

## The Impact of Actual Purchase Decision Towards Circular Behavior: A Case of Food Delivery Application Usage by Urban Millennials

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**Abstract.** The purpose of this study is to examine the impact of actual purchase decision toward circular behavior in case of food delivery usage by urban millennials in Jakarta City as The Capital of Indonesia. The increasing use of the Internet and the ease of getting food through food delivery application led to increased consumption by customers which has resulted in widespread of food waste. Quantitative method and online survey questioner techniques are used. Pre-test and pilot test are done to establish the credibility of the research. In total 160 valid samples are examined by SPSS and PLS SEM. Results show that actual purchase decision by urban millennials in Jakarta is positive and significant toward circular behavior actions. The sociodemographic analysis revealed that married women with Bachelor degree use grab food up to 5 times in a month and pay with digital wallet is the most frequent user. The effect size ( $F^2$ ) purchase decision toward circular behavior is relatively high with score 45.9%. Meanwhile, the  $R^2$  value is low with total score 31.5%.

**Keywords:** actual purchase decision, circular behavior, food delivery, urban millennials

### Introduction

The rise of food delivery application usage in Jakarta is booming in the recent years. Several food delivery application that exist in Jakarta are Go Food by Gojek, Grab Food by Grab, and Shopee Eats by Shoppe. Grab and Gojek dominate the Indonesian market with a combined Gross Merchandise Value (GMV) of 3.7 million USD (Voon, 2021). The Covid-19 pandemic and the rise of online purchasing have significantly transformed restaurant operations and altered customer behavior when it comes to food consumption (Kaur et al., 2020; Wen et al., 2022). Convenience is the primary motivation for customers to use food delivery applications, since it enables them to make purchases at any location and time they require (Handayani et al., 2022).

The growing number of customers by using food delivery applications is causing adverse consequences. Customers demonstrate impulsive and excessive eating patterns while placing food orders using food delivery applications. It leads to food waste. Previous research mention that the daily average urban customer in Jakarta throw a way food between 700 – 1.000 gram daily (Herman, 2022). The overall quantity of food waste per customer per year is 300 kg. Not wasting food can have a positive impact on the economy, culminating in savings of up to Rp 300 Trillion. Actual purchase decision is a challenging and risky task for customers (Hammond et al., 2020).

If we fail to end this practice, it will result in harmful effects on our environment and have severe consequences on society and the economy. Now is the ideal moment for all individuals to contemplate and behave with greater responsibility in order to engage in repetitive practices in their everyday activities, finally transforming it into a habit of life.

This research purpose is (1) to discover the sociodemographic food delivery application customer in Jakarta and (2) examine actual purchase decision toward circular behavior in the

use of food delivery application by urban millennial in Jakarta. This research will be useful for (1) restaurant industry to maximize the utilization food delivery application and creating a sustainable strategies (2) the management of food delivery application in creating strategies for actual purchase decision and creating circular behavior.

## Literature Review

### Actual Purchase Decision

Realistic situation related actual purchase is important to investigate (Herpen & Jaegers, 2022). However, a very limited number studies that measure actual purchase (Santa & Drews, 2023). Current customers demonstrate heightened levels of engagement and flexibility in their information-seeking initiatives, possessing enhanced competencies that facilitate seamless navigation of product or service planning, interaction, evaluation, sharing, and recommendation (Shen et al., 2020). According to Xue et al. (2021), actual purchase decision consist of six stages, such as attention, interest, search, action, and share.

### Circular Behavior

Circular behavior is an act that involve in environmentally conscientious and promotes responsible behavior that customer minimize waste in all consuming process stages and contribute beneficially to sustainability (Gomes et al., 2022; Ogiemwonyi, 2022). The efficacy of circular behavior rely on customers' capability to limit waste consumption throughout the purchase, utilization, and disposal processes (Canto et al., 2021). The implementation of circular behavior facilitates conceptual and social transformation by employing new processes, imaginative solutions, blockchain technology, and addressing the social implications associated with solving environmental concerns (Ilić et al., 2022).

### Food Delivery Application

The advent of technology is transforming the traditional economy into a digital economy by facilitating the establishment of e-commerce (Guyader et al., 2022). One of the example is food delivery application. Food delivery application is an internet platform that acts as an intermediary between customers and restaurants, connecting them through mobile devices. (Chakraborty et al., 2022). The advent of online purchasing has fundamentally transformed consumer behavior. The convenience of using a food delivery service has a significant impact on customers, leading them to purchase larger portions of food due to special offers given by restaurants. However, the research on food delivery applications is relatively limited and in its immature phase, resulting in a restricted comprehending of the factors motivating consumer adoption of such products and services (Kowalczyk et al., 2021).

### Urban Millennials

Urban relating to a city or town. Millennials or Generation Y is a people born between 1995 – 1977 (Filho et al., 2021). Millennials possess the trait of being adept at adopting new technology, driven by ambition, enthusiastic about taking on challenges, and have a taste for luxurious commodities (Slaton & Pookulangara, 2022). However, this research conclude that urban millennials is a customer age 28 – 46 years old that live in Jakarta as The Capital City of Indonesia.

## Research Methods

This research use quantitative method. It is a numerical research method adopting mathematical analysis to discuss a phenomenon and social existence (Ketter, 2019; Maravelakis, 2019). The technique used is online survey questionnaires. The population for this study consists of active customers, aged 28-46 years old (Millennials), who have been using a food delivery application in Jakarta for the past month. Pilot testing and pretesting are conducted to ensure the trustworthiness of the research. There are six questions referring to sociodemographic information and eleven questions about the actual purchase decision. Subsequently, the data is computed using SPSS and PLS-SEM. SPSS is utilized for the analysis of sociodemographic respondents, whereas PLS-SEM is employed to evaluate the research model. At this point, we have verified 160 sample participants.

## Result

### Sociodemographic Profile

According to Table 1, majority of urban millennials that use food delivery application in The Capital of Indonesia (Jakarta) is a married woman with bachelor degree that use Grab Food up to 5 times in a month and pay with digital wallet (example: Ovo and Go pay). It is supported previous research from Snapcart (2021) and Voon, (2021) that Grab Food is the primary food delivery application utilized by both customers and merchants in Indonesia. Over the past decade, digital wallets have emerged as the preferred payment method for urban millennials due to their practical design (Putritama & Sari, 2020).

**Table 1. Sociodemographic profile**

No.	Variable	Frequency
1.	<b>Gender</b>	
	Female	82
	Male	78
2.	<b>Payment</b>	
	Cash	7
	Debit card	4
	Credit card	8
	Digital wallet	140
	Pay later	1
3.	<b>Mobile Apps</b>	
	Go food	71
	Grab food	77
	Shopee food	12
4.	<b>Frequency in a month</b>	
	1 – 5	68
	6 – 10	46
	11 – 15	18
	>15	28
5.	<b>Education</b>	
	High school	18
	Diploma	23
	Bachelor	93
	Magister	26
6.	<b>Status</b>	
	Married	93
	Single	67

Source: author (2023)

### Validity and Reliability Test

Table 2 presents the results of the validity and reliability tests conducted in this research. According to the experts, the minimum outer loading score is  $>0.4$  (Hair et al., 2022), the minimum CR score is  $>0.7$  (Hair et al., 2021), the minimum HTMT score is  $<0.9$  (Cheung et al., 2023), and the maximum VIF score is 3 (Guenther et al., 2023). Nevertheless, all scores for outer loading, CR, HTMT, and VIF confirm overall validity.

**Table 2. Inner and outer model**

No.	Description	Mean	Outer Loading	CR	HTMT	VIF
1.	Actual Purchase Decision			.724		
	X1 Attention	3.712	.628			1.169
	X2 Interest	3.113	.734			1.163
	X3 Search	4.325	.580			1.252
	X4 Action	4.481	.417			1.090
	X5 Share	4.181	.562			1.185
2.	Circular Behavior			.822	.770	
	Y1 Pre Acquisition	4.169	.724			1.484
	Y2 During Acquisition	4.225	.732			1.633
	Y3 Post Acquisition	3.513	.695			1.402
	Y4 Pre Utilization	3.975	.707			1.880
	Y5 During Utilization	3.450	.728			1.391
	Y6 Post Utilization	4.150	.330			1.303

Source: author (2023)

### Discussion

Table 3 explain that actual purchase decision significantly and positively impacting circular behavior in urban millennials using food delivery application in Jakarta. It is confirm the previous research that to preform responsible consumption, specifically to accomplish circular behavior depends on actual purchase decision (Stein et al., 2020; Vergura et al., 2023). Recently, customer need a company to commit implementing a sustainable business strategies (Trivedi et al., 2018). According to (Confetto et al., 2023), the presence of social media has a significant impact on consumers, leading them to adopt circular behavior and engage in actual sustainable purchase decision. Customer have a crucial role in the implementation of responsible food purchase to minimize food waste (T'ing et al., 2021). An instance of circular activity can be observed when individuals purchase food in accordance with the required portion, consume it as a whole, and prevent from discarding edible food (Hamilton & Price, 2019).

**Table 3. Hypothesis**

Hypothesis	P Value	Original Sample	Sample Mean	Standard Deviation	T Statistics
Actual Purchase Decision → Circular behavior	0.000	0.561	0.589	0.048	11.576

Source: author (2023)

The data processing result indicates  $R^2$  score is 31.5%. It suggests that the level of actual purchase decisions towards circular behavior is very low. The  $F^2$  score of 45.9%

indicates a reasonably considerable influence size of actual purchase decision on circular behavior.

## Conclusion and Recommendation

### Conclusion

The actual purchase decision contributes a particularly important role in encouraging circular behavior. It is important to restaurant industry and management of food delivery application in creating a sustainable strategies to customer adapting circular behavior, such as provide food in small portions (Burke & Napawan, 2020), promoting sustainable food choices (Priya & Alur, 2023), fostering food waste disposal technique (Borrello et al., 2017), and provide food labelling (Rossi & Rivetti, 2023).

### Recommendations

There are limitations in this research. However, we suggests that future study should investigate knowledge and attitude as an endogenous determinant in the creation of circular behavior. Additionally, to examine the impact of gender and education on the implementation of circular behavior. Another urban location in Indonesia should be evaluated for comparison.

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