

A Conceptual Study on Working from Home in Malaysian Construction Industry

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Abstract. Stress, longer travel time, higher travelling cost, increased energy consumption are some of the reasons grumbled by many employees in the world. To overcome these problems, the benefits of Working From Home (WFH) have been unearthed by many researchers and implemented by many developed countries in the world. It has becoming a rising trend for many industries to engage professionals and clerical workers to work at the comfort of their homes. However, the research of WFH in construction industry is scarce even though the industry has no exemption when a WFH issue is discussed in research arena as it has the common problems faced by the employees in the construction industry. Complex environment, high stress level, risk at work are part of the issues raised by many in the construction industry. The paper attempts to explore the literature on WFH in various industries and how it can be implemented in the construction industry by proposing a model for future research to be carried out in the industry's professional firms.

Keywords: Working From Home, Various Industries, Construction Industry.

1. Introduction

Modern technology has make working from home (WFH) possible for many people. The development of information and communication technology has led directly to a growing importance of WFH as a new form of flexible working for many organizations. Most researchers claimed that with WFH, employees could achieve a balance between work and personal life commitments. The individual, organization and societal benefits are known to be obtained if WHF is implemented. Inexhaustible endeavours have been injected into researches geared towards WFH identifying industries that implement WFH in their organizations. Information technology, financing, service, technology and advertising are some of the industries that adopt WFH for their employees (Lal & Dwivedi 2009; Mihhailova, et al., 2011; Kowalski & Swanson, 2005; Peters, et al., 2010).

Organizational and global workforces implications together with scarcity of scholarly publications make this research a topic that warrants our further investigation. However, the Malaysian construction industry research on WFH is limited when this subject is discussed. Construction industry is known as a complex industry, multi processes where component of construction industry are interrelated and multifaceted. The industry is characterized by traditional work patterns where there is a strong culture of long hours and weekend works. The paper presents a conceptual study by exploring the literature to identify the implementation of WFH in various industries and eventually a suggestion is made for WFH to be implemented in the construction industry that has been implicitly discussed.

2. History and Definition of Working from Home

During 1950s, the literature on technological change led to the idea that telecommunications, combined with computing technology, could enable work to be relocated away from the traditional office (Baruch and Yuen, 2000). The idea of WFH concept has been triggered by Nilles in 1973 due to the first international oil crisis that eventually give rise to concerns over petrol consumption, long work commutes, and traffic congestion in major metropolitan areas. Since then, Collins (2005) emphasized that WFH began to be recognised widely throughout UK. Moynagh and Worsley (2005) recorded that in 2002 almost 3.8 million

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people (13.4 per cent) at UK worked either mainly on their own home or mainly in different places using home as a base or elsewhere.

They further concurred that WFH was expected to be the 'next workplace revolution' in the 1980s. In the 1990s, WFH emerged as a vital opportunity enable by advanced IT infrastructure and the practice of working at a location other than the central office but being linked by means of IT has been adopted (Wataad and Will, 2003).

Working from home is defined working day spent in the home environment (Sayers and Monin, 2005). According to Hassan and Nuruddin (2011), there are also various terms which are similar to working from home which is teleworking, telecommuting, homeworking, and working at home.

3. Overview of Working from Home in Various Industries

The use of telecommunication and computer technology to replace traditional commuting to workplace is in fact not a new idea of work arrangement and it has taken about 30 years for this work option to be appreciated among some developed countries and much longer in developing nations (Ndubisi and Kahraman, 2005). According to their research in the United States, most companies implement WFH are widely dispersed geographically while in UK, there are nearly 1.27 million telecommuters representing about 4.6 percent of the UK workforce and most of the companies involve are in financial industry.

The literature review carried out from publication year 1999 to the current year, 2012 found that service industry has been identified as the most industry researched for WFH followed by IT industry. The nature of works, organizational factors and competitions are among the drivers for these industries to implement WFH for their employees. A further comprehensive review of related literature has uncovered that WFH subject matters canvassed by the researchers seem to be largely on the industries shown in Table 1.

4. Discussion on Working from Home in Construction Industry

The construction industry has a culture of long hours and weekend works. Hence, construction employees struggle to achieve a balance between their work and personal lives (Lingard and Francis, 2005). Construction employees are concerned that the combination of long hours and tight deadlines together with a unique characteristic of project-based work further increases their concern on their negative work impacts upon personal life (Wharton and Blair-Loy, 2006). Pocock et al. (2007) in addition claimed the industry as a high-risk industry for work stress. Some of the stress faced by the professionals in construction is stress associated with external demands such as deadlines, time constraints and workload in construction estimators. Nevertheless, female construction professionals experience higher levels of work stress than their male counterparts. A comparative analysis was conducted on male and female architects and it was reported that female architects experienced significantly higher stress levels of work-family conflict and reported lower levels of job satisfaction and higher turnover intention than their male counterparts (Bowen et al., 2012; Sang et al., 2007). This probably due to the traditional work patterns prevalent in the construction industry are based on gendered assumptions about the nature of work and the ever-availability of employees. Work cultures that equate long hours spent at work assumed a division of labour where men's time is devoted to work while women's time is devoted to managing the home and family (Lawrence and Corwin, 2003). Further to that, a survey being made by the Association of Professional Engineers, Scientists and Managers (APESMA) in 2005 shows that 24 per cent of female engineers and 21 per cent of female architects were mothers and were also less likely to work part time and worked more hours in a week than other professionals. According to APESMA, many female professionals in engineering and architecture are forced to choose between career and family, with many leaving their professions in order to bear children (The Age, 2004).

Consequently, it could be emphasized that WFH is an alternative for construction employees to ensure that they can reduce their stress and achieve their work-life balance. It is hoped that WFH will begin to

implement in the construction industry in Malaysia and becoming a positive option by the professionals and the like. This is because an initial effort was made in year 2010 by the Ministry of Public Works Malaysia, the very first public institution to implement the concept of WFH with the launching of Work From Home Pilot Programme. The 3-months programme involved 39 staff who served as assistant quantity surveyors, draughtsmen and technicians.

All staff that are working in the civil engineering Branch, structural and bridge branch, architects and quantity surveying branch were selected based on the scope of duties which only involve with the use of computers and the internet. Department of Public Service is the agency involved that implemented Work From Home Pilot Programme as part of the transformation of the civil service, but due to the previous salary hikes in 2011, the government has decided to suspend the programme. The researchers' current research is hoped to further explore this issues for the WFH to be reinstated in Malaysia starting with the private professional firms i.e. quantity surveying firms, architectural firms and engineering firms.

Table 1: Working From Home in Various Industries

Bi l	Author / Industry	Consumer Goods				Finance		Service										Teh h.		Basic Materi al		Health Care	
		Manufa cturing	Transpo rtation	Food & Beverage	Electric Electro	Financi ng/Ban king	Insuran	Depart ments Stores (Fashion)	Law	Comme rcial	Postal	Service	Educati on	Media/ Publishing	Public	Entertai nment	Sports	Teleco m	Technol ogy	Oil & Gas	Agricult ure	Hospita l	Pharma ceutical
1.	Lal & Dwivedi (2009)																√	√					
2.	Demerouti, et al. (2004)									√													
3.	Mihhailova, et al. (2011)					√				√	√	√	√	√	√	√						√	
4.	Perez, et al. (2004)																√						
5.	Kowalski & Swanson (2005)					√											√	√					
6.	Kurland & Bailey (2000)																√						
7.	Bentley & Yoong (2000)													√									
8.	Harris (2003)			√																			
9.	Wadat & Will (2003)					√									√								√
10.	Ahmadi, et al. (2000)					√	√											√					
11.	Carr, et al. (2000)							√													√		
12.	Ndubisi & Kahraman (2005)	√	√			√	√	√	√								√		√				

Bi l	Author / Industry	Consumer Goods				Finance		Service										Tec h.		Basic Materi al		Health Care		
		Manufa cturing	Transpo rtation	Food & Beverages	Electric Electro	Financi ng/Ban king	Insuran ce	Depart ment	Stores	Hotels & Resorts	Law	Comme rcial	Postal Services	Educati on	Media/ Publishi ng	Public Utilities	Entertai nment	Sports	Teleco m	Technol ogy	Oil & Gas	Agricul ture	Hospita l	Pharma ceutical
13	Peters, et al. (2010)					√	√																	
14	Lupton & Haynes (2000)	√														√								
15	Siha & Monroe (2006)	√					√												√					
16	Tietze, et al. (2009)	√								√									√					
17	Lim & Teo (2000)																		√					
18	Baruch & Yuen (2000)				√																			

Furthermore, an outcome from the literature review will be the initial development of a theoretical model for WFH in Malaysian construction industry. The model contemplates the major variables from the literature which comprise significant antecedents and outcomes of successful WFH initiatives. We proposed that location, competition, employees' dissatisfaction, organization factors and nature of work are the main variables to stimulate organizations to consider working from home. The outcomes expected are government regulatory, productivity increases and cost reduction, employees' satisfaction as a result of flexibility and work life balance.



5. Conclusion

From researchers' viewpoint, the research on WFH in the construction industry is only beginning to scratch the surface. To better understand all of the degrees associated with this phenomenon, there is a need to understand nature of work, organization factors and employee motivations. Researchers working more closely with the practitioners may develop a more rigorous research grounded in theory and how working from home should be implemented in order to be successful. The literature review carried out to many industries may be helpful as a foundation for a future research. Therefore, there is ample opportunity to conduct research and contribute a better understanding for both scholars and people in the construction industry.

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7. References

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