

## Analysis of Segmentation Profile on Online Shopping Consumers in Padang City Based on Demographic and Psychographic Characteristics

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### ABSTRACT

Online shopping has become a more accessible way of purchasing. Customer segmentation play important role in online retailing industry. The main objective of this study is to analysis of segmentation profile of online shopping consumers in Padang City based on demographic and psychographic characteristics. This type of research was descriptive analysis. The data are subsequently related to demographics and psychographic. The sampling technique in this research was purposive sampling. Total samples in this research were 150. The data analysis technique used in this research was cluster analysis. We demonstrate that such cluster related to demographic as well as psychographic characteristics. The results of demographic segmentation, the majority of respondents are female (74.4%) and the most of respondents 21-30 years old. While, the result of psychographic segmentation using cluster analysis was applied to segment the customer into eight clusters that have distinct online customer profiles. These segments are named as risk taking consumers, adventurous consumers, active consumers, practical consumers, socialite consumers, economical consumers, passive consumers and independent consumers.

## 1. INTRODUCTION

Developing information and communication technology has brought major change in consumer behaviors. The internet has been generating consumer empowerment for over a decade (Pires et al., 2006). The ease and speed of accessing the internet has inspired and encouraged business in the world to use this universal system as the main medium in marketing both products and services. Internet is a global network of interconnected networks that includes millions of companies, governments, organizations and private networks (Strauss & Frost, 2014). Company can carry out various activities connected with internet (Utami, 2018). Internet provides channels for communication, information gathering and entertainment (Clemes et al., 2014). However, internet is also an important vehicle for commercial transaction (Swaminathan et al., 1999).

In recent years, people have used technology to purchase products and services through internet. This phenomenon is known as e-commerce or electronic commerce. E-commerce is an online application at stores or consumers through electronic transactions that can help online stores to market their products in the most advantageously manner (Ainy, 2020). One of the attractive features of e-commerce is provides various ranges and selections to shop for consumers. Understanding customer characteristics for personalized marketing strategies is a key to a sustainable e-commerce business (Zhou et al, 2021).

The increase of internet users is happening in the world. Indonesia is one of the countries with the highest internet access in the world (Sarah et al., 2021). Indonesia is the third country as the highest internet user in Asia which can be seen from the total of internet users in Indonesia on June 30, 2020 are 171.260.000 million users (World Internet User, 2021). In addition, based on data from (Internet Service Providers Association, 2021) from 2019 to 2020, the total of internet users in Indonesia have reached 196.714.070,3. It reached 73,7% of the total population of Indonesia. West Sumatera also showed significant increase of internet users from the previous year. The total of internet users in West Sumatera in 2018 were 4.556.735 million and from 2019 to 2020 increased to 5.008.263 million users. This fact showed that the total of internet users in Indonesia in general and West Sumatera in particular in Padang City has also risen.

Technology is increasingly changing the face of shopping (Ladhari et al., 2019). Online shopping is one of the most frequently used (Internet Service Providers Association, 2021). The spread of the corona virus (Covid 19) since the past two years has also had an impact on the business world as the pandemic has changed consumers' behavior, especially in Padang City. The majority of consumers shopping activities move from offline shopping to online shopping. Before Covid 19, people usually go to mall and local market to buy what they need, but now they preferring to shop online via marketplace (Angel & Natadirja, 2021). Online shopping has become a habit for some people because of the convenience it provides. Online shopping is an activity of purchasing goods and services through internet. Many people find

online shopping an easier and more convenient way to search and purchase the items they need.

Online shopping has become one of the most popular activities. Online shopping activities can be measured by the amount of time spent shopping, shopping frequency, and the amount of money spent for shopping (Ashlock, 2008). There are several advantages for customers in online shopping including convenience perceived by customers without being limited distance and time (Brynjolfsson & Smith, 2000) increasingly competitive prices and access increasingly widespread information (Jun et al., 2004). However, there is a large gap between developing countries on understanding about how consumers perceived online shopping and there is growing interest in understanding what factors impact on consumer decisions to shop (Brashear et al., 2009);(Shih, 2004).

According to (Swinyard & Smith, 2003) examined the lifestyle characteristics of online consumers and explained that consumers often choose to shop online because they like had products delivery at home and many their purchases to be private. Furthermore, additional studies found of product sold online, internet experience and ease in purchasing may also influence consumers decision to shop using the internet (Chang et al., 2005); (Limayem et al., 2000). According to (Lohse et al., 2000) also explain that an important as it may help companies clarify their online retail strategies for web site design, online advertising, product variety and market segmentation.

In the literature, the concept of market segmentation is introduced by (Smith, 1956). Market segmentation involves viewing a heterogeneous market as a number of smaller homogeneous markets, in response to differing preferences, attributable to the desires of consumers for more precise satisfaction on their varying wants. Market segmenting approach helps marketers to provide a deeper understanding of consumers. The marketer task to identify the appropriate number and nature of market segmentation and decide which one to target (Kotler & Keller, 2016). Market segmentation is one of important thing in research, especially in electronic commerce (Vellido et al., 1999). Customer segmentation is a process of dividing all customers into distinct groups that share similar characteristics, such as demographics, interests, patterns, or location, and can help a business focus marketing efforts and resources on valuable, loyal customers to achieve business goals (Zhou et al., 2021).

Customer segmentation is the process of dividing a market into subsets of consumers with common need or characteristics. Each subset represents a consumer group with shared need that are different from those shared by other group (Schiffman & Wisenblit, 2019). Market segmentation is the process of subdividing a heterogeneous market into homogeneous groups of customers who respond to marketing activities in the same way (Foedermayr & Diamantopoulos, 2008); (Ko et al., 2012). The identification of such segments can be the basis for effective targeting, enabling the redirection of made to measure content towards the customer (Vellido et al., 1999).

Consumer segmentation can be used to naturally identify consumer classification and other benefits are to understand the motives, characteristics, and the needs of segmentation. Customer segmentation, also known as market segmentation, can be performed to group customer with distinguishable shopping behavior (Zhou et al., 2021). The companies can analysis this information before releasing their products to the market (Swinyard & Smith, 2003). E-commerce companies and other organizations rely on customer segmentation to target specific customer groups with content and product that the consumers within a segment would likely find relevance (An et al., 2018).

According to (Kotler & Keller, 2016) market segmentation is divided into four major categories namely geography, demography, psychographics and behavior. Geographic segmentation which divides the market into various geographical units such as countries, states, regions, municipalities, or neighborhoods. Demographic variables are the most popular dimensions and include age, family size, family life cycle, gender, income, occupation, education, religion, race, generation, nationality, and social class (Hamka et al., 2014). According to (Elrod et al., 2015) analyzed a few demographic variables (e.g., age, gender, income) to identify essential and profitable customers for more targeted communications.

Psychographic segmentation divided into groups on the basis psychological/personality traits, lifestyle or values (Kotler & Keller, 2016). Most psychographic research attempts to segment customers in accordance with their activities, interest and opinion (AIO) (Prasad & Reddy, D, 2007). The study of (Wang & Somogyi, 2018) investigated the effects of psychological factors, including subject norms, personal norms, and attitudes, on consumer purchase intentions and identified the pioneer and conservative customer segments. Then, (Lin, 2002) combined psychographic segmentation with demographic segmentation to identify sub-markets for enhancing competitive business advantages.

Behavioral segmentation is marketers divided buyers into several groups based on knowledge, attitudes, use or response to a product. Retailer may find more success by focusing on how they satisfy specific shopper segment (Tower, A, H, 2017). This paper focuses on profile of online shopping customer and cluster analysis. So, knowing online consumers profile, e-commerce site can make segment of consumer's characteristics. The important of the company must make strategy and understand of customer segmentation based on demographic and psychographic characteristics. Based on these insights, the company or organization can more effectively engage and understand their consumers.

## **2. RESEARCH METHODS**

### **2.1 Data Collection**

This study was conducted to analyze the segmentation profile of online shopping consumers in Padang City based on demographic and psychographic characteristics. This research is a descriptive research and the method used in this research is a quantitative method using online survey. Quantitative research (Hair et al., 2014) is research that emphasizes the use of questions with formal standards and previously determined answer choices in questionnaires distributed to respondents. The technique of collecting data was a self-administered survey in which each questionnaire is filled out directly by the respondent (Cooper, D. R., & Schindler, S, 2011). The sampling method in this study was purposive sampling. Purposive sampling is a sampling technique with certain considerations (Sugiyono, 2017). The samples in this study are the people in Padang City over 17 years old and have online shopping at least once in the last six months. The total samples in this study were 150. The data analysis technique used in this study was cluster analysis.

### **2.2 Measurement**

This study focuses on segmentation profile of online shopping consumers in Padang City based on demographic and psychographic characteristics. Demographic characteristics data collected included gender, age, status, last education, income, occupation, the most frequently used devices, the most frequently used online shopping sites for online shopping, the frequency of online shopping in the last six months and the type of products purchased by online. Cluster analysis is group of multivariate techniques whose primary purpose is to group objects (respondents in this case) based on the characteristics they possess (Hair et al., 2014). We carry out the cluster analysis based on psychographic (attitude, interest and opinion).

This study was evaluated using 13 statement adapted from (Wiguno et al., 2015). Attitude was measured with four items consist of “I am the first one to buy online among my friends”, “I am active in looking for information about new products that are sold online”, “I shop online only when I am busy working or doing work at home”, and “I shop online only when I am with my family” Subjects rated the items on Likert scale from 1 (strongly disagree) to 5 (strongly agree). Interest was measured with five items consist of “I am interested in technological developments so I am interested in shopping online” “I am interested in shopping online because of the more benefits I get”, “I am interested in shopping online because of the new product innovations offered online” “I am interested in shopping online because I want to get new experiences” and “I shop online because my social groups also shop online” Subjects rated the items on Likert scale from 1 (strongly disagree) to 5 (strongly agree). Then, opinion was measured with four items consist of “I shop online independently without considering other people's opinions”, “I like shopping online because I am satisfied with the services provided”, “I shop online because it saves time”, “I am not afraid of my

personal information such as my home address being listed on online shopping websites”. Subjects rated the items on Likert scale from 1 (strongly disagree) to 5 (strongly agree).

### **2.3 Cluster Analysis**

The type of research used is descriptive research. This study focuses on segmentation profile of online shopping consumers in Padang City based on demographic and psychographic characteristics. This study uses cluster analysis. Cluster analysis is widely used in studies to discern the existence of shopper segments (Reynolds et al., 2002). This technique provides answers to market segmentation research and other business problems to classify similar or analogous groups. Cluster analysis will show similarities between the analyzed factors, especially when the factors to be analyzed are applied to consumers.

In marketing research, cluster analysis is generally used to segment a respondent based on the characteristics of the existing number of attributes. This is especially useful if the researcher does not have a strong picture and assumption about the number of clusters to be formed. K-Mean clustering is used to determine the constraint on the number of clusters to be formed. K-means clustering represents the most widely chosen technique because of its unique advantages, for example, it is easy to implement, produces tighter clusters than hierarchical clustering, guarantees convergence, and enables the researcher to manipulate and examine different cluster solutions separately and thoroughly (Ding & He, 2004).

## **3. RESULTS & DISCUSSION**

### **3.1 Validity Test and Reliability Test**

The validity testing in this research using confirmatory factor analysis. According to (Hair et al., 2014) items with a factor loading greater than 0,30 are regarded as minimally meaningful, greater than 0,50 as moderately meaningful and greater than 0,70 as highly meaning full. In this research, from 14 items, there is one item not valid (having a loading factor lower than 0,50). Based on the result of CFA, 13 items in this research have factor loadings ranged from 0,518 to 0,731.

**Table 1.** The Result of Validity Test and Reliability Test

Items	Factor loading	Cronbach's Alpha
<b>Attitude</b>		
I am the first one to buy online among my friends	0,570	
I am active in looking for information about new products that are sold online	0,624	0,721
I shop online only when I am busy working or doing work at home.	0,542	
I shop online only when I am with my family.	0,603	
<b>Interest</b>		
I am interested in technological developments so I am interested in shopping online.	0,665	
I am interested in shopping online because of the more benefits I get.	0,696	
I am interested in shopping online because of the new product innovations offered online.	0,731	0,813
I am interested in shopping online because I want to get new experiences.	0,650	
I shop online because my social groups also shop online.	0,625	
<b>Opinion</b>		
I shop online independently without considering other people's opinions.	0,545	
I like shopping online because I am satisfied with the services provided.	0,717	0,688
I shop online because it saves time.	0,518	
I am not afraid of my personal information such as my home address being listed on online shopping websites	0,540	

Source: Data Processed (2021)

The reliability analysis uses the Cronbach's Alpha, which measure the ratio of the variance of individual items to the variance of the entire scale (Taber, 2017). Its value is between 0 and 1. The closer it is to 1, its higher is the reliability. Cronbach's Alpha coefficients were calculated to assess the reliability of each factor. Cronbach's Alpha value in this study from 0,688 to 0,813. This proves that the data is reliable. Table 1 present the result of validity test and reliability test.

### 3.2 Profile of Online Shopping Consumer Based On Demographics Characteristics

Consumer demographics played an important role in influencing of online shopping consumers. The characteristics of the respondents based on demographics segmentation in this study include gender, age, status, last education, income (Tan et al., 2021), occupation, the most frequently used devices for online shopping, the most frequently used online shopping sites for online shopping, the frequency of online shopping in the last six months and the type of products purchased by online. According to (Elrod et al., 2015) analyzed a few demographic variables (age, gender, income) to identify essential and profitable customers for more targeted communications.

**Table 2.** Demographic Characteristics of Respondents (n =150)

Demographic Profile	Frequency	Percentage	Demographic Profile	Frequency	Percentage
Gender			The most frequently used electronic devices for online shopping		
a. Male	38	25,3	a. Desktop	3	2
b. Female	112	74,7	b. Smartphone	141	94
			c. Notebook	4	2,7
			d. Netbook	1	0,7
			e. Tablet	1	0,7
Age			The most frequently used website for online shopping		
a. 17-20 years old	35	23,3	a. Shopee	115	76,7
b. 21-30 years old	46	30,7	b. Lazada	19	12,7
c. 31-40 years old	28	18,7	c. JD.ID	2	1,3
d. 41-50 years old	26	17,3	d. Buka Lapak	2	1,3
e. >50 years old	15	10,0	e. Tokopedia	12	8
Status			Frequency of online shopping in the last six months		
a. Single	84	56	a. 1-2 times	39	26
b. Married	66	44	b. 3-4 times	40	26,7
			c. 5-6 times	21	14
			d. >6 times	50	33,3
Last Education			The products that purchased by online		
a. Senior high school	75	50	a. Electronic	12	8
b. Bachelor Degree	32	21,3	b. Fashion	101	67
c. Master Degree	39	26,0	c. Cosmetics	17	11,3
d. Doctoral	4	2,7	d. Book and Stationery	6	4
			e. Others	14	9,3
Income			Sub-District		
a. Rp 0 – Rp 1.000.000	62	41,3	a. Bungus Teluk Kabung	1	0,7
b. Rp 1.000.000 – Rp 2.500.000	17	11,3	b. Koto Tangah	41	27,3
c. Rp. 2.500.000 – Rp 5.000.000	35	23,3	c. Kuranji	27	18
d. Rp. 5.000.000 – Rp. 10.000.000	27	18	d. Lubuk Begalung	10	6,7
e. Rp >10.000.000	9	6	e. Lubuk Kilangan	4	2,7
			f. Nanggalo	9	6
			g. West Padang	12	8
			h. South Padang	6	4
			i. East Padang	15	10
			j. North Padang	17	11,3
			k. Pauh	8	5,3
Occupation					
a. College students	68	45,3			
b. Civil servants/BUMN	14	9,3			
c. Lecturer	32	21,3			
d. Self employed	15	10			
e. Others	21	14,0			

Source: Data Processed (2021)



The demographic profile of the studied indicates that majority of consumers are female (74,7%) and male (25,3%). The most of consumers are young 17-20 years old (23,3%) and 21-30 years old (30,7%). The most of respondents are single (56%). Based on the latest education, the respondents have graduated from senior high school (50%) and they have an income 0 – 1.000.000 (41,3%). Based on occupation, most of the respondents are college students (45,3%), and then the majority of the respondents use smartphones to online shopping (94%). The respondents using shopee site for online shopping (76,7%) and most of the respondents who shopped online in the last six months more than 6 times (33,3%). The majority of respondents bought fashion products (67,3%) and the most of them live in Koto Tangah sub district (27,3%). (Table 2)

### **3.3 Profile of Online Shopping Consumer Based On Psychographic Characteristics**

Psychographic segmentation is a segmentation in which consumers are grouped based on the characteristics of each consumer. We used the k-means clustering method to form group or cluster of respondents with similar psychographics. K-means cluster analysis was used to indicate which variable and factor were significant in clustering respondent. Table 3 present the result of final cluster that show the different segments each cluster. Based on the result of final cluster output is still related to the previous standardization process, which refers to the z score with the provisions that a negative value (-) means the data is lower than total average and positive (+) value means the data is higher than average. The customer segmentation approach relies on identifying key attributes from which one can separate customer into segments (Cooil et al., 2008). By identifying the factors with the highest z score on each cluster (Table 3), the final eight online shopping customer cluster were determined. The following subsections elaborate on (1) risk taking consumer, (2) adventurous consumers, (3) active consumers, (4) practical consumers, (5) socialite consumers, (6) economical consumer, (7) passive consumers and (8) independent consumers.

**Table 3.** Final Cluster from K-means Cluster Analysis (n =150)

Item	Cluster							
	1	2	3	4	5	6	7	8
<b>Activity</b>								
I am the first one to buy online among my friends	1,25	-0,22	-0,01	-0,36	1,25	-0,68	-0,56	0,82
I am active in looking for information about new products that are sold online	0,31	-0,39	0,43	-0,30	0,93	-0,62	-1,48	1,06
I shop online only when I am busy working or doing work at home.	-1,54	-0,81	0,42	-0,50	1,34	0,03	-0,52	-0,71
I shop online only when I am with my family.	-1,41	-0,56	0,36	-0,05	1,23	-0,79	-0,29	-0,86
<b>Interest</b>								
I am interested in technological developments so I am interested in shopping online.	-3,06	0,07	0,71	-0,57	0,83	-0,96	-0,62	0,21
I am interested in shopping online because of the more benefits I get.	-1,21	0,35	0,49	0,00	0,84	-0,91	-1,47	-0,42
I am interested in shopping online because of the new product innovations offered online.	-3,02	0,53	0,50	-0,01	0,89	-1,21	-1,15	-0,49
I am interested in shopping online because I want to get new experiences.	-2,60	0,42	0,50	-0,10	0,94	-1,23	-0,30	-1,25
I shop online because my social groups also shop online.	-1,66	-0,76	0,52	0,21	1,04	-1,07	-0,19	-1,18
<b>Opinion</b>								
I shop online independently without considering other people's opinions.	-2,06	0,24	-0,16	-0,18	1,13	-0,38	-1,16	0,87
I like shopping online because I am satisfied with the services provided.	1,34	0,10	0,26	-0,01	1,06	-1,31	-1,09	0,41
I shop online because it saves time.	0,89	0,62	0,18	-0,66	0,79	-0,64	-0,77	0,89
I am not afraid of my personal information such as my home address being listed on online shopping websites	1,61	-0,45	-0,25	-0,07	1,42	-0,86	-0,31	0,81
Cluster size	1	16	38	32	21	19	13	10
Percentage of Respondents	0,67%	10,67%	25,33%	21,33%	14%	12,67%	8,67%	6,67%

Source: Data Processed (2021)

Consumers in cluster 1 (n=1), whom we call “risk taking consumers. The smallest cluster of the sample overall. This cluster consists of respondents who are the first to buy online among their friends, enjoy online shopping because they are satisfied with the services provided and these respondents are not afraid of their personal information such as registered home addresses on online shopping websites. Consumers in cluster 2 (n=16), whom we call “adventurous consumers”, this cluster consists of respondents who are interested in technological developments so that they are interested in shopping online and these respondents shop online also because of new product innovations offered online and also because of getting new experiences. Consumers in cluster 3 (n=38), whom we call “active consumers and the largest cluster of the sample, the respondents who are actively looking for information about new products in online site and those who shop when they are busy working or doing work at home.

Consumers in cluster 4 (n=32), whom we call called “practical consumers”. This cluster consists of respondents who are interested in shopping online because of the more benefits and practice their will get. Consumers in cluster 5 (n=21), whom we call “socialite consumers” this cluster consists of respondents who shop online because their social groups. This cluster is the highest interval value among all clusters. Consumers in cluster 6 (n=19), whom we call “economical consumer”. This cluster consists of respondents who shop for work oriented. Consumers in cluster 7 (n=13), whom we call “passive consumers”, the lowest z-score from all clusters and all items have lower score from average. These respondents do not follow technological developments and do not active to seek information related to products on online shopping sites. Consumers in cluster 8 (n=10), whom we call “independent consumers”. This cluster consists of respondents who independently shop online without considering the opinions of others and who consider online shopping also saves time.

### 3.4 The Result of One Way Anova

One way Anova was used to identify significant difference between eight clusters. The anova table shows that the significance value of all variables in each cluster is lower than 0,05.

**Table 4.** The Result of One Way Anova

Item	Cluster		Error		F	Sig
	Mean Square	df	Mean Square	df		
I am the first one to buy online among my friends	9,264	7	0,593	142	15,633	0,000
I am active in looking for information about new products that are sold online	9,715	7	0,570	142	17,032	0,000
I shop online only when I am busy working or doing work at home.	10,460	7	0,534	142	19,600	0,000
I shop online only when I am with my family.	7,373	7	0,686	142	10,750	0,000
I am interested in technological developments so I am interested in shopping online.	10,751	7	0,519	142	20,701	0,000
I am interested in shopping online because of the more benefits I get.	10,125	7	0,550	142	18,403	0,000
I am interested in shopping online because of the new product innovations offered online.	14,322	7	0,343	142	41,724	0,000
I am interested in shopping online because I want to get new experiences.	11,910	7	0,462	142	25,767	0,000
I shop online because my social groups also shop online.	9,727	7	0,570	142	17,071	0,000
I shop online independently without considering other people's opinions.	9,254	7	0,593	142	15,602	0,000
I like shopping online because I am satisfied with the services provided.	10,775	7	0,518	142	20,796	0,000
I shop online because it saves time.	7,897	7	0,660	142	11,966	0,000
I am not afraid of my personal information such as my home address being listed on online shopping websites	10,072	7	0,553	142	18,220	0,000

Source: Data Processed (2021)

Based on Table 4, it means that there are significant differences between clusters in each variable. In addition, it is also marked with an F value which indicates that the F value has a greater than the mean square. It's means that all variables in cluster 1 to cluster 8 have a significant level of difference. The segment differed significantly in online shopping consumers. Furthermore, based on the result of cross tabulation from cluster analysis, the results of the psychographic segmentation of online shopping consumers in Padang City

based on AIO (attitude, interest, opinion) show that there are eight clusters are risk taking consumers, adventurous consumers, active consumers, practical consumers, socialite consumers, economic consumers, passive consumers, and independent consumers (Table 5).

The first is risk taking consumers (0,67% of sample) and the smallest cluster in the sample overall. The consumers are 31-40 years old, male, with bachelor's degree graduated and single. The risk taking consumer was self-employed with income IDR 2.500.000 - IDR 5.000-0000. The electronic devices often used for online shopping are notebooks, online shopping sites that are often used are tokopedia and frequency of shopping more six times during the last six months and products that are often purchased are electronic. Adventurous consumers (10,67% of sample) were between the aged 31-40 years old, The majority of consumers are female with bachelor degree graduated and married. These consumers are college students with income IDR 0 – IDR 1.000.0000. The electronic devices often used for online shopping are smartphone, online shopping sites that are often used are shopee with a frequency of shopping 3-4 times during the last six months and products that are often purchased are fashion products.

Active consumers (25,33% of sample) are 17-20 years old, female with senior high school graduated and single. These consumers are college students with income IDR 0 – IDR 1.000.0000. The electronic devices often used for online shopping are smartphones, with online shopping sites that are often used by shopee, frequency of shopping more 6 times during the last six months and products that are often purchased are fashion products. Practical consumers (21,33% of sample) are 21-30 years old, female with senior high school education background and single. These consumers are college students with income IDR 0 – IDR 1.000.0000. The electronic devices often used for online shopping are smartphones, with online shopping sites that are often used by shopee with a frequency of shopping 1-2 times during the last six months and products that are often purchased are fashion product.

Socialite consumers (14% of sample) are 21-30 years old, female with senior high school graduated and single. These consumers are college students with income IDR 0 – IDR 1.000.0000. The electronic devices often used for online shopping are smartphones, online shopping sites that are often used by shopee with a frequency of shopping >6 times during the last six months and products that are often purchased are fashion products. This segment has the higher score. Economic Consumers (12,67% of sample) who are 21-30 years old, female with bachelor's degree graduated and married status. These consumers are college students with income IDR 0 – IDR 1.000. 0000. The electronic devices often used for online shopping are smartphones, online shopping sites that are often used by shopee with a frequency of shopping 1-2 times during the last six months and products that are often purchased are fashion products.

Passive consumers (8,67% of sample) are 21-30 years old and 41-50 years old, female with bachelor’s degree graduated and single. These consumers are college students with income IDR 2.500.000 – IDR 5.000.0000. The electronic devices often used for online shopping are

**Table 5.** Cross Tabulation of Psychographic

Characteristic of Respondent	Psychographic Cluster							
	1 Risk Taking Consumers	2 Adventurous Consumers	3 Active Consumers	4 Practical Consumers	5 Socialite Consumers	6 Economic Consumers	7 Passive Consumers	8 Independent Consumers
Gender	Male	Female	Female	Female	Female	Female	Female	Female
Age	31-40 years old	31-40 years old	17- 20 years old	21 -30 years old	21 -30 years old	21 -30 years old	21 -30 years old and 41- 50 years old	21 -30 years old
Last Education	Bachelor Degree	Bachelor Degree	Senior High School	Senior High School	Senior High School	Bachelor Degree	Bachelor Degree	Senior High School
Status	Single	Married	Single	Single	Single	Married	Single	Single
Income	2.500.001 – 5.000.000	0 – 1.000.000	0 – 1.000.000	0 – 1.000.000	0 – 1.000.000	0 – 1.000.000	2.500.001 – 5.000.000	0 – 1.000.000
Occupation	Self Employed	College Students	College Students	College Students	College Students	College Students	College Students	College Students
Electronic Device Used	Notebook	Smartphone	Smartphone	Smartphone	Smartphone	Smartphone	Smartphone	Smartphone
Online Shopping Website	Tokopedia	Shopee	Shopee	Shopee	Shopee	Shopee	Shopee	Shopee
Frequency of online shopping	> 6 times	3-4 times	> 6 times	1-2 times	> 6 times	1-2 times	1-2 times	5-6 times
Product	Electronic	Fashion	Fashion	Fashion	Fashion	Fashion	Fashion	Fashion

Source: Data Processed (2021)

smartphones, online shopping sites that are often used by shopee with a frequency of shopping 1-2 times during the last six months and products that are often purchased are fashion products. Independent consumers (6,67% of sample) are 21-30 years old, female with senior high school graduated and single. These consumers are college students with income IDR 0 – IDR 1.000.0000. The electronic devices often used for online shopping are smartphones and online shopping sites that are often used by shopee with a frequency of shopping 5-6 times during the last six months and products that are often purchased are fashion products.

### 3.5 Discussion

The current study focuses on segmentation profile of online shopping consumers in Padang City based on demographic and psychographic characteristics. This studied the demographic and psychographic difference among characteristic, which provide a deep comprehension of the resulting profile. Some studies showed that consumer demographics (age, gender, education, income) influence their online shopping adoption and intention. This study is accordance with (Lin, 2002) that combined psychographic segmentation with demographic segmentation to identify sub markets for enhancing competitive business strategy.

Based on the results of cross tabulation from analysis cluster, we can classify consumers based on consumer behavior, especially in psychographic characteristics. Accordance to (Zhou et al., 2021), customer segmentation can be performed to group customers with

distinguishable shopping behavior. This study identifies eight clusters in online shopping consumers (Table 6). First, risk taking consumer who are the smallest cluster (0,067%) in the sample overall. The consumers who are the first to buy online among their friends and not afraid of their personal information such as registered home addresses on online shopping websites. The consumers are 31-40 years old, male, with bachelor's degree graduated and most of them are single. Second, adventurous consumers (10,67%) who interested in technological developments so that they are interested in shopping online and these respondents shop online also because of new product innovations offered online and also because of getting new experiences. The consumers are 31-40 years old and the majority of consumers is female with bachelor degree graduated and has an income IDR 0 – IDR 1.000.0000. The profile related with (Dirsehan & Çelik, 2011) and (Gabriel & Lang, 2006) this consumer who are explorer, identity seekers, communicator and activist.

Third, active consumer (25,33%) who the largest cluster of the sample. The consumers who are actively looking for information about new products in online site and those who shop when they are busy working. The majority of consumer are youngest consumers are 17-20 years old, female with senior high school graduated and have income IDR 0 – IDR 1.000.0000. The characteristic of this profile have common points with chooser and activist consumers from the study of (Dirsehan & Çelik, 2011) and (Gabriel & Lang, 2006). Fourth, practical consumers (21,33% of sample). The consumers who interested in shopping online because of the more benefits and practical their will get. These people take advantage of the internet, where it is easier to obtain information (Verhoef et al., 2007). The consumers are 21-30 years old, female with senior high school graduated and single. These consumers are college students and have income IDR 0 – IDR 1.000.0000.

Fifth, socialite consumers (14%) who interested to online shopping because their social groups. This cluster is the highest score among all clusters. The consumers are 21-30 years old, female with senior high school graduated. These consumers are college students and have income IDR 0 – IDR 1.000.0000. The characteristic of this profile have related to the profiles defined from (Dirsehan & Çelik, 2011) and (Gabriel & Lang, 2006). This segment has the higher score among all segment and the respondents who shop online because their social groups. Sixth, economical consumer, they who shop for work oriented. The consumer are 21-30 years old, female with bachelor's degree graduated background. These consumers are college students and have an income IDR 0 – IDR 1.000. 0000.

**Table 6.** Psychographics Segment and Characteristic of Online Shopping Consumers

<b>Risk Taking Consumer (n=1) 0,067%</b>	<b>Adventurous Consumer (n=16) 10,67%</b>	<b>Active Consumer (n=38) 25,33%</b>	<b>Practical Consumer (n=32) 21,33%</b>
The first to buy online among their friends. Does not afraid of their personal information on online shopping site. 31-40 years old Self employee and Bachelor degree graduated Income 2.500.000 – 5.000.000 Purchase using notebook Purchase from tokopedia Purchase frequency >6 times Product : electronic	Interested in trying something new to get new experience Interested in technological developments and new product innovation. 31-40 years old Bachelor degree graduated Income 0-1.000.000 Purchase using smartphone Purchase from shopee Purchase frequency 3-4 times Product : fashion	Active looking for information about new products and busy working  (Young) 17-20 years old Student and senior high school graduated Income 0-1.000.000 Purchase using smartphone Purchase from shopee Purchase frequency >6 times Product : fashion	Interested in online shopping because of t more benefits and easier.  21-30 years old Student and senior high school graduated Income 0-1.000.000 Purchase using smartphone Purchase from shopee Purchase frequency 1-2 times Product : fashion
<b>Socialite Consumer (n=21) 14%</b>	<b>Economical Consumer (n=19) 12,67%</b>	<b>Passive Consumer (n=13) 8,67%</b>	<b>Independent Consumer (n=10) 6,67%</b>
The consumers who shop online because their social groups.  21-30 years old Student and senior high school graduated Income 0-1.000.000 Purchase using smartphone Purchase from shopee Purchase frequency >6 times Product : fashion	The consumers who shop for work oriented.  21-30 years old Student and bachelor degree graduated Income 0-1.000.000 Purchase using smartphone Purchase from shopee Purchase frequency 1-2 times Product : fashion	Does not follow technological developments and does not to seek information related to products in sites.  21-30 years old and 41-50 years old (Older) Bachelor degree graduated Income 2.500.00 – 5.000.000 Purchase using smartphone Purchase from shopee Purchase frequency 1-2 times Product : fashion	Independent to shop online without considering the opinions of others.  21-30 years old Student and senior high school graduated Income 0-1.000.000 Purchase using smartphone Purchase from shopee Purchase frequency 5-6 times Product : fashion

Source: Data Processed (2021)

Seventh, passive consumers (8,67%) who do not follow technological developments and do not active to seek information related to products on online shopping sites and have lower score of all average. They are 21-30 years old and 41-50 years old, female with bachelor’s degree graduated and single. These consumers are college students with income IDR 2.500.000 – IDR 5.000.0000. Eighth, independent consumers (6,67%) who independently shop online without considering the opinions of others and who consider online shopping also saves time. The consumers are 21-30 years old, female with senior high school graduated and single. These consumers are college students with income IDR 0 – IDR 1.000.0000. This profile related to (Dirsehan & Çelik, 2011), This profile is not interested in communication and enjoyed individually in online shopping experience.

In addition, the majority of consumers are female from eight clusters in this study. It’s probably because the most of female are interested to online shopping. The result is related with (Sebald & Jacob, 2020) show that 87,5% who online shopping are dominated by women. The study of (Kuswanto et al., 2020) also describe that the respondents responses from 83 respondents did online shopping, 41% of them are male and 59% are female. Then, the majority of consumers are mostly students with lower income. They are the most likely to use e-commerce site to purchase fashion products. In this study, majority of respondent purchase fashion product such as clothes, shoes, bag and others. Knowing more about the profiles of these consumers is of interesting to fashion product. So, e-commerce site should improve their product especially fashion products and web design should focus on simplicity, informative and promotion. Then, this study showed that the most of respondents likely to used mobile

device (smartphone) for online shopping. Other studies report many shopper use smartphone to search information and make purchases (Ladhari et al., 2019). The study show that the shopper make their online purchases on a desktop computer and about 15% make majority of their purchases on mobile device.

#### **4. CONCLUSION & SUGGESTION**

This paper focuses on profile of online customer segmentation base on demographic and psychographic characteristic. Based on the results of the study in terms of demographics, the majority of respondents are female (74,4%) and senior high school graduated. Most of the respondents' have income IDR 0 - IDR 1.000.000 and most of them are college students. The electronic devices that are often used for online shopping are smartphones and the most frequently used site is shopee with a frequency of shopping in six months more 6 times. The most purchased products are fashion products and the most respondents live in Koto Tangah. In the meantime, based on data analysis and discussions carried out, the results of the psychographic segmentation of online shopping consumers in Padang City based on AIO (attitude, interest, opinion) show that there are eight clusters, namely risk taking consumers, adventurous consumers, active consumers, practical consumers, socialite consumers, economic consumers, passive consumers, and independent consumers.

The results of this study are expected to be a reference for descriptive research, especially in the concept of market segmentation, both demographic segmentation and psychographic segmentation. Because of this research only discusses demographic and psychographic segmentation, it is hoped that future research will add other segmentations such as geographic segmentation and behavioral segmentation. In addition, the sample size used in this study is relatively small considering the research location in the Padang City. Future research is expected to use a larger sample size with a wider range. The majority of respondents are college students; therefore the samples are less varied. It is hoped that the next research will be more varied, especially from the types of occupation. The contribution of this research is expected to be able to contribute to certain parties such as marketplace (shopee) in classifying consumers based on demographic and psychographic characteristics, so that company can provide better services. In addition, this research can be used as a data reference for the government in classifying people behavior in online shopping.

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