ENHANCED QUALITY OF LIFE AND IMPROVED CONVENIENCE FOR CONSUMERS RESULT FROM MARKETERS' RIGOROUS AND ONGOING INTEGRATION OF NEW TECHNOLOGIES AND MECHANISMS INTO THEIR PRODUCTS

CHEN ZHENGHUA 1st , ROZAINI BINTI ROSLI 2nd

ABSTRACT

This study explores how continuous adoption of new technologies and techniques by marketers into products impacts customers' quality of life and convenience. Technological advancements have driven continuous innovation in product design and functionality, transforming customer experience in several industries into more efficient, convenient, and accessible goods. The research focuses on the influence of marketing methods on the creation of innovations and their immediate link to customer satisfaction and welfare. Quantitative data was collected using customer surveys, focusing on product satisfaction, usability, and perceived quality of life improvements due to the introduction of new technology. The survey, which comprised 557 respondents, measured variables such as product efficiency, usability, time savings, and overall satisfaction with technology-based products. There is a large positive correlation between new feature introductions and the level of customer satisfaction. In the given study, it has been reported that seventy-five percent of the respondents believe that their daily life has become significantly better due to smart technology-based home appliances, while sixty-eight percent believe that high digital interfaces in consumer electronics made jobs easier and enjoyable. In addition, the ability of marketers to forecast the needs of customers and align product characteristics with changing technology was considered a critical factor in obtaining positive outcomes. This study indicates that the ongoing development of new technologies enhances the functionality of products and significantly enhances quality of life, emphasizing the role of marketing in the changing consumer environment.

Keywords: *Higher quality, Easier living, Results of marketers, Strictive implementation, New technology, Mechanism.*

1. INTRODUCTION

Today, in the rapidly changing contemporary world, people are increasingly chasing what adds convenience, efficiency, and enjoyment to their life. Marketers are now pivotal in this regard as they implement new technology and strategies all along to address evolving customer demands and expectations. By integrating such advanced technologies into their products, marketers enhance both the utility and appeal of these products, hence significantly enhancing customers' general quality of life. This pattern represents a broader shift towards more personalized, accessible, and high-performance devices that simplify and make daily activities easier and convenient (Rajaobelina et al., 2021).

Technological breakthroughs have opened up new areas for marketers to explore with the relentless pursuit of innovation. The availability of smart gadgets in homes and the development of AI-driven solutions in health and entertainment have the potential to change the consumer lifestyle. Through the application of these technologies, marketers design products that allow consumers to save time, become more productive, and enjoy a better life. The rise of smart home technology, including automatic thermostats and voice-activated assistants, has improved the efficiency of household management, giving consumers more control and comfort in their surroundings (Shava, 2024).

In addition, the integration of modern technology into consumer products goes beyond improving functionality. It also changes consumer behavior, changing the way people interact with goods and services. Marketers increase their products to fulfill customers' needs for convenience, communication, and sustainability. As a result, there is a perpetual cycle of improvement that

technological advancement to improve the standard of living and creates an ever smoother and enjoyable customer experience. The interactive pattern of technical ingenuity and advertisement shapes product development and plays a profound role in affecting the standard of living for contemporary customers. The convergence of marketing and technology is crucial in providing substantial advantages that transcend basic functioning, hence enhancing customer convenience and enjoyment (Luo et al., 2019).

2. BACKGROUND OF THE STUDY

Incorporating new technologies into products has become crucial in modern marketing strategies because corporations seek to meet the shifting demand of consumers who are now seeking more convenient, efficient, and improved living. This change is brought about by rapid changes in technology, particularly by the advancement of information technologies, artificial intelligence, and automation, which opened new avenues of enhancing product performance. As these technologies become more accessible and economical, marketers are using them to create new products that directly influence customers' daily lives (Gong et al., 2020). Historically, marketing has focused on product design and characteristics that meet the basic needs and desires of customers. As new technical tools emerge, marketers now need to include advanced processes into their products to remain competitive. The emergence of smart technology, such as interconnected devices, home automation systems, and AI-driven applications, has dramatically altered the landscape of product development. These technologies have the potential to enhance the productivity and performance of products while also enhancing user experiences through increased control, convenience, and personalization (Guido et al., 2022).

As integration with technology continues to grow, marketers are utilizing more aggressive implementation strategies to ensure that these innovations provide tangible benefits for customers. Companies are focusing on user-friendly interfaces, smooth connectivity, and live data to build products that save time, minimize effort, and make one happy. The shift toward technology-based marketing is most pronounced in electronics, home appliances, and healthcare sectors, where innovations such as voice recognition, machine learning, and predictive analytics have turned traditional products into smart, engaging solutions (Yang et al., 2021).

The growing emphasis on technology in the design of products is a response to changing customer needs. Modern customers are more technologically savvy and expect that products meet functional requirements but also deliver superior user experience. Through embracing these technological advancements, marketers can satisfy customers' needs, thus improving quality of life and making everyday chores easier. The continuous development and customer need illustrates the crucial role marketers play in shaping the future of consumer goods and lifestyles (Omolara et al., 2022).

3. PURPOSE OF THE RESEARCH

This issue sets out to explore how continuing integration of new innovations and techniques into consumer goods by marketers enhances quality of life on the whole and simplifies daily activities. The general aim is to explain in detail how the interaction of technical innovation with marketing technologies enhances the convenience, satisfaction of customers, and efficiency. Such research

seeks to depict, in more detail, the important role played by marketers in shaping and influencing the experiences of customers through the use of sophisticated technologies.

4. LITERATURE REVIEW

The integration of technology into consumer goods has received much attention in market research, especially on its impact on improving customers' quality of life and streamlining their daily tasks. A great deal of research has explored the impact of technical innovation on product development and its consequences on customer happiness, convenience, and overall well-being. The most significant area of focus is the growing reliance on intelligent technology (Yang et al., 2022). Integration of internet-enabled gadgets into products, like smart homes and wearable technologies, has transformed customer interactions with their surroundings to a considerable extent. The new changes offer the consumers much control over their surroundings, make things efficient, and personalize experiences that directly impact the quality of life right away. Similarly, gurus emphasize that the incorporation of new technology into goods facilitates customers to perform jobs much faster, more accurately and easily, thereby saving them time and providing more fun and enjoyment (Muhammed & Abubakar, 2022).

The most important ingredient is how marketers exploit technological innovations to meet emerging customer expectations. As a customer becomes more technologically literate, he begins to expect more intelligent, intuitive, and easy to use goods. Modern technological capabilities to be included in marketing target particular consumer issues, so that goods meeting functional needs are also conducive to better emotional well-being through processes being made simpler and more

comfortable. The emphasis on the role of automation, as well as artificial intelligence, in advertising approaches also comes up because proponents consider that, by incorporating features of AI and automation, marketers are better positioned to offer more highly personalized experiences. This personalization is an important aspect in the improvement of customer happiness, as it directly caters to individual tastes and behaviors, thus making consumers experience more esteemed (Bertrandias et al., 2023).

According to research, this constant and stringent use of new technologies by marketers leads to enormous improvements in people's daily activities and experiences as a consumer. With changing times, technology definitely molds the future of consumer items and the way they relate to improving the quality of human life.

5. RESEARCH QUESTION

i. In what ways does the ongoing integration of new technology by marketers into goods improve customers' quality of life and facilitate ease of living?

6. METHODOLOGY

A cross-sectional investigation was carried out by the researchers, and the study was carried out by the researcher for a period of four months in order to collect the data. For the cross-sectional design to be implemented, it was necessary to gather data at a single moment in time, which was both efficient and inexpensive. Many different organisations were responsible for carrying out research. A technique that is quantitative was chosen by the researcher because of the restricted

resources and the short amount of time available. Through the use of a random sampling process, each and every respondent was contacted for the survey. Following this, a sample size was determined using Rao Soft, and the total number of samples was 473. Individuals confined to wheelchairs or who are unable to read and write would have the survey questions read aloud by a researcher, who would then record their answers word for word on the survey form. While participants waited to complete their surveys, the researcher would inform them about the project and field any questions they may have. On occasion, it is asked that people finish and send back questionnaires simultaneously.

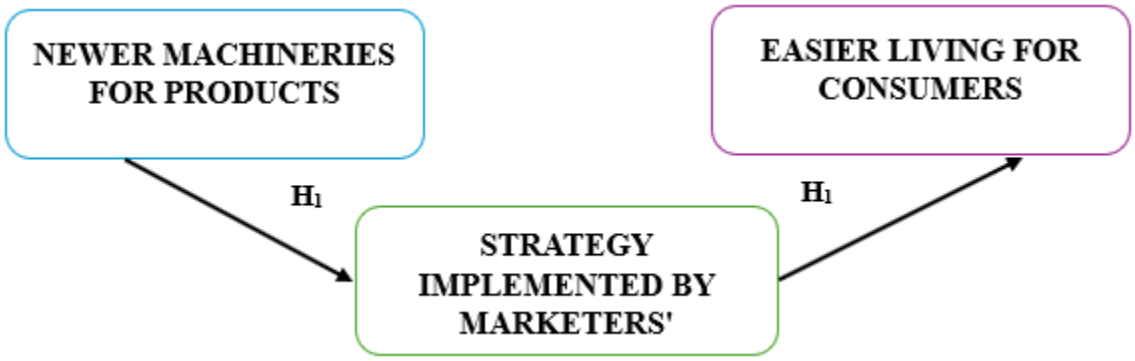
Sampling: Research participants filled out questionnaires to provide information for the research. Using the Rao-soft programme, researchers determined that there were 473 people in the research population, so researchers sent out 600 questionnaires. The researchers got 579 back, and they excluded 22 due to incompleteness, so researchers ended up with a sample size of 557.

Data and measurement: A questionnaire survey was used as the main source of information for the study (one-to-correspondence or google-form survey). Two distinct sections of the questionnaire were administered: Both online and offline channels' (A) demographic information, and (B) replies to the factors on a 5-point Likert scale. Secondary data was gathered from a variety of sites, the majority of which were found online.

Statistical Software: SPSS 25 was used for statistical analysis.

Statistical tools: To get a feel for the data's foundational structure, a descriptive analysis was performed. A descriptive analysis was conducted in order to comprehend the fundamental characteristics of the data. Validity was tested through factor analysis and ANOVA.

6.1 Conceptual Framework



7. RESULTS

7.1 Factor Analysis

Verifying the fundamental component structure of a collection of measurement items is a common use of Factor Analysis (FA). The scores of the observed variables are thought to be affected by latent factors that are not readily observable. The accuracy analysis (FA) method is a model-driven methodology. This research primarily focusses on constructing causal pathways that link observable events, hidden causes, and measurement errors.

The suitability of the data for factor analysis may be evaluated using the Kaiser-Meyer-Olkin (KMO) method. The sufficiency of the sample for each specific model variable and the overall model is evaluated. The statistics measure the degree of potential shared variation among several variables. Data with smaller percentages is often more appropriate for factor analysis. KMO yields integers ranging from zero to one. Sampling is considered sufficient if the KMO value is between 0.8 and 1.

Remedial action is required if the KMO is below 0.6, indicating insufficient sampling. Exercise your best judgement; some writers utilise 0.5 for this purpose, hence the range is 0.5 to 0.6.

• If the KMO is close to 0, it means that the partial correlations are large compared to the overall correlations. Component analysis is severely hindered by large correlations, to restate.

“Kaiser's cutoffs for acceptability are as follows:

A dismal 0.050 to 0.059.

• 0.60 - 0.69 below-average

Typical range for a middle grade: 0.70–0.79.

Having a quality point value between 0.80 and 0.89.

The range from 0.90 to 1.00 is really stunning.”

Table 1: KMO and Bartlett’s Test

KMO and Bartlett's Test[a]		
Kaiser-Meyer-Olkin Measure of Sampling Adequacy.		.957
Bartlett's Test of Sphericity	Approx. Chi-Square	6850.175
	df	190
	Sig.	.000
a. Based on correlations		

“The overall significance of the correlation matrices was further confirmed by using Bartlett's Test of Sphericity. A value of 0.957 is the Kaiser-Meyer-Olkin sampling adequacy. By using Bartlett's

sphericity test, researchers found a p-value of 0.00. A significant test result from Bartlett's sphericity test demonstrated that the correlation matrix is not a correlation matrix."

7.2 Test for Hypothesis

7.2.1 Dependent Variable (Higher Quality of Life of Consumers)

The "better quality of life" for consumers refers to an improved standard of living that is characterized by more well-being, satisfaction, and pleasure. It encompasses several aspects such as physical health, emotional well-being, personal safety, and access to resources that are needed. An enhanced quality of life regarding consumer goods is often influenced by advances that enhance ease, efficiency, and comfort. Products that make ordinary daily activities easier, more controllable, and personal, enhance quality of life. This can be achieved through innovative technology, such as smart products, automation, and artificial intelligence, which allows the consumer to save time and stress and make better-informed decisions, leading to improved life satisfaction. A better quality of life is, by its very nature, subjective and varies with individual needs and preferences, but it typically reflects a better balance between ease, enjoyment, and personal satisfaction (Genc et al., 2019).

7.2.2 Mediating Variable (Strategy Implemented by Marketers')

A strategy adopted by marketers is a systematic method or set of actions that is intended to achieve specific corporate goals, including an increase in sales, raising brand awareness, or enhancing customer satisfaction. Marketers employ various strategies, including market analysis, product development, focused promotion, and digital marketing, to effectively target and connect with

customers. In the sphere of emerging technology, these tactics often involve the infusion of advanced technologies, data-driven insights, and personalized experiences into goods and services. The idea is to capture changing customer demands, protect competitive advantages, and ultimately deliver improved quality of life and convenience to consumers (Popescu, 2019).

7.2.3 Independent Variable (New Technologies for Products)

New technologies for products are simply the latest developments of tools, systems, or innovation in goods to enhance their utility value, functionality, and effectiveness for its consumer. Those technologies include smart features and functionalities, automation, artificial intelligence, IoT, machine learning, and eco-friendly material. Integration of these kinds of technologies develops an efficient and intuitive product which may meet customers' various demands. Innovative technologies enhance convenience, save time, make things safer, and add more control, making products more appealing and contributing to an improved quality of life for consumers in various industries, such as home appliances, electronics, or healthcare (Illescas-Manzano et al., 2021).

- **Relationship Between New Technologies for Products and Higher Quality of Life of Consumers Through Strategy Implemented by Marketers**

The techniques utilised by marketers influence the correlation between innovative product technology and improved customer quality of life. As technology grows, marketers introduce newness into goods to satisfy needs of convenience, efficiency as well as personalization desired by customers. The integration of smart technologies, such as home automation and wearable devices, enhances the functionality of the products and allows users to carry out tasks more

conveniently, hence saving time and effort (Mazurek & Małagocka, 2019). Marketers, with strategic implementation, ensure that these technologies align with customers' expectations, thereby elevating their overall experience. With user-centric designs, real-time analytics, and bespoke solutions, marketers create products that improve life, leading to increased happiness and well-being. The strategic integration of emerging technologies results in products that heighten performance and enhance the quality of life, particularly by giving customers greater ease, comfort, and effectiveness in their day-to-day activities (Nuttavuthisit et al., 2019).

On the basis of the above discussion, the researcher formulated the following hypothesis, which was to analyse the relationship between New Technologies for Products and Higher Quality of Life of Consumers through Strategy Implemented by Marketers.

"H_{01}: There is no significant relationship between New Technologies for Products and Higher Quality of Life of Consumers through Strategy Implemented by Marketers."

"H_1: There is a significant relationship between New Technologies for Products and Higher Quality of Life of Consumers through Strategy Implemented by Marketers."

Table 2: H_1 ANOVA Test

ANOVA					
Sum					
	Sum of Squares	**df**	**Mean Square**	**F**	**Sig.**
Between Groups	89674.830	364	4976.394	587.893	.000
Within Groups	892.936	192	1.572		
Total	90567.766	556			

"In this study, the result is significant. The value of F is 587.893, which reaches significance with a p-value of .000 (which is less than the .05 alpha level). This means the ***"H_1: There is a significant***

relationship between New Technologies for Products and Higher Quality of Life of Consumers through Strategy Implemented by Marketers" is accepted and the null hypothesis is rejected."

8. DISCUSSION

The constant introduction of new technologies and processes into consumer products has undoubtedly transformed everyday life for the better, making things easier and more efficient. Marketers are instrumental in integrating technologies in ways that address changing customer demands for ease, personalization, and better experiences. Artificial intelligence, automation, and smart devices make things easy, save time, and are generally comfortable, so immediately enhancing quality of life. Marketers have to balance technological advances with user-friendliness and cost-effectiveness. The capacity to predict and fulfill expectations which marketers have when customers become more technologically proficient, remained to influence the future of consumer goods and their impact on well-being.

9. CONCLUSION

In short, through the continued assimilation of innovative technology into consumer products by marketers, quality of life has significantly been enhanced by means of greater convenience, efficiency, and personalization. Strategic innovation allows customers to employ more intelligent and intuitive products that facilitate easier everyday living and make better moments. With this regard, the marketer should change according to customer needs, and in return, the marketer must ensure that such innovations yield actual improvements in daily life. This continuous technological

advancement is crucial to build a future where customers will enjoy increased ease, comfort, and wellness.

REFERENCES

Bertrandias, L., Bernard, Y., & Elgaaied-Gambier, L. (2023). How using parental control software can enhance parents' well-being: the role of product features on parental efficacy and stress. Journal of Interactive Marketing, 58(2-3), 280-300.

Genc, E., Dayan, M., & Genc, O. F. (2019). The impact of SME internationalization on innovation: The mediating role of market and entrepreneurial orientation. Industrial Marketing Management, 82, 253-264.

Gong, X., Ye, Z., Liu, K., & Wu, N. (2020). The effects of live platform exterior design on sustainable impulse buying exploring the mechanisms of self-efficacy and psychological ownership. Sustainability, 12(6), 2406.

Guido, G., Ugolini, M. M., & Sestino, A. (2022). Active ageing of elderly consumers: insights and opportunities for future business strategies. SN Business & Economics, 2(1), 8.

Illescas-Manzano, M. D., Vicente López, N., Afonso González, N., & Cristofol Rodríguez, C. (2021). Implementation of chatbot in online commerce, and open innovation. Journal of Open Innovation: Technology, Market, and Complexity, 7(2), 125.

Luo, X., Tong, S., Fang, Z., & Qu, Z. (2019). Frontiers: Machines vs. humans: The impact of artificial intelligence chatbot disclosure on customer purchases. Marketing Science, 38(6), 937-947.

Mazurek, G., & Małagocka, K. (2019). Perception of privacy and data protection in the context of the development of artificial intelligence. Journal of Management Analytics, 6(4), 344-364.

Muhammed, Z., & Abubakar, I. R. (2022). Improving the quality of life of urban communities in developing countries. In Responsible Consumption and Production (pp. 357-370). Cham: Springer International Publishing.

Nuttavuthisit, K., Nuttavuthisit, K., & Achauer. (2019). Qualitative Consumer and Marketing Research. Springer Singapore.

Omolara, A. E., Alabdulatif, A., Abiodun, O. I., Alawida, M., Alabdulatif, A., & Arshad, H. (2022). The internet of things security: A survey encompassing unexplored areas and new insights. Computers & Security, 112, 102494.

Popescu, C. R. G. (2019). Addressing Intellectual Capital in the Context of Integrated Strategy and Performance: Emphasizing the Role of Companies' Unique Value Creation Mechanism, While Targeting Better Organizational Reporting in Romania: The Case of Green Marketing and Green Marketing Strategies. Journal of Marketing Research & Case Studies, 2019, 672821.

Rajaobelina, L., Prom Tep, S., Arcand, M., & Ricard, L. (2021). Creepiness: Its antecedents and impact on loyalty when interacting with a chatbot. Psychology & Marketing, 38(12), 2339-2356.

Shava, H. (2024). Unlocking Customer Happiness and Enhancing Quality of Life: The Potential of Small and Medium-Sized Enterprise ICT Initiatives in Stress-Inducing Environments. Sustainability (2071-1050), 16(19).

Yang, J., Cao, C., Ye, C., & Shi, Y. (2022). Effects of interface design and live atmosphere on consumers' impulse-buying behaviour from the perspective of human–computer interaction. Sustainability, 14(12), 7110.

Yang, Z., Jianjun, L., Faqiri, H., Shafik, W., Talal Abdulrahman, A., Yusuf, M., & Sharawy, A. M. (2021). Green internet of things and big data application in smart cities development. Complexity, 2021(1), 4922697.