# The Effect of the 4p's Of Electronic Cigarettes Towards Customer Satisfaction and Customer Loyalty in Indonesia

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ABSTRACT. As the world becomes more environmentally concerned, people are rapidly shifting from conventional (things) to cleaner energy, especially electric-based power. This is reflected in the increasing interest and shares of electric cars and motorcycles alike. The cigarette market has also seen a decline ever since the rise of electronic cigarettes. While electronic cigarettes can be seen as a better and cheaper alternative for the long run, its function remains the same as its conventional tobacco counterparts. The phenomena and the general statement of the problem that has always surrounded the tobacco and nicotine industry is that when consumers spend money, it is expected that it is spent on something beneficial for both the short and the long term. However, tobacco and nicotine companies have marketed their products in such a way that it has become a want or even a need for individuals on a daily basis, and as such, acts as the catalyst of this study. This study was conducted through the distribution of questionnaires, and collected a total of 100 respondents. All data collected were then analyzed using the statistics tool of SPSS version 26, which is further processed by using a path analysis by Structural Equation Modelling in AMOS version 23. The results of this study found out that Marketing Mix significantly affects Customer Satisfaction, Marketing Mix does not significantly affect Customer Loyalty, and Customer Satisfaction does not significantly affect Customer Loyalty. With these results, vape companies should continue to utilize the Marketing Mix and maximizing them to their full potential, though some careful considerations have to be made, such as the target market's budget, the desired profit margin, pricing strategies, and the pricing and the operations of competitors, which could affect both Customer Satisfaction and **Customer Loyalty.** 

Keywords: E-cigs, Electronic Cigarettes, Price, Promotion, Place, Product, Customer Satisfaction, Customer Loyalty

# 1. INTRODUCTION

Indonesia is the 5th world's largest tobacco producer and second in consumer after China. Tobacco companies greatly affect the society in general: socially, economically, and environmentally, both positively and negatively. Indonesia's abundance in agriculture and being the biggest sector, provides benefits such as reducing unemployment rates with its supply to provide job offerings. The tobacco industry has a large contribution to the Indonesian economy, as it contributes around 10 percent of tax revenue and employs around 2.5 million people who work in agriculture and manufacturing of tobacco. Because of this existing fact, the tobacco industry is something of a controversy in Indonesia, for the high population of smokers and the low prices of cigarettes encourage negative growth; The higher number of smokers means less healthy people, but with less healthy people, encourages growth and profits for tobacco companies (Hutauruk & Ghozali, 2020).

The Indonesian government imposes taxes or excises on tobacco companies to mitigate and/or reduce the number of smokers and the harm smoking causes. The government has imposed an increase of the minimum price of a pack of cigarettes by more than one-third, or 35 percent, and has been in effect since January 2020, along with raised taxes by 23 percent for tobacco products every year since 2014, however, there has been little to no impact so far (Suroyo, Jefriando, & Potkin, 2019).

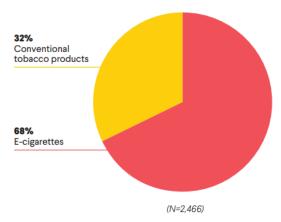
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Since the ban on showing physical cigarettes on media such as TV and Newspapers, Marlboro has changed advertisements forever with its "Marlboro Man" marketing campaign which <u>marketed</u> <u>cigarettes as a lifestyle rather than a one-time use.</u> <u>This creates value among consumers instead of a</u> <u>one-time product</u>. This has been followed by almost all tobacco companies. Indonesian tobacco companies, no less.

Ever since the world has become more environmentally concerned and has implemented initiatives to combat climate change by reducing carbon footprints. More renewable, efficient, and cheap alternatives, are being implemented, such as the transition from fossil fuels to solar, hydropower, wind, geothermal, and biomass. Such cases are Electronic Vehicles (EVs) being implemented, and now, electronic cigarettes (henceforth referred to as E-Cigs) are becoming more popular. Phillip Morris International has released a vision statement of becoming smokefree by 2060 (Phillip Morris International, 2022). As mentioned, the Indonesian Government, too, is putting efforts to combat and reduce the country's smoking rate and is done through raising taxes for tobacco products and has done so since 2014, though it is reported there has not been any significant effects yet. The WHO has reported that around 70 percent of all adults in Indonesia are active smokers, and that smoking leads to around 225,720 deaths in Indonesia every year (Indonesia Expat, 2019).

Although initially patented in the 1920s, the first commercial nicotine-based electronic cigarette was developed in 2003 by Chinese Pharmacist, Hon Lik under the brand name Ruyan, which was later acquired by Imperial Tobacco in 2013 for a sum of USD 75 million. An alternative to smoking, E-cigs use a system known as Electronic Nicotine Delivery System (ENDS) are devices that convert chemical agents to vapour; consists of rechargeable batteries, a cartridge, a regulator, and an electric coil. E-cigs contain nicotine, and propylene glycol, amongst other substances. However, it is still found that health risks from electronic cigarette smoking are derived from smoking conventional cigarettes, such as the two containing nicotine, which is a highly addictive substance and can affect developing brains, thus exposing the risk to youths and young adults, vapour from e-cigs have been linked to have an increased risk of cancer, and youths who use electronic cigarettes may develop habits of smoking conventional cigarettes, among many other reasons and threats that e-cigs poses (Lestari, Humairo, & Agustina, 2018). It has been a topic of debate of what type of classification electronic cigarettes fall into, as it exists somewhere between the grey area of being tobacco products, classified as what it exactly is, which is electronic cigarettes, amongst many other classifications. These classifications vary from nation to nation that is relative to their local laws and regulations regarding the issue of tobacco; In Indonesia specifically, under the regulation of local laws, classifies e-cigs as tobacco (imitation) products, sharing the same product classification as Brunei, Laos, and Singapore. The Philippines classifies e-cigs as medicinal products, while Thailand and Cambodia are the only ASEAN nations to classify e-cigs as they are (Jin & Jiang, 2017). Indonesia's tobacco law regulation had a broad definition of what is considered to be a tobacco product. It is stated that "wholly or partly made of tobacco leaf as its raw material that is processed for use by burning, sucking, and inhaling or chewing" and smokeable was the "tobacco product intended to be burned and sucked and/or its smoke inhaled, including kretek (clove) cigarettes, white cigarettes, cigars, or other forms produced from the nicotiana tabacum, nicotiana rustica, and other species of plants or their synthesized equivalents which contain nicotine and tar, with or without additives". These definitions include "inhaling" and "nicotine", which seemed to be the essential characteristics of e-cigarettes, and might therefore regulate e-cigarettes as tobacco products and smokeable." (Jin & Jiang, 2017, para. 3), which is discussed further by (Kennedy, Awopegba, Leon, & Cohen, 2016) which found that 68 countries. 22 countries regulate e-cigs using already existing regulations, 25 countries created new regulations, 7 countries made changes to existing laws and regulation, and 14 countries use a combination of both new and updated regulations, though the common policies are the minimum legal age of purchase, the indoor use of electronic cigarettes, and marketing regulations, while few countries are taxing electronic cigarettes. The study also pointed that the countries [reported in the study] regulate e-cigs using regulations that are not written specifically for e-cigs, which make it relatively difficult to regulate and classify, confirming the discussions and results by Jin and Jiang.

Figure 1: The Number of E-Cigarettes and Conventional Tobacco Products being Marketed Online in Indonesia



Source: (Magsumbol, et al., 2022)

Conventional tobacco products are sold in shops and kiosks, while electronic cigarettes are sold online and through vape shops, accounting for 35.3 percent and 64.7 percent respectively (Orlan, Parascandola, & Grana, 2019). According to a 2018 source, there are around 5000 vape shops in Indonesia that have daily sales of around IDR 3 Million per shop (Indonesia Investments, 2018). According to a 2021 source, the vaping population in Indonesia saw a decline due to the pandemic. However, the numbers increased again in 2021 with around 1.7 million users with a market that is worth USD 239 million, accounting for an 8 percent growth from the previous year. The author also noted that smoking rates are declining as smokers are shifting to e-cigarettes (Trnovec, 2021). Furthermore, according to a market report by Statista, the e-cig market in Indonesia amounts to USD 386.6 million in 2022, with an expected annual market growth of 3.47 percent (Statista, 2022), and according to all of the tobacco and nicotine products being marketed, electronic cigarettes account for 68 percent of them while the remaining 32 percent are conventional tobacco products from a survey carried out with 2,466 people (Magsumbol, et al., 2022).

The decline of smoking rates has forced tobacco companies to produce and to market nicotine-based products that is tobacco free. It is worth noting that major, international tobacco companies have subsidiaries or product lines that focus on the creation of electronic cigarettes. Table 1 below shows tobacco manufacturers and the electronic cigarette brands that they own.

Company	E-Cigarette Brand
Altria	MarkTen, Green
	Smoke
Philip Morris	IQOS Brand
International (PMI)	
Renolds Vapor	VUSE
Company	
Lorillard Vapor	Blu
Company	
Imperial Tobacco	Puritane (Ruyan)
(Fontem Ventures)	Blu (Acquired from
	Lorillard in 2015)
British American	Vype
Tobacco (BAT)	
Swisher	E-swisher
Japan Tobacco	E-Lites
International (JTI)	

Table 1: [Conventional]Tobacco Companies and
their E-Cigarette Brands

Human Services, 2016)

Ruyan has been previously mentioned as being one of the first electronic cigarettes, though later acquired by Imperial Tobacco. Despite the products between e-cigs opposing and conventional tobacco products, these multinational tobacco companies were able to kickstart or acquire companies that specialized in creating and distributing electronic cigarettes. This increases their product range, showing that these tobacco companies do in fact have the resources and wealth to research and develop or purchase electronic cigarette companies. For British American Tobacco, it allows them to fulfil their "A Better Tomorrow" campaign of a smoke-free future. It is also worth mentioning that Altria, the parent company of Marlboro cigarettes has acquired a 35 percent stake of JUUL in 2018 to diversify and to combat the decline of smoking rates, much like the companies as shown in Table 1.

Source (U.S. Department of Health and

Media in Indonesia							
Brand	Company	Country					
VOOPOO	ICCPP	China					
GeekVape	GeekVape	China					
	Technology Co.						
	Ltd.						
SMOK	Shenzhen IVPS	China					
	Technology CO.						
	Ltd.						
UPODS	UPODS	Indonesia					
	Indonesia						
UWELL	Shenzhen Uwell	China					
	Technology Co.						
	Ltd.						
HexOhm	CravingVapor	USA					
IQOS	Philip Morris	USA					
Source: (Magsumbol et al. 2022) with							

 Table 2: The Brands being Marketed on Social

 Media in Indonesia

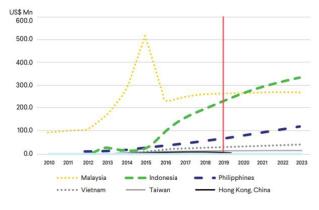
Source: (Magsumbol, et al., 2022), with

### modifications

Table 2 shows the brands that are being marketed on social media in Indonesia. It is worth noting that in fact most of the electronic cigarettes sold and distributed in Indonesia are of Chinese Origin, namely from Shenzhen, with HexOhm and IQOS being subsidiaries of American companies while UPODS by UPODS Indonesia remain the only brand that is local [Indonesian] brand that is observed.

Figure 2: E-Cigarette Market Sizes in Southeast Asian Nations (with the additions of Taiwan and Hong Kong), Observed from (2010-2019) and

Projected (2020-2023)



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Source: (Magsumbol, et al., 2022)

Figure 2 shows the electronic cigarette market sizes across Southeast Asian nations, with the addition of Hong Kong and Taiwan, that is observed from 2010-2019, and its projected market sizes from 2020-2023. It is observed that from 2010-2019 the e-cig market in Malaysia exponentially increased exponentially, starting in 2012, peaked in 2015, and finally decreased the next year in Indonesia followed suit, starting 2016. relatively slow but started to increase in 2015 and 2016, the same time Malaysia saw a decrease in its market size. Indonesia is the only country that is observed and projected to grow, followed closely by the Philippines while other countries such as Vietnam, Taiwan, and Hong Kong decrease or are stagnated. The statistics and reports provided that show the decline of tobacco companies while electronic cigarettes are increasing in popularity begs the question and the main focus on this research: What are the effects of the 4P's of electronic cigarettes manufacturers towards customer satisfaction and customer loyalty?

# 2. METHODOLOGY

Steps	Notes
Preliminary research, topic	Chapter
discussion & selection,	1
Research questions &	Chapter
hypotheses	1-2
Previous studies	Chapter
Previous studies	2
Research method	Chapter
Research method	3
Data gathering & data analysis	Chapter
using quantitative approach	4
Conclusions &	Chapter
recommendations	5

### **TYPE OF RESEARCH**

This study utilizes a quantitative, causalexplanatory research as the aim is to find relationships between the sub-variables and

variables. The purpose of a casual analysis is finding the root cause of a problem rather than the symptoms (ProfessionalOA, 2020), hence it will be used in this study as this technique help uncover the underlying theory or causes that leads to certain situations, in this case, customer loyalty and customer satisfaction. This study utilizes primary data obtained directly from respondents through the distribution of questionnaires. Although a qualitative approach that would take into account human behavior is possible to utilize in this research, this study opts to focus on a quantitative approach, as qualitative factors towards the intention and reasons of conventional cigarette and e-cig usage is something that is talked about numerous number of times, in which studies share similar outcomes or results with their respondents, and therefore, it may be generalized. Explanatory research is a type of causal research for this analysis aims to find the root causes rather than symptoms. An explanatory research can be used to explain a cause-and-effect model, scrutinizing patterns and trends that have not been previously investigated, and how or why certain phenomena occur and may be used to predict future events (George, 2021).

# **TYPE OF DATA**

The data obtained in this research is obtained directly, which is primary data. In this study, primary data is obtained via the distributions of online questionnaires. The questionnaire respondents are assessed by the Likert-5-Scale with the categories of:

Strongly Disagree, Disagree, Neutral, Agree, Strongly Agree

Secondary Data refers to data that is indirectly obtained, meaning the process of data collection and results have been previously done by someone else for their purposes. Though the data from previous researches may have different purposes, the data of previous researches is used in such a way to help the purpose of this research. Secondary data includes journals, textbooks, online sources, articles, and any other sources that is in-line to the current research. The secondary data obtained in this study relies heavily on the readily available and accessible sources online.

# OPERATIONALIZATION OF THE

# VARIABLES

The tables below show the list of questions and statements that is utilized in the collection of data via the online questionnaire. The differences that the questions may establish, such as the difference in gender, age, income level, etc. may show a slight correlation in the differences of position and title and their attitude towards electronic cigarettes.

# Table 3: General Questions

Measure	Questions	Scal				
			e			
Gender	What is you	r Gender?	NC			
	1.	Male	Nominal			
	2.	Female	al			
Age	What is you	r age?				
	1.	18-22				
	2.	23-27				
	3.	28-32				
	4.	33-37				
	5.	38-42				
	6.					
Income	What is you	r current				
	income per	month?				
	1.	No				
	inco					
	2.	Regional				
	Mini	imum Wage				
	3.	IDR 5-10				
	Mill	Million				
	4.	IDR 11-				
	15 N	fillion				
	5.	IDR 16-				
	20 N	fillion				
	6.	IDR 21-				
	25 N	fillion				

	30 Million		Table 4: Q Variab	Sub-	Statements	Sc
	8. > IDR 30		le	Variab		ale
	Million			les Price	1. I	
Domicile	Where are you based in?		Marke	The	am willing	Likert 5-Scale
Domicile			ting		to	rt 5
	1. Jakarta		4P's		purchase	-Sc
	2. Tangeran				electronic	ale
	g				cigarettes if the	
	3. Bekasi				initial	
	4. Depok				prices are	
	1				reasonable	
	5. Bogor				2. Gi	
Education	What is your last				ving discounts	
	education level?				affects my	
	1. Before				purchasing	
	High School				decision	
	2. Bachelor			Produ	1. Te	
				ct	chnical	
	's Degree				specificati ons are	
	3. Master's				important	
	Degree				to me in	
	4. Doctoral				an	
	Degree				electronic	
0 1'					cigarette device (i.e.	
Smoking	How often do you				Charging	
	smoke conventional				time,	
	tobacco products?				restriction/	
	1. Never				controlling of airflow,	
	2. Occasion				etc.)	
	al Smoker				2. Th	
					e	
	3. Active				packaging	
	Smoker				of the	
	4. Former				product will affect	
	Smoker				my	
	-				purchasing	
					decision	_
				Promo	1. Pro	
				tion	motions of	1

	T .t.			a1
	E-cigs is			electronic
	appealing			cigarettes
	to me			being
	2. I			promoted
	often			in physical
	purchase			stores
	e-cigs or			(kiosks)
	their	Cus	to Reliab	1. Rel
	componen	mer	•	iability of
	ts (liquids,	Sati		a brand
	cartridges,	ction	n perfor	will make
	coils, etc.)		m	me
	because of		promis	satisfied as
	friends		ed	a customer
	3. I		service	2. I
	am more		S	
			depend	fully
	willing to		ably	expect that
	try and			when
	buy			purchasing
	electronic			an
	cigarettes			electronic
	if my			cigarette
	friends or			device, I
	family use			expect it
	them			to last me
	4. I			a long
	am more			time
	willing to			3. Lik
	try and			ewise,
	buy			when I am
	electronic			in a
	cigarettes			
	_			physical
	if someone			store [vape
	I follow			shop/kiosk
	(influencer			s] I expect
	s) uses			that the
	them			staff will
Place	1. I			have an
	often see			extensive
	electronic			knowledge
	cigarettes			of the
	-			
	being			products
	promoted			being sold.
	on social		Word	1. I
	media		of	will spread
	2. I		Mouth	the good
	often see			word
				w Olu

		about the			service is
		brand/com			important
		pany if I			to me to
		have good			be a long-
		experience			term
		with it.			
					customer
		2. I			
		often share			2. If I
		unsuccessf			am
		ul business			satisfied
		activities			with the
		3. I			product,
		talk about			but not
		products			with the
		-			after-sales
		and			
		businesses			services, I
		that I am			will
		dissatisfie			consider
		d with			not
	Tangi	1. Pro			purchasing
	bility	duct			again from
	Physic	Quality is			the brand.
	al	important		Repeat	1. I
	faciliti	for me in		Purch	will
	es,			ases	
	equipm	purchasing		ascs	purchase
	ent,	items			the same
	and	2. W			product or
	appear	hen			similar/dif
	ance of	purchasing			ferent
	person	electronic			products
	nel	cigarettes			from the
	1101	or any of			same
		their			brand/com
		componen			pany if I
		ts in a			have good
		physical			experience
					with it
		store (vape			WILLI IL
		shop), the			
		appearanc			2. If I
		e of the			am
		staff is			satisfied
		important			with the
		to me			services,
Custo	After-	1. As			but not
mer	Sales	a			with the
Loyalt	Servic	customer,			product, I
y y	e	after-sales			will
J	-	aner-sales			** 111

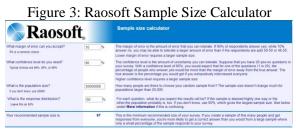
consider
purchasing
again from
the brand.

# POPULATION

The legal age for smoking in Indonesia is 18, and thus the sale of tobacco products is illegal for those under the age of 18. Despite that underage smoking remains high, this study will set its minimum age of respondents to 18 years of age and above. This study will also focus on individuals who are active, occasional, or former vapers, as they are the ones that are most likely to understand and able to relate to the statements based on each of their respective experiences, and as such, is one of the main criteria for the respondents. Likewise, to tie with the previous qualitative studies as discussed in the literature review, this study will also ask respondents if they are not, current, or former conventional cigarette smokers. As mentioned previously, the number of vapers declined due to the COVID-19 pandemic. However, the following year, the numbers increased again and saw an 8 percent growth from the previous year (Trnovec, 2021). This suggests that the COVID-19 pandemic has forced consumers to become more health conscious, and as a result, both smoking and vaping saw a decline, though in 2022, with restrictions being lifted, it is possible that people are starting to do it more often than during the start of the pandemic.

Equation 1: Slovin's Formula  $n = \frac{N}{(1 + Ne^2)} = \frac{20,000}{(1 + 20,000 * (0.1^2))} = 99.5$ Source: (Wulandari & Kurniasih, 2019)

The Slovin's Formula is used to calculate the minimum amount of required sample size. The Slovin's formula was utilized in a previous study by (Wulandari & Kurniasih, 2019) and their study focusing on forestry facilitation. According to the Slovin's formula, n is the sample size, N is the total population, and e represents the margin of error. Assuming that the population is 20,000, and the margin of error is 10 percent, the suggested sample size from Slovin's formula is 99.5 respondents.



Source: (Raosoft, Inc, 2004)

When compared to Raosoft, a readily-available sampling calculator online, which is used to verify the minimum amount of sample size that is needed for this study. According to Raosoft, as shown on figure 10, with a margin of error of 10 percent, confidence level of 95 percent, and the Raosoftrecommended amount of 20000 and 50 percent for the population size and response distribution size respectively. It is important to note that the number considered is 30 million based on online sources, as that is the population of the Greater Jakarta Area as of 2022, though Raosoft stated that the sample size does not change much for populations larger than 20,000. Raosoft recommends that the sample size is at least 97 respondents (Raosoft, Inc, 2004). For the population, this study opts to survey at least 100 respondents for the sample size, as the Slovin's formula recommends a sample size of 99.5 while Raosoft recommends a sample size of 97. When comparing the two recommended sample sizes of 99.5 and 97, the two do not have any significant differences, and hence, are both rounded up to a sample size of 100. 100 respondents will help ensure that the sample size is proportionate in relative to the areas being studied.

# SAMPLING METHOD

Below is the sampling process. This study will focus on the Jakarta metropolitan area, or Greater Jakarta Area, which consists of Jakarta, Bogor, Depok, Tangerang, and Bekasi, or dubbed JABODETABEK. This study opts to be focused in the Greater Jakarta Area, the reasons being that **JABODETABEK** is the most populous metropolitan area in Indonesia, and to add to that, the most developed and modernized, and thus has a higher chance of consumers vaping in the capital area and its vicinities. There is a total of around 30 million people living in the greater Jakarta area. According to the Indonesian Vaper Association (AVI), it is estimated that there are around 3,500 vape shops across the nation, with 2,300 of them being located on the island of Java (Nugroho &

Pradana, 2021), the most populous island in Indonesia.

Table 5. Sampling Flocess (Aleas of Sam			
Area	Total		
	Respondents		
Jakarta	20		
Tangerang	20		
Bekasi	20		
Depok	20		
Bogor	20		
Total	100		

Sampling Process
Table 5: Sampling Process (Areas of Sample)

# 3. PRE – TESTING

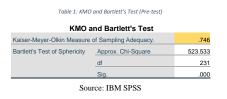
The pre-testing of the data is to ensure that the respondents answering the questionnaires understand fully each of the statements for each of the construct before further analysis can be continued. Although it is generally accepted that 25% of the sample size is the minimum threshold of when the validity and reliability testing can be done, this research opts to perform said operations at 50% of the targeted sample size, in this case, is 50 respondents. This encourages higher validity and reliability.

# **POST – TESTING**

Upon realizing that the results of the questionnaire in the pre-test is considered both valid and reliable, the study may undergo further stages of analyzing and finalizing the data. With the same questionnaire, the post-test will distribute to the remaining number of respondents until the minimum target is met

# VALIDITY

Validity can be assessed with the KMO and Bartlett's Test. It is generally accepted that the minimum KMO value of 0.5 is considered valid, and that any value closer to 1 is deemed more valid and thus be more favourable, and hence, will be used as the minimum threshold for this research.



From the table above, it is shown that the value for the KMO is 0.746, making it valid and making it appropriate for this research to be processed further.

# RELIABILITY

Reliability of a questionnaire may also be measured by the value of the Cronbach's Alpha.



The pre-test on reliability with the 50 respondents have shown that the value of the Cronbach's alpha is 0.886, which is above the recommended threshold of 0.5, thereby making the questionnaire reliable and acceptable to proceed with further analysis.

# **GOODNESS OF FIT TESTING**

According to Kline, the value for the CMIN/df, or the normed Chi square value of equal or less than 3 is considered to be an acceptable fit (Kline, 2015) while Marsh stated that any values that are equal to or less than 5 is considered to be a reasonable fit (Marsh, Balla, & McDonald, 1988). Following suit with the parameters set by the authors, this research will only accept the goodness of fit of data if the normed Chi-square (CMIN/df) values are below 5.

### 4. RESULT AND DISCUSSION DESCRIPTIVE STATISTICS Table 6: Table of Descriptive Statistics

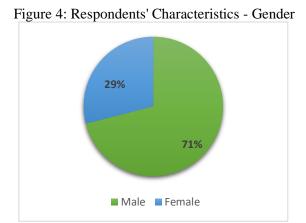
Table 6: Table of Descriptive Statistics

Descriptive Statistics											
							Std.				
	Ν	Range	Minimum	Maximum	Mean		Deviation	Variance	Skew	ness	Kurtosis
						Std.				Std.	
	Statistic	Statistic	Statistic	Statistic	Statistic	Error	Statistic	Statistic	Statistic	Error	Statistic
/M1	100	4	1	5	4.25	.088	.880	.775	-1.512	.241	2.870
/IM2	100	4	1	5	4.16	.085	.849	.722	-1.122	.241	1.558
/M3	100	4	1	5	3.91	.089	.889	.790	702	.241	.382
/M4	100	4	1	5	3.82	.107	1.067	1.139	802	.241	.199
/M5	100	4	1	5	3.70	.108	1.078	1.162	706	.241	.105
/M6	100	4	1	5	3.79	.107	1.066	1.137	843	.241	.025
/M7	100	4	1	5	3.63	.116	1.160	1.347	580	.241	670
/M8	100	4	1	5	3.20	.123	1.231	1.515	159	.241	-1.032
1M9	100	4	1	5	3.70	.105	1.049	1.101	760	.241	082
/M10	100	4	1	5	3.72	.094	.944	.891	586	.241	164
S1	100	4	1	5	4.30	.082	.823	.677	-1.277	.241	2.011
S2	100	4	1	5	4.22	.088	.883	.779	-1.438	.241	2.628
\$3	100	4	1	5	4.21	.095	.946	.895	-1.312	.241	1.623
S4	100	4	1	5	4.02	.099	.995	.989	-1.360	.241	1.907
35	100	4	1	5	3.49	.119	1.193	1.424	413	.241	778
.S6	100	4	1	5	3.79	.096	.957	.915	836	.241	.434
\$7	100	4	1	5	4.21	.090	.902	.814	-1.357	.241	2.166
.S8	100	4	1	5	3.88	.089	.891	.794	897	.241	1.128
11	100	4	1	5	4.13	.093	.928	.862	-1.192	.241	1.509
1.2	100	4	1	5	3.90	.094	.937	.879	848	.241	.682
1.3	100	4	1	5	4.15	.086	.857	.735	-1.081	.241	1.374
14	100	4	1	5	3.54	.103	1.029	1.059	507	.241	358
alid N	100										
istwise)											
Source: (IBM SPSS, 2023)											

According to (Hair, Hult, Ringle, & Sarstedt, 2022), skewness refers to the symmetry of the distribution, whether it gravitates more towards the right of left tail for the distribution. If the skewness value lies between -1 and +1, it is considered excellent, and values between -2 and +2 is acceptable, while any values above -2 and +2 are considered non-normal. Kurtosis is a measurement whether the distribution is too peaked. Like the values of skewness, if the kurtosis value is greater than +2 it indicates the distribution is too peaked, while a kurtosis value of less than -2 indicates a flat distribution (Hair, Hult, Ringle, & Sarstedt, 2022, p. 66). As shown on the table above, the results from SPSS show that the skewness is between -2 and +2 and therefore is deemed normally distributed. However, some of the values of kurtosis are shown to be above the +2 range, namely MM1, CS1, CS2, and CS7, showing that the distribution is slightly peaked, and as such, will be treated as one of the limitations of this research.

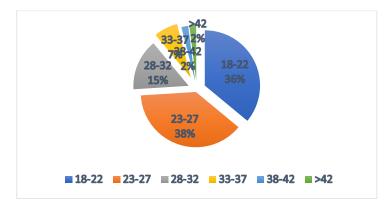
### **RESPONDENTS' CHARACTERISTICS**

The figures below show the characteristics of respondents with each respective construct. The questionnaire was distributed to 100 respondents, and thus, the terms 'respondents' and 'percentages' may be used interchangeably in this section.



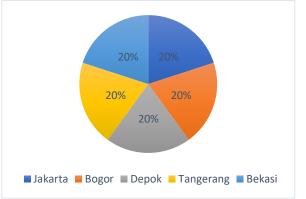
The majority of the questionnaire was filled by male respondents, which accounted for 71 percent, while females make the remaining 29 percent.

Figure 5: Respondents' Characteristics - Age Range

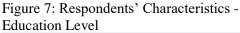


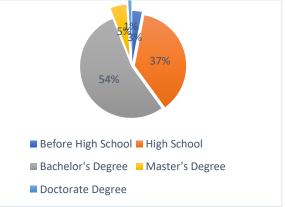
From the figure above, the majority of respondents were between the ages of 23-27 years old, accounting for 38 percent, while those aged 18-22 comes has a number of 36 percent, 15 percent, 7 percent, 2 percent, and 2 percent for age ranges 28-32, 33-37, 38-42, and above 42 respectively.

Figure 6: Respondents' Characteristics - Domicile



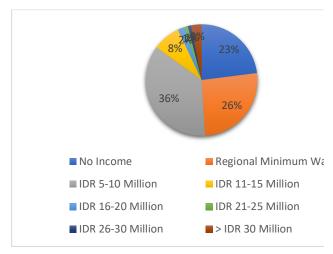
From the scale of domicile, the data was evenly distributed and answered by respondents from Jakarta, Bogor, Depok, Tangerang, and Bekasi, making up for 20 respondents for each respective city.



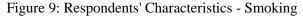


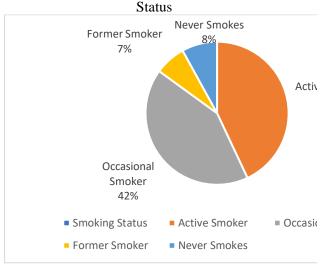
In terms of education level, the majority of the respondents were those hold a bachelor's degree, accounting for 54 respondents, along with 37 respondents holding high school diplomas/certificate, 5 respondents holding a master's degree, 3 respondents graduated before high school, while a single respondent holds a doctoral degree.

Figure 8: Respondents' Characteristics - Income Level



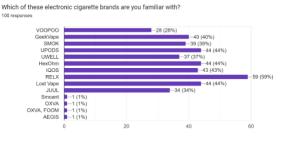
In terms of income level, the majority (36 percent) of the respondents have an income between IDR 5-10 million, followed by 26 percent receiving the regional minimum wage, 23 percent having no stable income, while 8 percent had a salary of IDR 11-15 million, 2 percent with a salary of IDR 16-20 million, 1 percent for each salary range of 21-25 million and 26-30 million, and three percent of the respondents having a stable income of over IDR 30 million.





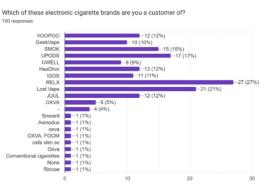
From the scale of smoking status (conventional cigarettes), the majority were active smokers with 43 percent of the respondents, followed by 42 percent of occasional smokers, 8 percent who never smoke conventional cigarettes, and 7 percent former smokers.

Figure 10: Respondents' Characteristics - Brand Familiarity



From the bar graph above, the majority were most familiar with the e-cig brand RELX, with 59 percent of the respondents being most familiar with it. It should be noted that for this part of the questionnaire, individuals were able to choose more than one of the given choices and/or fill in the brands they knew. In this case, some of the respondents filled out other brands such as Smoant, OXVA, FOOM, and AEGIS.

# Figure 11: Respondent's Characteristics - Brand Purchases



From the bar graph above, the majority it should be noted that for this part of the questionnaire, individuals were able to choose more than one of the given choices and/or fill in the brands they knew. In this case, some of the respondents filled out other brands they were customers of, such as Smoant, Asmodus, various variations of OXVA, and Rincoe.

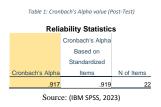
# VALIDITY & RELIABILITY (POST-TEST)

The Data below is based on the results gained from SPSS, though after reaching the desired number of

respondents, the data is then AVERAGED then further processed, and thus the data below are based on averaged values. The values are shown as below:

Kaiser-Meyer-Olkin Measure	of Sampling Adequacy.	.890
Bartlett's Test of Sphericity	Approx. Chi-Square	1053.976
	df	231
	Sig.	.000

The table above shows that value of KMO Measure of Sampling Adequacy in the post-test stage is 0.890, thereby making the questionnaires valid, thus allowing further analysis.



On the other hand, the test for reliability in the posttest shows that the value of Cronbach's Alpha is 0.917, making the questionnaire reliable and thus allowing further analysis.

Table 7: Comparison of Validity and Reliability (Pre-Test and Post-Test, general)

	Pre-	Post-
	<u>Test</u>	<u>Test</u>
Cronbach's Alpha	0.860	0,917
Based		
Kaiser-Meyer-Olkin	0.746	0,890
Measure of Sampling		
Adequacy		

Source: (IBM SPSS, 2023)

When compared to the pre-test and post-test values of both Cronbach's Alpha and KMO Measure of Sampling Adequacy, it can be seen that the values for both Cronbach's Alpha and KMO Measure of Sampling Adequacy are a lot better as they are higher than the previous values and are both closer to the value of 1, meaning it is more reliable and valid. Though for this process, the table above shows the general values for both the pre and posttest, in which all of the constructs are analysed at once. The more detailed and specific values for Cronbach's Alpha for each construct will be shown and discussed below. Rather than running the data and placing it under a single Cronbach's Alpha value for reliability testing, the reliability test should be run as many times as the number of constructs that are present in the research model, for respondents will be answering each of the constructs differently.

# VALUES FOR THE PRE-TEST RELIABILITY PER CONSTRUCT

The Pre-test of reliability is based on the first 50 responses and their understanding of the questions for each construct. As previously mentioned, the pre-testing of the data is to ensure that the respondents answering the questionnaires understand fully each of the statements for each of the construct before further analysis can be continued.

Table 8: Pre-Test Reliability

Variable	Inputs	Cronbach's Alpha		
	MM1			
	MM2	]		
	MM3			
Marketing Mix (4Ps)	MM4			
	MM5	0.800		
	MM6			
	MM7			
	MM8			
	MM9			
	MM10			
	CS1			
	CS2			
	CS3			
Customer	CS4	0.829		
Satisfaction	CS5	0.02)		
	CS6			
	CS7			
	CS8			
	CL1			
Customer	CL2	0.479		
Loyalty	CL3	0.473		
	CL4			

Source: (IBM SPSS, 2023)

It is shown that the construct of both Marketing Mix and Customer Satisfaction has the value of 0.8 and 0.829 respectively, making both constructs reliable, while the construct of customer loyalty is 0.479, making it slightly less reliable. It is generally stated that constructs with less than 5 items (statements/questions) It should be noted that the construct of Customer Loyalty is below the recommended threshold of 0.5. However, since the value is close to the value of 0.5, it will be accepted.

# Values for Post-Test Reliability per

# Construct

The table below summarizes the Cronbach's Alpha for each construct that was conducted in the post-test.

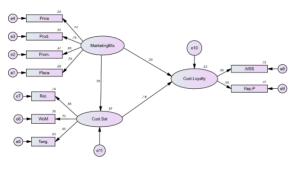
Table 9: Post-Test Reliability					
Variable	Inputs	Cronbach's Alpha			
	MM1				
	MM2				
	MM3				
	MM4				
Marketing Mix	MM5	0.780			
(4 <b>P</b> s)	MM6				
	MM7				
	MM8				
	MM9				
	MM10				
	CS1				
	CS2				
	CS3				
Customer	CS4	0.830			
Satisfaction	CS5	0.050			
	CS6				
	CS7				
	CS8				
	CL1				
Customer	CL2	0.712			
Loyalty	CL3	0.712			
	CL4				
	(IBM SPSS	, 2023)			

It is shown that the construct of both Marketing Mix and Customer Satisfaction has the value of 0.780 and 0.830 respectively. The Marketing Mix construct saw a slight decrease in the Cronbach's Alpha value while Customer Satisfaction saw an increase of 0.001, though in both cases, the values are still above 0.5, making both constructs reliable. The Cronbach's Alpha value for both Customer Loyalty and Customer Satisfaction were much better in the post-test rather than the pre-test and therefore making it more reliable and accepted as it is greater than the recommended threshold of 0.5.

# STRUCTURAL EQUATION MODELING (SEM)

The Structural Equation Modelling (SEM) was conducted on the IBM AMOS software to scrutinize the relationships between the variables in this study, as well as each construct and each of its indicators. and how correlated each of the constructs are and how much each of these subvariables contribute to the growth or decrease towards the variable. The model is shown as below:

Figure 12: Structural Equation Modelling



Source: IBM AMOS

The variable of Marketing Mix is an exogenous variable, or independent variable, while the constructs of Customer Satisfaction and Customer Loyalty as shown in the model are dependent variables, or outcome variables, hence the presence of the error terms. This section of the study will discuss the relationships between variables, as well as each variable and their respective sub-variables, while also taking into account the table of regression weights that have been acquired on IBM AMOS upon running the model successfully on the program. The table of the regression weights can be found in the Estimates tab in the Output window under "Regression Weights: (Group number 1 -Default model), while also discussing the values that are present in the model, which are also shown under "Standardized Regression Weights".

Table 1: Regression Weights - Variables

			Estimate	S.E.	C.R.	Р	Label
Cust.Sat	<	MarketingMix	1,291	,259	4,975	***	
Cust.Loyalty	<	Cust.Sat	,199	,575	,346	,729	
Cust.Loyalty	<	MarketingMix	,853	,817	1,043	,297	
-		Sour	ce: IBM AMC	)S			

The P-values suggests whether there is a statistically significant relationship between each variable. It is a rule of thumb that if the P-value is greater than 0.05, the relationship is not significant, while significant values in AMOS are shown as the three asterixis to denote a significant relationship. The following values present in Table 16 will be discussed further and elaborated down below.

This section will discuss the relationship between the construct of Marketing Mix and all its indicators.

			Estimate	S.E.	C.R.	Р	Label
Place	<	MarketingMix	1,000				
Prom	<	MarketingMix	1,407	,293	4,809	***	
Prod	<	MarketingMix	1,462	,284	5,155	***	
Price	<	MarketingMix	1,306	,261	5,010	***	

#### a) PRICE

From the structural equation model, the results show that Price has the value of 0.74 towards the Marketing Mix. This is interpreted as when Marketing Mix increases by 1 standard deviation, price goes up by 0.741 standard deviations, making it a strong positive correlation. In other words, price contributes to 74 percent of the improvement, therefore, price of vapes has a significant and positive impact towards the Marketing towards the marketing effort. This is further supported by the table of the regression weights as shown above, the effects of Marketing Mix towards Price are significant, as the P value is less than 0.05, also affirming that price is a significant influencer towards the marketing effort. Price is regarded as one of the integral elements in the Marketing Mix as it is the only element that has the ability to generate sales and income for a firm.

#### PRODUCT b)

From the structural equation model, the results show that Product has the value of 0.79 towards the Marketing Mix, This means that every 1 percent of Product improvement of Marketing Mix, contributes to 79 percent of the improvement. This is supported by the table of the regression weights as shown above, the effects of Marketing Mix towards Product are significant, as the P value is less than 0.05, making Product a significant influencer towards Marketing Mix. The two statements regarding product in the questionnaire were about technical specifications as well as packaging. From the respondent's perspective based on their answers given in the questionnaire for technical specifications such as charge time, controlling of airflow, etc. 47 respondents agreed, 26 respondents strongly agreed, 20 remained neutral, while 6 disagreed and a single respondent strongly disagreed. From this perspective, it can be stated that technical specifications are highly

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packaging and its effect on purchasing decision, 37 respondents agreed, 30 respondents strongly agreed, with 22 neutral, 7 disagreed and 4 strongly disagreed. Based on these numbers, packaging, too, is important, as it is usually the first thing people notice about a product as it is able to give a certain impression of a certain product, though said impressions may or may not fulfil the expectations of the individual, which could be one of the reasons of some respondents staying neutral or disagreeing. The role of product in the marketing mix is what makes sales possible, as a certain product that a firm manufactures may serve as substitutes. For example, electronic cigarette devices were created to have a less harmful alternative to conventional cigarettes, and thus, the tangible product of vape itself can be seen as a desirable device for people to have.

#### PROMOTION c)

From the structural equation model, the results show that Promotion has the value of 0.69 towards Marketing Mix. From AMOS, it is interpreted as when Marketing Mix goes up by 1 standard deviation, Promotion goes up by 0,686 (rounded to 0.69) standard deviations. This is interpreted as every 1 percent of improvement of Marketing Mix, Price contributes to 69 percent of the improvement, making it a moderate positive correlation towards the marketing effort. Despite being a moderate correlation, it is considered significant as the table of regression weights show that the effects of Marketing Mix is significant, for the P value is less than 0.05. The main aim of promotion is to establish the existence of a certain brand, which in this case, are electronic cigarette devices.

#### d) PLACE

From the structural equation model, the results show that Place has the value of 0.53 towards the Marketing Mix. This is interpreted as every 1 percent of improvement of Marketing Mix, the place of vape products contributes to 53 percent of the improvement towards the marketing effort. From this value alone, it is suggested that place is a moderate influencer of the Marketing Mix. However, this is not supported by the table of regression weights, as the table above suggests that the relationship between Marketing Mix and Place have no relationship, for the P value is not present. However, since Place is established as a part of the Marketing 4P's, this will be treated as one of the limitations of the research.

# **RELATIONSHIPS BETWEEN CUSTOMER** SATISFACTION AND ITS PARAMETERS

Table 19: Regression Weights - Customer Satisfaction

		Estimate	S.E
C.R.	Р		
Tang	<	Cust.Sat	1,000
***			1 00 4
WoM	<	Cust.Sat	1,004
,129	7,803	***	
Rel	<	Cust.Sat	,999
,108	9,235	***	
	Source:	IBM AMOS	

# a) **RELIABILITY**

From the structural equation model, it is seen that Reliability has the value of 0.86 towards the Marketing Mix. This is interpreted as every 1 percent of improvement of Marketing Mix, Price contributes to 86 percent of the improvement. In past studies, reliability is defined as the ability to deliver the promised service reliably and accurately, and that past studies also found that consumers prioritize and desire consistency and dependability (Shukri, Ab Yajid, & Tham, 2020). Based on the respondents of this study, the majority of the respondents agreed and strongly agreed that when they purchase an electronic cigarette device, they expect it to last them a long time, which is an indicator of reliability and consistency. Likewise, the majority of the respondents agreed and strongly agreed that when they are in a physical vape shop, they expect that the staff would be knowledgeable and have extensive knowledge on the products that are being sold, thus supporting previous studies by (Shukri, Ab Yajid, & Tham , 2020). who found out that consumers desire reliability, dependability, and consistency. The significance is supported by the table of the regression weights as shown above, Customer Satisfaction towards Reliability is significant, as the P value is less than 0.05.

# b) WORD OF MOUTH

From the structural equation model, the results show that Word of Mouth has the value of 0.75 towards customer satisfaction. This is interpreted as every 1 percent of improvement of customer satisfaction, Word of Mouth contributes to 75 percent of the improvement, making it a strong positive correlation, and thus a strong impact towards customer satisfaction. The significance is supported by the table of the regression weights as shown above, Customer Satisfaction towards Word of Mouth is significant, as the P value is less than 0.05, thus confirming that Word of Mouth is a significant Indicator of Customer Satisfaction and likewise, it is also an indicator of customer dissatisfaction. The statements in this study regarding Word of Mouth not only covers the topic of customer satisfaction, but also customer dissatisfaction. It includes statements such as, "I will spread the good word of the brand/company if I have good experience with it.", to which 49 agreed, 33 strongly disagreed, 9 remained neutral, 5 disagreed and 4 respondents strongly disagreed. The following statement, "I often share unsuccessful business activities on social media or by word, to which 32 agreed, 23 strongly agreed, 22 remained neutral, 17 disagreed and 6 respondents strongly disagreed with this statement, with the following statement including talking about products and businesses that they are dissatisfied with, where the majority of the respondents agreed and strongly agreed. These statements show that word of mouth does not only indicate customer satisfaction, but also dissatisfaction. However, since this is on the topic of customer satisfaction, WoM in this study supports previous studies that WoM positively impacts Customer Satisfaction.

# c) TANGIBILITY

From the structural equation model, the results show that Price has the value of 0.80 towards the Marketing Mix. This is interpreted as every 1 percent of improvement of Marketing Mix, Price contributes to 80 percent of the improvement, making it a very strong positive correlation. In this study, tangibility includes factors such as Product Quality as a means to measure something that is present, in which case, quality is one of them. The respondents in this study mostly agreed and strongly agreed that product quality is important to them. Initially, this is in line with previous studies by (Wantara & Tambrin, 2019) with their research on the effect of price and product quality towards customer satisfaction and loyalty from the brand Madura Batik, in which the research resulted in product quality having a significant and positive impact towards customer satisfaction. However, this claim is not supported by the table of regression weights, as from the table above, the effects of Customer Satisfaction towards Tangibility are insignificant for the P value is not present, suggesting that Customer Satisfaction has no relationship with Tangibility, and thus does not support the aforementioned previous studies.

# **RELATIONSHIPS BETWEEN CUSTOMER LOYALTY AND ITS PARAMETERS**

Table 20: Regression Weights: Customer Loyalty and its Parameters

		Estimate	S.E.
C.R	Р	Label	
AfSS	<	Cust.Loyalty	1,000
Rep.P	< 5.194	Cust.Loyalty	,720
,139	,	IBM AMOS	

# a. AFTERSALES SERVICE

From the structural equation model, the results show that After Sales Services has the value of 0.85 towards Customer Loyalty. This is interpreted as when Customer Loyalty goes up by one standard deviation, After-sales service increases by 0,85 standard deviations. Alternatively, every 1 percent of improvement of Customer Loyalty, aftersales service contributes to 85 percent of the improvement, meaning it is a very strong positive correlation. After-sales service being regarded as one of the highest factors of customer retention may be one of the reasons of this. From the questionnaire, most of the respondents agreed that they are satisfied with the product but not the aftersales services, they would consider not purchasing again from a certain brand, also supported by the statement that most of the respondents agreed and strongly agreed to the statement of after-sales service being important to them in order to become a long-term customer. Initially, the value of 0.85 confirms the previous study by (Ashfaq, 2019) in the Pakistani telecommunications industry, where the author found out that after-sales services has a significant influence on customer loyalty, as well as the previous study by (Purwati, Fitrio, Ben, & Hamzah, 2020), as the authors found that aftersales service had significant impact towards customer loyalty and customer satisfaction, both studies highlighting the importance of after-sales service as a means to maintain customer relationship and customer retention. However, this claim is not supported by the table of regression weights, as from the table above, the P value is not present, suggesting that Customer Loyalty has no relationship with After-sales service, and thus, does not support the previous aforementioned studies.

# b. REPEAT PURCHASES

From the structural equation model, the results show that Repeat Purchases has the value of 0.65 towards the Marketing Mix. This is interpreted as when Customer Loyalty goes up by 1 standard deviation, Repeat Purchases increases by 0,65 standard deviations, or every 1 percent of improvement of Marketing Mix, Price contributes to 65 percent of the improvement, making it a positive moderate correlation. The majority of the respondents agreed and strongly agreed with the statement that they will purchase the same product or similar or different product from the same brand or company if they have a good experience with it, while the majority of the respondents agreed and strongly agreed with the following statement that they would consider purchasing again from a certain brand if they are satisfied with the services but not fully satisfied with the product, though a fair amount, namely 23, 15, and 3 respondents chose to stay neutral, disagreed, and strongly disagreed respectively. This further highlights the importance of customer retention. Although it is possible that customers may not be fully satisfied with the product, services are also something to be taken into account, for if an individual purchases a vape product from either online or at a physical shop, there is no denying that some sort of service is involved, whether if it is the attitude of the employees or how competent they are at their jobs, these services may add up to the emotional value which certain consumers may prioritize.

# **RELATIONSHIPS BETWEEN MARKETING MIX AND CUSTOMER SATISFACTION**

According to the SEM, there is a very strong positive correlation between Marketing Mix and Customer Satisfaction. This is interpreted as every 1 percent increase of Marketing Mix there is an increase of Customer Satisfaction is improved by 93 percent, meaning it is a very strong positive correlation. It is also supported by the P value, as the table of the regression weights as shown above, Marketing Mix towards Customer Satisfaction is significant, as the three stars represent a P value that is lower than 0.01. The threshold of the P value is 0.05 and thus any values greater than 0.05 is considered not significant. Assuming that the target market, or segments are young adults starting form ages 18 and over, who have the desire to quit smoking conventional cigarettes but have the urge or tendency of smoking, then the number of 0.93 highly supports the marketing mix efforts towards satisfying customers, as vape companies and vape shops alike sell and distribute these products to the people that desire nicotine-based product, thus making them satisfied. This could also support the fact that the number of vapers is also increasing again since the start of the pandemic, in which both the smoking and vaping population saw a decline,

but is now increasing again as lockdown measures are being lightened. The results as shown by the SEM supports the previous study by Wantara and Tambrin on The Effect of Price and Product Ouality towards Customer Satisfaction and Customer Loyalty on Madura Batik, as the authors found that price has a significant effect towards customer satisfaction and customer loyalty (Wantara & Tambrin, 2019). On the topic of electronic cigarettes, this study also somewhat supports a previous study on vape consumers by (Nainggolan, 2022), who found that Customer Satisfaction is positively influenced by the Taste and Price of electronic cigarettes. The results of this study are contradictory to the previous studies on the effect of the Marketing Mix on Customer Loyalty through Customer Satisfaction of the multivitamins manufacturer company, PT. Merckby by (Simangunsong, Sitompul, & Sadalia, 2018). In said research, the authors found out that Marketing Mix has a direct and significant effect on loyalty, more so than the effect of Marketing Mix towards Customer Satisfaction. When compared to this research, it is quite the contrary as Marketing Mix has a higher effect on Customer Satisfaction rather than Marketing Mix, and is a moderate influencer rather than a significant influencer.

# **RELATIONSHIPS BETWEEN MARKETING MIX AND CUSTOMER LOYALTY**

According to the SEM, there is a value of 0.56, making it a positively moderate correlation between Marketing Mix and Customer Satisfaction. This means that for every 1 percent increase of Customer Loyalty, there is an increase of 56 percent Marketing Mix, and therefore is a moderate influencer of customer loyalty. According to the table of the regression weights as shown above, Marketing Mix towards Customer Loyalty is insignificant, as the P value is greater than 0.05. This could largely be due to the fact that Marketing Mix is heavily generalized under one term, while it has indicators that could otherwise be its own measure, rather than an indicator of Marketing Mix itself, and the efforts of marketing mix and its elements may not be enough to fully convert users into buyers, which should be the role of Customer Satisfaction. The results of this study are contradictory to the previous studies on the effect of the Marketing Mix on Customer Loyalty through Customer Satisfaction of the multivitamins manufacturer company, PT. Merckby bv (Simangunsong, Sitompul, & Sadalia, 2018).

In said research, the authors found out that Marketing Mix has a direct and significant effect on loyalty, more so than the effect of Marketing Mix towards Customer Satisfaction. When compared to this research, it is quite the contrary as Marketing Mix has a higher effect on Customer Satisfaction rather than Marketing Mix, and is a moderate influencer rather than a significant influencer, as both the regression values and the Pvalues suggest.

# RELATIONSHIPS BETWEEN CUSTOMER SATISFACTION AND CUSTOMER LOYALTY

According to the SEM, there is a regression value of 0.18, making it a very weak positive correlation between Customer Satisfaction and Customer Loyalty. This means that for every one percent increase of Customer Satisfaction, Customer Loyalty increases by 18 percent, or for every 100 satisfied customers, only 18 remain loyal customers. Though it is a positive correlation, the value of 0.18 is considered very weak and thus is not a significant impactor towards Customer Loyalty. This is further supported by the P value as according to the table of the regression weights as shown above, Customer Satisfaction towards Customer Loyalty is insignificant, as the P value is greater than 0.05. This does not reciprocate result previous studies done by (Wantara & Tambrin, 2019) and their research on Madura Batik, as their study found that customer satisfaction significantly (positively) impacts customer loyalty. One of the possible factors of this result could be the fact that this study did not focus on a certain brand, company, or vape shop, but rather general, and thus, when the respondents were filling the questionnaire, it may be biased to their certain brand that they own and thus could favour them more than the others, this is given in the statements where the respondents were allowed to choose which vape products they were familiar with and which ones they were customers of, which could mean that the respondents being satisfied with a certain brand may not be applicable to the other brands. However, the insignificant relationship also makes sense, as word of mouth is one of the indicators for customer satisfaction in this study, It is also possible that the respondents may be satisfied with the product that they own and may recommend it to their family, friends, and other social circles, but they themselves may never purchase it again. If this were the case, though the customer base may see an increase from the direct effect of word of mouth, loyalty may not be

established per individual, despite that a positive customer experience is one of the direct causes of Customer Loyalty, though despite this, satisfied customers may not always stick to one brand, which may be one of the flaws of repeat purchases from the construct of Customer Loyalty, though the findings of this research still somewhat support previous studies, as despite the low value and insignificant relationship as suggested by the table of regression weights, Customer Satisfaction is still a positive influencer towards Customer Loyalty.

# **GOODNESS OF FIT**

From the results on AMOS under the Output > Model Fit Summary tab as shown and highlighted below, the normed chi square value or CMIN/df is 2.466 and is less than the recommended threshold of 5 by Marsh and less than the recommended value of 3 by Kline, and thus the variables and subvariables are considered fit for the research model, and is accepted.

Table	1:	CMIN	Values

Model	NPAR	CMIN	DF	Р	CMIN/DF	
Default model	30	59.186	24	.000	2.466	
Saturated model	54	.000	0			
Independence model	18	461.512	36	.000	12.820	
Source: IBM AMOS						

# 5. CONCLUSION

This section of the study discusses the conclusions and recommendations from the results gained and analyses conducted from this study about the constructs of *Marketing 4P's* of vape products and its effect towards Customer Loyalty and *Customer Satisfaction*.

Based on the results of the structural equation model, there is a positive relationship between Marketing Mix towards Customer Loyalty and Customer Satisfaction, and Customer Satisfaction positively affects Customer Loyalty. With the results and the values gained from the SEM, to answer the research questions as stated in chapter one, the questions can be answered by:

- 1) Marketing Mix significantly influences [positively] Customer Satisfaction
- Marketing Mix does not significantly influence [positively] Customer Loyalty
- Customer Satisfaction does not significantly influence [positively] affect Customer Loyalty

Based on these conclusions and based on the goodness of fit discussed in the previous chapter, the hypotheses can be accepted, as all of these correlations between the variables scrutinized in this study, despite some of the low values and insignificance, were indeed positive influences, though some distinctions and elaborations have to be made, which will be discussed in the following section of Managerial Implications.

# MANAGERIAL IMPLICATIONS MARKETING MIX SIGNIFICANTLY AFFECTS CUSTOMER SATISFACTION

The result of this study found that there is a positive relationship of marketing mix towards customer satisfaction with the value of 0.93. With this in mind, vape companies should continue to utilize the Marketing Mix, taking into the account of all the elements that are part of the marketing mix and maximizing them to their full potential, though some careful considerations have to be made, such as the target market's budget, the desired profit margin, pricing strategies, and the pricing and the operations of competitors.

# MARKETING MIX DOES NOT SIGNIFICANTLY AFFECT CUSTOMER LOYALTY

The result of this study found out that Marketing Mix has a value of 0.56 towards Customer Loyalty whereas. As discussed in the previous chapter, this means that for every 1 percent increase of Customer Loyalty, there is an increase of 56 percent Marketing Mix. Marketing Mix itself, and the efforts of marketing mix and its elements, even if fully utilized, may not be enough to fully convert users into buyers, due to the fact that there are always competitors selling the same or similar commodities, which would mean that vape stores and vape companies would always have the threat of substitution from its competitors.

# CUSTOMER SATISFACTION DOES NOT SIGNIFICANTLY AFFECT CUSTOMER LOYALTY

Customer Satisfaction has a positive influence of 0.18 towards Customer Loyalty. This means that for every one percent increase of Customer Satisfaction, Customer Loyalty increases by 18 percent, or for every 100 satisfied customers, only 18 remain loyal customers. Assuming that if a certain brand sees Customer Satisfaction as a short-term goal, or a short-term achievement, customer loyalty should be the long-term goal for vape

manufacturers; as there are many vape companies existing today, they would be fighting for sales. This phenomena can also be seen from the perspective of the Marketing Mix, as the elements of the 4P's is enough to satisfy customers, and moderately convert individuals into loval customers, while Customer Satisfaction is not enough to ensure customer retention. One such way to ensure customer retention that could be implemented by vape shops are loyalty programs or loyalty cards; Per every purchase, the customers would get stamps and every couple of stamps, they would be entitled to either a free gift, a discount, etc.

# BIBLIOGRAPHY

- Al Badi, K. S. (2018, September). The Impact of Marketing Mix on the Competitive Advantage of the SME Sector in the Al Buraimi Governorate in Oman. SAGE Open Volume, 8(3). doi:https://doi.org/10.1177/215824401880 0838
- Amurwanti, D. N., Karim, M. F., & Joanita, N. (2021, January 18). Settling outside the WTO: the case of the Indonesia-US Kretek Cigarette Trade Dispute 2010-2014. Southeast Asia Research, 29(1), 92-107. Retrieved October 31, 2022, from https://www.tandfonline.com/doi/abs/10.1 080/0967828X.2020.1857657
- Ashfaq, M. (2019, January). After Sales Service, Customer Satisfaction, and Loyalty in Telcom Sector. *Journal of Applied Structural Equation Modelling*, 3(1), 31-42. Retrieved December 6, 2022, from https://jasemjournal.com/wpcontent/uploads/2019/10/JASEMV31\_As hfaq-20192.pdf
- Astuti, P. A., Assunta, M., & Freeman, B. (2018, July 24). Raising generation 'A': a case study of millennial tobacco company marketing in Indonesia. 41-49. doi:10.1136/tobaccocontrol-2017-054131
- Bigwanto, M., Ramadhan, F. A., & Wijayanto, X. A. (2021). *Online E-cigarette Promotion*

*in Indonesia.* Tobacco Report. Retrieved December 7, 2022, from https://tobaccocontrol.bmj.com/content/ea rly/2022/11/07/tc-2022-057568

- Borden, N. H. (1984). The Concept of Marketing Mix. Journal of Advertising Research, 7-12. Retrieved December 4, 2022, from http://www.guillaumenicaise.com/wpcontent/uploads/2013/10/Borden-1984\_The-concept-of-marketing-mix.pdf
- Canover, R. S., & Kartikasari, D. (2021). Penetration of Imported Products on Ecommerce Platform in Indonesia and Strategies for Improving Local Product Competitiveness. *International Journal of Economics, Business and Accounting Research (IJEBAR), 5*(1), 23-33. Retrieved December 1, 2022, from https://jurnal.stieaas.ac.id/index.php/IJEBAR/article/view/ 1328
- Dobbs, P. D., Lu, Y., Dunlap, C. M., Newcombe, K. V., Baer, C. M., Hodges, E., & Cheney, M. K. (2021, January 1). Young Adults' Intention to Quit using JUUL. *Drug and Alcohol Dependence, 218.* doi:https://doi.org/10.1016/j.drugalcdep.2 020.108399.
- Fauzi, R., & Areesantichai, C. (2022, January 13).
  Factors Associated with Electronic Cigarettes use among Adolescents in Jakarta, Indonesia. *Journal of Health Research*, 36(1), 2-11. Retrieved October 31, 2022, from https://www.emerald.com/insight/content/doi/10.1108/JHR-01-2020-0008/full/html
- Garcia, R., Sidhu, A., Allem, J. P., Garbanti, L. B., Unger, J. B., & Sussman, S. (2017, September 25). Marketing Activities of Vape Shops across Racial/Ethnic Communities. doi:10.18332/tpc/76398.
- George, T. (2021, December 3). *Explanatory Research / Definition, Guide, & Examples.* Retrieved March 10, 2022, from Scribbr: https://www.scribbr.com/methodology/ex planatory-research/
- Hair, J. H., Hult, G. M., Ringle, C. M., & Sarstedt, M. (2022). A Primer Least Squares

- Hutauruk, M. R., & Ghozali, I. (2020, March). Overview of Return on Investment on Cigarette Companies Registered in Indonesia Stock Exchange. International Journal of Scientific and Technology Research, 9(3), 4633-4637. Retrieved November 25. 2022. from https://www.researchgate.net/publication/ 340887410 OVERVIEW OF RETURN ON INVESTMENT ON CIGARETTE \_COMPANIES\_REGISTERED\_IN\_IND ONESIA STOCK EXCHANGE
- IBM SPSS. (2023, January 23). SPSS. *Statistical Software*. Tangerang, Banten, Indonesia. Retrieved January 23, 2023
- Indonesia Expat. (2019, September 14). *Indonesia Expat*. Retrieved October 24, 2022, from Indonesia Expat: https://indonesiaexpat.biz/featured/cigarett e-prices-to-increase-by-over-30-per-centin-2020/
- Indonesia Investments. (2018, January 11). *Liquid E-Cigarette Industry Indonesia Subject to* 57% *Excise Tax.* Retrieved October 19, 2022, from Indonesia Investments: https://www.indonesiainvestments.com/news/todaysheadlines/liquid-e-cigarette-industryindonesia-subject-to-57-excisetax/item8484#:~:text=There% 20are% 20c urrently% 20around% 205% 2C000,reachin g% 20IDR% 203% 20million% 20(approx.
- Jarrar, Y., Awobamise, A. O., & Aderibigbe, A. A. (2020). Effectiveness of Influencer Marketing vs Social Media Sponsored Advertising. Utopía y praxis latinoamericana: revista internacional de filosofía iberoamericana y teoría social, 40-54. doi:10.5281/zenodo.4280084
- Jin, P., & Jiang, J. Y. (2017, December 3). Ecigarettes in Ten Southeast Asian Countries: A COmparison of National Regulations. *Global Health Journal*, 1(3),

1-10. Retrieved November 8, 2022, from https://www.sciencedirect.com/science/art icle/pii/S2414644719300971

Karim, R., Latip, N. A., Marzuki, A., Haider, S., Nelofar, M., & Muhammad, F. (2021, March 27). The Impact of 4Ps Marketing Mix in Tourism Development in the Mountain Areas: A Case Study. *International Journal of Economics and Business Administration, IX*(2), 231-245. Retrieved December 2, 2022, from https://www.researchgate.net/profile/Faqe er-Muhammad-2/publication/351746745 The Impact of

2/publication/351746745\_The\_Impact\_of \_4Ps\_Marketing\_Mix\_in\_Tourism\_Devel opment\_in\_the\_Mountain\_Areas\_A\_Case \_Study/links/60a7607245851522bc07151 d/The-Impact-of-4Ps-Marketing-Mix-in-Tourism-Development-in

- Karyose, H., Astuti, W., & Ferdiansjah, A. (2017).
  Customer Loyalty: The Effect of Service Quality, Corporate Image, Customer Relationship Marketing and Customer Satisfaction as s Intervening Variable-Analysis of Bank Customers in Malang City. AIMI Journals: Marketing and Branding Research, 4, 336-347. Retrieved November 29, 2022, from https://mbr.cikd.ca/article\_60334\_b328b5 6530dbf772dcd63de2d6d2fed6.pdf
- Kennedy, R. D., Awopegba, A., Leon, E. D., & Cohen, J. E. (2016, November 30). Global Approaches to Regulating Electronic Cigarettes. *Tobacco Control*, 26(4). Retrieved November 31, 2022, from https://tobaccocontrol.bmj.com/content/26 /4/440?etoc=
- Kirkham, C., Potkin, F., & Morales, N. J. (2020, February 24). *Exclusive: Juul halts Indonesia e-cigarette Sales, Throwing Asia Expansion in Doubt*. Retrieved November 16, 2022, from Reuters: https://www.reuters.com/article/us-juulecigarettes-indonesia-exclusive/exclusivejuul-halts-indonesia-e-cigarette-salesthrowing-asia-expansion-in-doubtidUSKCN20I19Q

- Kline, R. B. (2015). Principles and Practice of Structural Equation Modeling (4 ed.). New York, New York, United States of America: The Guilford Press. Retrieved January 30, 2023, from https://books.google.com/books?hl=en&lr =&id=Q61ECgAAQBAJ&oi=fnd&pg=PP 1&ots=jFlk0oCbpm&sig=b1CL\_G38K3y mhm88xBe1dYruAEA#v=onepage&q&f =false
- Koczkodaj, P., Cuchi, P., Ciuba, A., Gliwska, E., & Peruga, A. (2021, December 9). Point of Sale Advertising and Promotion of Cigarettes, Electronic Cigarettes, and Heated Tobacco Products in Warsaw, Poland – A Pilot Study. (M. Hrywna, O. Ganz, A. Cole, & P. B. Tchounwou, Eds.) *International Journal of Environmental Research and Public Health*, 1-10. doi:10.3390/ijerph182413002.
- Kotler, P. (2000). *Marketing Management* (Millenium Edition ed.). New Jersey: Pearson Custom Publishing. Retrieved December 3, 2022, from https://www.researchgate.net/profile/Phili p-Kotler-2/publication/235362523\_Marketing\_Man agement\_The\_Millennium\_Edition/links/ 5509bd440cf20ed529e1eef3/Marketing-Management-The-Millennium-Edition.pdf
- Kotler, P., & Armstrong, G. (2011). Principles of Marketing (14 ed.). Retrieved December 8, 2022, from https://nit-edu.org/wpcontent/uploads/2021/09/Principles-of-Marketing-Kotler-Armstrong.pdf
- Kristianto, B. R., & Marta, R. F. (2019, March 29).
  Simplifikasi Ritual Harai dan Dimensi Kultural Hofstede Dalam Iklan Forte Versi Sumo . *Bricolage: Jurnal Ilmu Magister Komunikasi*, 5(1), 91-102. Retrieved October 31, 2022, from https://journal.ubm.ac.id/index.php/bricol age/article/view/1744/1466
- Kristina, S. A., Rosyidah, A. K., & Ahsan, A. (2020, March 18). Trend of Electronic Cigarette use among Students in Indonesia. *International Journal of Pharmaceutical*

*Research* , *12*(3), 657-661. doi:10.31838/ijpr/2020.12.03.099

- Kurt, S. (2020, January 6). *Social Learning Theory: Albert Bandura*. Retrieved December 2, 2022, from Educational Technology: https://educationaltechnology.net/sociallearning-theory-albert-bandura/
- Kusnadi, A. H., Siregar, M. Y., & Pribadi, T. (2021, December 31). The Effect of Product Involvement and Word of Mouth on Purchasing Decisions of Cosmetics from Korea with the Etude the House Brand. *Jurnal Ilmiah Manajemen Bisnis*, 2(2), 96-103. doi:10.31289/jimbi.v2i1.438
- Lee, W.-I., Cheng, S.-Y., & Shih, Y.-T. (2017, December). Effects among Product Attributes, Involvement, Word-of-Mouth, and Purchase Intention in Online Shopping. Asia Pacific Management Review. 22(4), 223-229. doi:10.1016/j.apmrv.2017.07.007
- Lestari, K. S., Humairo, M. V., & Agustina, U. (2018, July 11). Formaldehyde Vapor Concentration in Electronic Cigarettes and Health Complaints of Electronic Cigarettes Smokers in Indonesia. (S. Dobaradaran, Ed.) *Journal of Environmental and Public Health*, 2018, 6. Retrieved November 4, 2022, from https://www.hindawi.com/journals/jeph/2 018/9013430/
- Magsumbol, M., Kumar, N., Rachfiansyah , A., Dini , S., Rabindanata, Y., Martinez-Meija, C., & Raskin, H. (2022). Vape Tricks: How E-Cigarette Companies use Social Media to Hook Youth. New York: Tobacco Enforcement Reporting Movement. Retrieved November 1, 2022, from https://termcommunity.com/assets/content /20220327153330\_TERM\_-\_\_Vape\_Tricks\_in\_Indonesia\_-\_\_March\_2022.pdf
- Mantey, D. S., Pasch, K. E., Loukas, A., & Perry, C. L. (2017, November 6). Exposure to Point-of-Sale Marketing of Cigarettes and E-Cigarettes as Predictors of Smoking Cessation Behaviors. *Nicotine and Tobacco Research*, 21(2), 212-219.

- Marsh, H. W., Balla, J. R., & McDonald, R. P. (1988). Goodness-of-fit indexes in confirmatory factor analysis: The effect of sample size. *Psychological Bulletin*, *103*(3), 391-410. doi:https://psycnet.apa.org/doi/10.1037/00 33-2909.103.3.391
- Martin, J., & Nakayama, T. (2017). *Intercultural Communication in Contexts*. McGraw-Hill Education. Retrieved December 3, 2022
- Morean, M. E., Bold, K. W., Kong, G., Gueorguieva, R., Camenga, D. R., Simon, P., . . . Sarin, S. K. (2019, November 1). Adolescents' awareness of the nicotine strength and e-cigarette status of JUUL ecigarettes. *Drug and Alcohol Dependence*, 204. Retrieved November 29, 2022, from https://www.sciencedirect.com/science/art icle/abs/pii/S0376871619302716
- Nainggolan, B. (2022). The Effect of Taste and Price on Satisfaction Consumers of Electric Cigarettes (Vape). *International Journal of Economics (IJEC), 1*(1), 172-183.

doi:https://doi.org/10.55299/ijec.v1i1.111

- Nguyen, P., & Hoang, T. M. (2017). Factors Affecting Customer Satisfaction and Customer Loyalty The Case of Binh Duong Ceramic Product. NIDA INTERNATIONAL **BUSINESS** CONFERENCE 2017 **INNOVATIVE** MANAGEMENT: BRIDGING THEORY AND PRACTICE. Ho Chi Minh City. Retrieved November 29, 2022, from https://www.researchgate.net/publication/ 319482431 FACTORS AFFECTING C USTOMER\_SATISFACTION\_AND\_CU STOMER\_LOYALTY\_THE\_CASE\_OF\_ BINH\_DUONG\_CERAMIC\_PRODUCT
- Nor Asshidin, N. H., Abidin, N., & Borhan, H. B. (2015, October 6). Perceived Quality and Emotional Value that Influence Consumer's Purchase. *Procedia Economics and Finance, 35*, 639-643. doi:10.1016/S2212-5671(16)00078-2

- Nugroho, M. S., & Pradana, M. (2021, December). The Influence Of Product Quality On Purchase Decision Through Consumer Behaviour As Intervening Variable (case Study Of Indonesian Vape Consumers). *eProceeding of Management*, 8, pp. 8811-8828. Bandung. Retrieved December 6, 2022, from eProceedings of Management: https://openlibrarypublications.telkomuniv ersity.ac.id/index.php/management/article/ view/17231
- Orlan, E. N., Parascandola, M., & Grana, R. (2019). JUUL From the USA to Indonesia: Implications for Expansion to LMICs. *Tobacco Control*, 29(1). Retrieved December 7, 2022, from https://tobaccocontrol.bmj.com/content/29 /e1/e155
- Othman, A. B., Harun, A., Rashid, W. N., Nazeer, S., Kassim, A. M., & Kadhim, G. K. (2019, March 5). The Influences of Service Marketing Mix on Customer Loyalty Towards Umrah Travel Agents: Evidence from Malaysia. *Management Science Letters*, 9, 865-876. doi:10.5267/j.msl.2019.3.002
- Othman, B. A., Harun, A., Rashid, W. N., Nazeer, S., Kassim, A. M., & Kadhim, G. K. (2019, March 5). The Influences of Service Marketing Mix on Customer Loyalty Towards Umrah Travel agents: Evidence from Malaysia. Management Science 865-876. Letters, 9(72), Retrieved February 5. 2023, from http://www.m.growingscience.com/msl/V ol9/msl\_2019\_72.pdf
- Palipudi, K. M., Mbulo, L., Morton, J., Bunnell, R., Nelson, G. B., Kosen, S., . . . Asma, S. (2016, April). Awareness and Current Use of Electronic Cigarettes in Indonesia, Malaysia, Qatar, and Greece: Findings From 2011–2013 Global Adult Tobacco Surveys. *Nicotine and Tobacco Research*, 18(4), 501-507. doi:10.1093/ntr/ntv081
- Phillip Morris International. (2022, February 10). Delivering a Smoke-free Future. Retrieved October 24, 2022, from Phillip Morris International: https://www.pmi.com/our-

transformation/delivering-a-smoke-free-future

- ProfessionalQA. (2020, February 22). Casual Analysis Guideline. Retrieved November 31, 2022, from ProfessionalQA.com: https://www.professionalqa.com/causalanalysis-guideline
- Purwati, A. A., Fitrio, T., Ben, F., & Hamzah, M. L. (2020, October 2). Product Quality and Service Improving After-Sales in Customer Satisfaction and Loyalty. Jurnal 16(2), 223-235. Retrieved Economia, November 26, 2022, from https://pdfs.semanticscholar.org/5283/277 46f5b035bec6022ed7182defca10a97c5.pd f
- Raosoft, Inc. (2004). Sample Size Calculator. (Raosoft, Inc) Retrieved December 3, 2022, from Sample Size: http://www.raosoft.com/samplesize.html
- Salim, M., Bachri, S., & Febliansa, M. R. (2019, January 31). Customer Satisfaction (Public Satisfaction) On Services. 7(1), 17-30. Retrieved November 20, 2022, from http://repository.unib.ac.id/17452/
- Shukri, S. M., Ab Yajid, M. S., & Tham , J. (2020, January). Role of Responsiveness, Reliability, and Tangibility, on Customer Satisfaction. Sys Rev Pharm, 11(1), 1007-1013. Retrieved February 3, 2023, from https://www.sysrevpharm.org/articles/role -of-responsiveness-reliability-andtangibility-on-customersatisfaction.pdf#:~:text=H1%3A%20Tang ible%20has%20a%20significant%20positi ve%20relationship%20on,a%20significant %20positive%20relationship%20on%20th e%20cus
- Simangunsong, B., Sitompul, D., & Sadalia, I. (2018). The Effect of Marketing Mix on Loyalty Through Customer Satisfaction in PT. Merck Tbk Cabang Medan. *Kne Social Sciences*. Medan: Knowledge E. doi:10.18502/kss.v3i10.3397
- Statista. (2022, June). *E-Cigarettes Indonesia*. Retrieved November 9, 2022, from Statista:

https://www.statista.com/outlook/cmo/tob acco-products/ecigarettes/indonesia#revenue

- Stevens, E. M., Brett, E. I., Leffingwell, T. R., Wagener, T. L., & Leavens, E. L. (2019, December). JUUL in School: JUUL Electronic Cigarette use Patterns, Reasons for use, and Social Normative Perceptions among College Student ever users. Addictive Behaviours, 99. Retrieved November 26. 2022. from https://www.sciencedirect.com/science/art icle/abs/pii/S0306460318310049
- Stratton, K., Kwan, L. Y., & Eaton, D. L. (2018, January 23). Public Health Consequences of E-Cigarettes. Health and Medicine. Washington DC: The National Academic Press. Retrieved November 28, 2022, from https://pubmed.ncbi.nlm.nih.gov/2989411 8/
- Sudaria, S. A., Tarofderb, A. K., Khatibia, A., & Tham, J. (2019, April 15). Retracted: Measuring The Critical Effect Of Marketing Mix On Customer Loyalty Through Customer Satisfaction in Food and Beverage Products. *Management Science Letters*, 1385–1396. doi:10.5267/j.msl.2019.5.012
- Suroyo, G., Jefriando, M., & Potkin, F. (2019, September 13). *Indonesia to raise cigarette prices by more than a third at start of 2020*. Retrieved October 24, 2022, from Reuters: https://www.reuters.com/article/usindonesia-tobacco/indonesia-to-raisecigarette-prices-by-more-than-a-third-atstart-of-2020-idUSKCN1VY17A
- Thabit, H. T., & Raewf, M. (2018, March 1). The Evaluation of Marketing Mix Elements: A Case Study. International Journal of Social Sciences and Educational Studies, 4(4), 100-109. doi:10.23918/ijsses.v4i4p100
- The Jakarta Post. (2022, June 24). US orders all Juul vaping products off the market. Retrieved November 30, 2022, from The Jakarta Post: https://www.thejakartapost.com/business/

2022/06/24/us-orders-all-juul-vaping-products-off-the-market-.html

- Trnovec, P. (2021, November 17). Market report: open pods and local brands on the rise in Indonesia. Retrieved October 29, 2022, from ecigintelligence: https://ecigintelligence.com/marketreport-open-pods-and-local-brands-onthe-rise-in-indonesia/
- Twinomurinzi, H. (2011, March). Corruption in African Democratic Developing Countries and ICT: Apathy, Anxiety and Patriotism. *Corruption in democratic developing countries and ICT*, 4. Retrieved October 31, 2022, from https://www.researchgate.net/publication/ 281436110\_Corruption\_in\_African\_Dem ocratic\_Developing\_Countries\_and\_ICT\_ Apathy\_Anxiety\_and\_Patriotism
- U.S. Department of Health and Human Services. (2016). *E-Cigarette Use among Youth and Young Adults.* U.S. Department of Health and Human Services . Atlanta : National Library of Medicine Cataloging in-Publication Data. Retrieved November 24, 2022, from https://www.ncbi.nlm.nih.gov/books/NBK 538680/pdf/Bookshelf\_NBK538680.pdf
- UNODC. (2020). *Theories that Explain Corruption*. Retrieved October 31, 2022, from United Nations Office on Drugs and Crime : https://www.unodc.org/e4j/en/anticorruption/module-4/key-issues/theoriesthat-explain-corruption.html
- Vital Strategies. (2022, April 1). *How Indonesian Youth Are Being Hooked On E-Cigarettes Through Social Media*. Retrieved November 8, 2022, from Vital Strategies: https://www.vitalstrategies.org/howindonesian-youth-are-being-hooked-on-ecigarettes-through-social-media/
- Vogel, E. A., Ramo, D. E., & Rubinstein, M. L. (2018, July 1). Prevalence and Correlates of Adolescents' E-cigarette use frequency and dependence. *Drug and Alcohol Dependence*, 188, 109-112. Retrieved November 28, 2022, from

https://www.sciencedirect.com/science/art icle/abs/pii/S0376871618302631

- Walewangko, C. D., Pangemanan, S. S., & Pandowo, M. H. (2021, April 2). The Influence of Product Quality and Service Quality on Customer Satisfaction at JB Vape Store. Jurnal EMBA: Jurnal RIset Ekonomi, Manajemen, Bisnis dan Akuntansi, 9(2). doi:https://doi.org/10.35794/emba.v9i2.33 906
- Wantara, P., & Tambrin, M. (2019). The Effect of Price and Product Quality Towards Customer Satisfaction and Customer Loyalty on Madura Batik. *International Tourism and Hospitality Journal (ITHJ)*, 2(1), 1-9. Retrieved November 22, 2022, from https://rpajournals.com/wpcontent/uploads/2019/02/ITHJ-2019-01-14.pdf
- Wiyarni, C. A. (2018, October 10). Z-Score Bankruptcy Prediction Model and Stock Prices of The Cigarette Companies in Indonesia. *International Journal of Business Marketing and Management* (*IJBMM*), 3(10), 1-7. Retrieved October 29, 2022, from http://www.ijbmm.com/paper/Oct2018/14 3336537.pdf
- Wulandari, C., & Kurniasih, H. (2019, November
  4). Community preferences for social forestry facilitation programming in Lampung, Indonesia. *Journal of Forestry and Society*, 3(1), 114-132. Retrieved December 7, 2022, from Probability and Statistics:

http://repository.lppm.unila.ac.id/15114/