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**CONTENTS**



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great concern and it still plagues various tax agencies who are embracing electronic tax administration systems (AccountingWeb, 2002; ETAAC, 2002).

- *Optimism*: The optimism facet is defined as a positive view of technology and beliefs in the benefits of technology in increasing job efficiency and enhancing people's lives at work and at home.
- *Innovativeness*: The innovativeness dimension refers to the extent to which a person believes that he or she is a thought leader, and at the forefront of trying out new technology-based products/services.
- *Discomfort*: Discomfort refers to a perceived lack of control over technology and a feeling of lack of confidence in using the new technologies properly.
- *Insecurity*: Insecurity is defined as distrust of technology-based transactions and scepticism about its ability to work effectively.

In the United States, during the period 1999/2000, a nationwide telephone survey was conducted on 1,001 American adults. The American National Technology Readiness Survey (NTRS) was based on a random sample of American adults (18 years or older). The survey reported that that the mean score on a 5-point scale for each of the four TR dimensions were 3.8 for optimism, 3.2 for innovativeness, 3.5 for discomfort and 4.0 for insecurity perceptions (NTRS, 2000; Parasuraman, 2000). In the same survey, the results indicated that American adults were optimistic about new technology; nonetheless, they were also wary of Internet security. The findings further revealed that there were no significant differences in optimism and insecurity perceptions between genders; both male and female adults were positive about technology, and were concerned by the insecurity of Internet technology.

In addition, the results of the NTRS (2000) found that American males appeared to be more innovative than the females, and American females experienced greater discomfort with new technology as compared to the males1. The survey also found that older people tend to be less optimistic and less innovative about new technology as compared to younger participants. At the same time, older participants perceived more discomfort with new technology as compared to the younger ones. However, the views pertaining to insecurity varied little across age groups.

Parasuraman and Rockbridge Associates, Inc developed the Technology Readiness Index (TRI) to measure technology readiness. According to TRI, the combination of scores on the four TR dimensions represents a person's overall technology readiness. The first two TR dimensions, 'optimism' and 'innovativeness' are the 'contributors' that may increase an individual's technology readiness while the other two TR dimensions 'discomfort' and 'insecurity' are 'inhibitors' that may suppress technology readiness. Parasuraman (2000, p.317) stated that the TRI is "a multiple-item scale with sound psychometric properties that can be used to gain an in-depth understanding of the readiness of technology customers (both internal and external) to embrace and interact with technology, especially computer/internet-based technology".

Parasuraman (2000) and Parasuraman and Colby (2001) highlighted that technology readiness is an overall state of mind and not a measure of competency. In brief, there are three important components of technology readiness. First, technology readiness varies from one individual to another. Anyone can be a consumer of a technology, but

[1] One plausible explanation for such a finding was attributed to the education system in United States. Traditionally, more male students were selected to pursue computer sciences and IT related courses than females (Parasuraman and Colby, 2001).

some may seek technology actively, whilst others may need special help or coaxing. Second, technology readiness is multifaceted. Third, technology readiness can be used to predict and explain consumers' responses towards new technologies.

Extant studies provide support that the TRI scale is capable of capturing the relationship between technology readiness and technology usage behaviours (NTRS, 2000; Parasuraman and Colby, 2001). Empirical findings indicate that technology readiness correlates with actual use and intention to use the technology-based products and services in varying degrees (Parasuraman and Colby, 2001). Notably, an individual with a higher level of technology readiness has higher usage intention and more experience in using the technology based products and services in varying

Non-response bias may occur when potential respondents included in the sample failed to respond. Fowler (1993) indicated that when the mail survey method was employed, one way to reduce non-response bias is to do rigorous follow-ups to increase response rate. Accordingly, three weeks after the first mailing, one follow-up letter was sent to survey respondents, and for those who had e-mail addresses, an e-mail was sent. Subsequently, three weeks after the first follow-up mailing, a second follow-up letter with another copy of questionnaire plus a stamped self-addressed envelope was sent by post. In total, 192 completed questionnaires were received; hence, the response rate was about 34% (192/572). However, at the time of study, there has been no prior empirical study on Malaysian tax practitioners that can be relied on as a reference point. Therefore, in order to test for the potential non-response bias, the mean score for the research variables was compared, i.e., between the first early respondents and the last 30 respondents, based on guidelines provided in Armstrong and Overton (1977). The t test results show no significant differences between the early and later respondents at 5% significant level, indicating that non-response bias is not a serious problem in this study.

## DATA ANALYSIS AND DISCUSSION

The summated scale was used to compute the mean score of technology readiness dimension and usage intentions. The combination of scores on the four dimensions represents a person's overall technology readiness. The details of the survey results are presented next.

### The Respondents' Profiles

The respondents' profiles are presented in Table 1 and Table 2. As Table 1 shows, the respondents' were located all over Malaysia. As expected, the majority of respondents were from Wilayah Persekutuan (34.8%) and Selangor Darul Ehsan (13.9%). These proportions reflect the reality in this country as these two states have the biggest number of registered audit firms in Malaysia (Lee, 2002).

**TABLE 1 THE RESPONDENTS' PROFILE BY STATE**

| State | Percentage (%) |
|---|---|
| Wilayah Persekutuan (Kuala Lumpur only) | 34.8 |

Chinese males in the respondents' group reflects the reality in Malaysia where Chinese males are the major players in accounting and tax practice. Approximately 22% of the respondents were aged below 35. The predominant education level was professional qualification and university degree. More than 91% of the respondents indicated that they were members of local professional bodies such as Malaysian Institute of Accountants (MIA), Malaysian Institute of Chartered Public Accountants (MICPA), and Malaysian Institute of Chartered Secretary and Administrators (MAICSA), and 48% were member of Malaysian Institute of Taxation (MIT). About 37% of the respondents were also members of foreign professional accounting bodies

**TABLE 3: MEAN SCORES AND T-TEST FOR EQUALITY OF MEANS ACROSS GENDER AND AGE GROUPS**

| Technology Readiness Dimension | Items Mean (Std deviation) | Mean (Standard deviation) | | | Mean (Standard Deviation) | | |
|---|---|---|---|---|---|---|---|
| | | Male (N=165) | Female (N=27) | *t*-stats (*p*-value) | Aged below 35 (N=42) | Aged above 35 (N=150) | *t*-stats (*p*-value) |
| Optimism | 4.2891* (0.5707) | 4.2818 (0.5799) | 4.3333 (0.5189) | -0.434 (0.665) | 4.2619 (0.5548) | 4.2967 (0.5767) | -0.348 (0.728) |
| Innovativeness | 2.8576 (0.8865) | 2.8545 (0.9004) | 2.8765 (0.8120) | 0.119 (0.905) | 2.9444 (0.8739) | 2.8333 (0.8914) | 0.717 (0.474) |
| Discomfort | 2.9323 (0.9396) | 2.9727 (0.9423) | 2.6852 (0.9003) | 1.479 (0.141) | 2.7381 (0.7092) | 2.9867 (0.9898) | -1.521 (0.130) |
| Insecurity | 3.5903* (0.9248) | 3.5879 (0.9362) | 3.6049 (0.8575) | -0.089 (0.929) | 3.5873 (0.7644) | 3.5911 (0.9656) | -0.024 (0.981) |

All items were measured based

Secondly, the samples were collected from a homogeneous group; i.e. tax practitioners who were highly educated professionals. As qualified tax professionals, regardless of gender and age groups, all of them are frequently exposed to new technologies at work and at home nowadays; as such, their perceptions towards new ICT may not vary greatly despite gender and age differences. Nevertheless, it is important to note that data analysis using the Mann-Whitney U test, as presented in Table 4, did show some variations in the four TR dimensions across gender and age groups, which warrant further attention and study.

**Usage Intentions of the E-filing System**

The respondents were asked to indicate their usage intentions of the e-filing system. The mean score observed was 5.7 on a 7-point scale (standard deviation=1.070), and the reliability test of the usage intention construct showed a Cronbach alpha of 0.90, indicating a very satisfactory measurement consistency (Nunnally, 1978). The result indicates that the majority of the respondents have high usage intentions of the e-filing system. However, the results may not be a precise measure and could be over reported, as it is a self-reported measure (Davis, 1993). At best, self-reported usage intention should serve as a relative indicator (Legris, Ingham, and Collerette, 2003). The following is an example of the difficulty with self reported measures (La Presse Montreal, Tuesday, 17 October 2000, cited in Legris et al., 2003, p.202):

"Observers in public washrooms in New Orleans, New York,

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