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ANALYSIS OF DIFFERENCES IN CONSUMPTION LEVELS BETWEEN GENERATION Y AND GENERATION Z INFLUENCED BY DIGITALIZATION, SOCIAL FACTORS, AND DEMOGRAPHIC CHARACTERISTICS

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Abstract

This study aims to analyze the influence of digitalization and social factors on consumption levels among Generation Y and Generation Z by considering generational and demographic characteristics as moderating variables. The study employed a quantitative approach using primary data collected through questionnaires distributed to 200 respondents in Medan City. Likert-scale data were transformed from ordinal to interval scales using the Method of Successive Intervals (MSI). Data analysis was conducted using the Moderated Multiple Regression (MMR) method to examine the direct effects of the independent variables and the moderating roles of generational and demographic variables. The results indicate that digitalization and social factors have a positive and significant effect on consumption levels. Generational and demographic variables also exert a positive and significant influence on community consumption levels. However, the moderation analysis reveals that neither generation nor demographic characteristics moderate the relationship between digitalization and social factors and consumption levels. These findings suggest that the effects of digitalization and social factors on consumption are relatively consistent across different generational and demographic groups. This study confirms that digitalization is a dominant factor influencing consumer behavior in the digital economy era, supported by social environmental influences as well as generational and demographic characteristics.

Keywords: *Consumption Level, Digitalization, Social Factors, Generation, Demographics.*

INTRODUCTION

In the era of globalization and rapid digital transformation, understanding generational dynamics has become a crucial element across various disciplines, including economics, sociology, psychology, human resource management, and communication studies. Generations, defined as demographic groups based on birth-year cohorts, are shaped by historical events, technological advancements, and socio-economic changes that influence their values, attitudes, and behaviors. This concept was systematically developed by scholars such as Neil Howe and William Strauss through the Generational Cycle Theory, which emphasizes that each generation possesses unique characteristics resulting from its external environmental context. In this regard, Generation Y (also known as Millennials) and Generation Z have emerged as two dominant groups in the contemporary social and economic landscape, with significant implications for labor markets, consumption patterns, and social interactions. This study seeks to explore the backgrounds of these two generations, compare their characteristics, and highlight their relevance in addressing future challenges, particularly amid technological disruption and global uncertainties such as the COVID-19 pandemic. These generations exhibit significant differences in consumption patterns, particularly regarding their preferences for technology and social interactions influenced by digital media (Wibowo & Ayuningtyas, 2024). Based on Indonesia's population data by generation in 2025, the country's demographic composition is currently dominated by Generation Z and Generation Y, comprising approximately 66.77 million and 64.59 million individuals, respectively. Together, these two generations account for more than 48% of the national population, indicating that Indonesia is currently experiencing a demographic bonus, a condition in which the proportion of the productive-age population significantly exceeds that of the non-productive population.

The dominance of these younger generations has substantial implications for labor force availability and economic development. Generation Z (aged 15–29 years) represents an early productive-age group entering the workforce, adapting rapidly to technological changes, and exhibiting consumption behaviors highly influenced by digitalization. Meanwhile, Generation Y (aged 30–44 years) is at the peak of its productive years, possesses relatively stable purchasing power, and plays a vital role in economic growth and digital innovation. Both generations serve as the backbone of Indonesia's digital economy, acting as producers of creative labor and primary consumers in digital markets.

Generation X (aged 45–59 years), numbering approximately 52.40 million individuals, serves as a transitional cohort between the analog and digital eras and holds considerable potential in organizational leadership and economic policymaking. Meanwhile, Generation Alpha (aged 0–14 years), consisting of approximately 66.72 million individuals, remains outside the productive age group but serves as an important indicator of the sustainability of Indonesia's demographic bonus in the future. Conversely, the Baby Boomer generation (aged over 59 years), comprising approximately 33.94 million individuals, reflects an increasing dependency burden that must be balanced through the productivity of younger generations.

Consumption levels in both urban and rural areas are increasingly influenced by digitalization, which enhances access to information and services and shapes consumption patterns through the expansion of digital platforms. Digitalization has transformed the way individuals shop and interact with products, creating new opportunities for consumption behavior in both settings (Zhu & Wang, 2023). The impact of digitalization is particularly evident in the context of e-commerce, which has revolutionized consumer engagement with products and services. Platforms such as Shopee and Tokopedia have facilitated greater accessibility to a wide variety of goods, enabling consumers to make purchasing decisions based on price comparisons and product reviews, thereby increasing their purchasing power. This transformation indicates that digitalization not only changes shopping behavior but also influences purchasing decisions through more transparent and accessible information.

Data on internet usage in Indonesia demonstrate a consistent increase over time. In 2021, the proportion of internet users reached 62.1%, rising to 72.78% by 2024. This trend indicates a significant increase in digital technology adoption over the past four years, with internet access growing by more than ten percentage points. As internet accessibility expands, individuals gain greater opportunities to engage with digital platforms, including e-commerce, online marketplaces, and digital financial services, thereby expanding the scope of online consumption activities. This phenomenon illustrates how digitalization has created a new consumption ecosystem characterized by speed, interactivity, and personalization. The Theory of Planned Behavior (TPB), proposed by Icek Ajzen, provides a relevant framework for explaining the relationship between digitalization and consumption levels. The theory posits that individual behavior is primarily driven by intention, which is formed through three key components: attitudes toward behavior, subjective norms, and perceived behavioral control. Intentions to engage in specific actions, including consumption decisions in digital contexts, are strongly influenced by individuals' perceptions of these factors.

In addition to digital factors, subjective norms play an important role through social and environmental influences. In increasingly connected societies, consumption behavior is often shaped by social tendencies, such as the purchasing habits of peers and social groups actively engaged in online shopping. When individuals observe that people around them regularly make digital purchases, social pressure or encouragement may emerge, motivating them to adopt similar behaviors. Consequently, subjective norms contribute to strengthening the adoption of digital consumption practices. Beyond TPB, the perspective of Behavioral Economics also provides conceptual support for understanding the relationship between digitalization and consumption levels. This approach emphasizes that digital transformation alters consumers' psychological and cognitive mechanisms in decision-making processes (Zaman et al., 2024). Both TPB and Behavioral Economics offer robust conceptual frameworks for explaining how digitalization influences consumption behavior.

The relationship between social influence and consumption levels can also be explained through Social Comparison Theory, introduced by Festinger (1954). This theory argues that individuals tend to compare themselves with others to evaluate their social standing. In the context of consumption, such comparisons generate motivations to align lifestyles and purchasing behaviors with those of surrounding social groups. For example, individuals who observe their peers using specific products or services on social media may be more inclined to purchase the same products in order to maintain a comparable social image. Thus, social influence plays a significant role in shaping consumer preferences and purchasing decisions. The phenomenon of social proof also significantly shapes consumption behavior in the digital era. As described by Cialdini (2001) in the theory of Social Influence, social proof refers to individuals' tendency to follow the actions of others when those actions are perceived as correct or

popular. In digital environments, social proof is often manifested through user reviews, purchase counts, and influencer recommendations. When consumers observe that a product is widely used or positively reviewed, they become more confident and motivated to purchase it. Consequently, aggregate consumption levels increase because purchasing decisions are guided not only by rational economic considerations but also by social perceptions (Hatta, 2024). From a macroeconomic perspective, social influence can further amplify consumption multipliers within society. When a social group demonstrates increased consumption of certain goods—such as technology products, fashion items, or digital services—it may generate a demonstration effect on other groups. As explained in post-Keynesian consumption theory, this effect suggests that consumption behavior is influenced not only by income but also by the desire to emulate the lifestyles of groups with higher socio-economic status.

Therefore, social influence in the digital era cannot be overlooked when explaining shifts in societal consumption patterns. Social interactions through digital media reinforce normative and emotional factors in purchasing decisions while simultaneously creating more complex consumption dynamics. Social influence functions as a non-economic mechanism that accelerates the diffusion of consumption behaviors across demographic and geographic groups. Consequently, analyses of consumption levels in the digital era should incorporate social and psychological dimensions alongside economic and technological factors to provide a comprehensive understanding of modern consumer behavior (Lesmana, 2024).

Previous studies on consumption levels have employed various approaches and methodologies, demonstrating how social and technological changes contribute to dynamic consumption behavior across generations. Theoretical perspectives suggest that digitalization, social factors, and demographic characteristics influence consumption levels. Grigoreva et al. (2021), for instance, found that Generation Z's consumption patterns are shaped by their constant online presence, dependence on digital information, and preference for visual content. Similarly, Hasdiansa et al. (2023) highlighted that both generations are becoming increasingly aware of environmental issues and utilize social media to inform purchasing decisions. Although their study did not explicitly address the broader effects of digitalization, social factors, and demographics on consumption levels, it emphasized the significant role of social media in shaping preferences for environmentally friendly products. Furthermore, Lestari et al. (2022) demonstrated that digitalization significantly affects Generation Y's consumption behavior by transforming shopping habits through e-lifestyles and digital culture, leading to impulsive and excessive purchasing behavior. Social factors, including peer influence and online communities, further encourage consumptive tendencies.

Despite the growing body of research on consumption behavior in the digital era, several gaps remain insufficiently explored. One major limitation is the scarcity of comparative studies that directly examine consumption behavior differences between Generation Y (Millennials) and Generation Z. These generations possess distinct characteristics regarding technology adoption and consumption patterns, with Generation Y serving as a transitional digital cohort and Generation Z growing up entirely within the digital era. Most previous studies have focused primarily on Generation Z, thereby overlooking intergenerational consumption dynamics that collectively shape national consumption patterns. Moreover, research simultaneously integrating social factors, digitalization, and demographic characteristics within a single analytical framework remains limited. Modern consumption behavior is shaped not only by economic and technological factors but also by social influence, group norms, and intergenerational social identities.

Considering these gaps, a more comprehensive empirical model is needed to analyze differences in consumption levels across generations based on the digital exposure index, social engagement level, and urban–rural demographic characteristics. Such a model is expected to provide deeper insights into how the interaction between technological, social, and demographic factors shapes the consumption patterns of Generations Y and Z. As the largest metropolitan city outside Java and an economic hub in Sumatra, Medan exhibits relatively high levels of urbanization and digital penetration. This condition makes Medan an important representation of an urban area undergoing economic and social digital transformation. Meanwhile, surrounding regions such as Deli Serdang, Binjai, and Langkat display semi-urban and rural characteristics that remain in the process of digital transition. This contrast creates diverse social and digital contexts that are valuable for investigating differences in consumption patterns across varying levels of technological development.

Furthermore, the selection of this region is relevant because quantitative regional studies specifically examining the relationships among digital exposure, social engagement, and consumption levels outside Java remain limited. Most studies on digital behavior in Indonesia have focused on major cities such as Jakarta, Bandung, and Surabaya, providing limited representation of large non-Java urban centers such as Medan. Therefore, this study is expected to address this regional research gap while contributing empirical evidence regarding the transformation of digital consumption behavior in North Sumatra.

Based on the empirical issues, relevant theories, and socio-economic phenomena discussed above, the researcher considers it essential to conduct a more in-depth investigation of consumption levels and their determining factors. The preceding discussion raises important questions regarding how digitalization, social factors, and demographic characteristics collectively influence consumption levels, particularly among Generation Y (Millennials) and Generation Z (digital natives), who serve as the primary actors in today's digital economy. Considering the existing research gaps and the need for a comprehensive empirical model, this study is undertaken under the title: **"Analysis of Differences in Consumption Levels Between Generation Y and Generation Z Influenced by Digitalization, Social Factors, and Demographic Characteristics."**

RESEARCH METHOD

This study was conducted in November 2025 in Medan City through a hybrid questionnaire distribution method, consisting of both offline and online surveys using Google Forms. The research focuses on examining the influence of digitalization and social factors on the consumption levels of Generation Y and Generation Z while considering generational and demographic characteristics as moderating variables. Consumption levels were measured through primary, secondary, and tertiary expenditure patterns, whereas digitalization was assessed through indicators of technology access, transaction convenience, and digital promotion. Social factors were measured using descriptive norms and injunctive norms that influence individual consumption behavior. Medan City was selected as the research location because it represents an urban area experiencing rapid digital development while being adjacent to rural regions with distinct socio-economic characteristics, thereby providing a comprehensive representation of variations in consumer behavior. (Aiken & West, 1991; Ghozali, 2021).

This study employed a quantitative approach using primary data collected through a Likert-scale questionnaire and secondary data obtained from the Indonesian Central Bureau of Statistics (Badan Pusat Statistik – BPS), the Ministry of Communication and Digital Affairs (Kominfo), and various scientific publications related to digitalization and consumer behavior. The study population consisted of Generation Y and Generation Z individuals residing in Medan and its surrounding areas. A purposive sampling technique was employed based on specific criteria, including internet accessibility and active participation in both online and offline consumption activities. A total of 200 respondents were selected and proportionally distributed across generations and residential areas. The research instrument was tested using the Pearson Product-Moment validity test and Cronbach's Alpha reliability test to ensure the accuracy and consistency of the measurements. (Arikunto, 2019; Hair et al., 2019; Green, 1991).

Data analysis was conducted using Moderated Multiple Regression (MMR) with the assistance of IBM SPSS Statistics to examine the effects of digitalization and social factors on consumption levels, as well as the moderating roles of generational and rural–urban demographic characteristics. Prior to hypothesis testing, classical assumption tests were performed, including tests of normality, multicollinearity, and heteroscedasticity, to ensure that the regression model satisfied the criteria of the Best Linear Unbiased Estimator (BLUE). Hypothesis testing was carried out using the F-test, t-test, and ΔR^2 (Change in R^2) analysis to assess the significance of simultaneous effects, partial effects, and moderating effects among the variables. Through this approach, the study is expected to provide empirical insights into the consumption behavior of younger generations in the digital era and the influence of social and spatial environments on consumption decisions in Indonesia. (Baron & Kenny, 1986; Field, 2018; Hayes, 2018; Hair et al., 2019).

RESULTS AND DISCUSSION

Validity Test

Table 1. Validity Test Results

Item	Total Correlation	Description
Y.1	-0.076	Invalid
Y.2	.438*	Valid
Y.3	.472**	Valid
Y.4	.455*	Valid
Y.5	.367*	Valid
Y.6	.377*	Valid
Y.7	.366*	Valid
Y.8	0.235	Valid
Y.9	-0.003	Invalid
Y.10	.507**	Valid
Y.11	0.309	Valid
Y.12	.456*	Valid
X1.1	.417*	Valid
X1.2	.369*	Valid
X1.3	.372*	Valid
X1.4	.548**	Valid
X1.5	.620**	Valid
X1.6	.512**	Valid
X1.7	.576**	Valid
X1.8	.540**	Valid
X1.9	0.325	Valid
X1.10	0.254	Valid
X1.11	.482**	Valid
X1.12	-0.184	Invalid
X1.13	0.030	Valid
X2.1	.436*	Valid
X2.2	.518**	Valid
X2.3	0.270	Valid
X2.4	0.271	Valid
X2.5	0.293	Valid
X2.6	0.305	Valid
X2.7	.480**	Valid
X2.8	.438*	Valid
X2.9	0.329	Valid
X2.10	0.121	Valid

Source: Processed SPSS Output

Based on the validity test results presented in Table 1, it can be observed that not all questionnaire items met the validity criteria. Several items, namely Y.1, Y.9, and X1.12, were found to be invalid because their calculated correlation coefficients (r-calculated) were lower than the critical r-table value of 0.361. This finding indicates that these items were not able to adequately represent the constructs being measured. Therefore, to maintain the quality

of the research instrument and ensure that each indicator accurately measures its respective variable, items Y.1, Y.9, and X1.12 were excluded from the instrument and were not included in subsequent analyses.

Reliability Test

Table 2. Reliability Test Results

Reliability Statistics	Value
Cronbach's Alpha	0.776
Number of Items	35

Source: Processed SPSS Output

Based on the reliability test results presented in Table 2, the Cronbach's Alpha coefficient was found to be 0.776. This value exceeds the minimum reliability threshold commonly applied in social science research, which is 0.60. Therefore, the research instrument demonstrates good internal consistency, indicating that all questionnaire items can be considered reliable. Consequently, the instrument is deemed capable of measuring the research variables consistently and is suitable for use in further data analysis.

Descriptive Statistical Analysis of Respondents

This study involved 200 respondents, of whom 54.5% were female and 45.5% were male. Based on age distribution, the majority of respondents were between 15 and 19 years old (27.5%), followed by those aged 30–34 years (20.5%), indicating the predominance of younger age groups in the sample. In terms of occupation, most respondents were students (36.5%), while the highest educational attainment was predominantly senior high school graduation (56.5%), suggesting that respondents generally possessed moderate to high educational backgrounds. Furthermore, the largest proportion of respondents' expenditures was allocated to food and beverages (47.0%). Regarding shopping preferences, 51.0% of respondents preferred online shopping over offline shopping, reflecting the growing adoption of digital consumption practices among the study population.

Descriptive Statistical Analysis of Variables

1. Descriptive Analysis of the Digitalization Variable (X1)

Table 3. Descriptive Statistics of the Digitalization Variable

Variable	N	Minimum	Maximum	Mean	Std. Deviation
X1.1	200	1	5	3.38	0.806
X1.2	200	1	5	3.27	0.859
X1.3	200	1	5	3.27	0.831
X1.4	200	1	5	3.34	0.836
X1.5	200	1	5	3.30	0.912
X1.6	200	1	5	3.26	0.833
X1.7	200	1	5	3.27	0.825
X1.8	200	2	5	3.24	0.811
X1.9	200	1	5	3.36	0.924
X1.10	200	1	5	3.34	0.791
X1.11	200	1	5	3.24	0.871
X1.12	200	1	5	3.22	0.886
Valid N (listwise)	200				

Source: Processed SPSS Output

Based on the descriptive analysis results, all indicators of the digitalization variable were assessed by 200 respondents, with minimum values generally equal to 1 and maximum values equal to 5, indicating that respondents utilized the full range of the Likert scale. The mean scores of the digitalization variable ranged from 3.22 to 3.38, suggesting that respondents' level of digitalization was moderate to relatively high. The highest mean values were observed for indicators X1.1, X1.9, X1.4, and X1.10, while the lowest mean value was recorded for X1.12. Nevertheless, this indicator still reflected a relatively positive response toward the measured aspect of digitalization. Furthermore, the standard deviation values ranged from 0.791 to 0.924, indicating relatively homogeneous responses

among participants. Overall, the findings suggest that respondents, particularly those belonging to Generation Y and Generation Z, demonstrated a relatively high level of digital technology utilization in their daily activities.

2. Descriptive Analysis of the Social Variable (X2)

Table 4. Descriptive Statistics of the Social Variable

Variable	N	Minimum	Maximum	Mean	Std. Deviation
X2.1	200	1	5	3.25	0.830
X2.2	200	1	5	3.18	0.853
X2.3	200	1	5	3.46	0.844
X2.4	200	1	5	3.35	0.873
X2.5	200	1	5	3.25	0.859
X2.6	200	1	5	3.39	0.884
X2.7	200	1	5	3.37	0.916
X2.8	200	1	5	3.34	0.866
X2.9	200	1	5	3.35	0.913
X2.10	200	1	5	3.37	0.798
Valid N (listwise)	200				

Source: Processed SPSS Output

Based on the descriptive analysis results, all indicators of the social variable were evaluated by 200 respondents, with minimum values of 1 and maximum values of 5, indicating the use of the entire Likert scale range. The mean scores ranged from 3.18 to 3.46, suggesting that social factors had a moderate to relatively high influence on respondents' consumption behavior. The highest mean value was observed for indicator X2.3, followed by X2.6, X2.7, and X2.10, whereas the lowest mean value was found for X2.2. Despite this, respondents still demonstrated relatively positive perceptions of social influences. In addition, standard deviation values ranging from 0.798 to 0.916 indicate relatively homogeneous responses. Overall, these findings suggest that social factors continue to play an important role in influencing consumption behavior, particularly among Generation Y and Generation Z.

3. Descriptive Analysis of the Consumption Level Variable (Y)

Table 5. Descriptive Statistics of the Consumption Level Variable

Variable	N	Minimum	Maximum	Mean	Std. Deviation
Y.1	200	1	5	4.14	0.977
Y.2	200	1	5	4.20	0.913
Y.3	200	1	5	4.13	0.960
Y.4	200	2	5	4.21	0.887
Y.5	200	2	5	4.23	0.901
Y.6	200	1	5	4.16	0.990
Y.7	200	2	5	4.18	0.976
Y.8	200	1	5	4.25	0.906
Y.9	200	1	5	4.20	0.949
Y.10	200	1	5	4.24	0.915
Valid N (listwise)	200				

Source: Processed SPSS Output

Based on the descriptive analysis results, all indicators of the consumption level variable were assessed by 200 respondents, with minimum values ranging from 1 to 2 and maximum values of 5, indicating that respondents utilized nearly the entire Likert scale range. The mean scores ranged from 4.13 to 4.25, suggesting that respondents' consumption levels were relatively high. The highest mean values were observed for indicators Y.8, Y.10, and Y.5, while the lowest mean values were found for Y.3 and Y.1. Nevertheless, these indicators still reflected a relatively high level of consumption. Furthermore, standard deviation values ranging from 0.887 to 0.990 indicate relatively

homogeneous responses among respondents. Overall, the findings suggest that respondents exhibited relatively high consumption levels in the digital economy era.

Moderated Multiple Regression (MMR) Results

Classical Assumption Tests

Normality Test

The normality test was conducted to determine whether the residuals in the regression model were normally distributed. A normal distribution of residuals is an important assumption in linear regression analysis, as it affects the accuracy of the estimated results. A good regression model is characterized by normally distributed residuals. Therefore, this study performed a normality test to ensure that the data satisfied the normality assumption and that the regression analysis could be conducted appropriately. In this study, normality was assessed using the Kolmogorov–Smirnov Test. The analysis produced an Asymp. Sig. (2-tailed) value of 0.200, which is greater than the significance level of 0.05. Therefore, it can be concluded that the data are normally distributed and meet the normality assumption required for regression analysis.

Table 6. Normality Test Results

One-Sample Kolmogorov–Smirnov Test

One-Sample Kolmogorov-Smirnov Test

			Unstandardized Residual
N			200
Normal Parameters[a,b]	Mean		.0000000
	Std. Deviation		.84760892
Most Extreme Differences	Absolute		.052
	Positive		.052
	Negative		-.050
Test Statistic			.052
Asymp. Sig. (2-tailed)[c]			.200[d]
Monte Carlo Sig. (2-tailed)[e]	Sig.		.217
	99% Confidence Interval	Lower Bound	.207
		Upper Bound	.228

a. Test distribution is Normal.
b. Calculated from data.
c. Lilliefors Significance Correction.
d. This is a lower bound of the true significance.
e. Lilliefors' method based on 10000 Monte Carlo samples with starting seed 221623949.

Source: Processed SPSS Output

Multicollinearity Test

Table 7. Multicollinearity Test Results

Coefficients[a]

Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.	Collinearity Statistics	
		B	Std. Error	Beta			Tolerance	VIF
1	(Constant)	2.737	.109		25.225	<.001		
	Digitalisasi	.527	.103	.513	5.122	<.001	.281	3.564
	Sosial	.404	.095	.393	4.262	<.001	.331	3.019
	Generasi	.272	.124	.118	2.189	.030	.973	1.028
	Demografi	.253	.124	.110	2.039	.043	.969	1.032
	X1D1	.035	.113	.025	.310	.757	.417	2.399
	X2D1	-.115	.113	-.081	-1.021	.308	.443	2.259
	X1D2	-.119	.112	-.081	-1.063	.289	.484	2.068
	X2D2	.084	.113	.053	.746	.456	.551	1.816

a. Dependent Variable: Consumption Level

Source: Processed SPSS Output

Based on Table 7, the results indicate that the Variance Inflation Factor (VIF) values for all independent variables are below 10, while the Tolerance values for all independent variables exceed 0.10. These findings suggest that there is no multicollinearity among the independent variables included in the regression model. Therefore, it can be concluded that the model satisfies the multicollinearity assumption and is appropriate for further regression analysis.

Heteroscedasticity Test

The heteroscedasticity test was conducted to determine whether the regression model exhibited constant residual variance (homoscedasticity), which is essential for ensuring the reliability of regression estimates. A regression model is considered appropriate when the variance of its residuals remains constant across all levels of the independent variables.

In this study, heteroscedasticity was assessed using the Glejser Test. The results indicate that all variables have significance values greater than 0.05. Therefore, it can be concluded that the regression model does not suffer from heteroscedasticity and satisfies the assumption of homoscedasticity. Consequently, the model can be considered reliable for further analysis.

Table 8. Heteroscedasticity Test Results

Coefficients[a]

Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.
		B	Std. Error	Beta		
1	(Constant)	.691	.060		11.591	<.001
	Digitalisasi	.041	.057	.098	.732	.465
	Sosial	.030	.052	.072	.583	.560
	Generasi	-.021	.068	-.022	-.302	.763
	Demografi	.047	.068	.050	.693	.489
	X1D1	-.018	.062	-.031	-.283	.778
	X2D1	-.085	.062	-.146	-1.363	.174
	X1D2	-.044	.062	-.072	-.707	.480
	X2D2	-.065	.062	-.101	-1.051	.295

a. Dependent Variable: ABS_RES
Source: Processed SPSS Output

Moderated Multiple Regression (MMR) Analysis Model

Regression analysis is a parametric statistical method that requires data to be measured on an interval or ratio scale. However, the research data collected through Likert-scale questionnaires are categorized as ordinal data. Therefore, prior to conducting regression analysis, the data were transformed from an ordinal scale into an interval scale using the Method of Successive Intervals (MSI) to satisfy the assumptions of parametric statistical analysis. This transformation allows the data to be treated as interval data, thereby enabling the regression analysis to produce more methodologically appropriate estimates and statistical inferences.

In this study, the Moderated Multiple Regression (MMR) approach was employed and conducted in two stages. The first stage involved a regression model without interaction terms to examine the direct effects of the independent variables on the dependent variable. The second stage incorporated interaction terms to assess the moderating role of the moderating variables in strengthening or weakening the relationships between the independent and dependent variables.

Regression Model without Interaction Terms

Table 9. Regression Coefficients of the Model without Interaction Terms

Coefficients[a]

Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.
		B	Std. Error	Beta		
1	(Constant)	2.739	.106		25.788	<.001
	Digitalisasi	.491	.056	.478	8.837	<.001
	Sosial	.378	.056	.368	6.777	<.001
	Generasi	.257	.123	.112	2.096	.037
	Demografi	.265	.123	.115	2.156	.032

a. Dependent Variable: Consumption Level

Based on the regression analysis results, the following regression equation was obtained: Y = 2,739 + 0,491X1 + 0,378X2 + 0,257D1 + 0,265D2 + e**,** This equation illustrates the relationship between digitalization, social factors, generation, and demographic characteristics and their effects on consumption levels. The findings indicate that the digitalization and social variables have positive and statistically significant effects on consumption levels, suggesting that higher levels of digitalization and stronger social influences are associated with increased consumption among respondents. Furthermore, the generation and demographic variables were also found to have positive and significant effects on consumption levels. This finding implies that differences in generational and demographic characteristics contribute to variations in respondents' consumption behavior. Overall, the regression results demonstrate that all independent variables included in this study make significant contributions to increasing consumption levels.

Regression Model with Interaction Terms

Table 10. Regression Coefficients of the Model with Interaction Terms

Coefficients[a]

Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.
		B	Std. Error	Beta		
1	(Constant)	2.737	.109		25.225	<.001
	Digitalisasi	.527	.103	.513	5.122	<.001
	Sosial	.404	.095	.393	4.262	<.001
	Generasi	.272	.124	.118	2.189	.030
	Demografi	.253	.124	.110	2.039	.043
	X1D1	.035	.113	.025	.310	.757
	X2D1	-.115	.113	-.081	-1.021	.308
	X1D2	-.119	.112	-.081	-1.063	.289
	X2D2	.084	.113	.053	.746	.456

a. Dependent Variable: Consumption Level

Source: Processed SPSS Output

Based on the regression analysis results, the variables of digitalization, social factors, generation, and demographic characteristics were found to have positive and significant effects on consumption levels. Among these variables, digitalization emerged as the most dominant factor influencing consumption levels, indicating that greater utilization of digital technology tends to increase respondents' consumption behavior. In addition, social factors, generation, and demographic characteristics also exert direct effects on consumption levels, either through social environmental influences or differences in respondents' characteristics. However, all interaction terms between digitalization and social factors with generation and demographic characteristics were found to be statistically insignificant. This finding indicates that generation and demographic characteristics do not moderate the relationships between the independent variables and consumption levels. Therefore, the effects of digitalization and social factors on consumption levels tend to be direct and relatively consistent across different generational and demographic groups of respondents.

Hypothesis Testing

Simultan Test (F-test)

Table 11. F-Test Results without Interaction Terms

ANOVA[a]

Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	121.523	4	30.381	40.914	<.001[b]
	Residual	144.797	195	.743		
	Total	266.320	199			

a. Dependent Variable: Consumption Level

b. Predictors: Constant), Demographic Characteristics, Generation, Digitalization, Social Factors

Source: Processed SPSS Output

Table 12. F-Test Results with Interaction Terms

ANOVA[a]

Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	123.350	8	15.419	20.599	<.001[b]
	Residual	142.970	191	.749		
	Total	266.320	199			

a. Dependent Variable: Consumption Level

b. Predictors: (Constant), X2D2, Demographic Characteristics, Generation, X1D1, X2D1, X1D2, Social Factors, Digitalization

Source: Processed SPSS Output

Based on the results of the F-test for the regression model with interaction terms, an F-value of 20.599 was obtained with a significance level of < 0.001. Therefore, the model is considered statistically significant in simultaneously explaining the effects of digitalization, social factors, generation, demographic characteristics, and all interaction terms on consumption levels.

The F-test results for both models, with and without interaction terms, indicate significance values below 0.05, demonstrating that all independent variables collectively influence consumption levels. Furthermore, the regression model with interaction terms exhibits a slightly higher regression sum of squares than the model without interaction terms. This finding suggests that the inclusion of interaction terms improves the model's ability to explain variations in consumption levels more comprehensively.

Partial Test (t-Test)

Based on the results of the partial test (t-test), the variables of digitalization, social factors, generation, and demographic characteristics were found to have positive and statistically significant effects on consumption levels in both the regression model without interaction terms and the model including interaction terms. Among these variables, digitalization emerged as the most dominant factor influencing consumption levels, indicating that higher levels of digital technology utilization are associated with increased consumption among respondents.

Social factors, generation, and demographic characteristics also contribute to differences in respondents' consumption levels through social environmental influences, generational characteristics, and residential location differences. However, all interaction terms involving digitalization and social factors with generation and demographic characteristics were found to be statistically insignificant. This result indicates that generation and demographic characteristics do not moderate the relationships between the independent variables and consumption levels. Consequently, while digitalization, social factors, generation, and demographic characteristics exert direct effects on consumption levels, the moderating roles of generation and demographic characteristics are not supported by the empirical findings of this study.

ΔR^2 Test (Change in R^2)

Tabel 13. R^2 Test without Interaction Terms

Model Summary

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.676[a]	.456	.445	.861714

a. Predictors: (Constant), Demographic Characteristics, Generation, Digitalization, Social Factors

Source: Processed SPSS Output

Based on the results of the regression model without interaction terms, the R Square value was 0.456. This indicates that 45.6% of the variation in consumption levels can be explained by digitalization, social factors, generation, and demographic characteristics, while the remaining 54.4% is influenced by other variables not included in the research model. Furthermore, the Adjusted R Square value of 0.445 indicates that, after accounting for the number of independent variables in the model, the explanatory power of the model is 44.5%.

Table 14. R^2 Test Results with Interaction Terms

Model Summary

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.681[a]	.463	.441	.865178

a. Predictors: (Constant), X2D2, Demographic Characteristics, Generation, X1D1, X2D1, X1D2, Social Factors, Digitalization

Source: Processed SPSS Output

Pada model regresi dengan variabel interaksi, nilai R Square meningkat menjadi sebesar 0,463. Hal ini menunjukkan bahwa sebesar 46,3% variasi tingkat konsumsi dapat dijelaskan oleh variabel digitalisasi, sosial, generasi, demografi, serta variabel interaksi yang dimasukkan dalam model. Sementara itu, nilai Adjusted R Square pada model ini adalah sebesar 0,441 In the regression model incorporating interaction terms, the R Square value increased to 0.463. This result indicates that 46.3% of the variation in consumption levels can be explained by digitalization, social factors, generation, demographic characteristics, and the interaction terms included in the model. Meanwhile, the Adjusted R Square value for this model was 0.441. This finding suggests that the inclusion of interaction terms in the regression model improved the model's explanatory power by 0.7%. In other words, the moderating variables provided an additional contribution to explaining variations in consumption levels, although the magnitude of this improvement was relatively modest..

Discussion

This study aimed to analyze the effects of digitalization and social factors on consumption levels while considering the moderating roles of generation and demographic characteristics. The findings indicate that digitalization, social factors, generation, and demographic characteristics collectively influence respondents' consumption levels. Partially, both digitalization and social factors were found to have positive and statistically significant effects on consumption levels. The development of digital technology facilitates access to information, online transactions, and the use of digital platforms, thereby encouraging greater consumption activities among individuals. Moreover, social environments—including family members, friends, communities, and social media networks—play an important role in shaping individuals' consumption preferences and purchasing decisions. The generation variable was also found to have a significant effect on consumption levels, reflecting differences in consumption behavior between Generation Y and Generation Z, particularly in terms of the intensity of digital technology use and consumption-oriented lifestyles. Similarly, demographic characteristics were found to influence consumption levels, indicating differences between rural and urban communities due to disparities in economic access, lifestyle patterns, and digital infrastructure.

However, the results reveal that neither generation nor demographic characteristics significantly moderate the relationships between digitalization and consumption levels or between social factors and consumption levels. This finding suggests that the effects of digitalization and social factors on consumption behavior are relatively similar across different generational groups and residential areas. Such a condition may be attributed to the increasingly widespread availability of digital technologies, internet connectivity, logistics services, and digital payment systems, which have contributed to more homogeneous consumption patterns across society. Both Generation Y and Generation Z exhibit relatively high levels of digital literacy, resulting in similar responses to digitalization. Likewise, rural and urban communities now enjoy relatively comparable access to information and digital services,

reducing the influence of geographical differences in strengthening or weakening the effects of digitalization and social factors on consumption behavior in the contemporary digital economy.

CONCLUSION

Based on the results of the data analysis and discussion regarding the effects of digitalization and social factors on consumption levels, while considering the moderating roles of generation and demographic characteristics, the following conclusions can be drawn:

1. Digitalization has a positive and significant effect on consumption levels. This finding indicates that higher levels of digital technology utilization are associated with higher consumption levels. Therefore, the first hypothesis (H1), which states that digitalization affects consumption levels, is accepted.
2. Social factors have a positive and significant effect on consumption levels. This result suggests that social environments, including family, friends, and communities, influence individual consumption decisions. Therefore, the second hypothesis (H2), which proposes that social factors affect consumption levels, is accepted.
3. Generation has a positive and significant effect on consumption levels. This finding indicates that differences in consumption levels exist between Generation Y and Generation Z. Therefore, the third hypothesis (H3), which states that generation affects consumption levels, is accepted.
4. Demographic characteristics have a positive and significant effect on consumption levels. This result demonstrates that consumption levels differ between respondents residing in rural and urban areas. Therefore, the fourth hypothesis (H4), which proposes that demographic characteristics affect consumption levels, is accepted.
5. Generation does not moderate the relationships between digitalization and social factors and consumption levels. This finding indicates that differences between Generation Y and Generation Z neither strengthen nor weaken the effects of digitalization and social factors on consumption levels. Therefore, the fifth hypothesis (H5), which proposes that generation moderates the relationships between the independent variables and consumption levels, is rejected.
6. Demographic characteristics do not moderate the relationships between digitalization and social factors and consumption levels. This result suggests that the effects of digitalization and social factors on consumption levels are relatively similar among rural and urban communities. Therefore, the sixth hypothesis (H6), which states that demographic characteristics moderate the relationships between the independent variables and consumption levels, is rejected.

Overall, this study demonstrates that digitalization is the most dominant factor influencing societal consumption levels. In addition, social factors, generation, and demographic characteristics exert direct effects on consumption behavior. However, generation and demographic characteristics do not function as moderating variables in the relationships between digitalization and social factors and consumption levels. These findings suggest that the effects of digitalization and social factors on consumption behavior are relatively consistent across different generational and demographic groups.

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