

# The Intersection between Environmentally Friendly Consumption Behavior and Students' Ability to Utilize Information and Technology in Accelerating the National Green Economy

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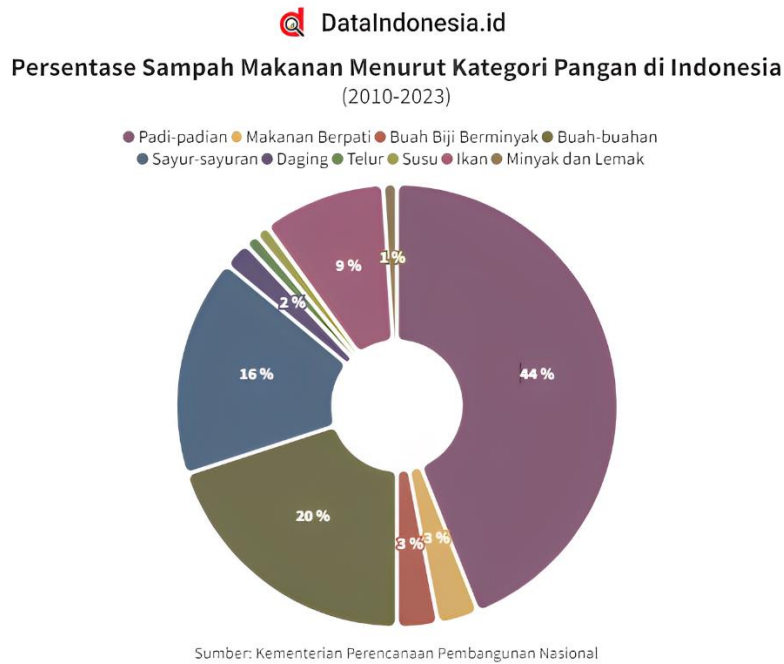
**ABSTRACT.** Realizing a green economy in Indonesia can be achieved through environmentally friendly consumption starting with the younger generation. Students as part of consumers need to apply environmentally friendly consumption patterns as a contribution to the national green economy. This study seeks to analyze how the variables of insight into food and beverages, attitudes towards environmentally friendly consumption behavior, the tendency of environmentally friendly consumption behavior, IT technical and operational skills, IT navigation and processing skills, and IT communication skills influence each other. The further objective of this research is that students are expected to be able to realize green economic awareness with environmentally friendly consumption behavior. In this study, using descriptive quantitative methods with the SEM-PLS method analyzed using primary data of 300 active students at four state universities in Malang City by distributing online questionnaires through G-Form. The results showed that the food and beverage insight variable had an effect on IT ordering ability, the environmentally friendly consumption behavior tendency variable had an effect on IT navigation and process skills through the mediating variable of food and beverage insight, the navigation ability variable had a direct effect on the attitude of environmentally friendly consumption behavior, and the IT technical and operational ability variable had a direct effect on the environmentally friendly consumption behavior tendency and IT communication skills. Implicatively, the research results link the two major variables of IT capability and green consumption behavior. However, if spread out, both IT capabilities and student behavior in implementing environmentally friendly consumption are mutually sustainable to achieve a green economy.

**Keywords:** digital information technology capability; environmentally friendly consumption behavior; green economy; young generation

## 1 INTRODUCTION

A green economy can be the result of developing human welfare and social equality, which is safe and significantly reduces the risk of environmental impacts and ecological scarcity (1). Green economy can be expressed as efforts to reduce carbon emissions, resource efficiency, social inclusion (2). The green economy is a policy agenda that becomes a tool that supports the achievement of sustainable development, based on social and environment (3). The green economy agenda is the potential for the creation of new sustainable technologies and the green sector as a direction of development (4). Green economics is concerned with economic cycles (5). The economic cycle will focus on reducing emissions for resource efficiency, reuse, and recycling (6). The economic cycle supports the transformation and development of industry and infrastructure supports sustainable consumption and production (7). Carbon emissions which are the goal of the green economy can be overcome by environmentally caring behavior through environmentally friendly consumption and production (8). Carbon emissions themselves can be generated from food waste consumed daily by the community (9). Food waste can actually produce carbon dioxide emission gases that are harmful to the environment (10). This requires individuals to adopt sustainable consumption patterns so as not to have a negative impact on climate change, loss of biodiversity, and pollution (11). Based on data from Bappenas, Indonesia lost 23-48 million tons of wasted food per year 2000-2019. Where the majority of wasted food is sourced from grains with a proportion of 44%. The pie chart below also shows food waste from fruits whose proportion is 20%. Then, as much as 16% of the food wasted is vegetables. In addition, as much as 9% of food wasted was fish in the same period. Then, proportion of starchy meaning and oily seeds are wasted as much as 3%. The graph also depicts leftover food from meat

whose proportion is as much as 2%. While the proportion of leftover food from eggs, milk, oil, and fat are both 1%. Based on the statement of Kepala Bapennas, Arief Prasetyo Adi from the many food wastes can still be consumed by 61-125 million Indonesians. Therefore, efforts that can be made are to contribute to realizing sustainable consumption and production. The implementation of sustainable consumption can be achieved by cultivating environmentally friendly consumption behavior patterns that refer to the use of services and products that produce a better quality of life accompanied by reducing the use of natural resources, toxic materials and waste and pollutant emissions during the life cycle that do not endanger the needs of future generations.



**Figure 1** Percentage of Food Waste by Food Category in Indonesia as of 2010-2023

Digital networks can improve the flow of information and may provide recommendations regarding attitudes and lifestyles. People can use digital information to learn how to change their consumption habits(12). The goals of SDGs and green economy can be achieved by linking digital information with the formulation of sustainable consumer behavior(13). Essentially, global consumption habits are driven by rapid population growth, world wealth, and a culture of consumerism among high-income groups(14). As consumption increases, the amount of household consumption waste produced also increases(15). Food loss and food waste are expressions used in connection with food waste. Food loss is defined as food that loses its quality due to elements in the food supply chain(16). Crop pests and bad weather are two of the main causes of food loss. While food waste is defined as food that has passed through the food supply chain but is not eaten and left behind. Food that has expired or left on the plate is a source of food waste. Food waste is a practice that increases waste methane and carbon dioxide, which are harmful to the environment and health(17). Therefore, food waste behavior must be controlled and changed, including making food waste economically beneficial(18).

The conversion of food waste consumption behavior into economic value has the potential to help the development of SDGs and green economy in Indonesia(19). Food waste is a pattern of consumption behavior that cannot be separated from the habits of students and society in general. Because most of these children are migrant children who also ride or rent, consumerism is ingrained in students. However, given the high percentage of internet access among students, it is important to be wary of initiatives to influence consumption habits, particularly food waste by converting it into economic value. Malang State University students were selected as research participants. This study aims to determine the influence of insight variables regarding food and beverages, attitudes towards environmentally friendly consumption behavior, trends in environmentally friendly consumption behavior, IT technical and operational skills, IT navigation and processing skills, and IT communication

skills influence each other both directly and indirectly. This study also seeks to reveal how intersectional between environmentally friendly consumption behavior variables and IT usage ability variables. Students as part of the younger generation have the ability to use IT that is more proficient than the older generation above, with the ability to use IT can influence their behavior and tendency to respond to the phenomenon of food waste and environmentally friendly consumption.

## **State of Art**

### **Level of Mastery of Digital Information**

The ability of the community to utilize technology in activities as a form of professional capability development in the digital era. Digital information uptake is the interests, attitudes, and abilities of individuals using digital technology and communication tools used to access, manage, integrate, analyze, and evaluate information, build new knowledge, (20) and make communication with others in order to participate effectively in society (21). The absorption of digital information can bring early opportunities to start a business in the modern era (22).

### **Indicators Measuring Digital Information Skills**

Based on the theory of Helsper and Deursen (2018) in their research entitled "From Digital Skills to Tangible Outcomes" presents indicators of the formation of four dimensions of digital skills including (23).

- a) Technical and operational skills
- b) Information navigation and processing skills
- c) Communication and interaction skills
- d) Content creation and production skills

Technical and operational: The ability to manage and operate information technology and its technical affordability of devices, platforms, and applications, from "button" knowledge to management settings to programming. Navigation and information processing: the ability to critically find, select, and evaluate digital sources of information. Communication and interaction: the ability to use various digital media and technological features to interact with others and build networks that support communication and interaction with others. Content creation and production: The ability to create quality digital content and understand how it is produced and how it is useful.

### **Eco-Friendly Consumption**

The concept of sustainable economy is closely related to SDGs or sustainable development. Sustainable development is development that meets the needs of the present without compromising the ability of future generations to meet their own needs (24). There are three indicators that measure sustainable development: economic growth, environmental protection, and social equity (25). Based on Berstchy's statement (2013) indicators in measuring sustainable development indices include, economic, social, institutional, and environmental variables (26).

## **1. Materials and Methods**

This research uses quantitative methods with a descriptive approach. Quantitative research with a descriptive approach is a form of research strategy through problem formulation to explore or identify social situations to be studied holistically. To obtain valid quantitative data in accordance with the topic of the problem, questionnaires are distributed to students as part of the younger generation who are able to represent and well-informed to answer instruments related to environmentally friendly consumption.

### **Conceptual Research: Models and Hypotheses**

In this study, researchers reviewed the literature on meta variables, namely environmentally friendly consumption behavior and the ability to use IT, these variables include food-beverage insights, trends in environmentally friendly consumption behavior, environmentally friendly consumption behavior attitudes, IT processing capabilities, IT technical and operational capabilities, IT

communication and delivery skills. The researcher then uses the results of this review to lay the foundation of a behavioral model using Structural Equations, with Partial Least Squares (PLS) as the method of choice, as shown in Figure 2 this will show the relationship between latent variables and their strength in relatedness. Thus, the main objective of this study is to analyze the relationship between food-beverage insight variables, trends in environmentally friendly consumption behavior, environmentally friendly consumption behavior attitudes, IT processing capabilities, IT technical and operational capabilities, communication skills and IT delivery.

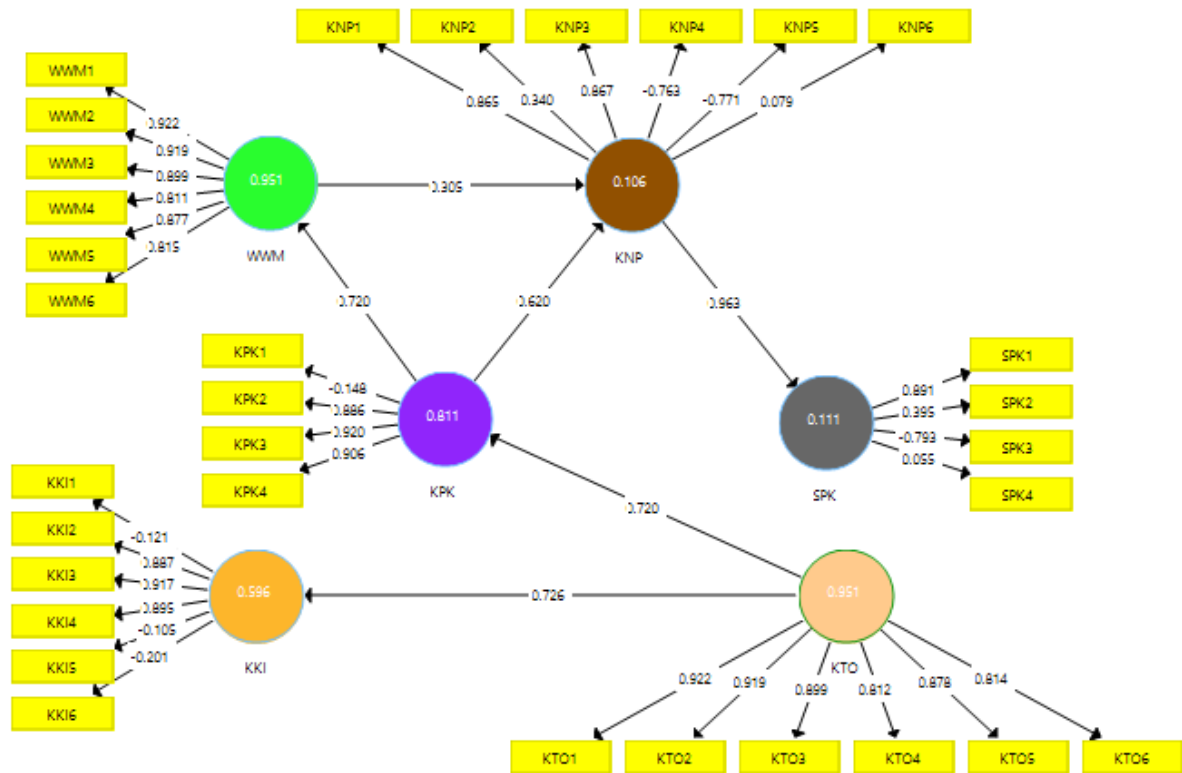


Figure 2. Pathway Conceptual Framework of SEM-PLS Results

Based on Figure 2 above, the researcher makes six hypotheses to describe the causal relationship between latent variables, namely:

- H1: Insights into the right and beverage positively affect IT processing capabilities;
- H2: IT processing capabilities have a positive impact on environmentally friendly consumption behavior attitudes;
- H3: IT technical and operational capabilities positively affect IT communication skills;
- H4: IT technical and operational capabilities have a positive effect on the tendency of environmentally friendly consumption behavior.
- H5a: The tendency of environmentally friendly consumption behavior has a positive effect on food-beverage insights.
- H5b: The efficiency of environmentally friendly consumption behavior positively affects IT processing capabilities through food-beverage insight mediation variables.

## 2 RESULT AND DISCUSSION

### Respondent Profile

The respondent profile consisted of 300 students spread across four universities in Malang City including Universitas Brawijaya, State University of Malang, State Islamic University of Malang, State Polytechnic of Malang. who are also part of the millennial and Z generation. Respondent profile analysis consists of respondents' gender, occupation, age, and education.

### Age of Respondents

Based on the results of research data on the questionnaire, the majority of respondents aged 20 years were 94 respondents or 31.3%. While the minority of respondents aged 31-54 years or 1 respondent each and 0.3%. Age 21 years as many as 69 respondents, age 19 years as many as 59 people or 19.66%.

### Respondent's Gender

Based on the results of research data on the questionnaire shown in the diagram and table above, the majority of respondents were female, namely 182 respondents or 61%. While the minority of respondents were male as many as 118 respondents or 39%.

### Regional Origin of Respondents

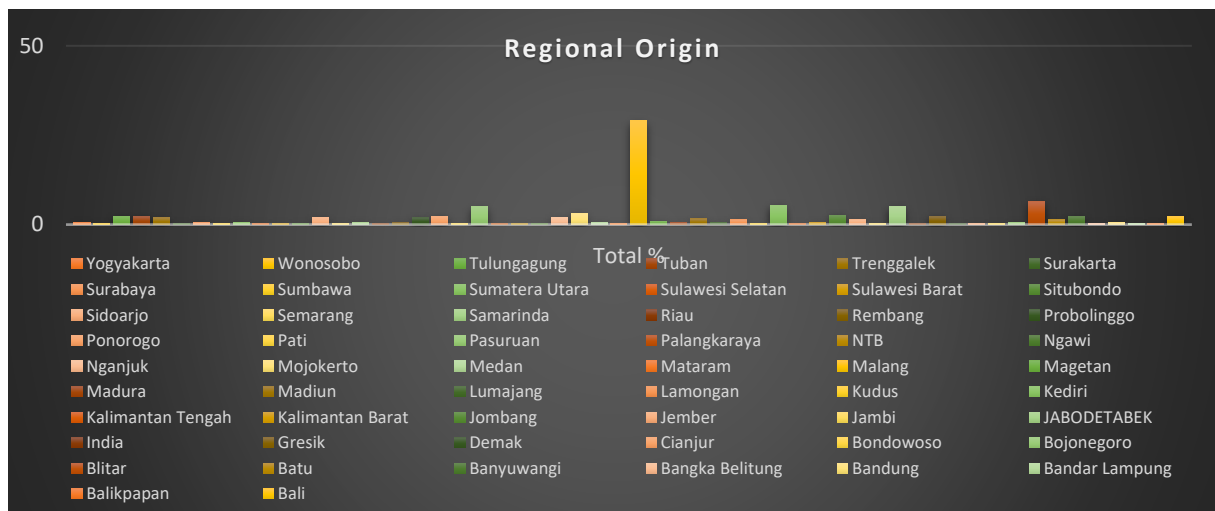


Figure 3. Respondent's Regional Origin Diagram

Based on the results of research data on the questionnaire shown in the diagram and table above, the majority of respondents came from the Malang Raya area, which was 87 respondents or 29%. While the minority respondents came from the provinces of East Java, West Java, Central Java, West Kalimantan, Central Kalimantan, West Sulawesi, North Sulawesi, South Sulawesi, NTB, and Sumatra or 1 respondent each and 0.3%. In addition, there was one respondent of 0.3% who came from India.

### Distribution of Respondent Universities

Based on the results of research data on the questionnaire shown in the diagram and table above, the majority of respondents came from State University of Malang, which was 152 respondents or 51%. While the minority of respondents came from universities of Universitas Brawijaya as many as 17 respondents and amounted to 5.67%.

### Respondent Department

Based on the results of research data on the questionnaire shown in the diagram and table above, the majority of respondents came from the Department / Department of Development Economics, which was 127 respondents or 42.3%. While the minority of respondents were in the departments of Hkn, Masgister of Economic Education, Medical Education, Psychology, Madrasah Ibtidaiyah Teacher Education, Agricultural Entomology, Plant Disease Pests, Language Education, Indonesian Literature, and Regional, and Physical and Spiritual Education, each of which was 1 respondent or 0.3%.

### Faculty Respondents

Based on the results of research data on the questionnaire shown in the diagram and table above, the majority of respondents came from the faculty of Economics and Business, which was 132 respondents

or 44%. While the minority of respondents came from FIK, FISIP, Faculty of Medicine, and Faculty of Social Sciences, each of which was 1 respondent or 0.3%.

### Validity and Reliability Test

The research model shown in Figure 2 consists of three latent variables. Table 1 below lists item validity and latent reliability.

**Table 3. Latent Validity and Reliability**

Latent Variable	Code	Correlation
Food and Beverage Insights $\alpha = 0.938$	WWM01	0.915
	WWM02	0.914
	WWM03	0.899
	WWM04	0.818
	WWM05	0.872
	WWM06	0.825
Attitude towards Eco-Friendly Consumption Behavior $\alpha = 0.014$	SPK01	0.432
	SPK02	0.622
	SPK03	0.309
	SPK04	0.642
Trends in Environmentally Friendly Consumption Behavior $\alpha = 0.671$	KPK01	0.291
	KPK02	0.843
	KPK03	0.852
	KPK04	0.853
IT Technical and Operational Capabilities $\alpha = 0.938$	WHO01	0.915
	WHO02	0.914
	KTO03	0.899
	KTO04	0.818
	KTO05	0.872
	KTO06	0.825
IT Navigation and Processing Capabilities $\alpha = 0.215$	KNP01	0.439
	KNP02	0.536
	KNP03	0.461
	KNP04	0.327
	KNP05	0.336
	KNP06	0.600
IT Social Media Communication and Interaction Skills $\alpha = 0.526$	KKI01	0.251
	KKI02	0.700
	KKI03	0.692
	KKI04	0.729
	KKI05	0.480
	KKI06	0.417

Source: Primary Data Processing SPSS 2023.

Based on Table 1, all questions from all analyzed variables have a correlation value ( $r$ ) better than 0.3, a significance value smaller than the error degree of 0.05. There are four variables that have a Cronbach alpha value of more than 0.50 or meaning strong reliability. However, the attitude variables of environmentally friendly consumption behavior and IT processing capabilities show a Cronbach alpha value of less than 0.50, which means they have weak reliability.

### Outer Model Analysis

Outer model analysis is used to represent the causal relationship between latent variables and their variable indicators, while inner model analysis is used to represent causal relationships between related latent variables. In outer model analysis, all items in the model reflect each of its constructs (27) Researchers analyze through Composite Reliability (CR) and extracted mean variance (AVE) for each latent variable and evaluate the factors and their significance for each indicator (28) The construct has internal consistency if AVE is 0.50 or more than 0.50 and CR is 0.708 or more than 0.708. In addition,

the loading factor for all on a given specification construction should be significant. Referring to the threshold value requirements and guidelines, to obtain the results of the outer model analysis, the SmartPLS 4.0 media bootstrapping procedure is applied, the details of which are in table 2 below.

**Table 2.** Outer Model Analysis Results

Latent Variable	AVE	CR	Code	Factor Loading	p-Value
Food and Beverage Insights	0.766	0.951	WWM01	0.922	0.000
			WWM02	0.919	0.000
			WWM03	0.899	0.000
			WWM04	0.811	0.000
			WWM05	0.877	0.000
			WWM06	0.815	0.000
Attitude towards Eco-Friendly Consumption Behavior	0.396	0.111	SPK01	0.891	0.000
			SPK02	0.395	0.000
			SPK03	0.793	0.000
			SPK04	0.055	0.000
Trends in Environmentally Friendly Consumption Behavior	0.618	0.811	KPK01	0.148	0.000
			KPK02	0.886	0.000
			KPK03	0.920	0.000
			KPK04	0.906	0.000
IT Technical and Operational Capabilities	0.766	0.951	WHO01	0.992	0.000
			WHO02	0.919	0.000
			KTO03	0.899	0.000
			KTO04	0.812	0.000
			KTO05	0.878	0.000
			KTO06	0.814	0.000
IT Navigation and Processing Capabilities	0.467	0.106	KNP01	0.865	0.000
			KNP02	0.340	0.000
			KNP03	0.867	0.000
			KNP04	0.763	0.000
			KNP05	0.771	0.000
			KNP06	0.091	0.000
IT Social Media Communication and Interaction Skills	0.416	0.596	KKI01	0.121	0.000
			KKI02	0.887	0.000
			KKI03	0.917	0.000
			KKI04	0.895	0.000
			KKI05	0.105	0.000
			KKI06	0.201	0.000

Source: Primary Data Processing PLS 2023.

Table 2 above shows three variables between food-beverage insight variables, trends in environmentally friendly consumption behavior, technical and operational IT capabilities having AVE values greater than or equal to 0.50. While the other 3 variables include attitudes towards environmentally friendly consumption behavior, IT navigation and processing skills, communication skills and IT social media interactions have an AVE value of less than 0.50. Analysis of the Composite Reliability (CR) of three variables in the model is greater than 0.708 as the recommended value. Furthermore, all six variables for this model have significant or quasi-significant loading factors. So based on this, researchers concluded that the structure in the model is worth analyzing.

### Inner Model Analysis

The inner model represents the causal relationship between related latent variables(29) The process of analyzing the inner model using PLS is assumed as an independent distribution for the variables in the model. Inner model assessment is carried out by applying non-parametric techniques through bootstrapping procedures. The model assessment step is to evaluate the AVE and coefficient of determination (R<sup>2</sup>) of endogenous latent variables with a minimum number of indicators of 2 items

((28) the significance of path values and the Goodness of Fit (GoF) model. Table 3 below lists the number of indicators of latent variables in the research model.

**Table 3.** Inner Model Analysis

Endogeneous Latent Variables	Items Total	R <sup>2</sup>	AVE
Food & Drink Insights	6	0.518	0.766
Attitude towards Eco-Friendly Consumption Behavior	4	0.927	0.396
Trends in Environmentally Friendly Consumption Behavior	4	0.518	0.618
Technical and Operational Capabilities	6	0.750	0.766
Navigation and Information Processing Capabilities	6		0.467
Social Media Communication and Interaction Skills	6	0.527	0.416
<b>Grand Total</b>	<b>32</b>	<b>3.240</b>	<b>3.429</b>

Source: Primary Data Processing PLS 2023.

By using the calculation of the Goodness of Fit (GoF) test, the researcher uses the formula described by Tenenhaus (2005) as follows (30).

$$GoF = (AVE \times R^2)^{0.5}$$

By calculating the values of AVE and R<sup>2</sup> to calculate the equation, the researcher gets a GoF value of 3.331. So with this value, it shows a large GoF value or more than 0.36. This value according to the researcher is sufficient to conclude the model is good enough to study the causal relationship between food-beverage insight variables, trends in environmentally friendly consumption behavior, IT technical and operational capabilities, attitudes towards environmentally friendly consumption behavior, IT navigation and processing skills, IT communication and social media interaction skills.

## DISCUSSION

Based on the results of the analysis on the inner and outer models as well as the significance test through bootstrapping, it is concluded as follows.

**Table 4.** Hypothesis Test Results

	Original Sample (O)	Sample Average (M)	Standard Deviation (STDEV)	T Statistics (O/STDEV)	P Values	Decision
<b>H1</b>	0.305	0.309	0.065	4.675	0.000	<b>H1 accepted</b>
<b>H2</b>	0.963	0.963	0.005	212.530	0.000	<b>H2 accepted</b>
<b>H3</b>	0.726	0.732	0.033	21.840	0.000	<b>H3 accepted</b>
<b>H4</b>	0.720	0.725	0.034	21.293	0.000	<b>H4 accepted</b>
<b>H5a</b>	0.720	0.725	0.034	21.275	0.000	<b>H5a accepted</b>
<b>H5b</b>	0.620	0.617	0.063	9.871	0.000	<b>H5b accepted</b>

Source: Primary Data Processing PLS 2023.

## Hypothesis Analysis

The first hypothesis or H1 suggests that there is a positive relationship between food and beverage insights on IT processing capabilities. The food-beverage insight variable refers to students' knowledge of the wealth of Indonesian food sources, the ranking of food waste disposal behavior, and waste management steps. While the variable of information processing ability is related to the extent to which students search and find sites related to environmentally friendly consumption. Therefore, of course, if the food-beverage insight of high students will affect the way they process information, including in searching for sites or websites related to environmentally friendly consumption. This is because individual knowledge will encourage individual interest in finding out more and more in related



matters. Implicitly, broad individual insights into the richness of food sources, how to manage food waste, and waste management influence students' interest in finding information on matters related to environmentally friendly consumption (31). If in theory this shows that the wider a person's horizons will increase their curiosity will be the same (32) The higher one's level of knowledge and understanding influences one's intention to continue to find out (33) This study shows that along with the high insight of environmentally friendly consumption, it will increase the ability to process information on environmentally friendly consumption.

The second hypothesis or H2 shows that there is a significant positive influence between IT processing capabilities and attitudes towards environmentally friendly consumption behavior. Attitude variables of environmentally friendly consumption behavior how students take a stance to consume local food, food waste, and waste management. Specifically, IT processing capabilities influence the point of view on taking a person's attitude towards matters related to environmentally friendly consumption. The amount of information an individual receives will influence their way of thinking to determine the appropriate attitude direction (34) Information about environmentally friendly consumption either through social media or online news encourages positive or negative changes in a person responding to things related to environmentally friendly consumption (35) This proves that the higher the ability of individuals to surf and expose IT will determine the attitude of consumption of environmental factors (36). This can happen considering that social media and the internet have never been separated from the grasp of the younger generation, including looking for things related to the environment (37) Currently, there are also many social media that install AI algorithms on each mobile phone so that individuals can be directed directly to related news including environmentally friendly consumption.

The third hypothesis or H3 shows that there is a significant positive influence of IT technical capability variables on IT communication and interaction skills. Variabel IT technical ability is related to the ability of students to operate their IT tools. While the ability of IT communication and interaction is related to how individuals are able to disseminate their content through IT media such as social media. This is certainly related to environmentally friendly consumption, when individuals are able to operate their IT well, of course they are very accustomed to disseminating the information they have through IT. This can happen because the more proficient someone is in operating IT, the more able they are to convey the things they have through IT, such as social media or internet sites (38) Someone tends to find out what they are mastered or interested in both conventionally and digitally (39) With the development of the times, people prefer to constrict information on social media (40) On the other hand, it does not deny that social media is a favorite IT media that can be used to spread all information even to all parts of the world. Departing from this, of course, has a positive impact on the dissemination of content about environmentally friendly consumption, individual proficiency in operationalizing IT helps them convey what is known about environmentally friendly consumption behavior in the wider community.

The fourth hypothesis or H4 shows a significant positive influence of IT operational capabilities on the tendency of environmentally friendly consumption behavior. The variable of environmentally friendly consumption behavior in the things that the younger generation does in consuming food sources, managing food waste, and managing waste. The high number of individuals in operationalizing IT will affect the tendency of environmentally friendly consumption behavior in society. The high ability of individuals to operationalize IT will encourage individual habits in daily life (41). The IT environment and social media owned by individuals today play a role in shaping behavior patterns in themselves (42). This is no exception to environmentally friendly consumption behavior, the younger generation who tend to be proficient in IT will find out the things they are interested in through the ease of IT (43) The ease of accessing IT will increase individual insight and shape environmentally friendly consumption behavior patterns in each individual (44) So that something that continues to be seen, read, searched, and discussed from IT information will form patterns of behavior changes in the psyche of the younger generation, especially in environmentally friendly consumption patterns.

The fifth hypothesis or H5a shows a significant positive influence on the influence of environmentally friendly consumption behavior on food-munuman insights. The variable of environmentally friendly consumption behavior in the things that the younger generation does in consuming food sources, managing food waste, and managing waste. Meanwhile, food-beverage wawasan is related to individual knowledge of food sources, food waste, and waste management. The

higher the probability of environmentally friendly consumption behavior, the more insightful individuals are about related matters. Individuals who have positive behavior will have an effect on their level of knowledge of the behavior (45). The more often the younger generation applies environmentally friendly consumption behavior, the higher their food-beverage insights (46). This can happen because a person's behavior affects an individual's curiosity, insight, and capability of something that becomes a daily habit.

The sixth hypothesis or H5b shows a significant positive influence on the tendency of environmentally friendly consumption behavior on IT processing capabilities through mediating variables of food-beverage insights. Variables of the tendency of environmentally friendly consumption behavior can affect the ability to process information. Currently, the community and even the younger generation seem to be inseparable from continuing to share things that are done daily on their IT and social media. In fact, TikTok content, Instagram Reels are often filled with individual daily activities that can inspire other communities around the world. So the tendency of environmentally friendly consumption behavior can influence individuals to process IT either in finding information or tracing related matters (47). The ability to find out about environmentally friendly consumption is influenced by mediating variables of food-beverage insights. Individual insight and knowledge affect an individual's ability to find out the same information (48). Similarly, the tendency of environmentally friendly consumption behavior of individuals affects how their ability to find information using IT.

### **IT-Based Environmentally Friendly Consumption Behavior in Accelerating Green Economy Achievements**

Consumers play an important role in more than 60% of final consumption in the OECD area. Environmentally friendly consumption behavior heeds the principles of green economy where every individual action contributes to environmental protection (49). Consumers must take responsibility for their personal consumption in purchasing power, social change campaigns, and the environment (50). Essentially, a green economy is an economy that results in improved human well-being and social justice, while significantly reducing environmental risks and ecological scarcity. In the simplest terms, a green economy can be defined as one that is low-carbon, resource-efficient, and socially inclusive. So, whether there is a relationship with environmentally friendly consumption, in fact environmentally friendly consumption is part of sustainable consumption which is the goal of SDGs 12. SDGs 12 emphasizes sustainable consumption and production. Environmentally friendly consumption can be applied by individuals by implementing sustainable behavior by reducing food consumption waste, choosing environmentally friendly products, and reducing carbon emissions produced in daily activities (51). Adapting two things that have the best implications is to reduce residual consumption and be wise in buying the desired product as much as possible to take sustainable options. Waste from consumption such as plastic is one of the main pollutants in the sea. Efforts to use reusable bags, use reusable straws, and recycle bottles are easy ways to apply in daily activities.

The concept of green economy does not replace sustainable development; Instead, it sets a renewed focus on economies, investment, capital and infrastructure, employment and skills, and beneficial social and environmental impacts across Asia and the Pacific (52). Sustainable consumption and production seeks to improve manufacturing processes and consumption habits to reduce resource consumption, waste creation, and emissions throughout the process and product life cycle (53). The use of resources to provide value to society is referred to as resource efficiency, and seeks to minimize the quantity of resources used, as well as emissions and waste generated, per unit of product or service. Green Economy is a macroeconomic strategy for long-term economic growth that focuses on investment, employment, and skills (54). The main areas of green economy include, 1) a advocacy of macroeconomic approaches to sustainable economic growth through regional, sub-regional and national forums, 2) demonstration of Green Economy approaches with a primary focus on access to finance, technology, and environmentally friendly investments, 3) dsupport to countries in terms of development and mainstreaming macroeconomic policies to support the transition to a Green Economy. The concept of green economy is a global strategy to face the threat of climate change that is now faced. Green economy strategies and SDGs goals are concepts that need to be taken into account, one of which is in shaping the behavior of individual worlds.

Climate change and global warming that occur today are the answer to the lack of individual awareness in protecting the surrounding environment. The greenhouse effect, carbon emission gases, pollutants, and consumption residues that are not managed properly are hot issues that are discussed until now. Efforts that can be made are to familiarize sustainable consumption behavior in order to realize a green economy and the success of global SDGs (55). Sustainable consumption can be applied through environmentally friendly consumption behavior or coupled with green behavior. Milis (2012) states that green consumption behavior is environmentally friendly consumer behavior. Environmentally friendly consumption depends on consumers who choose to use products that are not harmful to health or damage the environment (56). The younger generation in this study took on the role of promoters of green consumption behavior. The green consumption behavior of students can be influenced or affect the ability to use IT. IT advances that are felt in various parts of the world are the answer to the dynamics of life today (57). The younger generation of students is certainly very accustomed to IT, the ease of accessing information, finding information and even facilitating the AI algorithm system is the answer to starting green consumption habits. Environmentally friendly consumption based on digital IT shows the impact on the extent and how social media information received by the younger generation is managed into behavior change for the better. The creation of IT-based environmentally friendly consumption certainly helps achieve the goals of the green economy as previously described.

### 3 CONCLUSION

Green economy is a goal for all countries of the world including Indonesia. Green economy has elements of achieving sustainable consumption and sustainable production. Efforts to realize sustainable consumption are implementing environmentally friendly consumption behavior in the community, including for young people. Currently, the behavior of eating food waste is a negative behavior that does not heed the principles of environmentally friendly consumption. This actually worsens the world's climate conditions because of carbon gas produced from food waste. The younger generation in this study is that students can be pioneers for future generations about the importance of implementing environmentally friendly consumption behavior. In supporting awareness of environmentally friendly consumption behavior can be achieved with advances in information technology. Students as a young generation have the ability to use information technology that is much higher than the previous generation. This golden ability is a provision for the younger generation to apply positive behaviors, including implementing environmentally friendly consumption behaviors in everyday life. Simple things like reprocessing plastic waste used into items of economic value such as flower pots, wall hangings, and the like become a form of environmentally friendly consumption behavior. This study provides results that food-beverage insights, trends in environmentally friendly consumption behavior, environmental consumption behavior attitudes, IT technical and operational capabilities, IT processing capabilities, and IT communication skills are interrelated both directly and indirectly. These results show the interrelationship of environmentally friendly consumption behavior with the ability to use IT.

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