# The Relationship of Consumer Preference, Value Creation, and Global Supply Chain in the Third Wave Coffee Business in Sumatera Utara, Indonesia

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Abstract— The third wave of the coffee era has a significant impact on increasing the coffee drinkers in Sumatera Utara. It saw from the ease of finding local coffee shops in this area. Therefore, the higher levels of competition made much local coffee shops in Sumatera Utara facing a high rate of failure. One reason many local coffee shops fail to manage their stores in the long run is that, local coffee shops in Sumatera Utara do not yet understand the preferences of coffee drinkers in the third wave coffee era. This study focuses on how the coffee business trend in the third wave era can be enhanced through preference and value creation based on Global Supply Chain and consumer preference as theoretical background. This study utilizes non-probability sampling and there 97 coffee shop owners were participated. The result of this study showed that value creation has a significant effect on the Global Supply Chain, value creation has no significant effect on preference. Value creation has a significant effect on Global Supply Chain through consumer preference in the third wave coffee business in Sumatera Utara. This study can be helping business consumers in Sumatera Utara to understand the factors of consumer preferences and create unique values for each coffee shop to gain competitive advantages.

**Keywords**— Consumer preference, Business Coffee, Global Supply Chain, Third Wave Coffee, Value creation

## 1. Introduction

Based on Mintel's Global New Products Database (GNPD) (2017) in Asia for 2011-2016 there was an increase in coffee consumption by 95% compared to tea consumption which only increased by 55% in the same period. The extraordinary increase in coffee consumption referred to the era of riding the third wave coffee or the third wave coffee movement [1, 2]. The increasing interest in drinking coffee in this era makes coffee the most

consumed and most popular beverage. The results of the last five years of research conducted by Global Mintel Consulting (GMC), in 2017 Asia will be the largest consumer coffee in the world. Three of the four countries predicted to be the largest retail coffee markets are Indonesia (19.6%), Turkey (17.5%), India (15.1%), and Vietnam (14.9%). Coffee demand for several coffee plantation areas continues to increase as a result of an increase in the number of coffee shops in various regions both domestically and globally.

North Sumatra Province is a coffee-producing region whose coffee beans are well-known both domestically and globally. In provinces even though coffee beans are very well known such as Kopi Lintong, Kopi Sidikalang and Kopi Mandhailing and local coffee shops are growing, but still local coffee businesses do not have a strong brand image in the minds of consumers. The consumer preferences for coffee shops still tend to choose modern coffee shops like Starbucks. The increase in coffee consumption in Sumatera Utara Indonesia is also reflected in the ease of finding local coffee shops in Sumatera Utara. The increase in consumption is one of the entrepreneurial opportunities in Sumatera Utara if entrepreneurs want to open their stores [3]. The number of local coffee shops that are increasing continuously, of course, will potentially increase the competition and failure among coffee shop owners [4]. One reason many local coffee shops fail to manage their shops in the long run is that coffee shop owners have not fully understood consumer preferences in the third wave coffee business.

#### 2. Literature Review

## 2.1 Consumer Preference

The consumer preferences in the third wave coffee business prioritize local manifestations (not focusing on the style of Western coffee shops). It caused by sociocultural restructuring. According to [5] before deciding to buy or not buy, they are in the evaluation phase, where consumers form preferences between brands in a collection of choices. Consumer decisions to modify, delay or avoid purchasing decisions are also strongly influenced by perceived risk. Also, consumer preferences in the coffee business of this era are also influenced by the number of coffee drinkers in urban areas who are young, educated, culturally aware, which lead to a new form of urbanism [6].

Based on several recent studies, coffee shops in urban areas are not only for coffee consumption, but also as a place for work, socialization, relaxation and recreation [7-14]. Furthermore, consumers also want coffee shops to provide high profile products that reflect production, creative consumption, artisanal, and aesthetics [15]. For this reason Specialty Coffee Bars (SCBs) are born. SCBs are the forerunner of the third wave coffee shop to meet the expectations of coffee lovers [16]. The phenomenon of third-wave coffee makes coffee shops independent, independent roastery, and home-based subcultures [17]. It focuses on experience, expertise, sensory face-to-face communication, and community in the most traditional domains [18], but is also driven by technology (especially with attention and prestige in accordance with certain types of equipment) and utilizing the Internet extensively as place of discussion, social planning, product reviews, etc. [19].

#### 2.2 Value Creation

Different from previous wave, in third-wave SCBs creates value of coffee from the coffee beans originates, how the seeds are processed and with what the coffee is served. The origin of coffee has become one of the most important factors in the era of the third wave as well as indicating that consumer preferences for the coffee industry have changed. In this era, hunting of exotic coffee beans is also popular [14]. In this era the terms single origin [20] began to emerge and trend of global coffee consumption patterns has also changed. According to Coffee Global Supply Chain on of the concept used to critical global trends is GSC. Global supply chain (GSC) is one of the concepts

used to. In particular, GSC focuses on increasing the role of retailers and brands in creating global production, distribution and marketing networks [21]. The current trend in public consumption is coffee drinking and the author made several modifications to the GSC indicator to be an appropriate analysis of trends in coffee consumption patterns in the North Sumatra province.

## 2.3 Global Supply Chain

The GSC analysis previously called global commodity chain analysis was first developed to analyze trends in global manufacturing, and specifically the role of retailers and brands in the name of companies in creating global production, distribution and marketing networks [22]. While most of the literature on globalization in the 1970s and 1980s emphasized the role of transnational manufacturing companies as the main agents of globalization recognizing GSC is increasingly important. This is because of the increasing influence of branded retailers and marketers [23]. There are six dimensions of GSC [23-26]. These six dimensions are input and output structures. geographical scope, governance, upgrading, local institutional contexts and stakeholder analysis.

## 3. Methodology

The concept of GSC coffee in every country is certainly not the same, even in each province it can be different. For this reason, a data analysis was conducted regarding the upstream coffee businessman to obtain a significant factor affecting coffee GSC in North Sumatra in the third wave of the Coffee industry. The variables that will be used are value creation and consumer preference as independent variables

## 3.1 Data Collection

Furthermore, interviews were also conducted to obtain more in-depth empirical facts. Partial Least Square (PLS) methods [27] will be used to analyze the data obtained. The location of this research was carried out in several districts and cities in North Sumatra where Arabica coffee was produced, namely Sidikalang, Pematang Siantar, Tarutung, Siborong-borong, Balige, Dolok Sanggul, Toba Samosir, Karo, and Medan. The population in this study are all business consumers consisting of retailers, roasters and coffee shops. The sampling technique that will be used is purposive sampling.

The business consumers are assumed to understand very well about the third wave of coffee trends.

# 3.2 Sampling

The sample criteria are business consumer who (1) Selling coffee originating from one or all coffee-producing districts in North Sumatra Province (2)Having the ability to use internet marketing in selling their products and information technology in the marketing and distribution of coffee (3) Using modern coffee machines.

## 4. Results And Discussion

#### 4.1 Goodness of Fit Model

#### 4.1.1 Outer Model

Goodness of fit of the model for all constructs consists of reflective measurement models (the common factor model fit measures) and formative measurement models (the composite model fit measures). The reflective measurement models. This measurement model is assessed by reliability and constructs validity. For reliability, Cronbach's

Alpha can be used. This value reflects the reliability of all indicators in the model. The minimum value is 0.7 [28] while the ideal is 0.8 or 0.9. In addition to Cronbach's Alpha, the value pc (composite reliability) is also interpreted to be the same as the value of Cronbach's Alpha.

Each latent variable must be able to explain the variance of each indicator at least 50%. Therefore the absolute correlation between latent variables and indicators must be> 0.7 (the absolute value of outer raw loadings or called outer loadings). Reflective indicators should be removed from the measurement model if the standard loadings value is below 0.4. But [4, 13] state that the value of 0.50 is acceptable for the early development of construct. In addition, [5] state that acceptable values are 0.40 for broadly defined constructs. Based on the data analyzed, the Cronbach alpha value for each construct is between 0.903 to 0.992 and 0.861 to 0.941. Furthermore, the standard loading and composite reliability values are presented in the following table.

Table 1. Standard Loading and Composite Reliability

Variable	Standardized Factor loading	Composite Reliability	Remarks
Global Supply Chain		0.906	
Country (VC1)	0.832		Significant
Region (VC2)	0.830		Significant
Farm (VC3)	0.623		Significant
Simbolic of Place (VC4)	0.762		Significant
Altitudes (VC5)	0.726		Significant
Varietas (VC6)	0.476		Significant
Value creation process (VC7)	0.843		Significant
Taste Description (VC8)	0.759		Significant
Brewer (VC9)	0.584		Significant
Value creation third wave		0.657	Significant
Geographic origin (VC1)	0.491		Significant
Taste Description (VC2)	0.430		Significant
Varieties (VC3)	0.657		Significant

Processing method (VC4)	0.684		Significant
Consumer Preference		0.751	Significant
Search Pre-purchase information	0.775		Significant
Exploration offer	0.625		Significant
Alternative assessment	0.539		Significant
Social needs	0.673		Significant

## 4.1.2 Inner Model

The inner model in this study is shown in the path diagram as shown below:

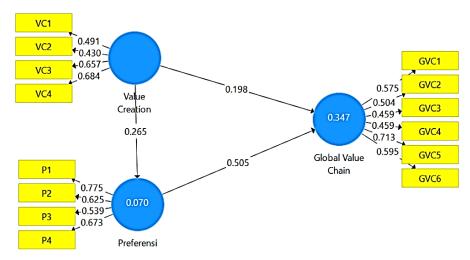


Figure 1: Inner Model using SEM-PLS

The structural model that describes the relationship among constructs in this study is presented in the following figure. This model will answer the hypotheses that have been stated before, both directly and indirectly.

## **4.2 Direct Effect**

The following table will show the results of the analysis regarding the direct influence between constructs. It can be seen as below:

Table 2. Direct Effect

Path Analysis	Coefficient	T Stats	P
Consumer Preference -> Global Supply Chain	0.038	2.393	0.017
Value Creation -> Global Supply Chain	0.974	136.338	0.000
Value Creation -> Consumer Preference	0.124	1.568	0.118

Table 4 shows that preferences have a significant effect on GSC with P values of 0.017. Value Creation has a significant effect on GSC with a P value of 0,000. While Value creation does not have

a significant effect on preference with P values of 0.118

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#### 4.3 Indirect Effect

constructs. It can be seen as follow:

The following table shows the results of the analysis of indirect effects between research

 Table 3. Indirect Effect

Path analysis	Coefficient	T Stats	P
Value Creation -> Consumer Preference> GSC	0.005	1.690	0.092

Table 3 shows the indirect effects on this study that used an intervening constructs of preference. Value creation has a significant effect on GSC through consumer preferences with P values of 0.092. This significance indicates that preference can be an intervening variable between value creation and GSC. The significance is because consumer preferences in this study are measured by prepurchase information search, exploration of alternative offers and assessments by business people. According to [11, 17], this strong interest can be explained by the emergence of new types of consumers, those who are more demanding, passionate about innovation and always looking for unique experiences. Customer satisfaction, through pleasant customer experience, has a positive impact on customer valuation [18], enabling companies to increase profitability and market share [16].

concept of coffee drinking However, the experience in the third wave era is a concept of experience that emphasizes coffee elements and not excessive promotion in coffee shop services cape, but focuses on deep verification of geographic origin, altitudes, varieties, and processing methods, and description of taste. Although coffee shops have existed in North Sumatra since colonial times, expansion of the third wave coffee business has not been like Hong Kong, Mexico, Dublin, Rio de Tokyo, Sydney, New Delhi, or Johannesburg. The preference of business people for the third wave coffee business in Sumatera Utara Province relies heavily on the globalization of consumer culture, increasing appreciation for high-quality coffee, and the willingness of the public to visit places to study, relax, and socialize.

#### 5. Conclusion

Preference and value creation have a significant effect on GSC. Value creation in the third wave coffee business has an effect on the activities of production, distribution, and marketing which are the factors forming the global supply chain. This effect is due to several factors: first, coffee beans originating from all coffee-producing regions through structuring inputs and output. This structuring includes production, process,

trading, roasting and marketing and this is done by business people from upstream to downstream. Second, coffee beans from various regions are distributed on time. This can be if the geographical scope infrastructure in each coffee plantation area are good. Currently the distribution of coffee beans uses the most expedition services. Third, the upgrading of the coffee business. This is in line with the research of [3]. In The Consumer Society, [9] reveals that the utilitarian nature of consumption that has become solid turns into an activity that produces emotions and symbols. In this case the object of consumption is "economic of experience" [22]. The third wave of coffee business that has been growing in recent years has aroused interest in coffee consumption through experience in the community. academics and business people.

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