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Full Length Research Paper

Structural model of factors influencing consumers' intention to use natural gas: an application of planned behaviour theory

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Oil and Gas play very important role in Indonesian Economy as a source of domestic energy, feedstock for national industry and source of government income. To support the government's plan, this study need to formulate the strategy of the Gas City development in Indonesia by identifying the factors that influence consumer's perceptions, attitudes and intentions in using natural gas, which refers to the model proposed by Icek Ajzen (1991) which is known as The Theory of Planned Behaviour. Based on statistic examination toward γ parameter (Gamma) are able to conclude that there is a positive and significant influence from attitude toward behaviour, power of controlling behaviour factor and perceived risk toward the intention to use gas. In addition to, the demography factor is including a significant factor in forming respondent decision for using natural gas. The respondent in higher economic status, have more independent opinion (attitude toward behaviour, the consequence evaluation, control beliefs, power of control behaviour) to determine using or not using natural gas. The suggestion which come from government and most of user is turn out them to influence using the natural gas. Likewise to the respondent in middle and low economic status but they still also have been thinking about the perceived risk that might be come when using the gas.

Keywords: city gas, intention, Theory of Reasoned Action, Theory of Planned behaviour.

INTRODUCTION

Indonesian Law No. 22 year 2001 on Oil and Gas, said that the implementation of oil and gas should be able to ensure the efficiency and effectiveness of the availability of oil and gas, both as a source of energy and as industrial raw materials or as a source of state revenue. Further in Presidential Regulation No.5 Year 2006 on

National Energy Policy is to be taken step-by-step use of alternative energy as a substitute fuel in order to reduce fuel subsidies, and including the use of natural gas. Based on data sourced from the Directorate General of Oil and Gas, Ministry of Energy and Mineral Resources, in 2011, natural gas production averaged 8.43 BSCFD (Billion Standard Cubic Feet per Day or billion standard cubic feet per day). Of the total production, which is used in the country at 41.2% or BSCFD of 3.47, while those exported by 53% or by 4.47 BSCFD. While the rest of

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5.8% or 0.49 BSCFD is loses. Portions export of natural gas are still great, in addition due to the obligation to fulfil contractual commitments that have been signed in the past, also due to the export price of gas is much higher than the price of gas to the domestic market, so the producers prefer to export natural gas of the selling in the country. Increased use of natural gas in addition will reduce kerosene consumption, it will also reduce the consumption of LPG, so the LPG which was originally use to meet the needs of urban areas will be used as additional allocations to meet the needs in areas that do not have natural gas distribution network. The areas that have the potential sources of natural gas supply, such as Samarinda, Balikpapan, Tarakan, Bontang and shoves a region which has a gas production field, or who skipped transmission pipelines or areas that already have a natural gas distribution pipelines need to be prioritized town gas. Energy needs from day to day continues to increase, but this condition is not offset by the availability of energy resources, especially petroleum energy sources (fuel), coal and natural gas. The main factors that determine the level of demand for fuel, is economic growth, population, fuel prices, and the pattern of energy use in the past. Therefore, to ensure the security of energy supply in the country and to support sustainable development, the Government set a National Energy Policy as a guide in the management of national energy. The policy stipulated in Presidential Regulation. 5 year, 2006, on National Energy Policy. On the other hand we are more gas reserves than oil reserves, but in fact the use of petroleum has been widely spread throughout the archipelago. While the use of gas, only spread to several cities and provinces only. Therefore, the city government communicate the formation of gas, which aims to improve the utilization of gas for our country. Increased use of natural gas in the country, besides aiming at providing cheap energy and environment-friendly society, can also reduce the financial burden of the state in subsidizing energy, particularly oil. Providing for the needs of the natural gas with natural gas selling prices are lower than the fuel subsidy, it will encourage people to switch from using natural gas to fuel subsidies. Fuel Subsidy burden state finances have been so, especially in 2008, when crude oil prices break the USD140/barrel. At that time, the financial burden of the state to achieve energy subsidies IRD 223 billion, consisting of a fuel subsidy by the IRD 139.1 trillion and electricity subsidies for IRD 83.9 trillion. The realization of fuel subsidy (fuel) in 2011 based on sources from the Directorate General of Oil and Gas Ministry of Energy and Mineral Resources mentioned reach 165.2 trillion or IRD 127.4 per cent above the target set in budget change 2011 of IRD 129.7 trillion. Increased use of natural gas with larger portions and more widely in various areas in Indonesia is expected to provide added value (added value) and a greater increase in macroeconomic side. Through integrated planning and analysis is expected to be

produced a draft strategic plan and in the development of gas distribution pipeline infrastructure and facilities to serve the household consumers and small customers in various regions in Indonesia.

Research Objectives

This study aimed to identify the presence of the influence of each of the latent exogenous variables, endogenous latent variable, by means of statistical tests on the parameters γ (Gamma) that can ultimately be one of the corner stone Gas City development strategy formulation in Indonesia. Intention model examined in this study refers to the model of Theory of Plan Behaviour proposed by Icek Ajzen (1991).

Novelty

Based on the facts uncovered, the novelty aspect of this research is the application concepts of Theory of Planned Behaviour in the program grow the town gas. This study also proves the confidence to provide an immediate effect in the control of behaviour to accept, but found a correlation between the variables of trust with subjective norms and attitudes on behaviour, as well as the correlation between the variables attitude toward behaviour with subjective norm.

Reasonable Behaviour Theory and the Theory of Planned Behaviour

An important step in the history of the theory of attitude has developed through the Theory of reasoned Action and its successor, the Theory of Planned Behaviour (Armitage and Conner, 2001). These theories are based on the idea that the behaviour of jointly dependent on the intention and behavioural control (Ajzen, 1971; 1991). However, empirically, the operationalization of the theory of reasoned attitudes (Fishbein and Ajzen, 1975) states that the link between behavioural intention and attitude toward the behaviour. The intention is not only dependent on the attitude, but also on subjective norms or perceived social pressure given by others, such as parents and good friends, to perform or not perform a behaviour.

The theory of planned behaviour (Ajzen, 1991) is a continuation of the theory of reasoned attitude through two variables controlling behaviour, i.e. the attitude toward behaviour and subjective norm. Fishbein and Ajzen joined forces to explore how to predict behaviours and outcomes. They assume that individuals are usually quite rational and systematic use of information made available to them. One considers the implications of their actions before they decide to engage or not engage in a particular behaviour (Ajzen and Fishbein, 1980, p 5). The

theory of reasoned attitude is a theory that can predict and understand the behaviour and outcomes through attitude toward behaviour and subjective norm, this framework is known as the Theory of Reason Action.

According Sumarwan (2011) theory of reasoned attitude is the development of theories that emphasize the attitude towards an attitude object, the theory linking between the beliefs and attitudes of consumers with the intention behaviour (Sumarwan, 2011). The theory of reasoned attitudes began to become part of the social sciences, Ajzen and other researchers realized that this theory is not adequate and it has some limitations (Godin and Kok, 1996).

The main difference between the theory and the theory of reasoned behaviour attitude is the addition of a third determinant of behavioural intention, perceived behavioural control or perceived behavioural control.

Perceived behavioural control, are additional variables that exist in the theory of planned behaviour. It is assumed to have a direct impact on intention and behaviour (Ajzen, 1991). Behavioural control refers to the availability of the necessary opportunities and resources such as time, money, and the cooperation of others, have a direct impact on behaviour. Since this process is often difficult to measure, perceived behavioural control is usually used as an approach to controlling the actual behaviour (Eagly and Chaiken, 1993). It is often assumed that the two are correlated (Garling et al, 1998).

Perceived behavioural control is determined by two factors that control beliefs or control beliefs and perceived power or perceived power. Perceived behavioural control suggests that motivation is influenced by how difficult behaviours that are considered, as well as perceptions of how individuals can succeed, or cannot do activities. If someone holds strong control beliefs about the factors that would facilitate the behaviour, then the individual will have a major impact on perceived control behaviour. Instead, the person will have a low perception of control if he holds strong control beliefs that inhibit behaviour. This perception may reflect past experience, anticipating the upcoming situation, and attitudes influence the norms that surround the individual (Mackenzie and Jurs, 1993).

Trust as an element in Consumer Behaviour

According Simamora (2003) belief is a descriptive thought that a person has about something, trust can be knowledge, opinions or simply believes and this belief will form the image of the product and brand.

Some journals that discussed the theory of planned behaviour as developed by Mazzocchi et al (2004) put his beliefs as an additional predictor of consumer behaviour. Darby and Karni (1973) explains that even though the trust is a certainty, but it is similar to the knowledge and attention needs to be placed on the individual's perceived

risk in combination with certain patterns of behaviour. Integration of perceived risk and trust within the framework of the theory of planned behaviour were also considered affected individual characteristics of different generating new development model called SPARTA II. SPARTA is an acronym for baseline variables suspected to establish consumer behavioural intentions, namely wiki norm or subjective norm, perceived behavioural control or perceived behavioural control, attitude toward behavioural or attitude toward the behaviour, perceived risk or perceived risk, and alia or variable sub demographics (Mazzocchi et al, 2004).

Confidence hypothesized effect on the perceived risk in particular, which only directly affects consumer intentions.

In another study Pavlou and Chai (2002) explain that trust is hypothesized as a faith that does not directly affect attitudes and intentions through perceived behavioural control, although the journal Pavlou and Chai (2002) also investigated the involvement of culture in influencing intentions.

Assessment Research Accomplished

Many researchers have contributed his thought in the realm of theory of planned behaviour. Some of the researchers like McKnight, Choudhury, Kacmar (2002), Kim, Ferrin and Rao (2007) and Dierks (2007).

McKnight, Choudhury, Kacmar (2002) in his journal entitled *The Impact of Initial Consumer Trust on Intentions to Transact with a Web Site: Faith Development Model* explains that the research conducted to develop and test a model of consumer confidence in online business (e-commerce vendors). Building trust is the key to consumer sales of web-based, strong beliefs influence consumer intentions to transact with a seller over the web. Confidence allows consumers overcome perceptions of uncertainty and risk, and link three critical behaviours that follow; receive offers advice from the seller, the seller circuitry sharing personal information, and purchase run website seller. Confidence is defined as a multi-dimensional with two interrelated components called Belief in belief itself (perception of competence, kindness and integrity of the seller) and the belief in the intention-willingness to depend (a decision that remains of the seller). Three factors are proposed to build consumer confidence: certainty structural (consumer perceptions of web security), owned by the seller's reputation and perception of the quality of the website. In this case the quality of the website and the reputation of being a major factor for fostering consumer confidence to overcome the negative perception of them. The study also suggested that perceived risk negatively impact online consumer intention to want to interact with web-based sellers.

Kim, Ferrin and Rao (2007) in his journal entitled *A Trust-based consumer decision-making model in*

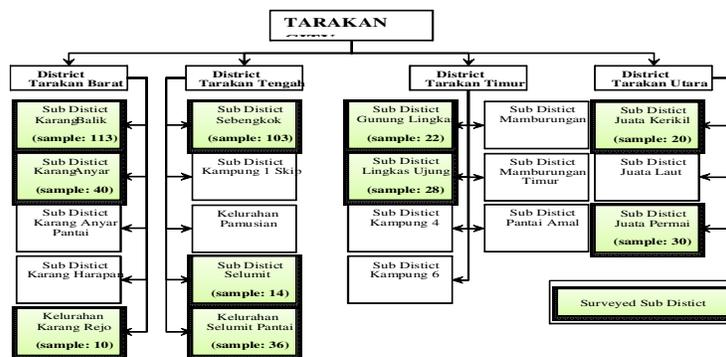


Figure 1 Sampling Technic

electronic commerce: The Role of Trust, Perceived Risk, And Their Antecedents explained that the purpose of the research to develop a theory that explains the basic process of decision-making by consumers when deciding to buy from a particular website, and test the proposed model using structural equation modelling the behaviour of buying through the Internet by using data collected through a web research, and consider the impact of these models. Results showed that consumer confidence and acceptable risk have a strong impact on the consumer to make a purchase decision. The tendency of consumers to trust the web reputation, concern for privacy and security, the quality of information from the Internet and corporate reputation has a strong effect on consumer confidence in the Internet. Interestingly, the guarantee of the three parties did not give a great effect on consumer confidence.

Dierks (2007) in his journal entitled does trust influence consumer behaviour Dierks explains that examines the role of trust as a determinant of consumer behaviour in Germany. The empirical analysis suggests that the impact of belief on consumer behaviour at this time may have been overlooked. Although there is the essential element of trust is incorporated with a deeper understanding of the behaviour of consumerism. The results showed that trust plays an important role when the product to the attention of the market.

Research Location and Time

Tarakan city is selected with an area 250.80 km² including the town close to the source of gas that consists of 4 (four) District; West Tarakan, Middle Tarakan, East Tarakan and north Tarakan. Interviews were conducted on January 19 to March 31, 2012. While the data processing began in April 2012 to complete.

Research design

Research was conducted by using descriptive survey approach by distributing questionnaires to the public

(respondents) aged 20 to over 55 years. Respondents were asked to fill out about preferences, personal factors, socio-economic, educational, and factors related to the use of natural gas as a fuel for household activities.

Research Methods

Study used the descriptive method approach through the distribution of questionnaires to survey respondents aged 20 and over 55 years as many as 416 respondents. The variables used are the people who use or do not use natural gas as the dependent variable. While the independent variables thought to affect consumer intentions are perceived, the level of interest and demographics (personal, socio-economic, educational). Data processing is performed using AMOS 18 of SPSS software through analysis approach SEM (Structural Equation Modelling).

Sampling Techniques

Sampling technique used in this study was multistage random sampling. Sampling started from the district till the neighbourhood by using purposive sampling. Research took a sample of 416 respondents aged 20 and over 55 years was randomized in Tarakan City. Prior to sampling, the study mapped the first sub-villages in two sub categories, namely village fed by natural gas pipelines, each taken 100 respondents / village temporarily represent this in the Karang Balik Village and Sebengkok Village.

While the village is not flowed gas pipelines represented by region West Tarakan and Central Tarakan and took 50 respondents each districts randomly. In addition, the use of secondary data obtained by the method of documentation or direct quotes from various sources through library research (library research). Studying and examining in the form of books, journals, or papers with a view to obtaining the theories and concepts related to the problem studied do the research literature.

Descriptive analysis

In data processing, a descriptive analysis is intended to transform the raw data set into more concise information that is easy to understand. Thus, the purpose of the analysis is descriptive is to simplify the data into a form that is more easily read and interpreted. Descriptive analysis consists of two stages. The first stage is to tabulate data on the respondents, and the second stage is to interpret the data from the tabulation. The descriptive analysis in this study is used to simplify the demographic data, perceptions and consumer behaviour.

Research variables

Consumer Intentions consists of the intention to use and not use natural gas. Measurement intention or interest of consumers is done using a scale of measurement interval. Variable to determine the consumer intention consists of: consumer intention to use / not using natural gas (behaviour intentions, Attitude Toward Behaviour: According to Gagne and Briggs (1974) in Aiken, SC (2002), attitude is an internal state (internal state) that affect individual's choice of action to the object, person or event, wiki norm: factors outside the individual that contains a person's perception of whether others will approve or disapprove of a behaviour that is displayed (Baron and Byrne, 2000) or a person's perception of the social pressure to display or not display the behaviour (Ajzen, 2005), perceived control behaviour: perceptions about the ease or difficulty to display the behaviour of use / continue to use natural gas. Demographics: Demographics aimed to describe the grouping of respondents into categories based on age, education level, monthly income, and monthly expenses.

Method of Data Analysis

The method used in this study using SEM analysis approach (Structural Equation Modelling / Structural Equation Models. Reasons for using SEM analysis techniques in this research involve the measurement and analysis of the latent variables. Latent variables are variables that are not measured directly but measured through indicators where these indicators are measured directly / asked directly to the respondent as an object of research. In terms of SEM, the indicators that directly measured from observations of objects are often referred to as manifest variables or observed variables. Equation model of Structural Equation Modelling (SEM) allows examining a set of relationships between one or more independent variables and the dependent variable is either continuous or discrete. Basically SEM is a combination of factor analysis and path analysis.

Structural model so that a formula based on the model and hypotheses are as follows:

$$\begin{aligned} \eta_1 &= \gamma_{1.1} \cdot \xi_1 + \gamma_{2.1} \cdot \xi_2 + \beta_{2.1} \cdot \eta_2 + \beta_{3.1} \cdot \eta_3 \\ \eta_2 &= \gamma_{3.2} \cdot \xi_3 \\ \eta_3 &= \gamma_{3.3} \cdot \xi_3 \end{aligned}$$

While the similarities between the indicator variables and the latent variables are as follows:

$$\begin{aligned} \xi_1 &= \lambda_{1.1} X_1 + \lambda_{2.1} X_2 \\ \xi_2 &= \lambda_{3.2} X_3 + \lambda_{4.2} X_4 \\ \eta_2 &= \lambda_{5.2} X_5 + \lambda_{6.2} X_6 \\ \eta_1 &= \lambda_{7.1} X_7 \end{aligned}$$

Where:

- ξ_1 = Attitude toward the behavior
- ξ_2 = Subjective norm
- ξ_3 = Confidence
- η_1 = Intention
- η_2 = perceived behavioural control
- η_3 = perceived risk
- X_1 = Confidence behaviour
- X_2 = Evaluation of consequences
- X_3 = normative belief
- X_4 = motivation to comply with
- X_5 = power factor control
- X_6 = Confidence control
- X_7 = Demographics

Structural Model

In this study is a latent variable is the variable Attitude Toward Behaviour, Subjective Norm, Perceived Behavioural Control, Trust, Perceived Risk and Intention to Use Natural Gas (Intention). Latent variable is measured through indicators that can be directly measured through scores on each object of research. In the structural equation model (SEM) are two important parts, namely: Measurement Model and Structural Model. Hair et.al in the Imam Ghazali (2004) propose structural equation modelling stage and into seven steps: Development of model-based theory, the path diagram, line diagram conversion into structural equation, selection of input matrices and estimation techniques on the proposed model, Assessing the structural model identification, estimation model evaluation criteria Goodness-of-fit, interpretation and modification / re specification model. Basically, the seven steps are systematic steps to test the fit between the hypothesized model is based on the theoretical framework of the model estimates are calculated based on data from the measurement of the object of research. The degree of fit between the hypothesized models with a model based on sample data obtained indicated the suitability index model (GFI / Goodness of Fit Index).

While the reliability of the measurement of latent variables can be calculated from the estimated value of

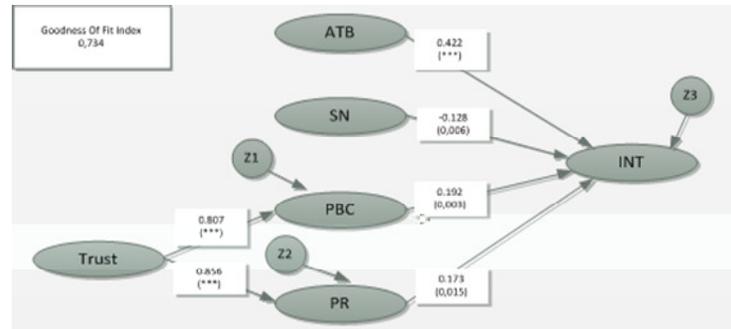


Figure 2 Structural Equation Modelling

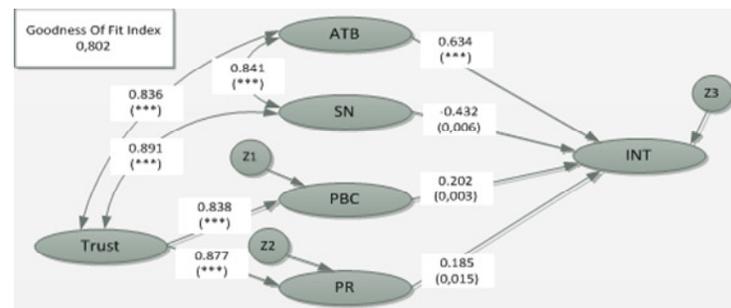


Figure 3 Modification Model

the standardized loading factor Construct Reliability view using the following formula

$$Construct\ Reliability = \frac{\left(\sum_{i=1}^n \lambda_i\right)^2}{\left(\sum_{i=1}^n \lambda_i\right)^2 + \left(\sum_{i=1}^n \delta_i\right)}$$

Where,

λ = Loading factor

δ = measurement error = 1 - λ^2

Limitation reliability coefficient used is the standard coefficient of reliability of Guilford and Fruchter (1972) where values: reliability coefficient > 0.9 otherwise very reliable, 0.7 - 0.9 otherwise reliable, 0.4 - 0.7 otherwise quite reliable, 0.2 - 0.4 otherwise less reliable, the reliability coefficient < 0.2 otherwise unreliable.

Based Output AMOS 18 program, the results of testing the research model can be described in the following chart:

Based on the structural model diagram above looks all parameters have estimated p-value below 0.05, thus all the parameters are expressed significant. But the value of GFI above structural models is relatively low (0.734); in the sense that it is possible to do re specification the model in order to obtain a better structural models fit the data.

Based on the modification index values AMOS output results showed no significant correlation relationship between the exogenous latent variables, namely: a correlational relationship between the latent variables Subjective Norms with confidence, correlational relationships between latent variables Attitudes Toward

Behaviour with confidence, Correlational relationship between latent variables Attitudes Towards Conduct by Subjective Norms. Modification / re-specification of the hypothetical model can be described as follows:

The model that has been in the re-specification of the above has a value greater than 0.802 GFI GFI value of the previous model. It shows the results of the model fit to the data re specification more research. Furthermore, these models serve as the best model to make the interpretation of the relationship between variables.

Parameter γ (Gamma) represents the amount of influence of each of the latent endogenous latent exogenous, If the value of the parameter γ (Gamma) equals 0 (zero) means there is no effect of these factors on preference and if the parameter γ (Gamma) is not equal to 0 (zero) means there is the influence of these factors on preferences To test the hypothesis statistically tested against the values of each parameter γ (Gamma). The results of hypothesis testing on the value of the gamma parameter indicate p-value less than 0.05 chance of making mistakes.

Interpersonal Latent Variables

Based on the model already looks di re-specification correlational relationship between exogenous latent variables. The results of the statistical test for correlations between parameters of latent exogenous variables conclude that: There is a positive relationship between latent variables Subjective Norms with Confidence, There is a positive relationship between latent variables

Table 1 The Direct and Indirect Variable Intention Of Using Natural Gas.

Variable	Effect of Intention		Total Effect
	Direct	Indirect	
Attitudes toward behavioural	0.6340	0.0000	0.6340
Subjective norm	-0.4320	0.0000	-0.4320
Confidence	0.0000	0.0032	0.3320
Socioeconomic level	0.2850	0.0000	0.2850
The power factor	0.2020	0.0000	0.2020
Perceived Risks	0.1850	0.0000	0.1850

Table 2 Role of Demographic Factors against Latent Factors

		A, B	C1, C2, D, E
Attitudes toward behavioural	Behavioural belief	79.0%	79.5%
	Evaluation of consequences	91.7%	89.0%
Subjective norm	Normative beliefs	71.8%	61.6%
	Motivation comply	44.8%	66.6%
Controlling behaviour	Confidence control	94.4%	85.9%
	The power factor control	94.4%	85.1%
Confidence	Confidence	83.3%	65.5%
Perceived Risks	Perceived Risks	76.2%	63.5%

Table 3 Role of Motivation Factors Demographics Comply

	A, B	C1, C2, D, E
Prompts most people	61.9%	65.4%
Influence of parents / husband / wife	49.2%	64.2%
Advice from friends	49.2%	65.9%
Appeal of the Government	84.5%	74.6%
Prompts from TV, radio and magazines	47.6%	64.1%

Attitudes Toward Behaviour with Confidence, There is a positive relationship between latent variables Attitudes Toward Behaviour Subjective Norms. Based on the output values obtained AMOS influence of each variable on the variable Using Natural Gas Interests that are shown in the [table](#).

Based on the [table](#) above, we see that the variable Attitude Toward Behaviour has the greatest influence on Intentions Using Natural Gas that is equal to 0.634. While the influence of Perceived Risk variable is equal to 0.185, this variable has the smallest influence than other variables. Variable belief though not directly affect Intention Using Natural Gas, but remains an important variable that affects the variables Intentions Using Natural Gas as it can influence indirectly through a variable power control and Risk Factors in feel, while demographic factors in this case the level of socio-economic effect on the intention of using natural gas 0.285.

Attitudes of Respondents by Demographics (The Economic Status)

Demographics are a factor that has a significant role in shaping one's intention in using natural gas.

Demographics are reviewed in this study is the economic status of the respondent-level factors. Based on the role of demographic factors (level of economic status) on the factors that influence the intention shown in the [table](#).

The [table](#) above shows the responses of the respondents in answering agree or strongly agree to each of the latent factors based on the level of economic status of respondents. The level of economic status in this study was divided into 6 categories such as A, B, C1, C2, D, and E each have a different status levels i.e. from high to low in order. Factor A has a higher level than B, B is higher level than the C1 and so on up to the level of E. How to measure each level of the economic status was calculated by considering three measures, namely the classification based on the observation of the surveyor, the number of facilities or property owned and expenditures each month. In this analysis created two groups of respondents, the respondents who have a high level of economic status (level A and B) and respondents with high medium and low economic status (level C1, C2, D and E).

In the [table](#) it can be seen that respondents in the high-level economic status tend to have a degree of independence or autonomy in determining the opinions or decisions that are high by respondents at the middle and lower economic status. The level of agreement among

respondent on the high level of economic motivation variable comply substantially lower (44.8%) compared with the group of respondent medium and low economic level (66.6%). On the other hand, the level of agreement of respondents on the high level of economic factors attitude toward the behaviour (behavioural beliefs (79%) and evaluation of the consequences (91.7%) and behavioural control (control beliefs (94.4%) and power factor control (94.4%) appear higher than the group of respondents in the middle and lower economic level. It is clear that the respondents in the higher economic status into account the personal opinions of attitude and personality they have and come from the perception of being digested through a process to determine the respondents have confidence in the decision, in this case whether to use natural gas or not.

As has been reviewed that respondents in the high economic level are less likely to have the motivation to follow the views of others in determining the decision to use natural gas. This is supported from the facts on the ground about the agreement of respondents was quite low in receiving influence from parents / husband / wife (49.2%), advice from friends (49.2%) and advice from TV, radio and magazines (47.6%). Yet another interesting fact is seen when a high economic level respondents prefer to hear an appeal from the government (84.5%) and the advice of most people (61.9%). This suggests that this group of respondents will use the cognitive role in making decisions, i.e., following the government's appeal as a driver program or policy makers and decided to digest the information that is circulating in the community.

CONCLUSION

Based on the results of statistical tests on the parameters γ (Gamma) can be concluded that there is a positive and significant effect of Attitudes Toward Behavioural latent variables, latent variable Power Factor Control and Perceived Risk of latent variables to latent variable intention to use natural gas. But the attitude toward the behaviour latent variables showed the greatest influence in decision-making respondents in the use of natural gas. In addition there is a positive and significant effect of the latent variables to the latent variables Confidence Power Factor Control, and a positive and significant effect of the latent variables Belief latent variable Perceived Risk. But found a negative and significant effect of the latent variables to the latent variables subjective norm intention using natural gas.

Demographic factors such as economic status, age, gender, and level of education is also a significant factor in influencing the decision to use the respondent or not using natural gas. Respondents to the economic status of the general attitude to own independence to make decisions in the use of natural gas, while respondents in

the middle and lower economic status is still worrying the risk that may occur when using natural gas. The appeal of the government is still giving a big contribution in the decision influencing respondents. Generally a young age respondents is a negative response to the program, while concerns still perceived by respondents with full-time jobs. Male respondents also had the same concerns as compared to female respondents. Level of education also affects the attitudes of respondents, mainly related to the low or the high gas prices and concerns about emerging risks.

SUGGESTION

As for suggestions that are needed to follow up this study are:

1. Deeper study in relation to the role of the subjective factor of the norm of others in giving effect to the public in relation to the use of natural gas or Developing Gas City concept. It is necessary to increase the positive perception and true to natural gas.
2. Indonesia has several regions that contain natural gas such as Senkang, Bontang, Prabumulih and several other cities; especially the character and typography are different so it will be interesting to study the same research.

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