

The Influence of the Push-Pull Mooring Effect on the Intention to Switch of Customers in the Household Segment at PT Perusahaan Gas Negara Tbk. Area Jakarta

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Abstract:- The Customer Retention Rate (CRR) which continues to decline each year coupled with the Covid-19 pandemic in 2019 to 2021 is a problem that needs to be addressed by PT Perusahaan Gas Negara Tbk. (PGN), which, when combined with the government's mandate to build a gas pipeline network and increase the number of residential customers to as many as 4 million, is a challenge for PGN. This study investigates and analyzes the Push-Pull Mooring Effects on the intention to switch gas pipe customers in the PGN Area Jakarta's residential segment. The push factor is determined by the variables of satisfaction and price perception, the attractiveness of alternatives explains the pull factor, and the subjective norm variable explains the mooring factor. Structured Question Modeling (SEM) analysis using the statistical software SmartPLS version 3.0 was utilized to analyze the data for this study. On the basis of research conducted on 357 pipe gas users in the household segment by PGN in the Jakarta area regarding the influence of Push-Pull Mooring Effects on customer switching intentions, it can be concluded that the push factors has a negative and significant influence on customer switching intentions, such that as the push factor increases, the intention to stop will decrease. The pull factor has a positive and significant effect, so as the pull factor increases, so does the intention to move. It is known that the mooring factor moderates the effect of the push factor on switching intentions. On the other hand, there is no evidence that the mooring factor mitigates the effect of the pull factor.

Keywords:- Push-pull mooring theory, satisfaction, price perception, alternative of attraction, subjective norm, switching intention, PT Perusahaan Gas Negara Tbk., household segment., SEM and PLS.

I. INTRODUCTION

PGN purchases natural gas from producers and then sells it to a variety of end-user categories, including residential customers (RT), small customers (PK), commercial and industrial customers, power plants, and the transportation industry. PGN operates an integrated network of natural gas infrastructures to support its natural gas trading business activities. PGN ensures the distribution of natural gas to end users, ensures product quality (composition, pressure, and temperature of natural gas), and provides customer service (contact with customers, problem

resolution) in accordance with international standards. Current customer management is centered on client segmentation, which is separated into Household customers, Small Customers, and Other Customers.

PGN provides distinct goods for each customer segment, such as: 1) Synergy, namely: Integrated energy usage solutions that are dependable and client-centric through an outstanding customer experience for commercial and industrial customer groups. 2) GasKita, namely: Solutions for simple, cost-effective, and environmentally-friendly energy use for residential and small business customers 3) GasKu, i.e., solutions for supplying clean, ecologically friendly, and efficient gas fuel with CNG mode for the transportation client segment; and 4) GasLink, i.e., natural gas supply solutions for locations without a natural gas distribution network via the Gas Transport Module (GTM).

The Gas Network (Jargas) development program for households in accordance with the National Energy General Plan (RUEN) will reach 4.7 million House Connections (SR) in order to serve as a benchmark for estimating the demand for natural gas. To reach the goal of constructing jargas in RUEN by 2025, it is essential to construct around one million jargas per year. The replacement of kerosene with LPG is still included as an assumption in this forecast, which is expected to be completed in 2022.

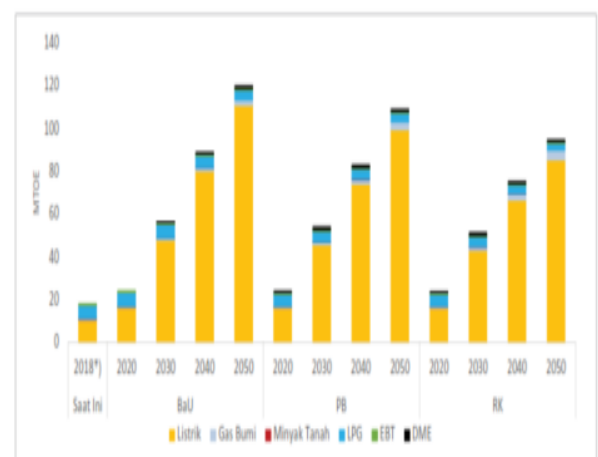


Fig.1: Household Sector Energy Demand

Customer retention refers to PGN's efforts to keep customers utilizing its products and services. Surprisingly, not all organizations prioritize client retention. Three to seven times more income can be generated from returning consumers than from one-time buyers. It's crucial to acquire new consumers, but it's even more important to keep existing customers. The greater the Company's customer retention rate, the greater the brand's potential for profit.

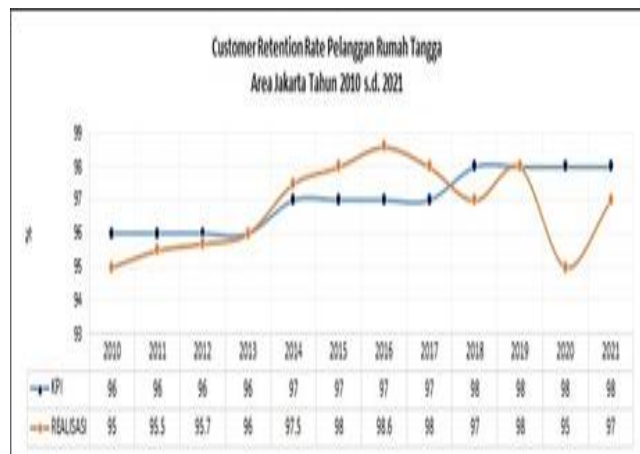


Fig. 2: Customer Retention Rate for Household Customers in the Jakarta Area in 2010 to 2021

Customers switching is a concept that is antithetical to customers or customer loyalty. Both are similar to the two sides of a coin. Customer switching is user disloyalty, which is evidenced by the migration of users from one service to another.

This study's scope includes residential clients of the PGN Sayang Ibu (PSI) PT program as research subjects. Perusahaan Gas Negara Tbk (PGN) Jakarta Area using research variables adopts the Push-Pull Mooring (PPM) model for switching intention and switching behavior of users of piped gas services which is also effective for designing various strategies that help the company's operations.

II. LITERATUR REVIEW

A. Push Pull Mooring Theory

The Push-Push-Mooring Theory is one theory that explains the phenomenon of customer switching (PPM). Bansal et al. (2005) established the PPM theory, which is extensively employed as a study model by prior scholars to analyze human migration events in geography. However, this hypothesis theoretically applies to other scientific practices. Customers migrate from one service provider to another (Bansal et al., 2005).

B. Switching Intention

The urge to switch is interpreted as a consumer's motivation to cease using the old service and begin utilizing the new service (Haridasan et al. 2021). Switching intention is described as a signal of partial or whole disengagement from the consumer's relationship with the previous service provider (Jabeen et al., 2015). Switching enables consumers to keep certain relationships with their old service providers while adopting new behaviors. While switching entirely

denotes that consumers have abandoned the previous service and adopted the new one.

C. Satisfaction

According to Schiffman and Wisenblit (2015), customer satisfaction relates to their assessments of the product's performance in relation to their expectations. The evaluation of a product's or service's success by customers is contingent on a number of factors, including the loyalty relationship between customers and brands (Kotler and Keller 2016).

D. Price Perceptions

Price Perceptions is how consumers interpret and make sense of price information for a product or service. By cognitively processing pricing information, consumers are able to make product-specific price comparisons (Peter and Olson 2009).

E. Alternative Of Attraction

Attractiveness of alternatives is one of the primary factors influencing a person's willingness to transfer to another channel. Alternative attractiveness is a customer's evaluation of the service provider they wish to utilize. Alternative attractiveness is the consumer's impression of the likelihood of consumer pleasure among competing market alternatives (Chang et al., 2017).

F. Subjective Norm

Subjective norms are individuals' feelings of social pressure to perform or refrain from performing a behavior (Ajzen 1991). Then, according to Schiffman & Wisenblit (2015), subjective norms are a person's feelings regarding what other relevant individuals (family, friends, or coworkers) think about the acts that person is contemplating.

G. Hypothesis and frameworks

The following six hypotheses and frameworks were derived from past research findings and relevant literature:

- Satisfaction has a negative effect on customer switching intentions
- Perceived price has a negative effect on the intention to switch customers
- Alternative attractiveness has a positive effect on customer switching intentions
- Consumer satisfaction is moderated by subjective norms influencing consumer switching intentions
- Perceptions of price are moderated by subjective norms influencing consumer switching intentions
- The attractiveness of alternatives is moderated by subjective norms influencing customer switching intentions

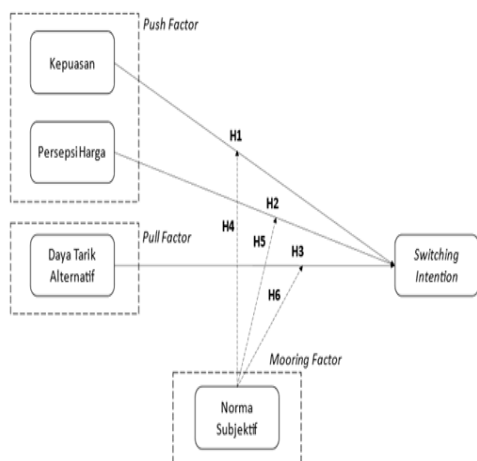


Fig.3. Research Framework

III. METHOD

A. Research design

This research employs both quantitative and descriptive causal research approaches. Due to the lack of a relationship or direct interaction between the researcher and respondent, this study employs a quantitative methodology. Therefore, this study is objective and not subjective.

B. Method Of Collecting Data

Probability sampling was employed as the data gathering approach for this study. In this study, individuals were selected via cluster random sampling based on gas supply sites in specific regions. By distributing questionnaires, information was collected through a survey. Using a questionnaire, the study gathered data from PGN gas customers in the Jakarta sales area to answer numerous research variables. In addition, data was collected through a literature review, which involved an examination of numerous literature articles, references, and documentation pertinent to the research issue.

C. Data Analysis Methods

A Partial Least Square (PLS)-based Structural Equation Model (SEM) technique was used to test the research hypothesis. PLS is a variant-based or component-based structural equation model (SEM). Structural Equation Model (SEM) is a statistical discipline that may simultaneously assess a number of correlations that are very difficult to measure.

IV. RESULTS AND DISCUSSION

The purpose of this study is to examine and determine the impact of customer satisfaction, price perception, and alternative attractiveness on switching intentions, with subjective norms serving as a moderating variable. The data gathering technique was conducted by distributing research questionnaires to 357 customers who utilize gas pipes in the residential section of PT. State Gas Company Tbk. in the Jakarta region.

A. Description of Respondents

- There were 206 male respondents (57.70%) and 151 female respondents (42.30%) out of 357 total respondents. Therefore, it may be stated that the majority of respondents in this survey were male.

Jenis Kelamin	Jumlah	Persentase
Laki-laki	206	57.70%
Perempuan	151	42.30%
Total	357	100%

Tabel 1: Respondent's Gender

- There were 201 respondents between the ages of 31 and 40 (56.30%), 77 respondents between the ages of 18 and 30 (21.57%), 64 respondents between the ages of 41 and 50 (17.93%), 10 respondents older than 50 (2.80%), and 5 respondents younger than 18 (1.40%).

Umur	Jumlah	Persentase
Kurang Dari 18 Tahun	5	1.40%
18 Sampai 30 Tahun	77	21.57%
31 Sampai 40 Tahun	201	56.30%
41 Sampai 50 Tahun	64	17.93%
Lebih Dari 50 Tahun	10	2.80%
Total	357	100%

Table 2: Respondent's Age

- The majority of respondents were married, with 260 respondents (72.83%) being married, 95 respondents (26.61%) being single, and 2 respondents (0.56%) being divorced.

Status	Jumlah	Persentase
Lajang	95	26.61%
Menikah	260	72.83%
Cerai (Duda/Janda)	2	0.56%
Total	357	100%

Table 3: Respondent's Marital Status

- The majority of respondents with domiciles in South Jakarta were 102 people (28.57%), followed by 97 people (27.17%) with domiciles in East Jakarta, 53 people (14.85%) with domiciles in Central Jakarta, 53 people (14.85%) with domiciles in North Jakarta, and 52 people (14.85%) with domicile in West Jakarta.

Domisili	Jumlah	Persentase
Jakarta Barat	52	14.57%
Jakarta Pusat	53	14.85%
Jakarta Selatan	102	28.57%
Jakarta Timur	97	27.17%
Jakarta Utara	53	14.85%
Total	357	100%

Table 4: Respondent's Domicile

- Respondents with a Bachelor's Degree (S1) made up the majority of respondents with 220 people (61.62%), followed by Respondents with a High School Education (S2) with 55 people (15.41%), Respondents with a Master's Degree (S2) with 24 people (6.72%), and respondents with Doctoral Education (S3) with 1 person (0.22%).

Pendidikan Terakhir	Jumlah	Persentase
SMP	2	0.56%
SMA	55	15.41%
D3	55	15.41%
Sarjana (S1)	220	61.62%
Magister (S2)	24	6.72%
Doktor (S3)	1	0.28%
Total	357	100%

Table 5: Respondent’s Education

- The majority of respondents were private employees, 213 individuals (59.66%), 64 BUMN employees (17.93%), civil servants (PNS/TNI/Polri) 22 individuals (6.16%), respondents with Student Jobs and Entrepreneurs each accounted for 17 individuals (4.76%), respondents with Other Jobs accounted for 13 individuals (3.64%), and respondents with Student Jobs accounted for 11 individuals (3.08%).

Pekerjaan	Jumlah	Persentase
Pelajar	11	3.08%
Mahasiswa	17	4.76%
Karyawan Swasta	213	59.66%
Karyawan BUMN	64	17.93%
Karyawan Sipil (PNS/TNI/Polri)	22	6.16%
Wiraswasta	17	4.76%
Lainnya	13	3.64%
Total	357	100%

Table 6: Respondent's Occupation

- There were 176 respondents with a monthly income of 5 to 10 million rupiah (49.30%), 84 respondents with a monthly income of more than 10 million rupiah (23.53%), 69 respondents with a monthly income of 3 to 5 million rupiah (19.33%), and 28 respondents with a monthly income of less than 3 million Rupiah (7.84%).

Penghasilan Per Bulan	Jumlah	Persentase
Kurang Dari 3 Juta Rupiah	28	7.84%
3 Sampai 5 Juta Rupiah	69	19.33%
5 Sampai 10 Juta Rupiah	176	49.30%
Lebih Dari 10 Juta Rupiah	84	23.53%
Total	357	100%

Table 7: Respondent's Income

B. Descriptive Statistical Test Results

Using descriptive statistics, the size of the minimum, maximum, and average values of satisfaction, price perception, attractiveness of alternatives, subjective norms, and desire to switch pipe gas customers in the residential part of PGN from the statistics acquired in this study, it can be deduced that of the 25 items of the instrument that were given as a trial to 357 respondents:

Variabel	Kode Item	Min	Max	Mean	Standard Deviation
Kepuasan	X1.1	1	7	4.529	1.415
	X1.2	1	7	4.497	1.429
	X1.3	1	7	4.473	1.395
	X1.4	1	7	4.431	1.420
	X1.5	1	7	4.409	1.415
Total Nilai Rata-rata dan Standar Deviasi				4.468	1.415
Persepsi harga	X2.1	1	7	5.232	1.211
	X2.2	1	7	5.112	1.178
	X2.3	1	7	5.291	1.220
	X2.4	1	7	5.286	1.210
	X2.5	1	7	5.126	1.154
Total Nilai Rata-rata dan Standar Deviasi				5.209	1.195
Daya tarik alternatif	X3.1	1	7	4.415	1.352
	X3.2	1	7	4.395	1.274
	X3.3	1	7	4.395	1.351
	X3.4	1	7	4.389	1.363
	X3.5	1	7	4.353	1.216
Total Nilai Rata-rata dan Standar Deviasi				4.389	1.311
Norma subjektif	M.1	1	7	4.597	1.447
	M.2	1	7	4.514	1.477
	M.3	1	7	4.580	1.421
	M.4	1	7	4.577	1.485
	M.5	1	7	4.577	1.431
Total Nilai Rata-rata dan Standar Deviasi				4.569	1.452
Niat berpindah pelanggan	Y.1	1	7	4.621	1.339
	Y.2	1	7	4.619	1.337
	Y.3	1	7	4.641	1.303
	Y.4	1	7	4.272	1.352
	Y.5	1	7	4.350	1.359
Total Nilai Rata-rata dan Standar Deviasi				4.501	1.338

Table 8: Statistical Test Results

C. SEM Analysis Using Smart PLS

➤ *Validity Testing*

According to Chin in Ghazali and Latan (2015), a construct indicator is considered valid if its value is more than 0.70.

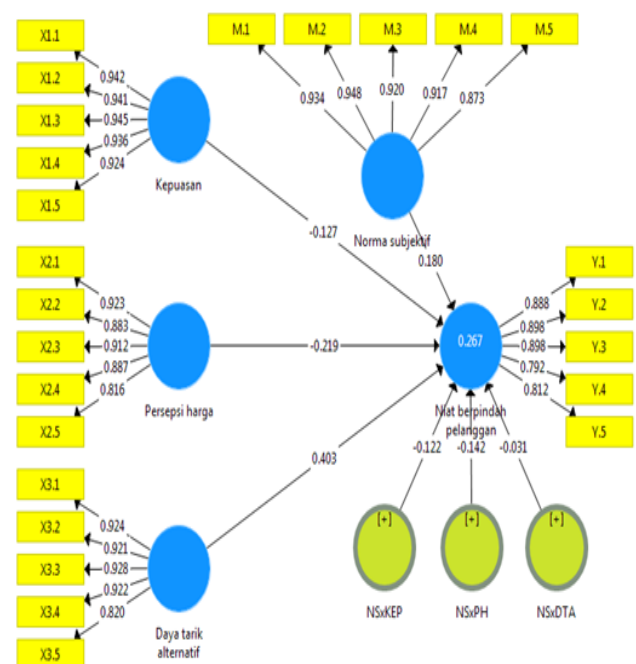


Fig. 4: PLS Model

Variabel	Kode Item	Outer Loadings	Keterangan
Kepuasan	X1.1	0.942	Valid
	X1.2	0.941	Valid
	X1.3	0.945	Valid
	X1.4	0.936	Valid
	X1.5	0.924	Valid
Persepsi harga	X2.1	0.923	Valid
	X2.2	0.883	Valid
	X2.3	0.912	Valid
	X2.4	0.887	Valid
	X2.5	0.816	Valid
Daya tarik alternatif	X3.1	0.924	Valid
	X3.2	0.921	Valid
	X3.3	0.928	Valid
	X3.4	0.922	Valid
	X3.5	0.820	Valid
Norma subjektif	M.1	0.934	Valid
	M.2	0.948	Valid
	M.3	0.920	Valid
	M.4	0.917	Valid
	M.5	0.873	Valid
Niat berpindah pelanggan	Y.1	0.888	Valid
	Y.2	0.898	Valid
	Y.3	0.898	Valid
	Y.4	0.792	Valid
	Y.5	0.812	Valid

Table 9: Validity test Result

All indicators have outside loadings greater than 0.70. If an indicator's value is larger than 0.70, it is considered valid, however if its outer loading is less than 0.5, it will be deleted from the model.

➤ Discriminant Validity Testing

Examining the results of the Heterotrait-Monotrait Ratio (HTMT) matrix in PLS to assess discriminant validity. Where it is advised that the measurement value be less than 0.85, and even if it is greater than 0.85 up to a maximum of 0.90, it is still deemed adequate.

	Norma subjektif	Kepuasan	Persepsi harga	Daya tarik alternatif	Niat berpindah pelanggan
Norma subjektif					
Kepuasan	0.284				
Persepsi harga	0.075	0.031			
Daya tarik alternatif	0.072	0.119	0.037		
Niat berpindah pelanggan	0.184	0.074	0.212	0.403	

Table 10: Discriminant Validity (Heterotrait-Monotrait Ratio)

➤ Reliability Testing

If the composite reliability value for all latent variable values is greater than 0.70 and Cronbach's alpha is greater than 0.70, this indicates that the concept has strong reliability or that the questionnaire employed in this study is reliable or consistent.

Variabel	Composite Reliability	Keterangan
Kepuasan	0.973	Reliable
Persepsi harga	0.948	Reliable
Daya tarik alternatif	0.957	Reliable
Norma subjektif	0.964	Reliable
Niat berpindah pelanggan	0.933	Reliable

Table 11: Composite Reliability Test Result

➤ R Square (R^2)

The R^2 values of 0.67, 0.33, and 0.19 for the structural model's endogenous latent variables show that the model is "strong".

	R Square	R Square Adjusted
Niat berpindah pelanggan	0.267	0.252

Table 11: R^2 Value

It can be seen that the R^2 value for the intention to switch customers is 0.267, placing it in the category of being weak. Thus, it can be inferred that customer contentment, pricing perception, alternative attractiveness, and subjective standards have a considerable impact on customer intention to switch.

➤ Effect Size (f^2)

The f^2 values of 0.02, 0.15, and 0.35 indicate whether the latent variable predictor has a modest, moderate, or substantial effect on the structural level, respectively.

	Niat berpindah pelanggan
Kepuasan	0.019
Persepsi harga	0.063
Daya tarik alternatif	0.203
Norma subjektif	0.040

Table 12: Effect Size (f^2) Value

➤ Predictive Relevance Value (Q^2)

The predictive value for Q^2 is 0.002 (weak), 0.15 (moderate), and 0.35 (high) (strong). If the value of predictive relevance (Q^2) is more than zero, it shows that the exogenous latent variable serves as an explanatory variable capable of predicting the endogenous variable; conversely, if the value is less than zero, it indicates that the model lacks predictive relevance.

	SSO	SSE	$Q^2 (=1 - SSE/SSO)$
Norma subjektif	1,785.000	1,785.000	
MxX1	357.000	357.000	
MxX2	357.000	357.000	
MxX3	357.000	357.000	
Kepuasan	1,785.000	1,785.000	
Persepsi harga	1,785.000	1,785.000	
Daya tarik alternatif	1,785.000	1,785.000	
Niat berpindah pelanggan	1,785.000	1,472.572	0.175

Table 13: Predictive Relevance Value (Q^2)

D. Hypothesis testing

The t-statistic coefficient is used to test the research hypothesis. Where the command bootstrapping generates t-statistics. Significant indicators have a t-statistic greater than 1.96.

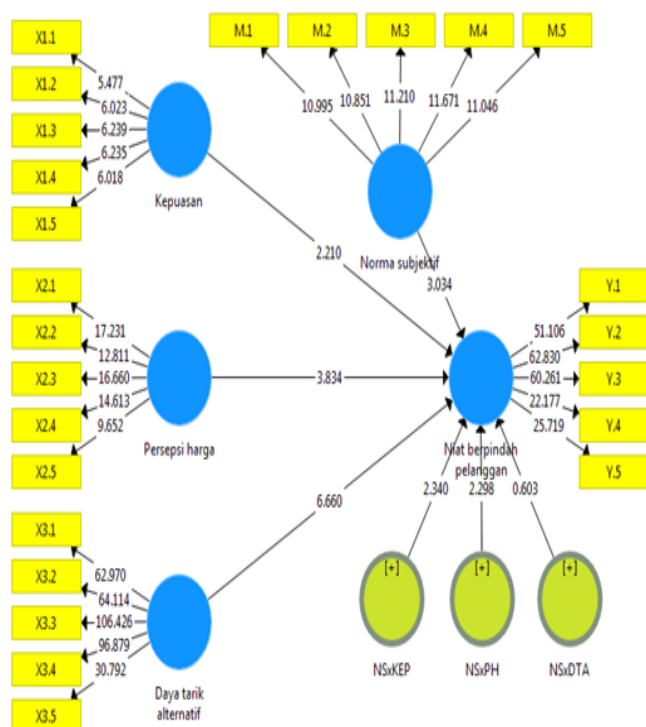


Table 14: Bootstrapping Model

The outcomes of evaluating the direct influence hypothesis can be summarized as follows:

- Hypothesis 1: Customer Switching Intentions and Customer Satisfaction**

H1 is accepted because satisfaction has a t-statistic of 2,210 greater than 1.96, a p-value of 0.028 less than 0.05, and an original sample of -0.127, indicating that satisfaction has a negative and significant effect on the intention to switch among pipe gas users in the household segment of PGN.

- Hypothesis 2 Price perception and consumer switching intentions**

The t-statistic for perceived price is greater than 1.96, the p-value is less than 0.05, and the original sample is -0.219, hence H2 is accepted, indicating that perceived pricing has a negative and substantial effect on the intention to transfer clients. Pipeline gas consumers in the residential part of PGN's service area in Jakarta.

- Alternative Attractiveness in Relation to Customer Switching Intentions**

Alternative attractiveness has a t-statistic of 6,660 that is greater than 1.96, a p-value of 0.000 that is less than 0.05, and an original sample size of 0.403; therefore, H3 is accepted, indicating that alternative attractiveness has a positive and statistically significant effect on the intention to switch. Pipe gas customers in the residential portion of PGN's service area in Jakarta.

Satisfaction with intention to switch customers moderated by subjective norms

H4 is accepted because the t-statistic for satisfaction with intention to switch customers with subjective norms as a moderating variable is 2.340 > 1.96, the p-value is 0.020 0.05, and the original sample is -0.122. This indicates that satisfaction is moderated by subjective norms and has a negative and significant effect on the intention to switch consumers. Pipeline gas customers in the residential division in the PGN.

- Hypothesis 5 Perceived pricing on Customers' Intention to Switch, with Subjective Norms as a Modifying Variable With a t-statistic of 2,298 > 1.96, a p-value of 0.022 0.05, and an original sample of -0.142, the null hypothesis that pricing perceptions are regulated by subjective norms and have a significant negative influence on the desire to transfer customers is accepted. Pipeline gas customers in the residential division in the PGN.

- Alternative Attractiveness and Customer Switching Intentions, Modified by Subjective Norms**

H6 is rejected because the t-statistic for alternative attractiveness to the intention to switch customers with subjective norms as a moderating variable is 0.603 1.96, the p-value is 0.547 > 0.05, and the original sample is -0.031, indicating that alternative attractiveness is moderated by influential subjective norms that are negative but not significant to the intention to switch consumers. Piped gas users in the residential division in the PGN.

V. CONCLUSIONS AND SUGESSTIONS

This study investigates and evaluates the effect of Push-Pull Mooring Effects on Intention to Switch Customers in the home sector of piped gas users in the PT. State Gas Company Tbk. In this study, the Structured Question Modeling (SEM) analytic technique using SmartPLS version 3.0 statistical software was employed to analyze the data.

A. Conclusions

On the basis of the findings of a study of 357 piped gas consumers in the household segment of PT. State Gas Company Tbk. in the Jakarta region regarding the influence of Push-Pull Mooring Effects on Intention to Switch Customers, the following may be stated:

- Consumer satisfaction has a negative and considerable impact on the propensity to transfer providers. Pipeline gas users in the household segment of PT. State Gas Company Tbk. Jakarta Area, indicating that changes in the value of Satisfaction have a non-unidirectional effect on changes in Intention to switch customers; if Satisfaction increases, the level of Intention to switch customers will decrease, and this effect is statistically significant.
- The influence of perceived price on the propensity to switch consumers is negative and considerable. Pipeline gas users in the household segment of PT. State Gas Company Tbk. Jakarta, indicating that changes in the

value of price perceptions have a non-unidirectional effect on changes in customer switching intentions or, in other words, if price perception increases, the level of customer switching intentions will decrease and this effect is statistically significant.

- The appeal of alternatives has a positive and considerable effect on customers' intent to switch. Piped gas consumers in the household section of PT. State Gas Company Tbk. Jakarta, implying that if the attractiveness of alternatives improves, the amount of customer intention to switch will increase significantly and statistically.
- Satisfaction has a negative and significant effect on Intention to switch customers with subjective norms as a moderating variable, which means that changes in subjective norm values have a non-unidirectional effect on changes in the influence of satisfaction on customer switching intentions Pipeline gas users in the household segment of PT. State Gas Company Tbk. Jakarta Area or, if the subjective norm increases, the level of satisfaction will decrease.
- Perceived price has a negative and significant effect on Intention to switch customers, with subjective norms as a moderating variable. This means that changes in the value of subjective norms have a non-unidirectional effect on changes in the influence between price perceptions and customer switching intentions.
- The attractiveness of alternatives has a negative but non-significant effect on the intention to switch customers, with subjective norms as a moderating variable. This means that changes in the value of subjective norms have a non-unidirectional effect on changes in the influence of alternative attractiveness on customer switching intentions.

B. Sugestions

Based on the aforementioned research findings, the following recommendations can be made:

- Companies are expected to be able to establish client loyalty through sustainably growing customer happiness. High customer satisfaction is required for a business to develop client loyalty. Customers who are loyal to the company are likely to make many purchases and have no plans to move to competing products. Customer satisfaction relates to their impression of the product's performance relative to their expectations. Customers who are highly content or happy continue to purchase the same items and brands, provide positive feedback, and spread the word to others, often becoming lifelong customers. In contrast, dissatisfied customers instantly switch to competitors or wait until other marketers offer lower pricing before switching. Individually understanding clients is the first step in enhancing customer satisfaction. This is done so that businesses may effectively engage with customers and provide them with the most suitable products and services. Each individual must be capable of being accurately profiled by businesses.
- The price has the greatest impact on purchasing decisions. Additionally, price has a big impact on client loyalty. According to this report, there are still customers who are dissatisfied with PT State Gas Company Tbk's prices.

Therefore, the corporation can modify the provided price list, discounts, rebates, payment conditions, and credit terms. All of these factors necessitate an increase in the company's resources, particularly in terms of increasing the company's ability to set prices for piped gas products offered to households in the Jakarta region by PT State Gas Company Tbk, taking savings in distribution and production costs into account. The price of a good or service is comprehended and meaningful to consumers. By cognitively digesting pricing information, consumers are able to conduct the desired price comparisons.

- Attractiveness of alternatives is one of the primary factors that impact a person's willingness to switch to a different product. Therefore, PT. State Gas Company Tbk. Jakarta must be able to offer extremely competitive and high-quality pipeline gas products for the residential market. Alternative appeal signifies that the projected results of other alternatives can be superior to those of the original product brand, hence encouraging buyers to switch. Thus, PT. State Gas Company Tbk. The Jakarta region must continue to innovate so that piped gas products for the household segment have numerous options, which have an impact on the higher the perceived value of the alternatives by consumers and the smaller the perceived value of the alternatives by consumers. kemungkinan mereka untuk berpindah ke produk lain.
- Consideration can be given to this study's limitations for future research. The number of respondents in this survey is insufficient to describe the actual conditions. Only 357 individuals participated in this study, and this figure did not include all piped gas users in the residential portion of PT. State Gas Company Tbk. This study utilizes a questionnaire as a measuring instrument to save time and effort. However, the questionnaire has limitations, such as the possibility of respondent bias. There is a chance that the respondents did not answer the questionnaire accurately or that they filled out the questionnaire based on their ideal expectations rather than the real conditions. This can result in measurements that do not accurately characterize the variables.
- Additional research is suggested to develop other dimensions of the indicators of Satisfaction, Perceived price, Attractiveness of alternatives, and Subjective Norms in order to conduct a more in-depth analysis to determine the level of Intention to switch pipe gas customers in the household segment of PT. State Gas Company Tbk.

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