## 3.3. Analyses

To test the study hypotheses, *Partial Least Squares* Structural Equation Modeling (PLS-SEM) were utilized. *Partial Least Squares* (PLS) is a wide class of methods for modeling relations between sets of observed variables by means of latent variables. The partial least squares (PLS) approach to SEM offers an alternative to covariance based SEM, which is especially suited for situations when data is not normally distributed. The basic PLS-SEM algorithm (Lohmöller 1989) follows a two-stage approach. In the first stage, the latent constructs' scores are estimated, and the second stage calculates the final estimates of the outer weights and loadings as well as the structural model's path coefficients (Hair et al. 2011).

## 4. Findings and Discussion

## 4.1. Assessment of the measurement model (Outer Model)

An evaluation of outer model consists of convergent, discriminant validity and composite reliability. In the studies involving PLS analysis, an overview of aspects related to the evaluation of the measurement models are: composite reliability should be higher than 0.70; indicator reliability: indicator loadings should be higher than 0.70; convergent validity: the average variance extracted (AVE) should be higher than 0.50; Discriminant validity: the AVE of each latent construct should higher than the construct's highest squared correlation with any other latent construct and an indicator's loadings should be higher than all of its cross loadings (Hair et al, 2011, pp. 145).

The results of composite reliability ranged from 0.853 to 0.942 (higher than 0.70) and reliability testing by coefficient of cronbach alpha generates the lowest value of 0.778 and the highest value of 0.927 and thus can be concluded that all of the construct have good reliability (cronbach alpha > 0.70). The AVE values were 0.595-0.735 (higher than 0.5), exceeding the threshold values for satisfactory convergent validity (Table 2).

In order to evaluate the discriminant validity, the square root of each variable's AVE value was compared with the correlation coefficients between variables. In Table 3, for each variable, the square root of the AVE value was larger than the correlation coefficient values with any other variable, thereby verifying the discriminant validity of this study (see Table 3).

The results of analysis test obtained from variables measurement demonstrate that all of the variables in this research have outer loading above 0.50 (see Table 5). This means that all of the indicators, as a measurement of the construct, have been proven to have convergent validity. The results of discriminant validity analysis test also show higher correlation between variables and each of indicators than between variables and other indicators. This means that the model has met discriminant validity. It can be concluded, therefore, that the evaluation of outer model has been fulfilled so the next evaluation is the evaluation of inner model.

## 4.2. Structural Model (Inner Model)

The structural model indicates the causal relationships among the latent constructs in the research model. Assessment of structural model was done first by determining the predictive power of the model and second by analyzing the hypothesized relationships among the latent constructs proposed in the research model. The R²-values of the dependent variables determine the predictive power of the research model and the path coefficients evaluate the strength of the hypothesized relationships. The judgment of what R² level is high depends, however, on the specific research discipline. Whereas R² results of 0.20 are considered high in disciplines such as consumer behavior, R² values of 0.75 would be perceived as high in success driver studies. In marketing research studies, R² values of 0.75, 0.50, or 0.25 for endogenous latent variables in the structural model can, as a rule of thumb, be described as substantial, moderate, or weak, respectively (Hair et al., 2011). Following Chin (2009), boots trap resampling method that uses randomly selected subsamples was employed to estimate the theoretical model and hypothesized relationships.

The results of analysis output are shown in Figure 1, the R<sup>2</sup> -values, path coefficients, t-value and the significance values are presented in Table 6. As is evident from Figure 1, the model has high