Information Communication Technology (ICT) adoption in the least developed countries (LDC) suffers from complex socio-cultural problems, where lack of knowledge and attitude towards ICT are the major stumbling blocks for ICT adoption in the public sector of Bangladesh. This empirical study was carried out through a quantitative survey across 352 government and non-government participants to investigate inter-relationship between these two factors. The result shows strong correlation amongst them, which further suggests that ICT skill, one of the components of ICT knowledge is potentially a strong driver to change the typical attitude and mindset towards ICT in the context of LDC. The findings have important implications in practice as well as research, which are expected to contribute in future direction of research and also in the effort to solve the complex puzzle of ICT adoption in developing country context.

Keywords: ICT, IT knowledge, attitude, mindset, LDC

1. Introduction

Information communication technology (ICT) adoption in the public sector of the least developed countries (LDC) suffers from a complex and interconnected set of barriers at the international, national and organization level under unique socio-cultural environment and context [1, 7, 11]. Researchers in this area have yet to come up with a complete explanation of the phenomenon to theorize the issue. Nevertheless the issue has attracted significant attention recently, because of its huge potential impact in practice, where two thirds of world population live [31] and also in research where less than 2% information systems papers published in top journals [42].

Whatever complexity it has, understanding of this problem and in depth study has become essential, as the need for ICT adoption has reached a critical juncture and is becoming an important agenda for these countries to survive in this modern economy. With the decreasing price of infrastructure and growing number of applications, opportunities are available to shape the direction of ICT diffusion and use in developing countries, which has huge potential to address many of its deep rooted problems such as efficiency, transparency and productivity [53]. In practice, it was found that such technological potential is often thwarted by managerial attitude and reluctance for adoption, who often mistakenly perceives it as a threat to their status and power along with fear of having less knowledge and grip on this. [10, 26, 45]. Saunders [41] reinforced in her editorial of MISQ special issue, “As IS (Information Systems) researchers, we should seek to understand all barriers that form the dark side of IS and ICTs, and actively seek solutions to these barriers’ (p.V).

A prior qualitative study by the author using nominal group technique (NGT) [48] elucidated the key factors for adoption of ICT in the public sector of Bangladesh [23]. ‘Lack of knowledge’ and ‘attitude’ were identified as the most influential inhibitors for ICT adoption in the public sector which also cover a range of sub factors. All other factors are either unique (such as socio economic condition, infrastructure) for the particular context or highly dependent (such as planning and strategy, vision, leadership, citizen demand) on these two major factors. These factors appeared to be interdependent with each other in a complex socio dynamic environment, which comprises different stakeholders from various professions (government and non-government). As such a clear understanding with some quantitative measures of these two factors and their sub factors were felt necessary in order to gather deeper insights of the issues. Attewell and Rule [6] also advocate that it makes sense to do fieldwork first by saying, "Getting close to the phenomenon - gathering insights or discoveries about causal links, motivations, reasons why things happened - should precede verification by more objective techniques, such as surveys” (p.314).

Accordingly, this survey was designed to examine the knowledge base, perceptions, and practices associated with the ICT use in Bangladesh, which was also useful
to study unstructured organizational problems in the area of information systems [19] and test important relationships among the major barriers to ICT adoption. In this study the relationship between these two major factors, attitude and knowledge, and their components amongst different categories of stakeholders, government and non-government are examined on the dependable variable, attitude.

The paper is structured as follows. The following section under the background draws some theoretical framework, prior work and the research context. The third section enumerates the development of the concepts, instruments and hypothesis. The fourth section discusses the methodology, followed by the result in section five. The last section concludes the paper.

2. Background

2.1 Theoretical framework

As most IS diffusion theories have been developed and tested in the context of developed countries, there is little research in the context of LDCs [50, 51]. However, a number of theories advance our understanding of the phenomenon from a broad perspective. According to Rogers [39] Diffusion and Innovation theory, one of the most significant elements of diffusion is ‘knowledge about the availability and potentiality of a new technology’. But Rogers found that people do not evaluate an innovation always based on scientific studies of implications; rather they depend on a subjective evaluation of what has been conveyed to them through social channels and what an individual perceives as advantageous. This implies that the importance of social awareness of the innovation as a component of knowledge. In Rogers’ Innovation Decision Process theory, knowledge is shown as the first step for potential adopters, which means they must learn about the innovation followed by persuasion of the value of the innovation. So a knowledge based society could be instrumental in creating a positive attitude towards any innovations in ICT. Attewell [5] also developed a theoretical framework for examining the diffusion of complex technologies in organizations, where knowledge and technical know how found to be important barriers to diffusion. According to Attewell, firms delay adoption of complex technology until they obtain sufficient technical knowledge to implement and operate it successfully. A number of studies have previously emphasized the need for education or knowledge deployment as a precondition of successful diffusion in developing country contexts [24, 32, 36-38, 49].

Scott’s [43] institutional theory also has a wide dimension which was found useful to advance our understanding of the use of ICT in the complex environment of developing countries. Institutional theory provides a means of handling the complexity of the interactions between people, organizations and other entities, which helps in explaining how people really make choices about an innovation. According to this theory, institutions are made up of formal constraints (e.g., rules, laws, constitutions) and informal constraints (e.g., norms of behaviour, conventions and self-imposed codes of conduct), which are also called institutional pressures [16]. Normative pressures come from the similar attitudes and approaches of professional groups, ongoing practices and socializations. This theory opposes the ‘technocentric’ assumption about technology shaping human cognition and behaviour, rather it emphasize human development itself in order to embrace appropriate technology. Wilson [52] conceptualizes and defines ICT as a scarce and desirable resource that groups and individuals contend for in order to consume or control for their own purposes. Individuals and groups who believe they will be disadvantaged will tend initially to block and oppose its diffusion, partly through ignorance of its full effects but also through an evaluation that their personal and professional status will be compromised. So it appears, individual cognition influence users’ attitude toward an ICT innovation, which is essential to achieve good outcome for an organization. Organizations usually vary in their members attitudes toward new technology, which can range from supportive to resistant and from proactive to reactive. As such, an organization needs to understand and develop tactics that will foster favourable attitudes among its members before adopting the innovation [20].

2.2 Prior work

An in-depth qualitative study earlier identified eleven important barriers in the context of Bangladesh where knowledge was overwhelmingly found as the principal barrier followed by attitude and mindset of people and decision makers towards ICT [23]. However, the correlation between knowledge and attitudes has been the source of controversy in research on the public understanding of science [32] with diverse and contradictory results, although most have been carried out in medical science [4]. Evans and Durant [17] in their study over British respondents, found that the internal consistency of attitudes towards science is
poor, and that the links between attitudes towards science in general and attitudes towards specific areas of scientific research are weak. Allum et al [4] reviewed the evidence on the relationship between public attitudes and public knowledge about science across 40 countries using a meta-analytic approach and found small positive correlation between general attitudes towards science and general knowledge of scientific facts and processes. This general relationship varies little across cultures but more substantially between different domains of science and technology. They suggested a focus on understanding the mechanisms that underlie the association that exists between knowledge and attitudes about science. Particularly in IS such empirical investigations are not prevalent. More investigations in different contexts are needed to understand and contest this debate.

Previously published surveys on related areas [13, 15, 22, 27, 35] found little similarity with the theme and context of the current study. Because of the huge digital divide and the differences in the ICT infrastructure and IS maturity between developed and least developed countries, many of the construct definitions and items for developed countries need modification “to suit the social setting in which practice occurs” [19, p.407]. Rose and Straub [40] also opine that “Future IT studies in LDCs therefore could be greatly enhanced by instruments construction which did everything possible to reduce culturally dependent biases’ (p.45).

2.3 Research context: Bangladesh

Bangladesh is an example of a typical LDC lagging in ICT adoption in its organizations. Despite some initiatives, such as the formation of an ICT Task Force’ with the Prime Minister as the chair person, and the formulation of The National Information and Communication Technology Policy 2002 [30], only a few ministries and government agencies have attained limited eGovernment capability and adopted ICT in their work processes. A study of 45 government ministries, divisions and departments by the Bangladesh Enterprise Institute (BEI) revealed a lack of serious resolve and drive in their implementation of ICT in Bangladesh [45].

ICT is not only a technical artifact, it is closely embedded in a much wider societal context [52]. However, in Bangladesh ICT is still seen in terms of a hardware and software industry. Its wider application within the national economy is missing.

The bureaucracy in today’s Bangladesh displays a number of traits of the British colonial period, which was imposed from the top in the Indian sub-continent to establish a centralized and strong executive administration based on the paternalistic traditions of Indian society. The most distinct feature of this tradition is hierarchy that structures the nature of interactions with common citizens. Cost and benefit analysis to achieve the best possible outcome is considered as a foreign tradition, where following the established norms are usually given more importance rather than achieving results [44]. Creativity and innovation are difficult to flourish in such an environment. A decision maker, therefore, usually does not search to find new ways of solving societal problems: neither he encourages subordinates to nurture innovative ideas [25]. A weak and inadequate education system, especially in Information System (IS) and Information Technology (IT), is failing to produce the required suitable workforce for the country. The institutional resources are not promoting such knowledge, where many senior echelons of the government or ministries do not have the general aptitude for developing computer based business processes [23]. A philosophical shift is thus felt necessary to integrate the technology with systemic social structures [8], which will psychologically change the attitude towards this new innovation of ICT.

3. Instrument and hypothesis development

Survey instruments and hypotheses were developed based on the themes that emerged from an earlier study [23]. While the instruments take into account the established theoretical literature [12, 29, 46], more emphasis is given to the local context and environment; their background, culture, language, practice, status, time and relationship, based on researcher’s personal experience and interaction with the community and environment under study (Researcher is a native Bangladeshi with long working experience in the ICT sector of Bangladesh). However, to acquire the best scenario prevailing on the ground, a balance was sought between the prior theoretical construct and its relevancy and application to the local context, through an iterative process of review and expert opinion. Details of the constructs and instruments are appended in Appendix A.
3.1 Definition of concept

IT Knowledge for this study refers to “specialized knowledge possessed by individuals: how well they understand fundamental IT concepts, how well informed they are about IT in their organization” [9, p.320]. According to Davenport and Prusak [14], there are two dimensions to tacit knowledge, one is the ‘technical’ dimension (procedural) which includes education base and IT skill and the other one is the ‘cognitive’ dimension, which implies awareness and perceptions about IT. So the ‘knowledge’ construct for this survey has three sub-constructs. First, IT education, which in this case refers to their level of IT orientation and interaction along with their formal education in the past. Second, IT skill refers to the individual level of technical and practical knowledge and skill on ICT. It is a combination of users’ experience with computers, the training they obtained, and overall computer skills [21], where the use of computer technology depends on the technology itself and the level of skill or expertise of the individual using it [34]. Lastly, awareness and cognizance about ICT refers to “a user’s knowledge about the capabilities of a technology, its features, potential use, and cost and benefits [39]. Technology cognizance is a critical prerequisite for creating the knowledge related to an IT innovation. It is more of how well they understand fundamental IT concepts and its use in their organization [9].

Another important concept is users’ attitude. Fishbein and Ajzen [18] define, attitude as , “a learned predisposition to respond in a consistently favourable or unfavourable manner with respect to a given object”, where according to American Heritage dictionary, “mindset is a fixed mental attitude or disposition that predetermines a person's responses to and interpretations of situations”. The typical mindset, especially amongst the decision makers and government officials, who are yet to be tuned into the modern ICT environment and work process, are holding back ICT adoption in the public sectors [23]. Based on the (Obscured)’s [23] study, this category includes sub categories like motivation, resistance to change, not ready to accept new ideas, fear of unknown and fear of losing job. Some of the constructs for this study to measure individual attitude towards ICT are taken from the studies prescribed by Ahuja & Thatcher [3] in regards to ‘Personal Innovativeness with IT’ [2] and ‘Intent to Explore IT’ [33] given at appendix A.

3.2 Hypothesis

The following hypotheses are advanced for exploration from this study:

H1. People with IT education background have more positive attitude.
H2. People with more IT skills have more positive attitude.
H3. People with more IT awareness have more positive attitude.

These hypotheses were tested amongst both the government and non-government (citizen) categories to investigate whether these two groups differ in their attitude. Figure 1 presents our research model.

![Figure 1. Influence of knowledge components on attitude for ICT adoption in the public sector of LDC](image)

4. Method

4.1 Questionnaire design and measurement

The questionnaire was designed based on the prior work [23] in consultation with some related literature [2, 9, 21, 22, 28, 33, 39]. The questionnaire was prepared in English as the target audiences of the survey understand basic English. The instruments selected finally had gone through internal consistency and reliability tests, which are reported in the following section. To test the hypothesis, ‘attitude towards ICT’ was measured as a dependent variable consisting of 11 items. The participants were asked whether they agree to the statements about personal innovativeness, intention to explore and motivation for IT. Each item in the construct consist of a five-point Likert scale ranging from 1= strongly disagree to 5= strongly agree. IT education, IT skill and IT awareness, the three components of IT knowledge construct were measured separately using 2, 16 and 5 items respectively. As a 5-point Likert scale is used in this circumstances also,
but with a slightly different connotation relating with the statements ranging from 1=None to 5=high on case to case basis. Although there were additional items for each category, only those items were considered for measurements which were able to capture and explain the variable to their maximum.

4.2 Pre-testing

A series of pre-tests were conducted on Bangladeshi origin ICT and non-ICT professionals and public servants working in Australia, as the research was developed in an Australian education institution. Pre-testing helped to reveal unanticipated problems with question wording, instructions to skip questions etc. Experts within the faculty were consulted to determine if any critical measures had been omitted from the survey instrument. Pre test results were not included in the analysis, as the survey questions were modified based on the observations followed by several round of review and also because of the different and current contextual and geographical locations of the participants.

4.3 Participants and data collection procedure

The survey was targeted towards the educated (of various professions) who have some understanding and influence in the decision making process in a least developed country like Bangladesh. In general, they are important stakeholders both from receiving and delivery point of view for initial adoption of ICT in the public sector of Bangladesh, because it is always the educated and upper class of society who spearhead any innovation like ICT [39]. The vast majority of the population, who are mostly illiterate with almost nil or very minimum perception about ICT, are excluded from this survey in the belief that they would ultimately follow the trend the educated and decision makers set for them. This is mostly applicable during the initial phase of adoption of an innovation [39]. The survey participants represent a wide range of individuals, including government officials, politicians, IT professionals, private sector officials, students and general citizens. As mentioned before the survey was primarily targeted towards government officers, which made it difficult to have more in number. However with the help of senior ex colleagues of the researcher and a few influential representatives of the government office (who were motivated and willing to help), 251 completed survey forms were collected from government servants with additional 101 completed forms from various professions of non-government categories. Overall, a total of 352 questionnaires were collected between August 2007– Jan 2008, with a response rate 44% (=352/800). Diversity was achieved through the participation of trainee government officers (of various levels) in Bangladesh Public Administration Training Centre (BPATC) located at Savar, Dhaka, who usually come from all over the country. Non government categories are mainly included to compare and also to reflect the overall standard of ICT readiness amongst the educated of the country.

The survey questionnaire was disseminated only in the paper version because of the low accessibility to computer and cultural habit of the participants in the context. Survey procedures were designed to assist in maximizing the response rates. Many of the survey forms were filled instantly sitting face to face and some were handed over to them to be filled in later. Some had to be pursued, but some were not returned back within the time frame of the researchers stay in the field of study.

5. Result

Data were analyzed using SPSS which identified specific variables, missing value considerations and formatting needs. Frequencies and their associated percentages were calculated for both individual variables as well as for variables that were derived from combinations of other variables (such as Knlavg, Attavg). The simple summary statistics such as the differences between percentages of a particular group and reference group is used to illustrate the analysis. In order to examine correlation amongst the variables on proposed hypotheses a linear regression was carried out first on overall samples and then on split files based on gov and non-gov category.

5.1 Participants demographics

Out of total 352 survey participants, 251 (71%) were government officials or public servants. Distribution of their (gov) job role shows (Figure 2) majority of them are from middle management group (34%) followed by professional (18%) and executive role (14%).
Figure 2. Distribution of professions (all categories) and job role (gov category)

About 40% of the participants were within the age group of 26-35 years (Figure 3), followed by a good number of gov officials within 36-44 (24%) and above 45 years (26%). A significant number of non-gov (37%) is below 25 age group who presumably are students.

Figure 3. Distribution of age group (gov and non-gov category)

All the participants can be considered as highly educated i.e. master degree holders (61% and 40% gov and non-gov respectively) and another 40% and 33% are graduates (Figure. 4) mostly from the public universities of Bangladesh (71%) with rest educated in private universities, colleges or overseas.

Figure 4. Level of education (gov and non-gov category)

But about 32% of these most educated gov officials and 29% of non-gov participants have not used computer in their education institution at all with another 24% have some or little interaction. Only 6% of government and 18% of non-government participant had significant computer training as part of their education (Figure 5).

Figure 5. Level of interactions with computer during their education

5.2 Reliability and internal consistency

The reliability or internal consistency within the items was assessed by computing Cronbach’s alpha, which measures how well each individual item in a scale

1 SSC- Secondary School Certificate (Class-10), HSC- Higher Secondary Certificate (Class 12)
correlates with the sum of the remaining items. The result is shown in Table 1.

### Table 1. Reliability statistics of the dependent and major independent variables

<table>
<thead>
<tr>
<th>Variable</th>
<th>Valid N</th>
<th>N of items</th>
<th>Cronbach Alpha</th>
</tr>
</thead>
<tbody>
<tr>
<td>IT Edn</td>
<td>351(99.7%)</td>
<td>2</td>
<td>.863</td>
</tr>
<tr>
<td>IT Skl</td>
<td>298(84.7%)</td>
<td>16</td>
<td>.922</td>
</tr>
<tr>
<td>IT Awareness</td>
<td>323 (91.8%)</td>
<td>5</td>
<td>.911</td>
</tr>
<tr>
<td>Attitude</td>
<td>339(96.3%)</td>
<td>11</td>
<td>.787</td>
</tr>
</tbody>
</table>

#### 5.3 Test of hypothesis

This section presents the findings that satisfy the objective to test the relationship as per proposed hypothesis. In a preliminary analysis, the correlation between ICT knowledge and IT attitude was measured through bi-variate correlation. The Pearson’s correlation coefficient for these two variables is 0.324 with p <0.001. This is further verified and explored with a multiple regression model taking the component of knowledge variables and other quantitative variables to see which components have more influence on knowledge than other. Consolidated regression results from these groups are appended in Table 2.

#### Table 2. Linear Regression result of all the independent variables

<table>
<thead>
<tr>
<th>H</th>
<th>IV</th>
<th>Gov N= 183, R2=.143</th>
<th>Non Gov N= 77, R2=.189</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>B</td>
<td>Sig</td>
<td>B</td>
</tr>
<tr>
<td></td>
<td>(Consta nt)</td>
<td>2.87</td>
<td>.000</td>
</tr>
<tr>
<td>H1</td>
<td>IT Edn</td>
<td>-.044</td>
<td>.219</td>
</tr>
<tr>
<td>H2</td>
<td>IT Skl</td>
<td>.186</td>
<td>.003</td>
</tr>
<tr>
<td>H3</td>
<td>IT Awr</td>
<td>.092</td>
<td>.018</td>
</tr>
</tbody>
</table>

The regression analysis gives following results. ICT education background did not show significant influence on attitude p>0.1, hence H1 is rejected. ICT skill is highly significant amongst both group (p<0.05) suggesting to have maximum effect on attitude. Hence H2 is supported. ICT awareness, H3 is significant (p>0.05) amongst gov category whereas not significant amongst non-government category (p>0.5). So H3 is supported only for gov category, suggesting awareness is also a contributing factor for government officials in forming positive attitude, when for non government category it did not show much influence.

#### 5.4 Comparison of mean

The mean extracted from selected variables through independent t-test (with equal variances not assumed) shows an interesting pattern (Table 3) between the gov and non-gov category. The analysis shows the attitude toward IT and all the components of knowledge are greater amongst the non-gov category than the gov category.

#### Table 3. Comparison of mean on selected variables amongst various categories

<table>
<thead>
<tr>
<th>Variables</th>
<th>Gov</th>
<th>Non Gov</th>
<th>p</th>
</tr>
</thead>
<tbody>
<tr>
<td>IT Attitude</td>
<td>3.48 (235)</td>
<td>3.62 (100)</td>
<td>.027</td>
</tr>
<tr>
<td>Knowledge</td>
<td>2.52 (198)</td>
<td>3.06 (81)</td>
<td>.000</td>
</tr>
<tr>
<td>Awareness</td>
<td>3.01 (226)</td>
<td>3.48 (95)</td>
<td>.003</td>
</tr>
<tr>
<td>Skill</td>
<td>2.17 (216)</td>
<td>2.73 (86)</td>
<td>.000</td>
</tr>
<tr>
<td>Education</td>
<td>2.40 (251)</td>
<td>2.94 (100)</td>
<td>.000</td>
</tr>
</tbody>
</table>

* N within brackets

#### 6. Conclusion

The results of this research leave little doubt that attitude toward ICT is highly dependent on the knowledge that an individual possesses. Therefore, overall it seems that effective and planned knowledge deployment can help people and the decision makers to adjust their cognitive perception about the system and implementation, which could prevent resistance to change. Institutional pressures including coercive pressures [43] could also be exerted by governments in the form of activities of knowledge deployment.

But more important contribution of the paper lies in extracting the IT skill as the key element within the knowledge domain which found to be playing the most significant role in forming positive attitude towards ICT. It was interesting to note that ICT education background was found not significant in influencing the attitude as oppose to IT skill. It appears that confidence built through ICT skill and practice significantly contributes to changing individual’s attitude towards ICT. The findings provide some important implications both for research and practice. IT skill is instrumental in improving attitude towards ICT, which supports Attewell’s [5] findings and strategy to lower the knowledge barrier on end user. According to Attewell, supply side institutions can play an important role to innovate not only in their own
design of products, but especially in the development of novel institutional mechanisms for reducing this learning burden upon end users. In practice, it is hoped the result will lead to improvement of devices to address attitude problems and will be important in formulating the future strategies in this area. The study also shows that attitude and knowledge varies across gov and non-gov categories, where non-gov categories are found to be more knowledgeable than their government counterparts. Awareness about the innovation is also found to be influential in forming attitude amongst the gov officials [39].

The study is expected to have some contribution in our quest for investigating this complex and new area. Future research could provide further insight on type of skill which contributes more than others to change attitude on different groups.

This study has some limitations. The context of the study is relatively new in Information Systems discipline, and thus the instruments used are not well established. The terms used in the survey might have slightly different interpretations in that context. Although the potential differences were minimized by several rounds of review process and pre-testing, different interpretations of some of the terms still might exist, which may fail to capture the inherent meaning. Moreover the varying interpretations on level of skill on five point Likert scale may not capture the accurate level of their ‘IT skill’ homogenously. Additional objective measurement was not undertaken, which could compare or validate the results. Finally the study did not include variables like socio-economic condition, culture, politics and some more variables which were assumed to be similar in context. Future studies are planned to include and test some of these variables and their effects.

References


APPENDIX A

Table 4. Survey Instruments

<table>
<thead>
<tr>
<th>Influences/ Domain</th>
<th>Indicators / instrument</th>
<th>Source</th>
<th>Questions</th>
</tr>
</thead>
<tbody>
<tr>
<td>Knowledge (on ICT)</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Section 2. IT Education base</td>
<td>a. Use computers in an education institution during study b. Had IT / computer training as a part of education</td>
<td>[52], FGD</td>
<td>5-10 (6)</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Section 3. Functional IT Skill (Competency)</td>
<td>a. Level of expertise (computer skills ) – 9 Items b. formal computer training have you had over all- 1 item c. Computer training received from different sources – 5 items</td>
<td>[33, 44, 46], FGD</td>
<td>11-18 (8)</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Section 4. Awareness</td>
<td>Rate personal knowledge on a. Capability, use and impact of IT as a whole b. Cost of deploying ICT c. Type of benefits derived by deploying ICT d. Extent of benefits derived by ICT e. Type of business activities in which ICT can be deployed</td>
<td>[44, 51], FGD</td>
<td>19-24 (6)</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Attitude and Mindset</td>
<td>Personal Innovativeness with IT ( 3 used out of 4 items ) a. If I hear about a new IT, I look for ways to try it. b. Among my peers, I am usually the first to try out new IT c. I like to experiment with new IT</td>
<td>[2]</td>
<td>25 (a-k)(11)</td>
</tr>
<tr>
<td>Section 5</td>
<td>Intention to explore (3 items ) a. I intend to explore for potential application in my work context b. I intend to explore to increase the efficiency of my work c. I intend to explore spend considerable time and effort this year in exploring new IT for potential applications</td>
<td>[51]</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Motivation (5 Items) a. IT is one kind of threat to my existing job b. IT is going to make my job easier c. Our government process/working mode need to be changed d. Sharing of government information on the web is a potential risk e. IT adoption in my organization will benefit me personally</td>
<td>FGD, [16]</td>
<td></td>
</tr>
</tbody>
</table>