

Table 1. Descriptive statistics and Cronbach's Reliability

Construct	Mean	SD	Cronbach's α
PU	3.74	0.88	0.89
PEU	3.93	1.03	0.92
AT	3.86	0.87	0.86
BI	3.9	0.96	0.74

These responses came from IT organizations in public sectors, such as IT centers in universities, ministries and institutions as well as from major IT companies in the Kingdom. Respondents also were kindly asked to resend the survey hyperlink to their colleagues working in the IT sector. Further details about the study sample are presented in the sample section.

RESULTS

Validation Tests

Before commencing with the data analysis process, several validation tests were carried out in order to ensure the reliability and discriminant validity of the instruments. For instance, Cronbach alpha test was performed on the items of each construct to ensure the validity of the questionnaire and its internal consistency. The reliability of items in each construct ranged from 0.74 for behavioral intention to 0.92 for perceived ease of use (Table 1), which exceeded the standard suggested by Nunnally and Bernstein (1994). Therefore, the internal consistency of the questionnaire was within an acceptable range.

Furthermore, factor analysis was carried out in order to test the convergent and discriminant validity of the instrument (questionnaire). A total of 28 items were analyzed at the level of four factors (i.e., perceived usefulness, perceived ease of use, attitude and behavioral intention). Table 2 shows the correlation matrix for the factor analysis using principal component analysis as an extraction method and Varimax rotation. It can clearly be noticed that each item scored higher (i.e., higher than 0.50) in its

construct than any other construct. According to Fornell and Larcker (1981), this result represents a satisfactory level of discriminate validity and convergence.

Sample

As mentioned previously, the questionnaire was distributed by e-mail to people who work in information technology organizations in the Kingdom of Saudi Arabia. A total of 171 completed surveys were received and used for analysis. Seventy-three percent of respondents were male and the majority of the respondents were aged between 20 and 35 years old. Table 3 shows a descriptive analysis of sample characteristics.

Hypotheses Testing

The first five hypotheses (i.e., hypothesis 1–5) tested the relationships amongst the regular TAM constructs (PU, PEU, AT and BI) while the rest of the hypotheses (i.e., hypothesis 6–10) tested the effect of the external variables (age, gender, job domain, education and nationality) on attitudes towards cloud computing in Saudi organizations. In order to test these hypotheses, linear regression was applied on the obtained data. The results are presented in Table 4. Hypotheses 1 and 2 tested the effects of PU and PEU on the AT of cloud computing in Saudi organizations respectively. Moreover, hypotheses 6, 7, 8, 9 and 10 tested the effect of gender, age, education, job domain and nationality on the AT of cloud computing in Saudi organizations, respectively. Entering all variables in one block, the results presented a significant percentage of variance 62% ($R^2 = 0.65$, $F(7,163) = 37.92$,