends on the company's understanding of the user's behavior in the context of his/her capabilities and opportunities. If the use of a product asks for a higher sophistication than the user has to offer, it is the product that is responsible for its non-usage, not the user.

Summary and Conclusion: Identifying Attractive Areas for Innovation

Market success of innovations is neither defined simply by technology determinism nor by the pure existence of customer needs. Only the interconnection of both technologies and market needs substantially increases the economic success of an invention. When discussing the potential of Universal Design, companies frequently ask which products or bundles of products represent the highest potential for innovation. In order to derive and identify attractive areas for innovation, the intersection between novel technologies, markets, customers, and applications needs to be analyzed in greater detail. The largest potentials for innovation are right at the intersection between technologies and markets where both merge in a well-balanced proportion. Figure 9.5 represents this intersection of specific customer needs of the 50+ generation and a couple of selected gerontechnologies (i.e. technologies that can be applied specifically to improve the day-to-day life of the elderly). The objective of gerontechnologies is to provide older people with the opportunity to live and experience an "active aging".

In general, innovative solutions targeting the elderly can be found everywhere, because every industry is principally affected by the demographic development – some industries more, some less. Industries that offer products that are preferably

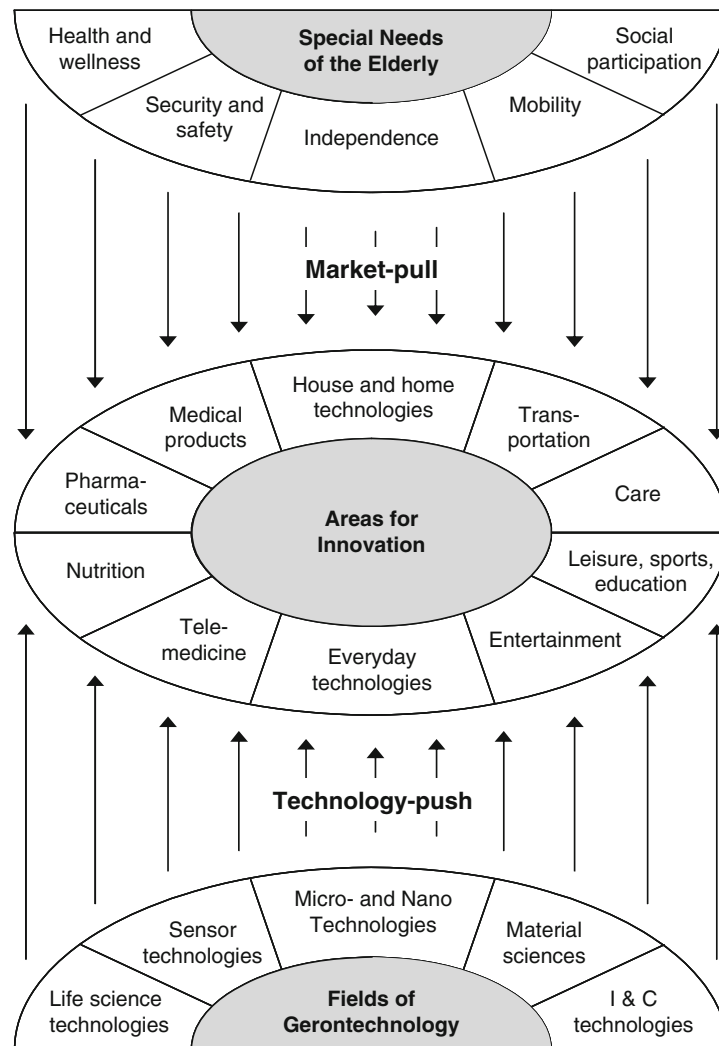


Fig. 9.5 Attractive areas with a high potential for innovation emerge where markets meet technologies

consumed by older customers offer, of course, the highest potential for innovation. However, industries that have a broad customer profile and target all age groups can also benefit substantially from applying Universal Design principles. It can be assumed that the areas for innovation in Fig. 9.5 are characterized by a comparatively high innovation potential due to their strong technology affinity. Besides the innovation areas in Fig. 9.5, there are additional sectors that might benefit from the demographic development. However, they usually depend less on innovative technologies. Examples of these “soft” innovation areas include financial services, religion and esotericism, gero-transcendence, culture, and traditions.

In summary, the importance of demographic change requires addressing one high-level issue: the awareness and sensitivity around the potential, chances, and opportunities that arise from demographic change need to be taken into account not only by politicians and society, but also by leaders in the corporate world. Products and services that include older generations but don't exclude younger generations have a high value for society, and therefore for companies. Only if the mindset of all stakeholders fully grasp the meritoric character of age-friendly products, is it possible to find the necessary reforms in society and business that address one of the most pressing challenges of the future – demographics.

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The Silver Market Phenomenon
Business Opportunities in an Era of Demographic
Change

Kohlbacher, F.; Herstatt, C. (Eds.)

2008, XXXVI, 506 p. 59 illus., 29 illus. in color.,

Hardcover

ISBN: 978-3-540-75330-8