

# **A Conceptual Framework To Examine The Role Of Information Systems Quality In Work Life Balance And Employee Performance (Research in Progress)**

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## **ABSTRACT**

The challenges of amalgamating work and family life is an obvious fact due to technological advancement which allows remote working. A well-balanced career and social obligations are enforced as part of the human resource initiatives to maintain a healthy and committed work force in some companies abroad. This study aims to bridge the gap in the body of literature pertaining to information system quality's impact on work life balance and employee performance in Malaysian ICT environment. The project intends to ascertain if work life balance has a mediating relationship between information system quality and employee performance. The objectives are to examine the role of information system quality (ISQ) in work life balance and determine the impact of work life balance (WLB) on employee performance. The study will be conducted with a positivist approach in mind. An integrated outline will be developed based on interviews with employees working in a remote environment from selected companies that has embarked on providing services in a 24/7 operations together with theories pertaining to ISQ and WLB from prior work drawing on multiple theoretical perspective. The findings of this study will be helpful in fostering new tools and technologies that are driven by ISQ dimensions which can be useful to formulate recommendations to the ICT sector on issues pertaining to sustainable development/policy formulation with reference to WLB. Therefore, this will indirectly empower people in the ICT sector to work remotely thus addressing pressing issues such as traffic congestion, social-family co-evolution.

**Key Words:** Work life balance, information system quality, ergonomic quality, systems quality, employee performance

## **INTRODUCTION**

Information and Communication Technology (ICT) has become the most talked about industry to lead Malaysia in the new era of globalization, knowledge and development. Rapid technology advancements in Malaysia have made information and communication technology (ICT) as the most popular industry in Malaysia in last couple of years (PIKOM, June 2013). The Malaysian ICT industry has become

more mobile and competitive to meet the demands in this growing industry. ICT has made significant inroads into our day-to-day functions both in the workplace and at home. In fact, advanced computing technologies have led to new forms of working concepts such as telecommuting. The introduction of mobile computing and increasing access to the Internet and its component technologies have also paved the way for working from a remote location instead of the conventional office environment. However, not all companies allow such facilities for the benefit of their employees, but most global service providers such as Dell, T-Systems, Hewlett Packard (HP), Shell and many others in the 24/7 service operations for global support have opted to remote working as a benefit to enhance work life balance amongst their workforce. Hence, competing demands between work and home front have surfaced and increased the need for flexible working methods (Korunka & Hoonakker, 2014).

Today's aggressive global atmosphere and demanding work stress brings many work life challenges in various sectors. According to a report and survey by PIKOM, the Malaysian ICT industry is regarded as a place with long working hours, painstaking work, heavy job stress and pressing targets to be met (PIKOM, June 2013). Numerous employees in the ICT sector are dependent on portable electronic devices and tools to work away from the traditional office. They rely extensively on remote connectivity to ensure that they have a balance of work and non-work responsibilities. Employees specifically those from the 24/7 operations sector of the ICT industry tend to work from a remote office with schedule flexibility (Felstead, Jewson, Phizacklea, & Walters, 2003; Pasamar, 2014). Long working hours tend to deprive employees of the time they should spend with their loved ones leading to stressful day and lack of quality family time (Ammons & Markham, 2004; Cabanac & Hartley, 2013). Thus, remote working was opted to be a solution for maintaining well-balanced life and career (Felstead A., Jewson, Phizacklea, & Walters, 2003). The need for remote working systems is also increasing given the rise in the number of women in the work force, longer working hours and more complex and sophisticated technology which enables constant contact between employees and workplace demands. Thus, the employees are subjected to increased pressure to ensure they fulfil both their employment as well as social and family responsibilities (Rapoport, 1970). Several researchers (Burchell, 1999); (Sylvain, 2011); (Guest, 2002); (Deery, 2009); (Sturges & Guest, 2004), (Kahnweiler, 2008); (Macky & Boxall, 2007); (Aryee, Srinivas, & Tan, 2005) note that there were many factors influencing employees' work life balance (WLB). These factors differed according to the type of employment sectors they worked in. It is no doubt that the progress and operation of information communication systems in the last couple of years has had and still has a major impact on all levels of society. To facilitate remote work, one cannot undermine the role of Information Systems (Shagvaliyeva, 2014). The existence of good quality information systems is needed to ensure remote working possibilities can be achieved by organizations (Kankanhalli, 2012). This in turn can pave the way for improved work life balance (Brown, 2010).

## PROBLEM THEME

Pressures to sustain with work obligations lead to longer unsocial working hours thus depriving quality family time (Guest, 2002). Due to the increased work commitments and dependence on technology and infrastructure to work from a remote location there is a need to extend the study to find the possible role of information system quality (ISQ) towards work life balance (WLB) and employee performance (EP). Although the problems relating to WLB has been discussed in many areas, especially in the areas of contemporary organizational research, less interest has been shed on the global ICT operations service industry (Mulvaney, O' Neill, Cleveland, & Crouter, 2006; Cabanac & Hartley, 2013). The problems surrounding WLB are aggravated when considered in the context of the ICT environment which is concentrated with skilled workers who work on a 24/7 shift operations supporting various time zones.

Researchers have looked at areas of Information Systems Success in terms of implementation and adoption rather than a psychological effect of such systems on employee performance. According to Shannon & Weaver's (1949) model, the DeLone & McLean's IS success categorization and its success groups are supported by a process model of information systems. Many researchers have looked at the DeLone & McLean's IS success model applications and tested them in many areas from a technical perspective (Seddon & Kiew, 1994; Etezadi-Amoli & Farhoomand, 1996; Jurison, 1996; Igbaria & Tan, 1997; Teo & Wong, 1998). Other pragmatic studies have completely tested the model by looking into several information systems (IS) success dimensions and their interrelationships (Igbaria & Tan, 1997; Yuthas & Young, 1998). However, it was found that work life balance (WLB) has not been studied in relations to the DeLone & McLean's IS Success Model. WLB and its contributing stressors primarily the dimensions such as "ergonomic quality, accessibility quality, transactional quality, contextual quality and representation quality" based on Adenekan (2000) which have not been tested in the Malaysian ICT industry particularly amongst remote workers who rely heavily on gadgets to perform their work (Adenekan, 2000).

The commonly found predictors of work-life balance include role conflict (Greenhaus & Beutell, 1985; Sturges & Guest, 2004; Wharton & Erickson, 1995), role demand or expectations (Ashforth, Kreiner, & Fugate, 2000; Staines, 1980; Wharton & Erickson, 1995). Morris & Madsen's (2007) argument is that integrated solutions could aid employees balance work, family and life conflicts to an immense degree (Morris & Madsen, 2007). Various research teams have begun to identify that the nature of profession, the office environment and work culture of the company may have an important impact on the capability of employees to balance their occupation and family commitments. WLB initiatives have begun to receive a central place in HR developments whereby it is no longer regarded as an option but rather an essential part of human resource management to retain employees (Grzywacz & Carlson, 2007).

Numerous scholars have conducted studies on antecedents and factors affecting

work life balance and studies on factors leading to success of an information system, (Lawrence, Detelin, & Tom, 2012) but there is no clear relationship that studies the role of an information systems quality (ISQ) and its impact on the employees' work life balance (WLB) which indirectly may affect employee performance (EP).

## **LITERATURE REVIEW**

Approximately 2000 empirical studies were published between 2009 and 2014 where the researchers examined various antecedents that contributed to a good work life balance (Chang, 2010; Myers, 2010; Beauregard, 2009; Hayman, 2009; McNall, 2009; Brown, 2010) The key researchers (Beauregard, 2009; Lu, 2009; Muster, 2011; Pasamar, 2014; Korunka & Hoonakker, 2014; Shagvaliyeva, 2014) examined antecedents such as job stress, flexible working hours and schedules, role conflict, role balance, turnover, employee engagement and many more. None however, examined the role of information systems quality and its significance to work life balance and employee performance. In this context, one could argue that empirical work that examines information systems quality (ISQ) and work life balance (WLB) is necessary.

Several theorists have proposed that "blurred boundary of personal life and work" is an outcome of the control and dependence over technology. Therefore, technological dependence and control has appeared from the organizational facilities and information technology infrastructure (Barker J. R., 1993). Nowadays companies use email communications and distribute smart phones and blackberry devices to allow their workforce to stay connected to their work and responsibilities even when they are not in at their workplace. According to Barker's (1993) argument, this type of technological dependence and control replaces the "direct, authoritarian control, or simple control" between managers and subordinates. Consequently, communication in the sequential and structural aspects of work has transformed thus defining a "new concept of workplace". Therefore, employees become more connected to their careers and responsibilities beyond the boundaries of the usual schedule and workplace (Boswell & Olson-Buchanan, 2007). Higher work-to-life conflict is self-reported by employees due to the increased blurring of the boundary (Boswell & Olson-Buchanan, 2007).

Technological advancement has made it possible for work to be done almost from anywhere (Kinnunen, Geurts, & Mauno, 2004). Although many theoretical framework has been used to measure technology usage, satisfaction but none have been developed to investigate the link between the information system qualities' effects over achieving work life balance. Quality is a strong determinant on a customer's expectations for any type of gadget. In this case, customers are employees who work with these gadgets to provide remote round the clock services for the organizations which employ them (Chen & Chen, 2010)

Traditional literature review suggests that researchers were looking at technological perspective of information systems quality and psychological perspective of work life balance and employee performance individually rather than collectively.

The underlying problem shows that there is limited scholarly research that seeks to uncover possible relationships both from a technological as well as a psychological perspective which eminently focuses on remote ICT employees in Malaysian context. Work practices have changed over time due to globalization of commodities and adoption of a 24/7 operations and variety of services in the Malaysian ICT industry. As quoted by Microsoft Malaysia's Managing Director, Ananth Lazarus "Malaysia is one of the countries that is still at its infancy stage in adoption of the latest technologies such as big data, cloud services and many more, however many organizations have resorted to adoption of this current and upcoming technology to manage their services and resources" (Star, 2011). This warrants a great deal of commitment to work and work demands creating a barrier in maintaining a healthy lifestyle, balanced family time, leisure activities, travel and study (Appelbaum & Milkman, 2006).

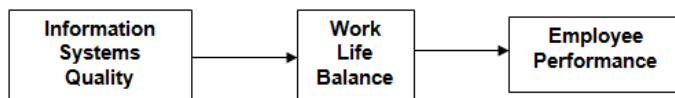
Thus, a systematic review of literature based on the initial analysis suggests the following:-

- i. WLB has been well researched in the past but its emergence lately due to changing work practices have evolved to be an important aspect in any organization.
- ii. Advancements in technology has made communication from a remote location possible, thus leading to the ability to work from anywhere at any time with the aid of various tools and technical support systems.
- iii. WLB has not been examined from an Information Systems (IS) perspective, where there seem to be a lack of light shed in this aspect.
- iv. ISQ may have a role to play on WLB with the current technological advancements and changing work practices.

## **DEFINING A NEW FRAMEWORK FOR ISQ-WLB**

Since DeLone and McLean (1992) developed the IS success model, many researchers have either attempted to modify, extend and test the model in various industries to gain insights on prevailing IS quality issues. Organizations have increased their spending on Information Technology and communication since 2008 (Kanaracus, 2008), thus the need to improve IT services and support. Vis-à-vis there is numerous outsource companies beginning to mushroom to meet the current need to provide remote support services. The study utilizes the most recent DeLone & McLean's model (2003) and tests its effect on work life balance and employee performance. DeLone & McLean recommended researchers to use this model in a predictive manner, thus cautioned that each and every variable should be measured and controlled to ensure a complete understanding of IS success.

Based on the theory derived from DeLone & McLean's (1992) IS success model and the further updates as stated in the DeLone & McLean's (2003) Updated IS success model, the following conceptual framework was derived as shown in Figure 1 below.



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