Conceptual Framework: AIS Technostress and Its Effect on Professionals’ Job Outcomes

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Abstract
The purpose of this paper is to develop a conceptual framework that examines and provides a systematic understanding of the impact of accounting information system (AIS) information characteristics on technostress creators and its effect on professionals’ job outcomes. The research draws on literature in technostress, AIS information characteristics, job satisfaction, task performance and social psychology in order to ascertain the impact of AIS information characteristics on technostress creators and its effect on job satisfaction and task performance as well as the moderating role of technostress inhibitors. The framework depicts the process of fit between the AIS information characteristics and users within the content of antecedents and consequences of technostress. The results of the literature review suggest ten propositions with four AIS information characteristics, namely: scope, aggregation, timeliness and integration) and its relationship with technostress creators (techno-overload, techno-invasion, techno-uncertainty, techno-insecurity and techno-complexity) as the determinants and job satisfaction and task performance as the outcomes. The framework provides both researchers and practitioners the opportunity to further examine the effect of technostress on AIS usage.

Keywords: AIS information characteristics, technostress creators, job satisfaction, task performance, technostress inhibitors

1. Introduction
Technostress is an offspring of stress. Anxiety and tension are perceived phenomenon with stress with resultant emotional and psychological reactions. However, work-related stress ensues once there is a mismatch between the job demands and resources and capabilities of the worker to meet the demands (Blaug, Kenyon, & Lekhi, 2007). Recent study, Kayastha, Adhikary, & Krishnamurthy (2012) shows the effect of the changes brought about by technology in the workplace unveiled the occupational stress of the professionals. Their findings indicate that the introduction of technology in the workplace has added additional stress to the professionals and its effects on them have adverse effects on their job satisfaction and performance. Even though it has contributed immensely to organisational performance (Brynjolfsson & Hitt, 2000).

Technostress is described as the struggle to accept or over identifying with computer technology in a healthy manner (Brod, 1984). Weil & Rosen (1997) advocated that technostress is not a disease, but is a negative consequences that have a direct or indirect impact on the physiological, behavioural and psychological changes of the user which manifest in the form of physical and emotional exhaustion. In addition, Wang &Shu (2008) claimed that persistent mental fatigue, negative thinking, poor judgment, momentary confusion, distorted ideas, inability to concentrate, anxiety, depression, irritability and impatience are some of the symptoms of technostress. They further posited that the possible health consequences associated with technostress are cardiac arrest, migraine headaches and hypertension. Perhaps, that is why Pankajakshi &Shailaja (2012) and Ibrahim (2010) described the use of technology as a ‘double-edged sword’. Nonetheless, the technology has many undisputed benefits for organizations and these might have reduced the understanding of the workers’ experience of stress by making available needed information, aided decisions making and allowing for more flexible work plans (Ragu-Nathan, Tarafdar, Ragu-Nathan, & Tu, 2008).

The introduction of accounting information system (AIS) in organisations is aimed at improving professionals’ performance. AIS is defined as a data collection and processing procedures which generates desirable
information for the users (Sori, 2009). AIS usage has helped in no small measure to improve the information requirements and decisions making in the organisations (Nicolaou, 2000). Although, the negative attitude of users to technology innovation is recognized in academic literature to have effect on its performance (Lapointe & Rivard, 2005).

Nevertheless, several factors have been found to influence AIS performance in organisations, chiefly are contingent on contextual issues – business strategy and organisational culture (Belfo, 2013; Boulianne, 2007; Liu & Vasarhelyi, 2014). Many factors like strategic-types, users’ satisfaction, infrastructure, training, demography, among others are studied to improve AIS performance. But one factor that required to be investigated is the stress associated with the use of AIS. In other words, literature shows pointer that there is a relationship between AIS information characteristics with technostress creators, which is capable of causing technostress. For instance, information overload is associated problem of AIS (Tsui & Gul, 1996) which (Mollanazari & Abdolkarimi, 2012) claimed can render it ineffective.

Therefore, with the ubiquity of AIS usage and its pervasiveness in the organisations, professionals interacting with it may experience technostress. This suggests that a research study is required on the relationship between AIS usage and technostress and its effect on outcomes. Besides, Tarafdar et al., 2011 advocate increase urgent research and wide range of managerial interest in understanding the dark side of information system. Similarly, it is emphasized by Vaassen & Hunton (2009) that there are many areas to be explored in AIS research because it is eclectic in nature. Thus, the technostress experienced by the professionals using AIS in the organisations is an area to be explored.

So, instead of ascribing general technostress effects to technologies, Alleyne (2012); (Ayyagari, Grover, & Purvis, 2011) suggested studies on specific technology relevant to some specific organisational context. It is in this light that the study proposed a framework of the impact of AIS information characteristics (Chenhall & Morris, 1986) on technostress creators (Tarafdar, Tu, Ragu-Nathan, & Ragu-Nathan, 2007) to identify the information characteristics that impact higher technostress on the professionals and the effects on the outcomes (job satisfaction and task performance). In addition, the moderating role of technostress inhibitors (Tarafdar et al., 2011) is also entrenched in the framework. This research study is subjected to AIS users, particularly the accountants. Thus, the aim of the study is to conceptualise the effect of technostress and the moderating role of its inhibitors on job satisfaction and task performance of the professionals.

The paper proceeds to previous work related to stress literature and narrowing it down to technostress. This is followed by the explanation and justification of the theoretical lens of the proposed framework. Next is the description of conceptualization process and finally, theoretical contributions and practical implications, as well as areas of further research.

2. Literature Review

Stress as a research field first featured in the social sciences in 1936 by Hans Selye and had since been studied in psychology (relationship between human factors and stress) and behavioural sciences (relationship between contingent factors and stress) (Antonovsky, 1987). This explains why the definition of the concept is in different perspectives. For the purpose of this study, stress is defined as the harmful physical and emotional responses that occur when the requirements of the job do not match the capabilities, resources, or needs of the worker (Shields, 1999). Behaviourally, Brod (1984) defined technostress as a modern disease of adoption caused by an inability to cope with the new technologies in an unhealthy manner. He further maintained that people are blind because of their love for ICTs without envisaging the possible consequences but devoting long hours on it both at work and home. Although, he concurred that a little stress in workplace is normal and even healthy for employees to be productive. Besides, it is established that the professionals experience more technostress than other end-user (Agbu & Simeon, 2011; Ayyagari, 2007; Schuld & Totten, 2008). Therefore, assessing the performance of AIS may be incomplete if the impact of technostress is not integrated. Hence, integrating technostress concept into AIS research stream through person-environment fit theory extends research studies to improve AIS performance.

2.1 Person-Environment Fit (P-E fit) Theory

P-E fit theory is an approach to stress that has a long tradition in psychology and can be traced back to the Person’s concept of congruence in vocational guidance. Later in early 1930’s the theory was affected largely by Lewin’s axiom who claimed that behaviour is a function of individual and environment (Goštautaitė & Bučiūnienė, 2010). The fundamental principles of the person-environment fit theory provided the basis for understanding the variables that would be used in this research study. However, the P-E fit theory basically
assumed that a person will be more satisfied and efficient at work when the characteristics of the person and environment are congruent (Ostroff & Rothausen, 1997).

Edwards (1996) asserts that authors maintained that there are two types of fit: demands or supplies. The former (D-A fit), focuses on the correspondence between environmental demands and individual’s characteristics (skills and ability) and the latter (S-V fit), focuses on the correspondence between environmental supplies and individual characteristics (values, motives and goals). Consequently, D-A or S-V misfit will produce negative physiological, psychological and behavioural consequences and a combination of these misfits (D-A and S-V misfits) will be considered as a strain which have effects on job satisfaction and performance. In this study, P-E fits has been conceptualized in the relationship between AIS information characteristics and technostress creators to ascertain the characteristics that imposed higher technostress and their effects as covariance on technostress creators and outcomes. This will occur when professionals’ skills and abilities are insufficient to the demands imposed by AIS information or when AIS information did not match professional accountants’ values, motives and goals. As a result, the effects of the antecedents will be counterbalanced or reduced on the application of technostress inhibitors to attain the fit between AIS and accountants using it. Resolute, since individual perception of stressor and their response to it cannot be separated according to cognitive appraisal approach, the misfit between users and technologies will be reflected (Yan, Lee, & Vogel, 2013) in this study as shown in Figure 1. This procedure is applied to identify the effects of integrating technostress concept in AIS usage to improve professionals’ performance.

2.2 Theoretical Gap

Figure 1. Research framework

Technostress, like stress field of research is yet to be studied extensively by scholars (Lee, Jin, & Choi, 2012; Tarafdar, Tu, Ragu-Nathan, & Ragu-Nathan, 2007). Previously, research studies on technostress mostly focus on general technology usage, that is, from stressor-strain with moderating factors between the variables (Ragu-Nathan, Tarafdar, Ragu-Nathan, & Tu, 2008; Tarafdar, Tu, Ragu-Nathan, & Ragu-Nathan, 2007). Ayaggari et al., (2011) introduces a new theoretical approach (T-P Model) of investigating the characteristics of
technology as antecedents of technostress (technological antecedents and implications). In addition, there is little evidence in the literature that investigate the effect of specific technology relevant in some specific organisational context on technostress, especially among professionals. It is against this background that AIS, as a wide range of accounting applications that collect and store raw data (inputs), process the data (procedures) and information (outputs) that serve professionals’ purpose is chosen for this study. This study is similar to technostress studies conducted on enterprise resource planning (ERP) (Alleyne, 2012; Hayashi, 2011), Smartphones (Yan, Lee, & Vogel, 2013) and Telemedicine (Yan, Lee, & Vogel, 2013).

Although in the recent times, a lot of research has been conducted to investigate the technostress in various contexts, some studies (Fieseler, Grubenmann, Meckel, & Muller, 2014; Kumar, Lal, Bansal, & Sharma, 2013; Tarafdar, Bolman Pullins, & Ragu-Nathan, 2014; Weinert, Maier, Laumer, & Weitzel, 2014) (Weinert et al., 2014; Fieseler et al., 2014; Kumar et al., 2013; Trafdar et al., 2014; Agbu & Simeon, 2011; 2012; Rajput et al., 2011; Alleyne, 2012) have investigated technostress of professionals (IT, managers, sales, supply chain managers, etc.) in organisations. Nevertheless, these prior studies provide explanations on the negative effects of technostress on performance, productivity, job satisfaction, commitment, behavioural strain, psychological strain, etc. However, little or no study has been conducted on effect of technostress on task performance. Hence, the application of technostress to the domain of task performance would be an ideal extension of investigating the outcomes of technostress on this construct.

Again, findings of previous studies on job satisfaction of technostress were mostly based on general technostress (Kumar et al., 2014; Ragu-Nathan et al., 2008; Ayyagari, 2007; which therefore might not be transferable or applicable to the use of AIS because of its unique characteristics from other technologies. Besides, literature review failed to locate any technostress studies on antecedents of AIS technostress to job satisfaction. Thus, this research intends to provide new findings, which reflect technostress/job satisfaction of professionals using AIS, which is conceptualised in in Figure 1.

2.3 Hypotheses

2.3.1 Technostress Creators and Outcomes

Technostress is the inability of the user to cope with or over relying on the technologies in an unhealthy manner in accomplishing the organisational task (Brod, 1984). Tarafdar, Tu, Ragu-Nathan, & Ragu-Nathan (2011) developed technostress creators with five components, which shall be used in this study as: (a) techno-overload, described circumstances where AIS forced the professional accountants to work faster for long hours, (b) techno-invasion, described circumstances where AIS makes it possible to reach out to the professional accountants anytime anywhere regardless work hours, (c) techno-complexity, described circumstances where AIS intricate of the technology threatened professional accountants job skills, (a) techno-insecurity, described circumstances where professional accountants using AIS feel threatened of being replaced by more skillful candidates within and outside the organisations, (a) techno- uncertainty described circumstances where the AIS pace of change makes the professional accountants unsettled.

Nevertheless, Karr-Wisniewski & Lu (2010) assert that in spite of the fact that technology enhances performance in the organisations by increasing productivity, it is also crafting in the users with overload in terms of technology itself, communication and information. Unequivocally, Xu (2003) confirmed that AIS has advantages to the organisations, but sometimes create problems, e.g. information overload. As a result, ICT information overload generates frustration and stress in the users (Ragu-Nathan, Tarafdar, Ragu-Nathan, & Tu, 2008) and leads to decline performance (Tams, 2011) as well as job dissatisfaction (Tarafdar, Tu, Ragu-Nathan, & Ragu-Nathan, 2011). By and large, Allyne (2012); (Tarafdar, Ellen, & Ragu-Nathan, 2014) found that technostress creators have significant impact on job satisfaction and job performance. Lee, Jin, & Choi (2012) study technostress and use of Smartphones which they found that even the individuals with IT innovation and adventurous to new IT experience technostress. Ragu-Nathan, Tarafdar, Ragu-Nathan, & Tu (2008) specified the levels of technostress experienced by professionals, which they said techno-overload and techno-complexity imposed more stress than other technostress creators. In developing countries, the response to technostress is not different. The study of academic and nonacademic staff indicated that technostress was significantly related to the performance of both categories of staff at the Open University of Nigeria (Agbu & Simeon, 2011). All technostress creators (occupational stress indicator) were statistically significant on employees’ productivity (Rajput, Gupta, Kesharwani, & Ralli, 2011). Tarafdar, et al. (2014) recently validate the adverse effect of technostress creators on technology-enabled innovation of professional salesperson's behavioural performance.

The impact of technostress on the outcomes is of interest to scholars. Tarafdar et al. (2014) found that technostress creators are positively related to stress Unlike other technostress creators, the techno-invasion has
no statistical difference with professionals’ productivity (Rajput, Gupta, Kesharwani, & Ralli, 2011). Technostress creators did positively affect job satisfaction levels of supply chain professionals during the extended time spent using technology (Alleyne, 2012). Hung, Chang, & Lin (2011) hypothesized that the omnipresent technostress creators have a positive effect on job stress. Recently Tarafdar et al. (2014) found that technostress creators are positively related to the role stress of professional salesperson’s behavioural performance. Thus, the different problems identified in literature with AIS usage by the scholars (Cao, Calderon, Chandra, & Wang, 2010; Dillard & Yuthas, 2002; Galbraith, 1973; Ismail, 2009; Mollanazari & Abdolkarimi, 2012; Stanton, Bachiocihi, Robie, Perez, & Smith, 2002; Tsui & Gul, 1996; Yau & Auyeung, 1995) identified certain behaviour of AIS that are capable of imposing technostress on users. Therefore, when AIS provides information (i.e. future vs. historical or external vs. internal events) for professionals’ job outcomes which exceeds their perceived abilities to deal with, it will account for misfit. The misfit can lead to stress (technostress) due to AIS usage which may decline professionals’ job outcomes (job satisfaction and task performance). Thus, two hypotheses are proposed as:

**H1** Technostress creators have a negative impact on the job satisfaction outcome of professionals using AIS information.

**H2** Technostress creators have a negative impact on the task performance outcome of professionals using AIS information.

### 2.3.2 Technostress Inhibitors and Outcomes

Technostress inhibitors as organizational mechanisms dampen the intensity and outcomes of technostress creating conditions. In other words, technostress inhibitors impact on technostress to reduce/lessen its effects on the users of technologies (Ragu-Nathan, Tarafdar, Ragu-Nathan, & Tu, 2008). Tarafdar et al. (2011) identified four technostress inhibitors, which are used in this study as: (a) literacy support, is an organisations mechanism that assist the professionals to handle the difficulties of learning about new AIS. Technical support, is an organisations mechanism that assist in addressing professionals’ anxiety about potentially disruptive mistakes and technical problems of AIS usage. Technology Involvement Facilitation, is an organisations mechanism that assist in keeping professionals informed and familiar with the new AIS. Innovation Support, is an organisations mechanism that assist professionals in learning about and accept AIS-driven changes in their routines and tasks.

Scholars used different variables to arrive at the different moderating effect decision of technostress inhibitors. Ragu-Nathan, Tarafdar, Ragu-Nathan, & Tu (2008) hypothesized that technostress inhibitors moderates the relationship between technostress creators and job satisfaction as well as organisational and continuance commitment among ICTs users. They also found that technostress inhibitors increase job satisfaction and organisational and continuance commitment. Furthermore, Tarafdar et al. (2011) hypothesized and confirmed in their study of professionals in US that technostress inhibitors adversely moderate the relationship between technostress creators and role stress. Koo & Wati (2011) studied the employees of companies in South Korea and found a negative moderating effect of literacy facilitation in influencing the relationship between task complexity and technostress. Furthermore, in the study of registered radiologic technologists, Furniss (2014) found that no statistical relationships were found between technostress inhibitors and institutional characteristics. Therefore, technostress inhibitors are hypothesized restrain the effects of technostress creators on the job outcomes of professionals using AIS. The misfit (technostress) created due to AIS usage which may decline professionals’ job outcomes (job satisfaction and task performance) in hypotheses 1 and 2 should be dampen for effective and efficient performance of AIS in organisations. Therefore, technostress inhibitors can dampen the effect of technostress associated with AIS usage. Hence, two hypotheses are proposed as:

**H3** Technostress inhibitors will moderate the relationship between technostress creators and job satisfaction of professionals using AIS information.

**H4** Technostress inhibitors will moderate the relationship between technostress creators and task performance of professionals using AIS information.

The direct relationship of technostress inhibitors with outcomes are also hypothesized as:

**H5** Technostress inhibitors have positive relationship with job satisfaction of professionals using AIS.

**H6** Technostress inhibitors have positive relationship with task performance of professionals using AIS.

### 2.3.3 AIS Information Characteristics and Technostress Creators

AIS information characteristics can enhance or improve organisation’s performance by identifying and correcting errors which reduce task uncertainty and create effectiveness in the users (Arnold & Sutton, 2001).
Supposedly, AIS provides the necessary information for effective management functions (Sajady, Dastgir, & Nejad, 2008). Nevertheless, AIS information is not free of technical problems that may impact on the information to be supplied, which in turn can impact on the professionals’ job satisfaction and task performance. Some scholarly articles highlight problems related to technostress; Cao, Calderon, Chandra, & Wang (2010) found in their study that slowness in server and/or computer programmes in dealing with security market frustrated the users. Dillard & Yuthas (2002) further argued that if the users are finding it difficult to access and use AIS information, the benefits will be limited. Noticeably, broad scope information characteristics of AIS have the attribute of information overload (Galbraith, 1973; Tsui & Gul, 1996). Situations like this can lead to frustration and anxiety which is capable of imposing technostress on the professionals. Gostautaitē & Bučiūniene (Goštautaitė & Bučiūniene, 2010) argued that when there is an understanding of the interplay between individual and environmental variables, performance is enhanced which in turns improve organisation’s performance. Therefore, hypotheses are formulated to understand the impact of AIS information characteristics on technostress creators to identify the AIS information characteristics that impose higher technostress on the professionals.

2.4 Scope
The AIS scope information refers to focus, quantification and time horizon in organisations’ transactions. This information could be a continuum of narrow and broad scope. The former refer to internally focus, quantification and time horizon while the latter focused on economic conditions, customer preference, future events among others. Therefore, scope information characteristic in this study is encompassing.

The scope information assist professionals in decision making, planning and control purposes for the reason that it contains economics, non-economic and future event information. Of great importance, scope makes it possible for professionals to access transactions information of organisations to perform their functions. As a result, the professionals have much information to deal with from the AIS in order to make them efficient and effective. Hence, AIS scope has been found to improve the performance of professionals in dealing with transactions using information of the organisation. Nonetheless, previous studies have uncovered positive relationship between broad scope information and the degree of task difficulty and variability (Choe & Lee, 1993). Moreover, Mollanazari & Abdolkarimi (2012) argued that AIS that provides broad scope information have a positive impact on the users under highly task variability, task difficulty and highly decentralized situations. Furthermore, Chenhall & Morris (1986) argued that there is a direct relationship between the AIS scope information characteristics and perceived environmental uncertainty, organisational interdependence and decentralization. However, delayed, inaccurate or/and too much information of AIS can affect the professionals, which can create a misfit. Therefore, recognizing the role of scope information characteristics provide to professionals in achieving objectives, it is equally important to recognize that the information may perhaps cause technostress due to information overload. Therefore, it is hypothesized that:

H7 There is a positive relationship between AIS scope information and technostress creators.

2.5 Aggregation
Aggregation refers to formal composition of temporal and functional summation of data collected within periods of time or areas of interest (Chenhall & Morris, 1986). This helps the professionals in summing up information on the functional areas of management within a stipulated period of time which improves the outcome of AIS usage.

Moreover, for efficient and effective use of the volume of information accessible by and from AIS, accountants need the information separated into a mass. By so doing the professionals are able to utilize the large volume of information from within and outside the organisations. Thus, AIS information aggregation has been found to have assisted the professionals in the choice of the most appropriate information for specific task context in the organisations. It is based on this that Choe & Lee (1993) posit that information aggregation is positively associated with the degree of task difficulty and variability. Similarly, Mollanazari & Abdolkarimi (2012) state that AIS aggregated information have a positive impact on the users in highly task variability, task difficulty and decentralized situations. More so, Chenhall & Morris (1986) claim that there is a direct positive relationship between AIS aggregated information and perceived environmental uncertainty. Although aggregated information can lead to high task performance and job satisfaction of the professionals, the difficulties in accessing and using aggregated information can affect summation process and lead to misfit between the professionals and AIS usage; which consequently is capable of causing technostress. Therefore, it is proposed that:

H8 There is a positive relationship between AIS aggregation information and technostress creators.
2.6 Timeliness

Timeliness refers to the quick provision of information and the regularity of reporting information to the users systematically. This implies that timeliness of AIS information influence professionals’ respond to events (transactions) quickly and should make them effective in an unpredictable environment.

The important aspects of the AIS information producer are accuracy and the timeliness of financial information (Xu, 2003). AIS timeliness information characteristic can influence organizational performance (Sami, Abdullah, Othman, & Warokka, 2011) because taking the right decision at the right time based on availability of information is crucial to the success and survival enterprise. Therefore, the use of AIS has made needed information handy which positively impacted on the performance of the professionals’ vis-a-vis organisational performance. Hence, Sami, Abdullah, Othman, & Warokka (2011) found that there is a positive relationship between timeliness and organizational performance. Similarly, Chenhall & Morris (1986) confirmed that there is a direct positive relationship between AIS timeliness of information and perceived environmental uncertainty. Likewise, Choe & Lee (1993) posit that AIS timeliness information characteristic has positive impact on the users in highly decentralized situations. Mollanazari & Abdolkarimi (2012) established that AIS that provides timely information has positive impact on the users in highly task variability, task difficulty and highly decentralized situations. From the foregoing, AIS timeliness information characteristic improves performance of organisations. Although the problem of slowness with server and/or computer programmes can lead to professionals being frustrated in accessing information. Hence, they can experience technostress in AIS usage. Consequently, it is hypothesized that:

**H9** There is a positive relationship between AIS timeliness information characteristics and technostress creators.

2.7 Integration

Integration refers to coordination, which is an aspect of organisational control that harmonize various segments within the subunits. Integration therefore is referred to as incorporating the activities of subunits toward overall organisational objectives. This attribute of AIS enhances coordination of activities in organisations.

The AIS integrated information makes it possible for professionals to access information concerning transactions in the organisation to be synchronized with the activities of various segments dealing with accounting information. As a result, it assists professionals to have first-hand information concerning the transactions of the various segment and organisation as a whole. Hence, AIS integrated information has been found to have enhanced the performance of professionals in having and presenting financial and non-financial information of the organisations at a glance (Dehghanzade, Moradi, & Raghibi, 2011). Therefore, the integrated AIS information in the previous studies disclosed a positive relationship with organizational coordination and control requirements (Nicolaou, 2000). In addition, Chenhall & Morris (1986) state that there is a direct positive relationship between AIS integrated information and organisational interdependence and decentralization. Even though AIS integration is all about incorporating and coordinating the financial and non-financial activities of organization generally for effective and efficient performance. The professionals can be exposed to more information than they could handle or use through AIS. Consequently, the professionals can experience technostress due to AIS usage. Therefore, it is hypothesised that:

**H10** There is a positive relationship between AIS integrated information and technostress creators.

3. Procedures

In verifying this conceptual model, the procedure involves justification of measurements, structural model and direction for future research. Therefore, a quantitative research method will be applied to enhance the reliability of the measurements. This study adopts already established scales for measuring AIS information characteristics, technostress creators, technostress inhibitors and job satisfaction and task performance in this research context.

To measure job satisfaction intrinsic five-item instrument of the Minnesota Satisfaction Questionnaire is adopted for use in this study with a Cronbach coefficient alpha .86. this construct has been used in the recent research in this field by (Buitendach & Rothmann, 2009; Martins & Proença, 2012). Secondly, to measure the task performance, a five-item instrument used by Williams &Anderson (1991) used by (Bellia, 2007) is adopted with a Cronbach coefficient alpha of .91. Thirdly, to measure technostress creators a twenty three-item instrument developed by Ragu-Nathan, Tarafdar, Ragu-Nathan, & Tu (2008), used by Tarafdar et al. (2014) is adopted with a Cronbach coefficient alpha of .86 and it has been frequently used in the previous research in this field. Fourthly, to measure technostress inhibitors a combination of eighteen-item instrument used by Ragu-Nathan, Tarafdar, Ragu-Nathan, & Tu (2008) used by Tarafdar et al. (2011) is adopted with a Cronbach coefficient alpha of .86.
Finally, to measure AIS characteristics twenty four-item instrument used by Chenhall & Morris (1986) was adopted and it has been frequently utilised in the previous research in this field. To this end, the questionnaire adopted will be used as the instrument for data collection in this survey. This is in accordance with Ticehurst & Veal (2000), who argued that questionnaire is used when quantifiable information (behaviour and attitudes) about the population is acceptable as a source of information. The analysis of these measurements and the structural model will be performed using the techniques of Structural Equation Model (SEM). Since individual’s perception of stressor and their response to it cannot be fully separated (Ayyagari et al., 2011), cognitive appraisal approach will be used measure the P-E misfit, which is to be measured in seven-point Likert scale to indicate the weakest opinion to the strongest opinion. The researchers proposed a sample frame of professionals employed in private organisations in order to make a generalization of the study. Reliability analysis will be performed on all the variables – AIS characteristics, technostress creators, technostress inhibitors and the outcome (job satisfaction ad task performance) – to assess the degree of internal consistency between measurements of multiple variables which is widely used in Cronbach’s Alpha. The model fit indices can also be checked and the coefficient parameters on the correlations with the result of significance test can show whether the proposed hypotheses are supported. The statistical results of SEM will provide a base for justification of the proposed model, AIS technostress antecedents and outcomes and the misfit of AIS usage among professionals.

4. Conclusions

This study fills the gap in the literature by identifying AIS information characteristics as antecedents of technostress and its impact on the outcomes. The research framework reveals the process of misfit between AIS information characteristics and technostress and how it affects the outcomes of professionals using it. Furthermore, integrating person-environment fit theory into AIS research to improve its performance in the organisations. The paper draws on literature from technostress, AIS performance, job satisfaction, task performance and social psychology in order to ascertain the framework as a guide for future research and practice.

For the practitioners, especially the professionals (accountants and managers) using AIS information for decision making, control functions and planning, the framework offers an insight into the effect of technostress on their job satisfaction and task performance in organisations. Consequently, it helps organisations to take appropriate action by creating and fostering a healthy environment that promotes job satisfaction and task performance of professionals.

The framework offers the researchers explanation on the relationship of AIS information characteristics with technostress creators and its impact on job satisfaction and task performance. The researchers also have the opportunity to test and validate the framework with statistical results which can contribute further to knowledge that improves AIS performance as well as enhance organisational performance.

References


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