IoT BASED OMNI-CHANNEL CONSUMER CONFORMITY IN FASHION INDUSTRY: DO GENDER, AGE, MONTHLY INCOME STILL MATTER?

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Abstract

The research aimed to examine the influence of socioeconomic characteristics (age, gender, and income) on consumer conformity during the Internet of Things. A 7 items instrument using 7-likert scale for dimensions of consumer conformity in fashion industry for fashion consumers in Indonesia aged between 18 – 55 years old. Data analysis was performed on 470 responses using ANOVA Three-Way Test to find out if the socioeconomic characteristics are significant to the components of consumer conformity in fashion industry. This is considered the first research examining the influences of socioeconomic characteristics to Consumer Conformity. The results reveal that among the three characteristics, only age is found to be significant to Consumer Conformity. Therefore, to support the Consumer Conformity in fashion consumers, the marketer should pay attention to each age groups.

Keywords: age, consumer conformity, gender, monthly income, IoT, omnichannel.

INTRODUCTION

Due to Covid19 pandemic, the predicted technology disruption has become even faster and has changed the behaviors of consumers (de Pedraza, Guzi, & Tijdens, 2020; Ready, 2020). After more than sixteen months of pandemic, consumers are simply separated into two, those who comply to the new normal and keep themselves protected by practicing all safety protocols and those who accept the new normal and try to live normally. This can be seen from how all the public places are starting to operate in almost normal business hours, the traffic jam is back, and the malls are packed on weekends.

This is a great relief for the marketers as they need customers to visit their stores and purchase things. Even though the customers can buy things online or via marketplaces. Unlike other products, most consumers prefer to try the clothes first before they decide to buy the clothes (Rose, Shoham, Kahle, & Batra, 1994). Therefore, the fashion marketers are usually present in omnichannel, both online and offline. These two are closely linked, as the store existence provides trust (Bu & Go, 2008; Warner-Söderholm et al., 2018; Yeon, Park, & Lee, 2019) for the consumers to buy products and online platforms act both as advertisings and selling platform. There are many stories on how the consumers visit the stores only to observe the products and purchase the items online, or vice versa.

Moreover, the marketing scope has moved beyond just buying and selling products, consumers are more demanding, hard to predict, and difficult to satisfy. Consumers in digitalization era do not easily trust marketers and the consumers can seek information just
by using clicks. Unlike the traditional and modern marketing, the digital marketing requires support from previous customers to provide feedbacks and reviews to gain trust from the other customers or to obtain loyalty and engagement from existing consumers (Auer & Griffiths, 2018; Kumar et al., 2010). Likewise, the marketers use the power of role models, like celebrities or famous people to initiate purchase intention (Cheng, Gu, & Shen, 2019; Park & Yang, 2012). This research argues on this tendency as consumer conformity as explained by (Lascu & Zinkhan, 1999). The consumer conformity variable has been long introduced but are rarely investigated. However, the social conformity theory, which is the foundation of consumer conformity has been studied abundantly in psychological and social contexts. Therefore, this research seeks to address this gap and tries to examine the relationships.

Gender, age, and income, as the socioeconomic characteristics have been examined in many different contexts and industries such as in psychosocial improvements (Ligh et al., 2020), social network (Antonucci, Ajrouch, & Abdulrahim, 2015), purchase intention (Beneke, 2013; Casper, 2007), external locus of control (Siddiquah, 2019), Internet activities and usage (Akman & Mishra, 2010; Van Deursen, Van Dijk, & Ten Klooster, 2015), pattern of smoking (Fukuda, Nakamura, & Takano, 2005), customers experience dimensions (peace of mind, moments-of-truth, outcome focus, and product experience) during their retail store stay (Deshwal, 2016), net tax liabilities (Aziz, Gemmell, & Laws, 2016), store loyalty (Reisenwitz & Gupta, 2016), SMS call-to-action campaigns (Standing, Jackson, Leppaniemi, & Karjaluoito, 2008), Covid19 protection measures (Untaru & Han, 2021), life expectancy (Kim & Kim, 2017), digital divide in e-services (Elena-Bucea, Cruz-Jesus, Oliveira, & Coelho, 2020), design of public health interventions (McLean et al., 2014), and e-shoppers behavior (Hernández, Jiménez, & Martín, 2011).

With so many studies related to socioeconomic characteristics, we can see that these characteristics are not really examined carefully by the researchers in marketing studies. In fact, as to the author’s knowledge, there has been no studies relating the socioeconomic characteristics to consumer conformity during the Internet of Things in fashion industry. Hence, this research provides a strong novelty to the body of knowledge in marketing.

LITERATURE REVIEW

Asch (1955) introduced the concept of conformity and argued that people are influenced by the people around them. When they are influenced, either by pressure or self-acceptance, they conform to the opinion of others. In the previous studies of the conformity process, people are said to conform more to the majority (Bond, 2005; Levine, John M; Russo, 1981) even if the majority is wrong. This can happen due to the group pressure (Asch, 1956). Other contradictory studies however, show that the minority can also influence the majority (Baer, 2010; Gee et al., 2017; Hu et al., 2018; Reis, Sprecher, & Fingerman, 2013; Tümen, 2017). Conformity refers to the compliance or acceptance of other’s opinion in two contexts. First, the normative conformity as an act of conformity to avoid conflicts and second, the informational conformity, which is an act of conformity after receiving enough information on a specific view (Asch, 1956).

Previous studies on conformity have been various, like from Murphy and Witt (1975) who investigated conformity with three measurements: attitude, group size, and occurrence. Furthermore, Caruso (1996) argued that conformity can be seen as positive but also weakens creativity and kill freedom. In addition, some people prefer to be unique and reject conformity (Wang, Yu, & Wei, 2012; Wu & Lo, 2017). These people are known as the non-conformists in the social conformity theory (Tsao et al., 2015), whereas in the theory of diffusion of innovation is known as laggards (Orr, 2003). The bigger the size of the
majority, these people will avoid the conformity tendency and try to stand out in the majority (Durand & Kremp, 2016).

Consumer Conformity is the term introduced lately to describe the act of conformity in purchasing goods or service (Lascu & Zinkhan, 1999). They related the conformity act to marketing theories. Some other studies try to seek the psychological factors of conformity, like social influence (Bond, 2005; Zafar, 2011, Rosander & Eriksson, 2012), gender (Khan, Hui Hui, Booi Chen, & Yong Hoe, 2015; Rosander & Eriksson, 2012), task difficulty (Rosander & Eriksson, 2012), social comparison (Faith, Leone, & Allison, 1997; Goethals & Darley, 1987; Latané & Wolf, 1981; Princes, Manurung, So, & Abdinagoro, 2020).

Consumer Conformity and Internet of Things (IoT)

The recent digitalization and Internet of Things (IoT) has strengthened the impacts of consumer conformity in purchasing behaviors. This fact is strengthened by the obvious effects of social media and internet use to human lives. In the marketing context, we can see that companies are pursuing opportunities to increase purchase intention by using the power of social media such as Instagram (Casaló, Flavián, & Ibáñez-Sánchez, 2020; Kurniasih, 2019; Yahia, Al-Neama, & Kerbache, 2018), Facebook (Fiorini, 2018; Ivana, 2018; Van der Schyff & Flowerday, 2019), Twitter (Wang, 2017), YouTube (“10 Hot Consumer Trends”, 2019), and even the newest one, Tik-Tok. The strategies are mainly focused on using the influence of famous people as role model and celebrities to increase the intention of customers to buy products, known as celebrity endorsement (Bisht, 2013; Hani, Marwan, & Andre, 2018; Tseng & Lee, 2013). Moreover, reviews from others and Word of Mouth (WOM) have acted as the biggest reason for consumers to make purchase decision (Kumar et al., 2010; Yeon, Park, & Lee, 2019; Tsao, 2014; Yamada, 2019).

When we compare these facts to consumer conformity theory, it is obvious that the strategies launched by the companies to increase purchase intentions by using the influence of others are actually part of the consumer conformity process. However, until this paper is written, there are still very limited studies on consumer conformity. In fact, this paper is the continuation the author’s previous studies on conformity with the intention to examine this variable further.

Previous Studies on Age, Gender, and Income

Examining the previous studies on how age, gender, income have influenced various contexts and industries, here are some studies that are considered relevant to consumer conformity. First, the study by (Hernández et al., 2011) shows that the socioeconomic characters of individuals have almost no significance on the e-shoppers behavior, once the e-shoppers have become familiar with the marketing channel. Second, higher income was related to wider network size and less contact frequency. (Antonucci et al., 2015). Third, the 26-45 age group needs to be reassured of the brand authenticity, and that the brand managers must use appropriate marketing channels to solve perceived risks (Beneke, 2013).

Fourth, Van Deursen et al. (2015) investigated the seven types of internet activities and found that the Internet provides more opportunities for those with higher income. Fifth, a study by (Casper, 2007) showed that purchase intention is significantly influenced by income. Sixth, in 2016, Deshwal shows that with the increase of age and income, people tend towards outcome focus, which indicates that customer experience dimensions in retail store stay must seek to achieve the same to attract consumers. Seventh, in the context of SMS call to action campaigns, Standing et al. (2008) found that mobile advertising is not limited to teenagers only. The results indicated that the consumers in the 36-45 age group respond to SMS calls-to-action in a television program better. Lastly, Akman & Mishra (2010) posited that gender positively influences the average daily Internet usage but most importantly, they found that gender, age, and income do not significantly
influence the Internet usage for electronic services such as e-banking, e-commerce, and e-shopping.

Conformity in Fashion Industry

Based on the web page by Casanova (2015) and the research of conformity in clothing (Rose et al., 1994), there are four effects that may cause conformity in the fashion industry: 1) Fashion enforces socioeconomic status. Fashion has served as a way of distinction among social classes since centuries ago as seen in the Chinese dynasties in which the ranks were defined by the color of their clothing. Clothing choice may lead to stereotypes and discrimination; 2) Fashion enforces hyper-masculinity and hyper-feminity. In modern society body images of both men and women can be distorted by commercial fashion. Clothing is believed to be able to define and communicate social identities and social information to others. The research on how clothing is related to social identity was conducted by Feinberg, Mataro, and Burroughs (1992). They agreed on the argument that to obtain the real perceived meaning of the actual social identities of the individuals, the clothes should be self-selected by the individuals to represent themselves.

MATERIALS AND METHODS

The research investigates the effects of socioeconomic characteristics on consumer conformity in fashion industry by using a 7-likert scale questionnaire shared online during a 3-month period, May 2020 – July 2020. From 600 questionnaires distributed online to fashion consumers in Indonesia, 523 questionnaires returned. The respondents were aged between 18 – 55 years old as defined by the Ministry of Labor as the productive age. This research examined the relationship between gender, age, and income with responses to each survey item. For analyses, age was dichotomized at 18 – 25 years old, 26 – 35 years old, 36 – 45 years old, and 46 -55 years old. Similarly, the monthly income was dichotomized at less than 2 million, 2 million to less than 4,5 million, 4,5 million to less than 10 million, 10 million to less than 25 million, and greater than 25 million rupiah.

The collected data were then treated for missing data, outliers and validations resulting in 470 respondents valid for analysis. The data were analyzed using Three-Way Anova with the SPSS Statistical Tool.

RESULTS AND DISCUSSIONS

Table 1 lists the mean, min and max and standard deviation values of all indicators in this research. Statistically, the standard deviation value shows the measure of the amount of variation or dispersion of a set of values. The lower the value of the standard deviation, the closer it is the mean (or can also be called as expected value). Higher standard deviation indicates that the values are wide and spread out. By using the standard deviation, statisticians may determine whether the data is normally distributed or not. If the data behaves in a normal curve, then 68% of the data points will fall within one standard deviation of the average or mean.

<table>
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The standard deviation values in Table 1 show the value of more than 1 and less than 2. The mean of 0 and standard deviation of 1 usually applies to the standard normal distribution, often called the bell curve. With the value of standard deviation 1, we can say that the values of the indicators are normally distributed. As the questionnaire uses a 7-point scale with 4 as the middle point, which means with mean falls on more than 4, 5 or even 6 then the responses are skewed to the right. As
a conclusion, with mean values and standard deviations as stated in Table 1, we can conclude that the 470 responses used in this research are normally distributed and skewed to the right.

**Table 2. List of Correlations Matrix for Consumer Conformity Indicators**

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<td>0.475**</td>
<td>0.518**</td>
<td>0.687**</td>
<td>0.636**</td>
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<td>Sig. (2-tailed)</td>
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**. Correlation is significant at the 0.01 level (2-tailed).

The Pearson Correlation values show strong correlation matrix between all the indicators representing the variable. From the values of correlation matrix in Table 2, we can see that the indicators in the Consumer Conformity variables have medium strength of correlation and therefore we can say that the indicators are not highly correlated and suitable to represent the variable. The correlation value shows that the highest correlation is between CC6 and CC7 with the value of 0.784. This value is still acceptable. Moreover, all the significance tests return the value of 0.00 which is lower than 0.05 and therefore all the indicators are considered unique and do not have any multicollinearity issues.

**Table 3. The Three-Way-ANOVA Test Result for Consumer Conformity**

Table 3 shows the result of the three-way ANOVA where three factors are tested for significance to the Consumer Conformity. This process is important to understand the effect of each descriptive variable to the dependent variable. For the purpose of this test, SPSS Statistics 24 was used and obtained the following result: Gender has no significant influence on Consumer Conformity. Age has a significant influence on Consumer Conformity. Monthly income has no significant influence on Consumer Conformity. The interaction of Gender and Age has no significant influence on Consumer Conformity. The interaction of Gender and Monthly Income has no significant influence on Consumer Conformity. The interaction of Age and Monthly Income has no significant influence on Consumer Conformity. The interaction of Gender, Age and Monthly Income has no significant influence on Consumer Conformity.

Figure 1 shows that at the income level 1 or below Rp 2.000.000 the women in the of age 18 – 25 years old have higher conformity than the men. This is contradictory with the people in the age of 26 – 35 where the men have a higher conformity level than the women. There is a huge difference level of conformity between men and women in the age of 36 – 45 years old where the men have very low conformity, and the women have very high conformity. This is acceptable remembering that in this age the women have become housewives or mothers, so they usually listen to the husbands and children and not too busy outside, especially when they have low income. In the age of 46 – 55 years old, both
men and women with low income are not interested in conformity or any fashion ideas. Figure 2 shows that at the income level 2 or between Rp. 2.000.001 and Rp. 4.500.000, the women in the age of 18 – 25 years old and 36 – 45 years old have a higher conformity than the men. There is a huge difference level of conformity between men and women in the age of 18 – 25 years old where the men have very low conformity and the women have very high conformity. This situation might happen because in this age, the women are strongly affected by the surrounding on how they should dress themselves, the women want to look impressive in the eyes of others and they have the money to do the buying while the men in this age are usually feeling comfortable with what they wear, do not pay too much attention on their outfit. However, both men and women in the age of 46 – 55 tend to have a higher conformity when they have the income between Rp 4.500.001 and Rp 10.000.000. They listen to their family more. Figure 3 shows that at the income level 3 or between Rp 4.500.001 and Rp 10.000.000, the women in the age of 26 – 35 years old and 36 – 45 years old have a higher conformity than the men. There is a huge difference level of conformity between men and women in the age of 18 – 25 years old where the men have very low conformity and the women have very high conformity. This is contradictory with the people in the age of 26 – 35 where the men have higher conformity level than the women. There is a huge difference level of conformity between men and women in the age of 46 – 55 years old where the men have very low conformity and the women have very high conformity. When they have extra income, they are focused on buying things for the family, such as their grandchildren. The men, on the other hand, usually focus on saving more money to prepare for retirement or just simply let his wives deal with purchasing problems.
Figure 4. Estimated Marginal Means of Consumer Conformity at Income Level = 4

Figure 4 shows that at the income level 4 or between Rp 10,000,001 and Rp 25,000,000, the women in the age 26 – 35 years old and 36 – 45 years old have a higher conformity than the men. However, both men and women in the age of 46 – 55 tend to have a higher conformity when they have the income between Rp 4,500,001 and Rp 10,000,000. On the other hand, at such high-income level, both men and women at the age of 18 – 25 do not have any conformity level. This might happen due to the confidence of their own personal taste when they have high income.

Figure 5. Estimated Marginal Means of Consumer Conformity at Income Level = 5

Figure 5 shows a very different condition from all other income. As seen in the graph, with such very high income, the men at the age of 26 – 35 and 46 – 55 have a higher level of conformity than the women. Meanwhile, the comparison between men and women aged 18 – 25 years old and 36 – 45 years old in the level of conformity is not far too different. This result is appropriate when it is matched with the psychological behavior of men that tend to spend money easier than women when they have extra money while the women are more calculative than men in spending money, but they are easily distracted by discounts.

From Figure 1 to 5, it is obvious that interactions effect of gender, age and income level to consumer conformity is not significant. Each of the factors plays a specific role in consumer conformity independently, and the age holds the biggest influence followed by the gender. However, when these factors interact to influence consumer conformity, they do not have significant influence on consumer conformity.

CONCLUSIONS

From the findings and results above, this research concluded that from the three socioeconomic characteristics: gender, age, and income; only age is found to be significant to consumer conformity. This result contradicts the previous research by (Hernández et al., 2011) and Akman & Mishra (2010) who found no significant relationships between socioeconomic characteristics to e-commerce behaviors and also by Casper (2007), which showed that purchase intention is significantly influenced by income.

However, the result confirms the previous study that mobile advertising is not limited to teenagers only, that it differs between age groups. Moreover, Beneke (2013) revealed that the 26-45 age group needs to be reassured of the brand authenticity, and that the brand managers must use appropriate marketing channels to solve perceived risks. Therefore, the research concludes that age, as the socioeconomic characteristic, influences the consumer conformity in IoTs Based Omni-Channel in fashion industry.

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IoT Based Omni-Channel


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