p–ISSN: 2723 - 6609 e-ISSN: 2745-5254
Vol. 5, No. 11, November 2 024
http://jist.publikasiindonesia.id/

# Online Grocery Shopping Intentions: A Comparative Study between Gen Millenials and Gen Z in Indonesia

**Felicia Vionita[1*], Roger Alexsander Siburian[2]**
Universitas Bina Nusantara, Indonesia
Email: felicia.vionita@binus.ac.id[1*], roger.siburian@binus.ac.id[2]

*Correspondence

**Keywords:** online grocery shopping; generational; comparison Indonesia market.

**ABSTRACT**

This study focuses on behavioral intentions in buying groceries Online. This research also aims to compare the factors influencing Gen Millennial and Gen Z consumers. This research applies the Technology Acceptance Model (TAM). The hypotheses used are perceived usefulness, perceived ease of use, and perceived enjoyment of online grocery shopping. This research uses a survey to collect data from 199 respondents, 98 are millennials and 101 are Gen Z in Indonesia. The results showed that perceived usefulness and perceived enjoyment have a significant effect on online grocery shopping intentions in Gen Millennials and Gen Z, while perceived ease of use only affects online grocery shopping intentions in Gen Millennials.

## Introduction

The COVID-19 pandemic has changed many people's behavior patterns, including online shopping activities, especially online grocery shopping. In Indonesia, during the PSBB (large-scale social restrictions), many online grocery start-ups emerged such as SayurBox, TaniHub, Segari, and Traveloka Mart that received funding from investors.

However, over time only a few online grocery start-ups were able to survive. According to information from CNN Indonesia (2022), Traveloka Mart was only able to operate for six months, this was marked by officially closing the service in March 2022. In addition, the same phenomenon also happened to the start-up company Bananas which stopped its operations after operating for ten months (CNN Indonesia, 2022). HappyFresh temporarily stopped in the context of business restructuring due to default on obligations but resumed operations in September 2022 after obtaining funding. Segari laid off 24 percent of its employees in January 2023, and SayurBox also laid off its employees in 2023 (CNBC, 2023).

This phenomenon is contrary to the results of a survey conducted by (Advisor, 2024) Where the market size of online grocery is estimated to grow at a CAGR of 24.7% in the period 2024-2030. This growth estimate is also in line with the results of a survey conducted by TGM Consumer Sentiment Report in Indonesia 2024 that reveals a significant 31% of respondents indicate their intention to increase spending on necessities and groceries over the next three months. In more detail, Based on the total number of respondents, 38 percent of Gen Millennials agreed to do their grocery shopping online, followed by Gen Z at 26 percent.

Research that has been conducted by (Shameer, 2019) Revealed that Millennials and Gen Z are highly dependent on the use of technology in their lives, this can include choosing how they shop for groceries. According to Databoks (2022), the largest population in Indonesia is dominated by Gen Z (27.94%) and Gen Millennials (25.87%). Gen Millennials and Gen Z's dependence on technology and their large population is the reason for this research to focus on Gen Millennials and Gen Z in Indonesia.

Gen Millennials is a generation born between 1981 and 1994 and grew up in the internet era. (Robinson, 2017) This generation grew up in a world that was changing rapidly in terms of the economy, ecology, politics, society, and technology. (Tri Marhendra Rahardyan et al., 2023). Millennials have grown up in an online and social network society. They are familiar with computers, the internet, and graphical user interfaces (GUI) (Ruangkanjanases et al., 2021).

Gen Z is the generation born between 2000 and 2010, known as the first generation to grow up in a globally linked society and be accustomed to technology and instant information as the iGeneration or the internet generation. (Tri Marhendra Rahardyan et al., 2023). Gen Z also has sophisticated and complex visual abilities, producing many visual learning techniques.

A characteristic of Generation Z is their native use of technology. If millennials are considered the “digital pioneers”, who witnessed the explosion of technology and social media, then Gen Z was born in a world at the peak of technological innovation - where information can be accessed quickly and social media is increasingly available. (Jin, 2010).

Previous studies have shown that there are some factors in the technology acceptance model (TAM) affecting the purchase intentions of online buyers towards online groceries. Research conducted by (Mondal & Hasan, 2023) On online grocery shopping after the COVID-19 pandemic using the Technology acceptance model (TAM) theory found that there was a significant influence of perceived usefulness, perceived ease of use, and shopping habits during COVID-19 on online grocery shopping intentions but only focused on Gen Millennials in Bangladesh. Besides, research conducted by Ruangkanjanases (2021) comparing Thai and Indonesian millennials in adopting online grocery shopping through TAM shows that there is an influence of social influence, perceived usefulness, and perceived ease of use on the intention to purchase groceries online. There has been no comparative study

investigating consumer intention to adopt online shopping between millennials and Gen Z in Indonesia before.

The purpose of this study is to identify the direct impact of perceived usefulness, and perceived ease of use on online grocery shopping intentions, especially among Gen Millennials and Gen Z in Indonesia by adding perceived enjoyment as an additional indicator by recommendations from previous research. This research is expected to be able to answer whether there is the same influence between Gen Millennials and Gen Z with several different characteristics as mentioned above.

## Method

### Sample and Data Sources

The research design used in this study is quantitative research with non-probability sampling techniques, while the method used is a purposive sampling method because the sample is selected based on certain considerations, in this study those selected as samples are people who have done online grocery shopping which is divided into two generations: 14 to 29 years old as gen millennials, while 30 to 44 years old as gen Z. (Pradhana et al., 2024). Determining the sample size is based on the sample-to-item ratio, with the ratio should not be less than 5 to 1 (Gorsuch, 1983; Hatcher, 1994; Suhr, 2006). In this study, the number of indicators or items used is 14 times so there must be at least 70 samples. To collect data using the structured questionnaires. The questionnaire contains two types of questions such as demographic questions and close-ended questions, signifying the constructs.

### Measures

The dependent variable online grocery shopping intentions uses constructs adapted from (Abdullah et al., 2016). The independent variables perceived usefulness and perceived ease of use are also adapted from (Abdullah et al., 2016) Investigating the influence of the most commonly used external variables of TAM on students' Perceived Ease of Use (PEOU) and Perceived Usefulness (PU) of e-portfolios. Perceived enjoyment adapted from Hasan (2021). Each variable is measured ordinally with a five-point Likert scale taken from Sugiyono (2013), with weight one as strongly disagree, while weight five as strongly agree.

### Data Analysis

Data analysis used Partial Least Square (PLS) with Smart PLS 4.0 as the analysis tool. After the required data was collected, PLS was chosen for the study because it uses indicators to measure each construct and the measurement model is structural.

The PLS analysis program is divided into two parts: Measurement model analysis and Structural analysis. Measurement model analysis is used to define the measurement of latent variables and aims to measure the reliability and validity of the measurement model (Hair,2021). Meanwhile, Structural model analysis is useful for showing the interrelationships among latent variables in the form of a structured model (Hair,2021).

## Results and Discussion

### Demographic

The sample data collected was 199 respondents using questionnaires distributed via Google Forms. Based on the data collected, 51% are aged 14-29 years as Gen Z and 49% are aged 30-44 years as Millennials. If divided by gender males 42%, females 58%. Based on educational background, it is dominated by Bachelor (S1) as much as 85%, followed by students at 8%, then Master (S2) at 7%, and finally Doctor (S3) as much as 1%. Based on occupation, it is dominated by private employees 75%, students 10%, self-employed 9%, others 6%. Finally, based on area, most respondents are in Jabodetabek 96%, and the remaining 4% are outside Jabodebatek.

### Measurement Model

The study used a two-step approach to data analysis, where confirmatory factor analysis (CFA) is performed to ensure the quality of data and proposed constructs, and PLS-SEM is used to test the causal relationships between constructs. The convergent validity value is seen from the outer loading on endogenous and exogenous variables. The recommended value is >0.7. The AVE value is expected to be> 0.5. In this study, all indicators already have an outer loading value> 0.7 in Table 1 for Gen Millennials and Table 2 for Gen Z. Furthermore, the reliability test is based on the CR> 0.7 and CA > 0.7 values (Sarstedt et al., 2021). In this study, composite reliability and Cronbach's alpha are above 0.7. Therefore, these variables are considered reliable.

**Table 1**
**Measurement model result in Gen Millenials**

| Construct / Items | Factor Loadings | Cronbach's Alpha (α) | Composite Reliability (CR) | Average Variance Extracted (AVE) |
|---|---|---|---|---|
| **Perceived Usefulness** | | | | |
| Online grocery shopping would be helpful in my life | 0,736 | 0,726 | 0,847 | 0,650 |
| Online grocery shopping would improve my life | 0,772 | | | |
| Online grocery shopping would increase my productivity | 0,901 | | | |
| **Perceived Ease of Use** | | | | |
| Online grocery Shopping makes it easy to get what I want to purchase | 0,823 | 0,688 | 0,826 | 0,613 |
| Online grocery Shopping would be flexible shop | 0,719 | | | |

| | | | | |
|---|---|---|---|---|
| Online grocery shopping would be clear and understandable | 0,802 | | | |
| **Perceived enjoyment** | | | | |
| Online grocery shopping would be enjoyable | 0,864 | 0,812 | 0,888 | 0,726 |
| Online grocery Shopping would be interesting to me | 0,837 | | | |
| Online grocery Shopping would enhance my excitement | 0,857 | | | |
| **Online grocery Shopping intentions** | | | | |
| I intend to continue to shop online in the future | 0,879 | 0,785 | 0,875 | 0,700 |
| I intend to purchase from online sellers in the future | 0,768 | | | |
| I intend to continue online grocery shopping next few years | 0,859 | | | |

**Table 2**
**Measurement model result in Gen Z**

| Construct / Items | Factor Loadings | Cronbach's Alpha (α) | Composite Reliability (CR) | Average Variance Extracted (AVE) |
|---|---|---|---|---|
| **Perceived Usefulness** | | | | |
| Online grocery shopping would be helpful in my life | 0,741 | 0,726 | 0,845 | 0,646 |
| Online grocery shopping would improve my life | 0,837 | | | |
| Online grocery shopping would increase my productivity | 0,830 | | | |
| **Perceived Ease of Use** | | | | |
| Online grocery Shopping makes it easy to get what I want to purchase | 0,786 | 0,723 | 0,842 | 0,640 |
| Online grocery Shopping would be flexible shop | 0,813 | | | |

| | | | | |
|---|---|---|---|---|
| Online grocery shopping would be clear and understandable | 0,801 | | | |
| **Perceived Enjoyment** | | | | |
| Online grocery shopping would be enjoyable | 0,836 | 0,821 | 0,893 | 0,736 |
| Online grocery Shopping would be interesting to me | 0,871 | | | |
| Online grocery Shopping would enhance my excitement | 0,866 | | | |
| **Online grocery Shopping intentions** | | | | |
| I intend to continue to shop online in the future | 0,883 | 0,844 | 0,905 | 0,762 |
| I intend to purchase from online sellers in the future | 0,859 | | | |
| I intend to continue online grocery shopping next few years | 0,875 | | | |

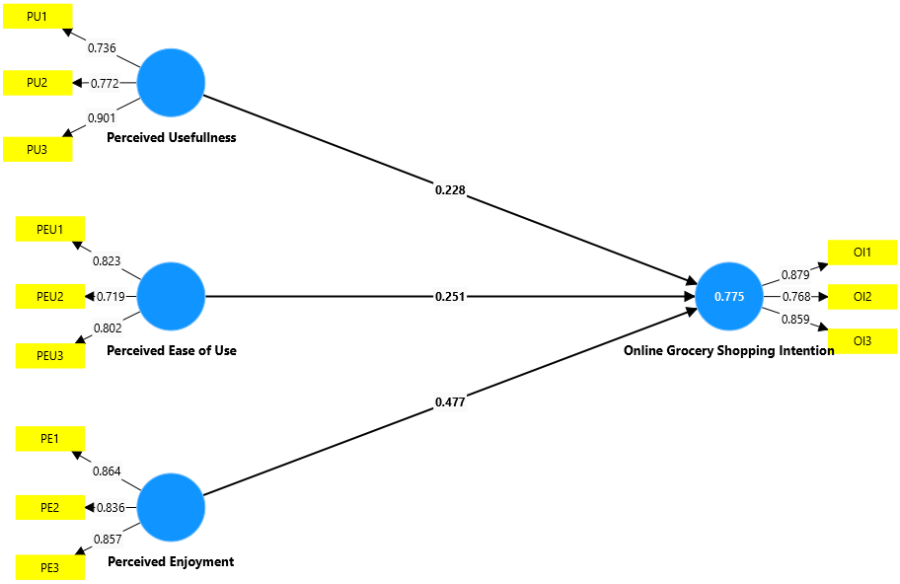


**Figure 1**
**Measurement Model Gen Millenials**

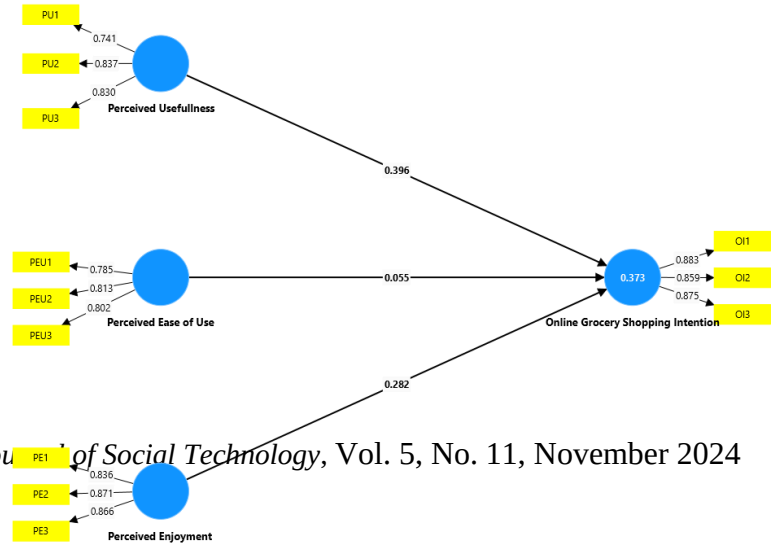

**Figure 2**
**Measurement Model Gen Z**

## Structural Model Analysis

After justifying the reliability and validity through the measurement model, the goodness of fit indices of the theoretical framework is assessed using the structural mode. The Coefficient of Determination (R-square) value in the Gen Millennial is 0,7. While in Gen Z 0,3. This means that the variable relationship to the Gen Millennial is moderate because it is above 0,5, while the variable relationship to Gen Z is weak because it is only above 0,25. The cross-validated redundancy (Q^2) value for Millennials' online grocery shopping intention variable is 218,126 and for Gen Z is 182,839. Because the value is greater than 0, it can be concluded that the model prediction is relevant to the dependent construct. This implies that the model can predict without using a sample. The result of the NFI value in Gen Millennials is 0,706 and the NFI in Gen Z is 0,680. Because all NFI values are <0,9, it means that the model is fit for testing (Hair, 2018). Based on the SRMR value, Gen Millennial is 0,093 and Gen Z is 0,089. Because the SRMR value is <0,1. Thus, it can be concluded that this research is included in the fit category (Hair, 2018).

## Hypothesis Testing

Based on the T-test, the following are the results of hypothesis testing:

**Table 5**
**Hypothesis Testing Gen Millenials**

| | T statistics (\|O/STDEV\|) | P values | Path Coefficient | Result |
|---|---|---|---|---|
| H1a : Perceived Usefullness -> Online Grocery Shoping Intention | 2,039 | 0,042 | 0,228 | Supported |
| H2a : Perceived Ease of Use -> Online Grocery Shoping Intention | 2,086 | 0,000 | 0,251 | Supported |
| H3a : Perceived Enjoyment -> Online Grocery Shoping Intention | 4,923 | 0,037 | 0,447 | Supported |

**Table 6**
**Hypothesis Testing Gen Z**

| | T statistics (\|O/STDEV\|) | P values | Path Coefficient | Result |
|---|---|---|---|---|
| H1b : Perceived Usefullness -> Online Grocery Shoping Intention | 3,701 | 0,000 | 0,396 | Supported |
| H2b : Perceived Ease of Use -> Online Grocery Shoping Intention | 0,549 | 0,583 | 0,055 | Not Supported |
| H3b : Perceived Enjoyment -> Online Grocery Shoping Intention | 2,455 | 0,014 | 0,282 | Supported |

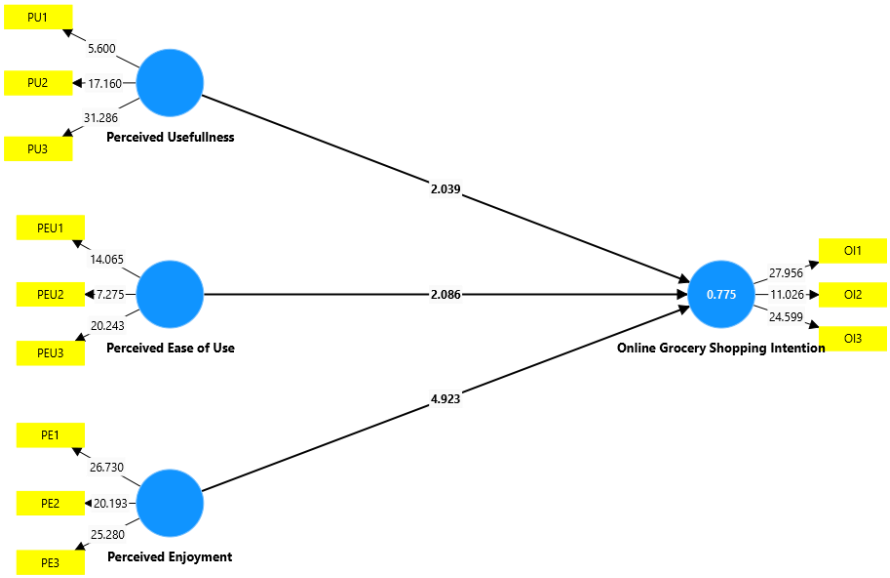


**Figure 5**
**Hypothesis Testing Gen Millenials**

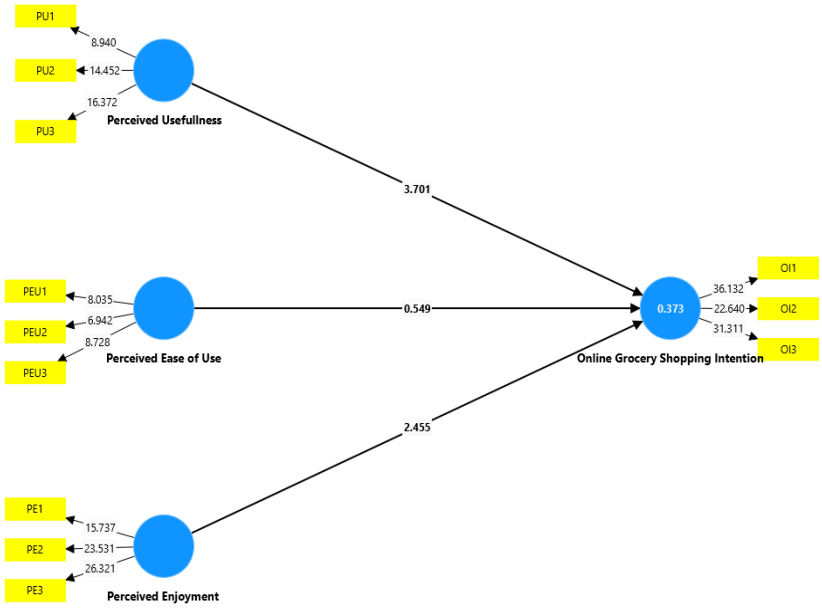


**Figure 6**

**Hypothesis Testing Gen Z**

H1a, H2a, and H3a are supported. Perceived usefulness, perceived ease of use, and perceived enjoyment have T statistics values greater than 1.66 and p-values smaller than 0.05. Indicates a significant influence on online grocery shopping intentions in Gen Millennials. H1b, H3b supported. Perceived usefulness and perceived enjoyment have T statistics values greater than 1.66 and p-values smaller than 0.05. Indicating a significant influence on online grocery shopping intentions in Gen Z. While H2b is not supported means that perceived ease of use does not have a significant effect on online grocery shopping intentions in Gen Z.

Based on the path coefficient value in Gen Millennials, the perceived enjoyment variable has the highest value compared to other variables, meaning that perceived enjoyment has a strong and positive influence on online grocery shopping intentions. This is based on the (Cohen, 1998) that a path coefficient value >0.35 means a strong influence. In Gen Z, the highest path coefficient value is on the perceived usefulness variable. This means that perceived usefulness has a strong and positive influence on online grocery shopping intentions in Gen Z.

Gen Millennials and Gen Z are generations that are familiar with the use of technology in everyday life. However, there are still differences in the timing of technology adoption. Gen Z is a native of the digital generation, while Gen Millennials are still in the transitional period between digital and conventional. Gen Z grew up with more advanced technology and easier access to information than Gen Millennials. They are also better able to cope with technological issues and adapt to digital devices faster than Millennials because they tend to have access to multiple sources of information. As such, Gen Z tends to be more accustomed to seeking answers or solutions independently.

Perceived enjoyment is a factor that influences Gen Millennials and Gen Z in online grocery shopping intentions, in line with research conducted by Tujom (2021). Indicating that online shopping activities must be fun and interesting for them because they are used to activities on social media. So online grocery platforms need to create interesting and fun activities that create excitement when shopping for groceries online. Such as complementing it with games, sales discounts, and gift coupons for online transactions.

In addition, online grocery shopping can make their lives easier and increase their productivity in their busy schedules due to their productive age. Therefore, the first two factors, perceived enjoyment, and perceived usefulness, are the main factors in online grocery shopping intentions.

This study also shows that perceived ease of use significantly affects online grocery shopping intention in Gen Millennials, but it has no significant effect on Gen Z. This indicates that Gen Z, which is a generation born in the digital era, does not think that the ease of use of technology does not affect their intention to use it because they are familiar with technology and can find solutions independently, while Gen Millennials still think that ease of use still plays an important role.

## Conclusion

This study has several limitations, leaving several potential areas for future research. First, this research was conducted over a limited period, while future research could be conducted over a longer period. Second, this study only focuses on the Gen Millenials and Gen Z, so these findings cannot be generalized to all customers. Third, this study only uses perceived usefulness, perceived ease of use, and perceived enjoyment as predictive variables, while future research can explain the effects of customer satisfaction, trust, and security as predictors of online grocery shopping in Indonesia.

## Bibliography

Abdullah, F., Ward, R., & Ahmed, E. (2016). Investigating the influence of the most commonly used external variables of TAM on students' Perceived Ease of Use (PEOU) and Perceived Usefulness (PU) of e-portfolios. *Computers in Human Behavior*, *63*, 75–90.

Advisor, M. (2024). *Indonesia Online Grocery Market Research Report: Forecast (2024-2030)*.

CNBC. (2023). *Sederet Startup Sayur-Buah RI yang PHK, Bangkrut, atau Tutup*.

CNN Indonesia. (2022). *Startup Bananas Tutup Meski Baru Operasi 10 Bulan*.

Jin, S. A. A. (2010). The effects of incorporating a virtual agent in a computer-aided test designed for stress management education: The mediating role of enjoyment. *Computers in Human Behavior*, *26*(3), 443–451. https://doi.org/10.1016/j.chb.2009.12.003

Mondal, S., & Hasan, A. A.-T. (2023). Online grocery shopping intentions in the post-COVID-19 context: a case of millennial generations in Bangladesh. *South Asian Journal of Marketing*. https://doi.org/10.1108/sajm-01-2023-0001

Pradhana, I. P. D., Kusnadhy, D. B., Saputra, I. K. A. W., Wijaya, I. P. Y. P., & Sihaloho, A. P. (2024). A Phenomenological Study of Gen Z Workers in Facing Conflict Generation Gap in the World of Work. *JKBM (JURNAL KONSEP BISNIS DAN MANAJEMEN)*, *10*(2), 223–236.

Robinson, S. R. (2017). *Engaging a Multigenerational Workforce*. Walden University.

Ruangkanjanases, A., Sirisrisakulchai, P., Natali, & Simamora, B. H. (2021). Predicting Consumer Intention to Adopt Online Grocery Shopping: A Comparative Study between Millennials in Thailand and Indonesia. *International Journal of Electronic Commerce Studies*, *12*(2), 193–208. https://doi.org/10.7903/ijecs.1894

Shameer, S. (2019). *Welcome the New Kids on the Block: How Millennials and Gen Z Are Disrupting FinTech*.

Tri Marhendra Rahardyan, Bakri, M. R., & Anastasya Utami. (2023). The generation gap in fraud prevention: Study on Generation Z, generation X, millennials, and boomers. *International Journal of Research in Business and Social Science (2147- 4478)*, *12*(3), 361–375. https://doi.org/10.20525/ijrbs.v12i3.2566