

The Perception and Satisfaction towards Product Appearances by Ageing Consumers

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Abstract

This study proposes to suggest a course of examining product impression regarded by ageing customers. It further explores the correlation between ageing thought towards product presentation in order to entirely comprehend ways in which they will react to products as they age. A comprehensive literature revision was administered to recognize the notable, substantial findings hitherto. The collected data in this paper were collected from the secondary research method. Finally, suggestions are made as a way forward to identify the product appearance attributes and where can be considered by designers, marketers, or researchers in designing a product for ageing population. With the availability of this method, the researchers or designers, thereby can produce a quality and better product design requirement that meet the consumer needs. There is a necessity to investigate the relationship between ageing and product evolution, particularly in the presentation of the product. By recognizing the essentials of aging, it will be beneficial to marketers and designers, especially in designing a product that will fulfil their needs.

Keywords: *industrial design, ageing, consumers, design management*

1. Introduction

Today, every second two people will reach the age of 60 by 2030, 16% of the world's population will be over 60. Ageing community persists to be regarded as a global sensation and has transformed the demographic silhouette of numerous nations. By 2035, Malaysia will present ageing population. It signifies 15% of its people will be categorized as senior residents as the elderly population is thriving. By the year 2035, too, the Minister of Women, Family and Community Development proposes that a projection by the statistics department revealed that Malaysia's ageing community would total as 5.6 million. Coping with ageing population can be a great challenge [1]. Since the rise of this generation is becoming an issue, many sectors have to take an action to improve the wellbeing of the ageing particularly in the consumerism aspect in product design development. Despite the importance of this study for understanding the aging and developing better ways to serve older consumers. Research on this issue in Malaysia, particularly still infancy and relatively limited.

This article renders a literature analysis on distinct elements of ageing knowledge of product image to thoroughly learn how they will react to products as they grow older. This paper begins by briefing about ageing in Malaysia then followed by reviewing ageing as a consumer. However, the intention is not to discuss or to seek descriptions of biological or sociological ageing. Finally, it focused on the aspects of ageing perception of product appearance in a different context. It is anticipated that the subsequent interests will be achieved by examining current practice and conferring. After considering these issues, suggestions are made so that designers may pay more attention as they design for ageing consumer's that will meet their needs for the future.

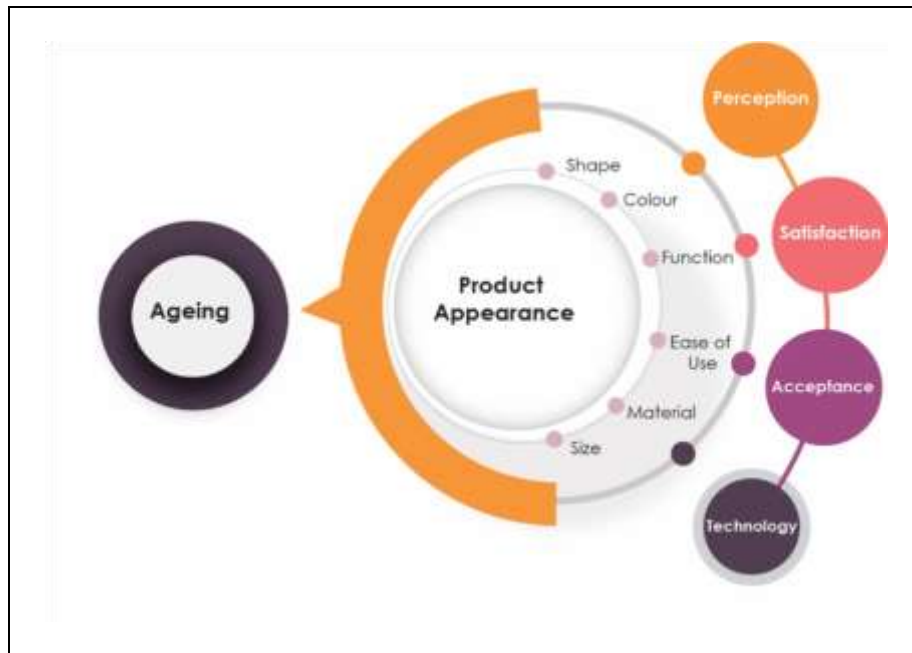


Figure 1. The Conceptual Framework of Product Appearance Towards Ageing Consumers

The keywords or factors illustrated in Figure 1 will be repeatedly used during the explanation and discussion throughout the study. Below are the definitions of the keywords related to this study:

- a) 'Ageing' is the primary concern in which the researcher needs to study the possible contribution towards product appearance and technology. In the context of this study, ageing is referred to as those aged 45-65 because, based on quotes from literature, 60 years and above is the age agreed to be considered as ageing population. Malaysia will have a sharp ageing rate in 2035, and a 45-year-old respondent today will attain 62 years of age at that time. Therefore, their statements or ideas are indispensable to produce appropriate products and meet the requirements of ageing population in the future.
- b) 'Product Appearance' appears as the primary concern of this study that the researcher needs to give it emphasis. In this study, the physical externalities of a tangible product were being studied. They include shape, size, material, function, ease of use, and colour. The purpose of this attribute is to examine the suitability and importance of the appearance of the product to the future 'new old' population.
- c) 'Satisfaction' is perceived as a degree of fulfilment of expectations [2]. The consumers' satisfaction by using the daily products is considered necessary with several factors that could differently influence on the consumers. In this study, the focusing factors consist of the fulfilment of consumer needs, intentions to own a product, brand, and price. The consumer judgments towards the product value are needed to answer the research questions.
- d) 'Perception' is considered an essential keyword that the researcher needs to discover. It is because ageing perceptions of product appearance and technology is essential to fulfilling the needs, products ownership, and satisfactions that will be used by these populations in the future. Perception is a process involving selecting, organizing, and interpreting the information to produce meaning [3]. It is an individual or consumer image or impression about different products on retailers, producers, and many more.
- e) 'Technology' in this context means the extent of ageing 'acceptance' in factors affecting the perceptions and the technological significance of the elderly's lives. The emphasis is given on the impact of the product with technology and whether the

technology is important in influencing the acceptance of change on the product. Besides, the use of technology is seen to improve the lives or care of older people and is beneficial for a better future.

The progress of ageing and product design research in this area has been limited and still new, especially in Malaysia. Most of the research has been done in Malaysia are focusing on social welfare, retirement, medical services, economic, and other facilities for ageing. Hence, the issues highlighted, uniquely, in administering adequate healthcare, amenities, and foundation for the senior subjects [4]. For instance, in other countries such as the United Kingdom, Canada, and few Asian countries such as Japan, China has been doing research on product development for ageing ages ago. Concerning that, there is a need for this issue to be studied, and there is an impact on the ageing population in Malaysia to support their activities in daily life. A previous study also had mentioned that many of today's products and services are not meant to satisfy the demands of older individuals, and novel product growth for them is still at the fundamental level [5].

The main focus of this study is related to product creation through product appearance. Designers produce products that are acceptable in a certain way by a specific user group. Therefore, in order to realize this objectivity, the understanding of target users becomes an essential requirement. Besides, user equations and mechanisms are products communicate perceptions and user response to the product. The researcher has collected attributes or keywords related to product appearance and will discuss this further. The finalized six attributes or physical properties of a product, which are colour, function, ease of use, size, material, and shape, were generated from different appearance attributes, which will make the attributes more objective for the designer.

2. Literature Review

The community age composition shift is apparent from the Malaysian population pyramid in figure 2 below. In 2010, the state of the Malaysia population pyramid was retrogressive and was anticipated to continue until 2040. This regression designates a low birth movement, which is being represented with convex slants. It suggests that the adult society mortality rate is low. In the year 2040, the pyramid exhibits a flat and more widespread apex betokening a growth in the ageing society.

In 2040, the aged inhabitants are forecasted to progress and folded in comparison to 2010. As being quoted from Malaysia's Department of Statistics, indicates that ageing is increasing in Malaysia, and the elderly consumer might increase proportionally to the population projected. At this point, the consumer will not only the youngsters but the elderly as well. The focus can now be shifted to elderly consumers.

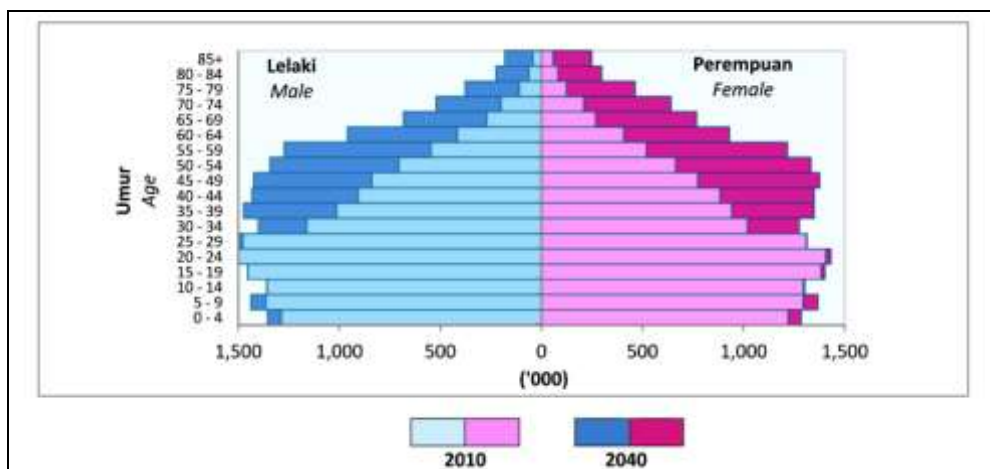


Figure 2. Malaysia Population Pyramid 2010-2040 (Department of Statistic Malaysia)

Health Ministry of Malaysia describes seniors as those aged 60 years and beyond, and the ascertainment of this is age lower in comparison to the age employed by the World Health Organization (WHO). It suggests 65 years, instead. There is no explicit stipulation of a law establishing the word aging [4]. Presently, ageing is impossible to be classified based on age solely. It is because “chronological age” does not signify “physiological age.” The elderly mental and physical capacities may vary. The culmination of ageing is the rise in life anticipation amongst the aged community since there is advancement in healing ability and technology, promoting the excellence of experience, reduction fatality rates, drop in productiveness, progress education standards, and develop the sense of health. It signifies numerous concerns encountered by people who may bear harsh consequences and unfavorable for the nation [6].

People or governments in Malaysia only concern about the issues mentions, but what about the product that will support them in their daily life. Increasing age also causes physical and psychological changes to mean the daily product also is essential in helping them to survive and to help them manage in daily life. Besides all the issues mentioned above, a healthful lifestyle, including a healthy diet and a healthy social life, have adequate rest, hygiene, and a pleasant environment is also essential. Besides, more than half of the elderly in this country live alone without family [6]. The aging problem is not only a concern among the sectors involved and policymakers, but it is also a concern among those aged itself due to some challenges to be confronted with their life in their golden years.

On the other hand, in the policy statement, the senior citizens of the country are the government’s commitment to creating a self-sufficient elderly, dignified, and appreciated by enhanced individual’s latent with healthy ageing, concrete, effective, prolific and assistance to advance the welfare in emerging nations.

2.1. Ageing as a Consumer

The rapid ageing of the world population has numerous implications for product design. As the proportion of the population born in ‘baby-boomers’ years of 1946-1964 advances into the older age groups over the next decade or so, their changing needs are likely to become economically crucial for marketers. The ageing issues will influence the productivity and economic growth of the nation [7].

The growth of the older generation is estimated to increase up to two times the number of children from 2010 to 2035, specifically in Malaysia. Particularly with the rise of this generation, the consumerism aspect of product design development will be affected in order to cater to this market. The increasingly more substantial ageing community makes it challenging for marketers, too, to overlook the segment’s captivation [8].

For ageing customer, innovative technology commodities carry the prospect to facilitate life, to establish contact with relatives and associates, to support health facilities, and to promote safety and independence in their later life stage [9]. Technology is one means of guaranteeing their sustained security. The social assimilation advancing and independent living completed with technology is promoting the elderly’s prosperity, and this is significant to maintain the needed supplies to render outstanding interest at enduring standards [10]. Product design provides the possibility for distinctive interest in the market [11].

The satisfaction standard of ageing consumer regarding product design is crucial and has become a pressing matter as many constituents to be considered depending on their circumstance and life habit.

2.2. Product Appearance

There is a broad collection of literature associated with a product presentation — the product image performs a vital function in deciding buyer acknowledgment [12]. When customers notice a product presentation, they recognized distinct bodily traits that collectively form the product composition, for instance, appearance, configuration, and surface [13]. These components incorporate perceptual product features, like form, balance, pace, symmetry, elements, colouring, embellishment, and form [14].

Merchandise representation may carry artistic and illustrative sense for purchasers, can deliver useful features and present a quality consequence (functional weight), and can demonstrate the efficiency of application (ergonomic advantage). Besides, it can attract and can impact the classification of the goods [11]. This research identifies six appearance functions that proved pertinent to customers and were ample to illustrate the magnetism of commodity presentation on product selection.

Similarly, focuses are on the appearance of colour on a particular brand of the product, which responded to customer choices [15]. The study explores if colour elements influence customer choices in product appearance by asked to indicate an opinion on impression, emotion, and appreciation to understand the customer perception towards physical of product, which involved colour from the particular brand. It was administered by assuming that the color knowledge preference and acknowledgments of the customer for many goods have become very intricate since they have uncovered an extensive array of colour associations for various goods. Colours carry as much symbolic power as the specific objects of the design.

A typical formation was produced for product experience that pertains to every valuable response that can be executed in unique goods communication [16]. Three distinct stages of merchandise encounters were discussed, and there are appearance activities, a sense of purpose, and emotional involvement. Each of these three ingredients forms the primary means. The aesthetic level needs a product's potential to enjoy one or more of the clear modalities. The weight level concerns the capacity to designate character or other significant features. It is also to examine the individual or allegorical point of the produce. The emotional standard includes those contacts that are predictably reflected in emotion psychology and regular communication regarding sensations. The evaluated relational sense of products provides the levels. The framework stipulates guides for the method that stress the diverse examples of productive commodity activity, which are used to define the individual and complicatedness quality of the goods.

Product display perpetually surrenders content to a customer; hence, numerous people tend to purchase a good that appears physically engaging, and the product optical impression may affect purchaser product assessment and selection in specific methods [11].

Mainly, during the competitive price demands, design modifications of dimension, colouring, pattern, covering, traits, and accessories are essential for the production of the differential gain which sells novel goods and allows firms to cope with demographic, human, social and commercial modifications [17], [14].

However, the purpose of this study was to view the product appearance and the relationship to aging as a consumer. It is clear that all the opinions on product attributes are relevant, and the visual element meaningful to the physical of the product. It is significant because product appearance plays a role in determining consumer response. Along with this, the product experience such as aesthetic, meaning, and emotional experience, explained the personal and nature of the product. There has been much research and discussion conducted on this topic but still lack of study focusing on this

topic on ageing as a respondent, particularly in Malaysia. More research is required to gain a better understanding as ageing population is growing.

3. Methodology

Secondary research has been used as a method to assess the literature. It is collected from other sources such as books, journals, newspapers, and documents from related government departments. In order to identify the gaps and other deficiencies of this research, secondary data are used and considered as helping the primary data collection to be more specific on its purpose. There was also some additional evidence that needs to be collected for the same reason, and finally would generate new insights from previous analyses [18].

4. Results and Discussion

The research registers that a customer possesses diverse requirements and prepositions regarding product features.

Prior pieces of knowledge on ageing and the manifestations of the goods will set the recognition and content of the application of a product and features. The design of the product's outer image is imperative as a means of an engaging message to the clients. It will be an interesting point to realise that it is not about the designer or product developer. The presentation may also impact consumer inclinations.

Several scholars attempted to intellectualize the kinds of knowledge carried by the product and ways in which the design and visual manifestation of a product inspired users' cognitive/behavioral reactions in a customer/goods context. A more extended analysis is required to recognise determinants that regulate ageing acknowledgments to merchandise ideas.

5. Conclusion

Demographic inclinations about the impression of ageing proved that both contemporary conditions and coming inclinations immediately involve all of us. Ageing, is a present truth for some, and the rest is their future. In reflecting the association between ageing and product advancement, the prospective investigation proceeded to endeavor and to promote the perception of ways in which ageing impacts user activity on product features. Products or services should be designed and meet the needs of the ageing consumers. They want right quality products at a reasonable price they can afford. Designers need to understand which market segment that the product is to be sold and also to consider what different people will use products at different stages in life. Nowadays, customers are looking for new experiences in products or services. This fact is strengthened by the statement of today's market trend is towards emotional [19]. Our work will be driven by stories and emotions, not just by data. The new experience is very much related to words like 'Fun,' 'Entertainment', and 'Individualized.' Designers have ideas and imaginations for happiness, and the idea realization can gradually educate the people or users, consumers, and customers towards new happy lifestyles. We must have a connection cycle between the designer (provider/developer) and the users [20].

Ergo, the ageing consumers are motivated by psychosocial needs and their financial status. These points are immediately linked to the characteristics of 'Baby boomers.' They bear notable distinct dispositions. It starts from keeping and spending designs, to output anticipations, until requirements on corporations for culturally responsible modes, improved position, and consumer assistance exercises.

References

- [1] F. S. Ong, and D. R. Phillips, "Older consumers in Malaysia", *International Journal of Ageing and Later Life*, Vol. 2 No. 1, (2007), pp. 85–117.
- [2] H. A. Nasser, S. B. M. Salleh, and H. M. Gelaidan, "Factors affecting customer satisfaction of mobile services in Yemen", *American Journal of Economics*, Vol. 2. No. 7, (2012), pp. 171-184.
- [3] O. William, E. E. Appiah, and E. A. Botchway, "Assessment of customer expectation and perception of service quality delivery in Ghana commercial bank", *Journal of Humanity*, Vol. 4 No. 1, (2016), pp. 81-91.
- [4] W. Lim, W. Xin, N. Sulaiman, and D. Baldry, "A conceptual framework for understanding the social care facilities management audit (SCFMA) at the residential care home for the elderly (RCHFE) in Malaysia", *2nd International Conference on Management, Economics and Finance*, (2013), pp. 112–140.
- [5] C. Herstatt, F. Kohlbacher, and P. Bauer, "Silver product design: Product innovation for older people", *Working Paper No. 65*, (2011), pp. 1-15.
- [6] D. P. Selvaratnam, N. A. Idris, N. A. Bakar, and O. B. Kim, "Kesan peningkatan jangka hayat di Malaysia", *Proceeding of Perkem*, Vol. 4 No. 1, (2009), pp. 305–315.
- [7] D. E. Bloom, D. Canning, and J. Sevilla, "The demographic dividend: A new perspective on economic consequences of population change", *RAND Corporation*, Santa Monica, (2002).
- [8] F. S. Ong, and D. R. Phillips, "Older consumers in Malaysia", *International Journal of Ageing and Later Life*, Vol. 2 No. 1, (2007), pp. 85–117.
- [9] A. Dickinson, and R. L. Hill, "Keeping in touch: Talking to older people about computers and communication", *Journal of Education Gerontology*, Vol. 33 No. 8, (2007), pp. 613-630.
- [10] A. C. B. Madeiros, N. Crilly, and P. J. Clarkson, "The influence of ageing on the experience of information and communication technology", *Workshop at the HCI*, (2008), pp. 25-26.
- [11] M. E. H. Creusen, and J. P. L. Schoormans, "The different roles of product appearance in consumer choice", *Journal of Product Innovation Management*, Vol. 22, No. 1, (2005), pp. 63-81.
- [12] N. Crilly, J. Moultrie, and P. J. Clarkson, "Seeing things: Consumer response to the visual domain in product design", *Design Studies*, Vol. 25, (2004), pp. 547–577.
- [13] J. Blijlevens, M. E. H. Creusen, and J. P. L. Schoormans, "How consumers perceive product appearance: The identification of three product appearance attributes", *International Journal of Design*, Vol. 3, (2009), pp. 27-35.
- [14] A. B. Veyisoglu, "The influence of product appearance on perceived product quality in reference to washing machines", *Master thesis*, Middle East Technical University, Ankara, (2010).
- [15] N. Jamalludin, A. M. Hashim, and A. A. Zalay, "Customer choice of colour elements in relation to physical product appearances", *Jurnal Seni Dan Pendidikan Seni*, Vol. 2, (2014), pp. 118-130.
- [16] P. Desmet, and P. Hekkert, "Framework of product experience", *International Journal of Design*, Vol. 1, No. 1, (2007), pp. 57–66.
- [17] M. Berkowitz, "Product shape as a design innovation strategy", *Journal of Product Innovation Management*, Vol. 4, No. 4, (1987), pp. 274-283.
- [18] S. Irwin, and M. Winterton, "Debates in qualitative secondary analysis: Critical reflections, Timescapes: An ESRC qualitative longitudinal study UK data archive", *University of Leeds, London South Bank University, Cardiff University, University of Edinburgh*, (2011).
- [19] R. Jensen, "The dream society", *McGraw-Hill*, New York, (1999).
- [20] A. Z. A. Majid, "Design strategy for designing a service in Malaysia", *International Journal of Advanced Science and Technology*, Vol. 28 No. 15, (2019), pp. 172-181.