

Employee Retention Factors in the Energy Sector in Klang Valley, Malaysia

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Abstract

Employee retention is vital for organisations as it helps build competitive advantage and acts as a significant symbol of accomplished objectives. This paper aims at identifying the organisational commitment, rewards and compensations, and working environment which influences employee retention in the energy sector in Klang Valley, Malaysia. Prior studies have stated the importance of the relationship between the mentioned independent variables and employee retention. A quantitative study was conducted which consisted of 500 questionnaires distributed around the oil and gas companies in Malaysia. The independent variables of this study are organisational commitment, rewards and compensations, and working environment, whereas the dependant variable would be employee retention. The research results was analysed using Factor analysis, Multiple Regression Analysis and Reliability analysis by utilizing the SPSS statistic tool which will then be used for further discussion and to be related to the hypotheses and research questions. This analysis will allow in identifying if the independent variables would have a significant relationship with employee retention in the energy sector in Klang Valley, Malaysia.

Keywords

Organisational commitment, rewards and compensations, working environment, employee retention, energy sector

Introduction

The aim of this study was to test the relationship between employee's retentions in the energy sector in Malaysia and organisational commitment, rewards and compensations, and working environment. The study sought to explore further on how organisational commitment, rewards and compensations, and working environment are able to retain the employees longer in the organisations.

The energy industry analysed in this study comprised the oil and gas industry. This industry consisted of various divisions which were based on work function. The divisions included exploration and production, processing, refinery, retailing, shipping and a broad range of auxiliary support services. The industry is divided into upstream and downstream divisions based on work activity. The upstream division starts with the exploration phase. In this phase, the operator companies carry out a series of studies to determine the availability of oil

resources. When oil is discovered, the appraisal phase starts whereby feasibility studies are conducted to determine the economic viability of developing the specified area into an oilfield. The exploration and production phase involved planning, financing and managing the oil and gas project. The third phase is the development phase where the operator company establishes facilities for drilling and extracting oil and gas. The upstream work activities officially end here. After extraction of oil and gas, the downstream division continues work in the refinery phase and retail phase. They are involved in refining, transporting, retailing and marketing oil and gas as well as related products and services.

The volume of work functions and tasks in the oil and gas industry are extensive. Therefore, a lot of work tasks are subcontracted out to service companies. They perform work on a contract basis for operators. Human resources in service companies perform work for operator companies in the oil and gas industry and many other industries such as power generation, agriculture, shipping and mining. The energy industry faces a severe shortage of technical employees and high levels of employee turnover (10%-30%) (Pricewaterhouse, 2012). Oil and gas is an industry which yields high revenue and contributes significantly to the national revenue. The oil and gas industry generate 44% of federal government revenue (Economy of Malaysia, 2016). The end product (petroleum and other fuel) is a staple resource for many other industries and individuals. Given its pivotal position, price of petroleum wields a heavy influence on establishing the prices of many other goods and services as well as foreign exchange rates.

As this industry is of utmost importance to the growth of Malaysia's economy, it is important for the organisations to ensure smooth operations to prevent slowing down of long term growth and development. The oil and gas industry requires primary and secondary resources constantly in order to achieve their aim. As a primary resource, human capital represents the backbone of the entire industry. To carry out functions such as exploration and production an organisation requires a large pool of technical expertise. When there is a shortage of technical expertise it hinders the operations of the industry. There is a large difference between turnover intention and employee retention or talent retention. The duration of an employee retained in an organisation refers to employee retention while turnover intention refers to the number of employees who intend to exit the organisation (Donoghue, 2010). The inclination of an employee to serve a single organisation for a long time reflects the employee retention as well as the stableness of employment in organisations (Donoghue, 2010).

The aim of this study is to investigate the variables that influence employee retention in the energy industry. The author intends to find out if organisational commitment, rewards and compensations, and working environment could contribute to employee retention in the energy sector in Malaysia.

Therefore, the objective of this research is to determine the following:

- i. The correlation between organisational commitment and employee retention.
- ii. Identify the correlation between rewards and compensations and employee retention.
- iii. Whether working environment will affect employee retention.

Materials and Methods

The research methodology used was the quantitative method which used a survey to determine the relationship between the independent variables and the dependent variable. The technique utilized during the allocation of the polls was the non-probability convenience sampling. The factors which will be influencing employee retention in the energy sector in Malaysia are organisational commitment, rewards and compensations, and working environment.

This research is consigned with the class of correlation study, whereby it concentrates on establishing a connection between the factors. This includes the topography of the study, the population and sample, the instruments used to gather data, the review design, and the characterisation of the strategies used for validation of data and the reliability of the instruments.

The research was initiated in a quantitative manner to obtain information, and then the obtained information was structured and investigated. The assessment and the correlations focused on collecting information from a detached questionnaire and are evaluated by utilising numerical measurement and analysis. To accommodate a big number of respondents from a broad population, quantitative method is used. Mathematical and statistical means are used to prove quantitative experiments; since, (Venkatesh, et al., 2013) stated that results which are statistically explored can be discussed and published justly.

The causal research method was applied since the study sought to establish a cause and effect relationship between the independent and the dependent variables. The purpose of this research was to identify the correlation between the independent variables which are organisational commitment, rewards and compensations, and working environment and the dependent variable which is employee retention in the energy sector in Malaysia.

Since this study concentrates on employees from the energy sector, hence the unit of analysis consisted of individuals from the energy sector in Klang Valley, Malaysia. The online questionnaire which was distributed, are replied by the employees from the energy sector in Klang Valley, Malaysia, which have been taken into consideration to test the formed hypotheses and to proof the subject matter in the research. The discoveries of the research are focused on its sample units since it is the key components which have been taken into consideration for this research. The reason people are chosen as the unit of analysis is because the research is influenced by the independent variables on the employee retention in the energy sector in Malaysia. Hence, they are the main concentrate of the research.

The data is gathered from the primary and secondary data sources. The researcher gathered the primary data by conducting the online surveys whereas, the sources of secondary data are obtained from administrative archives, government sectors and statistics available on the government websites, which had been previously gathered for other studies.

The method of assessment determines the strategy of information collection used by researchers (Goodman et al., 2013). There are distinguished techniques available in order to gather the necessary information. For instance, if the examination intends to deliver quantitative information then surveys could be used as a mean to gather information. On the other hand, if researchers are looking at gathering qualitative data then surveys and interviews could be utilised. Since this research intended to collect quantitative information, therefore survey was used to gather the information.

To carry out this research primary data will be used. Collecting data from the primary data is essential for a researcher to investigate the hypotheses in a statistical and informative manner. Primary data is defined as the original data which is gathered for a definite research goal (Hox & Boeijs, 2005). Questionnaire will be utilised as the primary data in this study, whereby a set of created questions will be distributed for the respondents to answer. This is an effective and efficient manner to collect data from the respondents. It provides researchers with the necessary information and the manner to measure the variables of interest. Besides, it also increases data accuracy and reliability for researchers to carry out research.

In order to analyse the data, SPSS programming was utilised. The reason SPSS was used is because it allowed breaking down of the required information and at the same time ensuring that the end goal of this research is to establish important discoveries of the investigation on the relationship between the independent variables and the dependent variable. The data was tested using the descriptive analysis, factor analysis, reliability test and multiple linear regression analysis.

Research Questions and Objectives

Research Objective 1: To determine the significance of relationship between organisational commitment and employee retention.

Research Objective 2: To determine the significance of relationship between rewards and compensations and employee retention

Research Objective 3: To determine the significance of relationship between working environment and employee retention.

Research Question 1: Does organisation commitment affects employee retention in the energy sector?

Research Question 2: Do rewards and compensations affects employee retention in the energy sector?

Research Question 3: Is there a significant relationship between working environment and employee retention in the energy sector?

Sample

The target population must be set to conduct this research. Target population is defined as a specified grouping of people, objects or events which are of interest to the researchers and may also be referred to as the source of information that can help towards the success of the study (Sekaran & Borgue, 2009). Therefore, the target population in this research is the oil and gas employees in Klang Valley, Malaysia. The target population is not restrained to the period of employment in an energy sector, as long as they are currently attached to the organisation from the energy sector.

Method of Analysis

The sampling technique used to collect information for the research was the non-probability sampling techniques. This is due to the undefined population of the energy sector employees in Klang Valley, Malaysia. Besides that, the convenience sampling method was adopted in this research because the questionnaires are circulated to the energy sector employees who are available conveniently. 500 questionnaires were distributed online and the maximum number of participants evaluated is 500. According to Krejcie and Morgan (1970), the substantial polls gathered should not be lesser than 384 to make the data measurably legitimate.

Results and Discussion

Descriptive Analysis

Socio-Demographic Profile

The circulated questionnaire was retained online for a month. The number of questionnaires gathered from respondents is 202. There were no rejected questionnaires, since the questions were set as such it was required to answer all question using the *Google* form features, thus, the number of respondents for this study was 202 (100% response rate). Descriptive analysis was performed on the respondent's demographic profile, which included the gender, race, age and number of years in the energy sector. The demographic profile based on the frequency and percentage of the total population is listed in Table 4.2.

Table 4.2: Respondent's Demographic Profile Summary (n = 202)

		Frequency	Percentage (%)
Gender	Male	88	44%
	Female	114	56%
Race	Chinese	34	17%
	Malay	83	41%
	Indian	68	34%
	Others	17	8%
Age	Below 30 years old	63	31%
	31 – 40 years old	58	29%

	41 – 50 years old	35	17%
	Above 50 years old	46	23%
Years of service in the Energy Sector	1 – 3 years	75	37%
	4 – 6 years	49	24%
	More than 6 years	78	39%

The questions included in the demographic questions were the gender, race, age, and years of service in the energy sector. Based on gender, the respondents were fairly divided since there were 88 (44%) male and 114 (56%) female. Majority of the respondents are Malay (n = 83, 41%), followed by Indian (n = 68, 34%), Chinese (n = 34, 17%) and Others (n = 17, 8%). As for the age, the majority age group is from the range of below 30 years old (n = 63, 31%), followed by 31 to 40 years old (n = 58, 29%), above 50 years old (n = 46, 23%) and then 41 to 50 years old (n = 35, 17%). Finally, as for the years of service in the energy sector, the majority number of years is in the range of more than 6 years (n = 78, 39%), followed by 1 to 3 years (n = 75, 37%) and subsequently followed by 4 to 6 years (n = 49, 24%).

In a review, the majority of the demographic profiles of the respondents are females (n = 114, 56%), Malay (n = 83, 41%), with the age group of below 30 years old (n = 63, 31%) and has been in the energy sector for more than 6 years (n = 78, 39%).

Factor Analysis

To compute the rotated component matrix, exploratory factor analysis (EFA) was performed. This allows outlining the number of construct and the fundamental structure within the variables in the analysis. To discover the dormant fundamental factors in employee retention in the energy sector in Klang Valley, Malaysia, factor analysis was performed.

Measure of Sampling Adequacy

This study consisted of 3 independent variables that had been pre-determined while developing the questionnaire, whereby it was organizational commitment, rewards & compensations, and working environment. The data was first tested for the Keyser-Meyer-Olkin (KMO) and Bartlett Test of Sphericity. This would indicate the suitability of the data to be further tested using the factor analysis. A KMO value above 0.8 is and a Bartlett value below 0.05 with a confidence interval of 95% is acceptable (Cerny& Kaiser, 1977). Table 4.3 shows the KMO value of 0.809 and the Bartlett's test value is 0.00 which is lesser than 0.05. Therefore, the data gathered for this study is suitable to be tested for factor analysis.

Table 4.3: KMO and Bartlett's Test of Sphericity

Kaiser-Meyer-Olkin Measure of Sampling Adequacy.		.809
Bartlett's Test of Sphericity	Approx. Chi-Square	673.668
	df	6
	Sig.	.000

Rotated Component Matrix

Factor analysis was performed to identify if there is relationship within the questions of the same factor. Rotated Component Matrix depicts the loading of questions constructed on its similarity and the loading value. According to Castelo & Jason (2005) for social sciences study, any factor which loads below 0.5 should be eliminated. Table 4.4 shows the Rotated Component Matrix results obtained. Since all the 20 questions loaded on the right with value more than 0.5: DV1, DV2, DV3, DV4, DV5, IVa1, IVa2, IVa3, IVa4, IVa5, IVb1, IVb2, IVb3, IVb4, IVb5, IVc1, IVc2, IVc3, IVc4, and IVc5 thus it is taken into consideration.

Table 4.4: Rotated Component Matrix

Code	Questions	Factor Loading			
		1	2	3	4
DV2	I plan to establish and build my entire career in this organisation	0.813			
DV3	I am loyal to the organisation I am currently in	0.772			
DV1	I am prepared to put in a great deal of effort beyond what is normally expected in order to help my organisation to be successful	0.806			
DV5	I would recommend this organisation to a friend if he/she is looking for a job	0.641			
DV4	This is the best organisation for me to work for	0.761			
IVa4	I am proud to be working in this organisation		0.771		
IVa5	I would turn down another job offer for more pay in order to stay with this organisation		0.878		
IVa3	I find that organisation's values and mine are inline		0.687		
IVa2	I would take almost any job to keep working in this organisation		0.777		
IVa1	I am willing to work harder than I have to in order to help this organisation succeed		0.788		
IVb4	The organisation I work in remunerates me according to the remuneration offered by other similar organisations from the same industry			0.731	
IVb5	The organisation I work in considers the expectations and suggestions of its employees when designing a system of employee rewards			0.723	
IVb1	In the organisation where I work, I get incentives such as promotions, commissioned functions, awards, bonuses, and etc			0.781	
IVb3	The organisation I work in offers me a salary that is compatible with my skills, training and education			0.780	
IVb2	In the organisation where I work, my salary is influenced by my results			0.632	
IVc5	The facilities and physical condition (lighting, ventilation, noise and temperature) of the organisation I work in are ergonomic, comfortable, and appropriate				0.649
IVc4	The organisation I work in is concerned with my health and quality of life				0.665

IVc2	The organisation I work in has programs or processes which helps employees cope with incidents and prevent workplace accidents	0.651
IVc3	The organisation I work in is concerned of the safety of their employees by having access control of people who enter the company building/facilities	0.669
IVc1	The organisation I work in provides basic benefits (e.g., health care, transportation assistance, food aid, etc.)	0.795

*The other load values are left blank since it is below 0.5

Communalities of Variables

The quantity of variance between variables in the study is known as the communality. As stated by Aaker et al. (1998), the proportion of one variable's variance which provides the correlation with other variables is the communality. The communalities table below demonstrates the results of variance described by each factor, whereby the acceptable range should be above 0.5 (Castelo & Jason, 2005). In Table 4.5, it can be seen that all the 20 factors scored an extraction value above 0.5. This indicates that the variance of the study is explained by the questions comprehensively.

Table 4.5: Communalities of Variables

Code	Question	Extraction
DV1	I am prepared to put in a great deal of effort beyond what is normally expected in order to help my organisation to be successful	0.916
DV2	I plan to establish and build my entire career in this organisation	0.960
DV3	I am loyal to the organisation I am currently in	0.817
DV4	This is the best organisation for me to work for	0.946
DV5	I would recommend this organisation to a friend if he/she is looking for a job	0.779
IVa1	I am willing to work harder than I have to in order to help this organisation succeed	0.898
IVa2	I would take almost any job to keep working in this organisation	0.746
IVa3	I find that organisation's values and mine are inline	0.944
IVa4	I am proud to be working in this organisation	0.849
IVa5	I would turn down another job offer for more pay in order to stay with this organisation	0.901
IVb1	In the organisation where I work, I get incentives such as promotions, commissioned functions, awards, bonuses, and etc	0.869
IVb2	In the organisation where I work, my salary is influenced by my results	0.724
IVb3	The organisation I work in offers me a salary that is compatible with my skills, training and education	0.954
IVb4	The organisation I work in remunerates me according to the remuneration offered by other similar organisations from the same industry	0.859
IVb5	The organisation I work in considers the expectations and suggestions of its employees when designing a system of employee rewards	0.911
IVc1	The organisation I work in provides basic benefits (e.g., health care, transportation assistance, food aid, etc.)	0.887

IVc2	The organisation I work in has programs or processes which helps employees cope with incidents and prevent workplace accidents	0.747
IVc3	The organisation I work in is concerned of the safety of their employees by having access control of people who enter the company building/facilities	0.934
IVc4	The organisation I work in is concerned with my health and quality of life	0.789
IVc5	The facilities and physical condition (lighting, ventilation, noise and temperature) of the organisation I work in are ergonomic, comfortable, and appropriate	0.816

Reliability Analysis

Both the dependent and independent variables were tested using the reliability test. The indicator used is the Cronbach Alpha, whereby the range of 0.6 – 0.7 is considered acceptable and if it is between 0.7 -0.9 it is considered excellent (George &Mallery, 2003). Table 4.6 shows all variables obtained Cronbach Alpha of more than 0.8. Therefore, all the 20 questions within the same variable category are related closely to each other and can be used in terms of reliability.

Table 4.6: Cronbach Alpha Results from Reliability Test

Construct	Cronbach's Alpha	Number of Items
Employee Retention	0.83	5
Organisational Commitment	0.84	5
Rewards & Compensations	0.88	5
Working Environment	0.89	5

Multiple Linear Regression Analysis

To investigate the significance of the relationship between the independent and dependent variables, a multiple linear regression analysis was performed. Table 4.7 depicts the strength of the linear regression (R square), whereby it includes the organizational commitment, rewards and compensations, and working environment towards explaining the variability of the response data which in this study is the employee retention.

Based on the results in Table 4.7, the value of the adjusted R square is 0.741. This indicates that the model explains there is 74.1% variability of the response data (organizational commitment, rewards and compensations, and working environment) on employee retention; whereas, 25.9% could be due to different factors.

Table 4.7: Model Summary

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.861 ^a	.741	.737	.31113

- a. Predictors: (Constant), WE, OC, RC
- b. Dependent Variable: ER

The collinearity was also tested for by utilizing the tolerance and variance inflation factor (VIF). The results obtained are shown in table 4.8. It can be observed that all the three independent variables scored a tolerance of more than 0.1 and a VIF of below or around 3, which indicates that there is no strong multicollinearity between the data.

Table 4.8: Multicollinearity

Model	Collinearity Statistics	
	Tolerance	VIF
(Constant)		
Organisational Commitment	0.385	2.597
Rewards and Compensations	0.258	3.874
Working Environment	0.325	3.081

To confirm if the model is a substantial predictor for employee retention, the Significance value in the ANOVA table was observed. Table 4.9 shows a Significance value of 0.00, which is lesser than 0.05, this shows that the model is a substantial predictor with a confidence interval of 95%.

Table 4.9: ANOVA

Model	Sum of Squares	df	Mean Square	F	Sig.
Regression	54.790	3	18.263	188.670	.000 ^b
Residual	19.166	198	.097		
Total	73.956	201			

The significance of the relationship between organizational commitment, rewards and compensation, and working environment with employee retention is as shown in the coefficient table. From Table 4.10, organisational commitment (Standardized Coefficients Beta = 0.533; Significance < 0.001) and rewards and compensations (Standardized Coefficients Beta = 0.410; Significance < 0.001) significantly affects employee retention. However, working environment (Standardized Coefficients Beta = -0.036; Significance > 0.573) exerts no significant influence on employee retention.

Table 4.10: Coefficients

Model	Unstandardized Coefficients		Standardized Coefficients Beta	t	Sig.
	B	Std. Error			
(Constant)	1.180	.151		7.796	.000
Organisational Commitment	.454	.050	.533	9.135	.000
Rewards and Compensations	.318	.055	.410	5.764	.000
Working Environment	-.034	.061	-.036	-.563	.574

Conclusion

The factors affecting employee retention in the energy sector in Klang Valley, Malaysia was studied via the research objectives. Thus, the investigation has accordingly tested and identified the significance of the relationship between the independent variables (organisational commitment, rewards and compensations, and working environment) and the dependent variable (employee retention in the energy sector in Klang Valley, Malaysia). As previously discussed in the conceptual framework, this research model has three independent variables which are organisational commitment, rewards and compensations, and working environment and one dependent variable which is employee retention in the energy sector in Klang Valley, Malaysia. Thus, three hypotheses were constructed based on the variables to test the factors influencing employee retention in the the energy sector in Klang Valley, Malaysia. From the findings of the research it was found that only organisational commitment and rewards and compensations has a significant relationship with employee retention in the energy sector in Klang Valley, Malaysia. Whereas, the working environment does not significantly influence the employee retention in the energy sector in Klang Valley, Malaysia.

References

- Aaker et al. (1998). *Competing for Talent*. Key recruitment and retention strategies for becoming an employer of choice: Palo Alto, CA: Davies-Black Publishing.
- Castelo, C. M., & Jason (2005). *Quantitative and Qualitative Research : A View for Clarity*. International Journal of Education, 2(2), 1-14.
- Donoghue, C. (2010) *Nursing Home Staff Turnover and Retention: An Analysis of National Level Data*. Journal of Applied Gerontology. Feb 2010; 29(1):91.
- Economy of Malaysia (2016). *Economic Assessment of Malaysia 2016*. Available at: <http://www.oecd.org/eo/surveys/economic-survey-malaysia.htm> [Accessed: 28 September, 2017]
- George, J. M., & Mallery, A. P. (2003). *Personality and work-related distress*. *Personality and organizations*. Mahwah, NJ: Lawrence Erlbaum Associates, 193-222.
- Goodman, J. K., Cryder, C. E., and Cheema, A. (2013). *Data collection in a flat world: The strengths and weaknesses of Mechanical Turk samples*. Journal of Behavioral Decision Making, 26(3), 213-224.
- Hox, Joop J., and Hennie R. Boeije. "Data collection, primary vs. secondary." Encyclopedia of social measurement 1 (2005): 593-599.
- Krejcie, R. V., & Morgan, D. W. (1970). *Determining sample size for research activities*. EducPsychol Meas.
- Pricewaterhouse, Coopers (2012). *Study on Talent Demand and Supply in the Oil and Gas Sector: Final Report*. Kuala Lumpur: Pricewaterhouse Coopers Advisory Services Sendirian Berhad.
- Sekaran, U., and Bougie, R (2009). *Research methods for business: A skill building approach*. (4th ed.). Chichester, West Sussex: John Wiley & Sons, Inc.
- Venkatesh, V., Brown, S. A., & Bala, H. (2013). *Bridging The Qualitative-Quantitative Divide : Guidelines for Conducting Mixed Methods Research in Information Systems*. MIS Quarterly, 37(1), 21-54.