## The Benefits of and Challenges Faced by Worldwide Federal Governments in Implementing the Telework Program

Kang Eng Thye<sup>1</sup>, Wan Rozaini Shek Osman<sup>2</sup>, Nafishah bt. Othman<sup>3</sup>, Rafidah Abd. Razak<sup>4</sup>, ZahurinMat Aji<sup>5</sup>

<sup>1,2,3,4,5</sup>College of Arts and Sciences, School of Computing, Universiti Utara Malaysia, kang1178@uum.edu.my, rozai174@uum.edu.my, nafishah@uum.edu.my, zahurin@uum.edu.my

## **ASBTRACT**

ABSTRACT: Problem statement: In recent decades, the telework program implemented in advanced and developed countries, has started to draw the interests of many parties towards understanding their experiences. The efforts to understand telework benefits and challenges would serve as an important basis prior to considering the adoption any telework program by the federal government agencies. Books, websites and journals were the primary sources that allowed the conduct of intensive literature reviews to obtain a full understanding of the telework issue. In terms of benefits, employers gain the competitive edge; less disruption of operations and better services to remote communities. Employees could enjoy the flexible time schedule; better family dependent care; less commuting costs and time; and higher productivity. Society could enjoy new job creation; less environmental pollution and work redistribution. In contrast, the challenges experienced are insufficient central federal government funding; top management resistance; and the difficulty to measure employee productivity. No program offers 100 percent unlimited benefits. Telework, in this case, is no different. Nevertheless, no one size fits all. Further tailoring of telework policy to suit different government agencies' specific needs is an important approach to ensure its success.

**Keywords:** Telework, Benefits, Challenges, Federal Government

## I. INTRODUCTION

Telework is a new way of working that allows workers to stay away from the central office. This phenomenon is attracting the attention of many countries. The Federal government, in this context is the key player that motivates private and government agencies, in particular, into this new work environment. The US Congress, for instance, has initiated the Telework Act since 1990 to encourage agencies to implement telework in the federal government (GAO Reports, 2003). Other countries that have followed suit are countries in the European Union, and Thailand, Japan is also taking an active interest to this telework concept from as early as 2000 (The FactPoint Group, 2008). In short, telework is treated as a new way of nationwide strategic survival of an organization

compared to the conventional rigid organizational work culture that is fast becoming outdated (Silver, 2010).

The main aim of this study is to highlight the benefits gained from the telework program that has been implemented, as well as the challenges encountered by other countries. This information would be crucial for Malaysia, as a primary platform to learn about experiences in telework implementation.

In order to substantiate some of the points raised in this review article, the relevant journal articles, websites and electronic database systems in Universiti Utara Malaysia were used as primary sources.

## II. LITERATURE REVIEW

Office According the of Personnel to Management's (OPM) guide to telework, telework can be defined as a "work arrangement in which an employee regularly performs officially assigned duties at home or at other worksites that are geographically convenient to the residence of the employee" (Lee and Hong, 2011:874). The major enabler of telework is primarily the technology revolution advantage that allows workers to stay away from the central office. Ninety-one percent of workers surveyed said they are interested in telework, and 61 percent believe that technology can help them fully replace face-to-face meetings (PR Newswire, 2011). Table 1 shows the summarized states of telework program implemented across different countries, not only involving the advanced countries like US and countries within the European Union (EU), but also developing countries, like Thailand as well. It can be clearly seen that telework is not merely a basic IT supplement but is a vital survival tool in the new working environment that drives the overall performance of both the workforce and the organization towards greater competitiveness in the global market environment.

#### III. RESULTS

The benefits gained from the telework program can be viewed vis-à-vis three main parties, namely employer (federal government), employee and society (Larence, 2005) as displayed in Table 2. In short, the key benefits offered to the federal government agencies include the continuance of operations despite weather or disaster disturptions; increased company overall performance and competitive edge as well as enhanced services to remote communities. Employees can gain

in terms of commuting time and cost; flexible working time; better care for family and dependents; retention of talented employees and more work opportunity for the disabled. For society, the benefits obtained through telework program include less environmental pollution; new jobs creation and geographical work restructuring.

Besides the benefits of telework implementation, the federal government telework practitioners also encounter some challenges. From the employer perspective, federal government agencies encounter the lack of funds to support telework infrastructure; critical information security; loss of authority to supervise employees; less top management commitment and insufficient telework policy guidance. Employees view the challenges in terms of difficulty in measuring the results of productivity and accountability that is also difficult to quantify.

**Table 1: Global Governments Encourage Telecommuting** 

European	4.5 million teleworkers in 2007 growing to more than 17 million employees by 2010. In 2002, the EU agreed on a framework to
Union	regulate telework areas such as employment conditions, health and safety, training and collective rights. In the UK, 39% of firms
	offer flexi-time.
U.S.	41% of federal employees are eligible for teleworking but only 19% do so. In June 2008, the House of Representatives voted to
	require federal agencies to expand telecommuting.
Japan	Offers tax breaks to companies that allow telecommuting, which has become widespread in the electronics industry. Matsushita
	Electric Industrial Co has 3,000 employees working from home. At NEC Corp., 20000 employees telework one day a week.
Thailand	Starting in July 2008, more than 40% of staffers in a Finance Ministry unit are eligible to work at home one day a week.
Singapore	Started a fund to help companies to implement work-life or family-friendly work practices such as telework.

Source: The FactPoint Group. (2008:3)

Table 2: The Telework Benefits Gained by Employer, Employee and Society										
Emp	ployer	Er	nployee	Soc	eiety					
-	competitive edge with prival sector(Bridgeford, 2007; Silve 2010) avoidance of weather and disast disruptions (Bednarz, 2006; Koon 2005; Shoop, 2010; HR Specialis 2011; GAO Reports, 2003)	er z,	Saves commuting cost (Rosenberg, 2008; Agency Group 09, 2009; Rosenberg, 2008a; Manssour, 2003; PA Times, 2008b; Gross, 2008; Bednarz, 2006) and time (GAO Reports, 2003; Ramstack, 2001) or both (PA Times, 2008a; Agency Group 09, 2001) flexibility of work schedule (Lee and Hong, 2011; Barr, 2005; Samenow and O'Keefe, 2011)	-	reduces energy use (Bendarz, 2008) reduces emissions and air pollution(Telework Exchange, 2011; PA Times, 2008b; Bendarz, 2008; Barr, 2004; Bednarz, 2006; Joice and					

- continuity business despite terrorist emergencies or threat (Bednarz, 2006; Agency Group 09, 2009; GAO Reports, 2003; Shoop, 2010; Bendarz, 2008; Joice and Noll, 2008; Communications News, 2007; Walker, 2006; PA Times, 2008a,
- saving on rent (Newell, 2004) and office space (GAO Reports, 2003)
- profits in flexibility, productivity and creativity (Manssour, 2003)
- Use of Alternate Facilities and Telework during Disruptions (Kootz,
- major decentralization in some areas that will move government services back to communities (Agency Group 09,2008)

- Barr, 2005; Samenow and O'Keefe, 2011)
- ease in taking care of dependents like elders and children and disabled (Lee and Hong, 2011)
- employees balance their responsibilities in and out of the workplace (Agency Group 09, 2009; GAO Reports, 2003)
- increases worker productivity (Censer, 2011; Cooney, 2007; Bendarz, 2008; GAO Reports, 2003; Agency Group 09, 2001; PA Times, 2008b; Agency Group 09, 2008)
- maintains labor-management partnership/top talent employee (Long, 2011; Telework Exchange, 2011; Agency Group 09, 2009; Joice and Noll, 2008; GAO Reports, 2003; PA Times, 2008a;2008b)
- enhances employee quality of life (Kosmetatos, 2004; Newell, 2004) and boosts morale (Agency Group 09, 2001)
- oppurtunity for disabled, elderly, housewives (Norfleet, 2010; GAO Reports, 2003; Manssour, 2003)

- - iir b; 4: Bednarz, 2006; Joice and Noll, 2008; GAO Reports, 2003)
- cuts traffic congestion (Newell, 2004; Manssour, 2003; Communications News, 2007; Cooney, 2007; Agency Group 09, 2009; PA Times, 2008a)
- growth of telework the provides new opportunities for businesses (Agency Group 09. 2008)
- work possibilities and aids, social and geographic redistribution work (Manssour, 2003)
- reduction street maintenance costs. elimination of rush time (Manssour, 2003)

Em	ployer	Em	Employee		
-	IT requirement and support (Bendarz, 2008; Telework Exchange, 2011)	-	Difficult to measure Productivity		
-	updating their policies for purchasing telework(Telework Exchange, 2011)		(Norfleet, 2010; Barr, 2005)		
-	Security (Norfleet, 2010; Bridgeford, 2007; Ramstack, 2001)	-	Employee accountability		
-	Capturing data (Telework Exchange, 2011)		(Bendarz, 2008)		
-	Data is protected (Telework Exchange, 2011)	-	Measure of result is very difficult		
-	Lack of funding from central federal government (O'Keefe, 2011; PA Times, 2008c; Bridgeford,		(O'Keefe and Yoder, 2011;		
	2007)		Rosenberg, 2008a)		
-	Top management's low awareness and resistance (Joice and Noll, 2008; Gross, 2008; Bendarz,				
	2008; Cooney, 2007; Telework Exchange, 2011)				
-	Top management fear loss of control (Bridgeford, 2007)				
-	Less communication / face-to-face interaction(Bridgeford, 2007)				

Lack of Telework proper guidelines/not well defined (GAO Reports, 2003) Managing Telework program metrics (Telework Exchange, 2011)

Consistency definition of telework (Larence, 2005)

## IV. DISCUSSION

# Telework as Competitive Edge for Federal Government

The main impetus for the federal government of advanced and developed countries (as shown in Table 1) to adopt the telework approach as a new work culture, is primarily due to the lagging behind of the workforce when using traditional work environment. In order to be on par with the private sector and gain competitive advantage, telework appears to be the only way that could lead to the new work environment. The rigid bureaucracy of work operations under centralized governments must be decentralized by adopting a telework approach so as to help expedite the overall organizational performance and productivity. In short, telework is not merely a technology supplement for organizational operations, but also a key driver of organizational survival.

## • Pressure of High Commuting Cost

The average federal employee would save \$5,878 a year in commuting costs by teleworking three days a week (Rosenberg, 2008b). Besides, an average US resident spends \$2,052 a year for gas to commute, and spends 264 hours on the road (Gross, 2008:17). This is indicative of the urgency to seek an alternative to commuting to reduce cost. Telework in this instance, is appropriate to reduce the unnecessary commuting costs for the workforce. It is very obvious that high energy gas consumption and long hours spent on the road are new challenges that mandate the central government to seriously embrace telework as part of a new work culture.

## • Restructuring of Society via Telework

Society would be able to enjoy several benefits via the telework program. Besides the benefit of less environmental pollution as a result of less traffic congestion and gas emission, telework could provide more job opportunities especially for the elderly, housewives and disabled. More people entering into the workforce can help boost national productivity through the secondary level of the workforce. Through such an infrastructure setting, telework can play an important role in realigning work structure and cultivating closer relations or distance within federal government services with remote communities. Such society breakthrough structure can only be realized with the assistance of telework technology as indicated by the quote "technological evolution which, in turn, stimulates changes in social relationship" (Manssour, 2011:32).

## • Employees Gain Quality of Life

Not only the employer gains benefits, employees could also enjoy some advantages. Retaining talented and competent employees to serve as government servants is very important. Telework can offer flexible work timetable for the workforce to alleviate the family dependence problems and difficulty in adjusting to conventional routine work hours. Some workers may have problems of dependents suffering long term chronic diseases, young children to take care of which currently, are major obstacles in traditional work environment, over and above the normal work pressure. Without handling these challenges well, competent employee, may decide as a last option, to quit his job. It is also expected that the US medical expenditure will reach 19.3% of national economic output by year 2019 (Fritze, 2010). Employees or family members who suffer from any diseases, is no longer personal affair, but seriously affects organizational operations as a whole. Therefore, telework can offer assistance to employees, in terms of medical care for both their families and themselves, without adversely affecting their work performance.

## Challenges of Telework Program

No new program can offer 100 percent benefits that is devoid of any limitations or challenges. Telework is not exception. Information security is a primary concern among top management especially high profile information dealing with national security, like the Department of Defense (Agency Group 09, 2009). In this case, telework program works well with less security information from the federal department. Top management resistance and fear of loss of supervision are also main challenges faced during telework implementation. With proper guidelines and more awareness training given to managers (Larence, 2005) and employees, both parties should be able to gain better understanding regarding the positive outcomes of that telework could offer. Lastly, the difficulty of measuring results and employee productivity are also challenges to faced when implementing telework. Not all productivity can be quantified easily. The organizational workforce normally comprises several levels of supporting staff, supervisors and managers. Measuring productivity and gauging results become much more difficult the higher the position.

#### V. RECOMMENDATION

No one size fixes all problems (Long, 2011a). The implementation of the telework program, also needs to be further refined and customized in order to meet the specific needs of every federal government agency. All departments cannot apply the same telework policy. The telework adoption among workforce should be tailored according to the position and duties of employees involved. It is suggested that

both parties, i.e., employer and employee, jointly undertake the drafting of the telework policy so that both parties could reach a consensus. A comprehensive telework policy with its adequate elements (GAO Reports, 2003) is also another mandatory requirement so that all aspects of telework could be thoroughly reviewed to avoid the occurrence of any future disputes. In other words, employee welfare and employer benefits can be protected by laws in case of any telework problems. An expert telework team comprising the central federal government members can also play an important role in assisting to clear the doubts from federal government agencies that are interested in implementing the telework program. In the US, the OPM and the General Services Administration (GSA) both are key players to provide guidance, services, resources and promote telework for federal agencies (GAO Reports, 2003). Family-friendly policies are also seriously considered in U.S. federal agencies (Major et. al., 2008) that allow "alternative work schedules, telecommuting or telework, part-time employment, job sharing, dependent care programs, child care services, [and] leave for family responsibilities" (Lee and Hong, 2011:871). It is clear that besides formal employee welfare, the dependents of the employees are also an important component that cannot be neglected when implementing this new telework paradigm work environment.

## VI. CONCLUSION

Telework is the new move to restructure conventional federal government organization operations into virtual enterprises that allow the workforce to work virtually away from the central office. It plays a more proactive role in assisting the employer to be more effective in terms of operations; enhances employee productivity and provides better family dependent policy. Society also benefits through more job opportunities as well as better and more friendly environmental conditions due to less vehicle congestion. The main challenges are top management resistance, data security matters and difficulty in measuring employee productivity. Lastly, knowing the benefits and challenges of telework would be a good platform to learn from the countries that have adopted telework program, as case studies. Avoiding the same mistakes and adopting the good experiences would place us in a better position towards ensuring the success of the telework program.

## REFERENCES

- Agency Group 09. 2001. Teleworking Brings Benefits for Employees. http://eserv.uum.edu.my/login?url=http://search.ebscohost.com/l
  - http://eserv.uum.edu.my/login?url=http://search.ebscohost.com/login.aspx?direct=true&db=bth&AN=32W2720270600&site=ehost-live&scope=site
- Agency Group 09. 2008. Officials Provide Information for Employees Victimized by Flood. http://eserv.uum.edu.my/login?url=http://search.ebscohost.com/l

- ogin.aspx?direct=true&db=bth&AN=32W3844663611&site=eh ost-live&scope=site
- Agency Group 09. 2009. Defense Department Seeks to Expand Telework Program. FDCH Regulatory Intelligence Database.
- Barr, S. 2004. With Miles to Go, Government Makes Progress Toward Telecommuting. Washington Post, The. ISSN: 01908286
- Barr, S. 2005. Wolf Again Putting Pressure on Agencies to Increase Telecommuting. Washington Post. ISSN: 01908286
- Bednarz, A. 2006. Telework tax-relief plan gathers steam. Network World. 23, 21:31-31.
- Bendarz, A. 2008. More federal workers telecommuting. Network World. 25,5:12-39.
- Bridgeford, L. C. 2007. Out of sight, out of mind. Employee Benefit News. 21,4:14-16.
- Censer, M. 2011. Tech companies tap into government's telework push. Washington Post, The.
- Communications News. 2007. Telework lags in private sector. 44, 5:10-10.
- Cooney, M. 2007. Telecommuting: Security a top issue. Network World. 24,12:27-27.
- Fritze, J. 2010. Medical expenses have 'very steep rate of growth'. http://www.usatoday.com/news/health/2010-02-04-health-care-costs\_N.htm
- GAO Reports. 2003. Human Capital: Further Guidance, Assistance, and Coordination Can Improve Federal Telework Efforts: GAO-03-679.
- Gross, G. 2008. Demand for telework still unmet. Network World. 25,24:17-17.
- HR Specialist. 2011. Let it snow: Fed workers can forget unscheduled leave. HR Specialist: Compensation & Benefits. 6.2:7-7.
- Joice, W. and Noll, T. 2008. An Overview of FederalTelework. Armed Forces Comptroller. 53, 1:16-19.
- Koontz, L. 2005. Critical Telework. Government Executive. 37, 9: 14-14. ISSN: 00172626.
- Kootz, L. 2006. Continuity of Operations: Selected Agencies Could Improve Planning for Use of Alternate Facilities and Telework during Disruptions: GAO-06-713. GAO Reports.
- Kosmetatos, S. 2004. Telecommuting improves quality of life for federal workers. Daily Record, The (Baltimore, MD). http://eserv.uum.edu.my/login?url=http://search.ebscohost.com/login.aspx?direct=true&db=bwh&AN=L5497913DRMD&site=e host-live&scope=site
- Larence, E.R. 2005. Agency Telework Methodologies: Departments of Commerce, Justice, State, the Small Business Administration, and the Securities and Exchange Commission: GAO-05-1055. GAO Reports.
- Lee, S.Y. and Hong J.H. 2011. Does Family-Friendly Policy Matter? Testing Its Impact on Turnover and Performance. Public Administration Review. 71, 6: 870-879. pp:10; DOI: 10.1111/j.1540-6210.2011.02416.x
- Long, E. 2011. Putting people first. Government Executive. 43,7:36-40.
- Long, E. 2011a. Dialing Up Telework. Government Executive. 43,3:11-12.
- Major, D. A.; Verive, J. M. and Joice, J. W. 2008. Telework as a Dependent Care Solution: Examining Current Practice to Improve Telework Management Strategies. Psychologist-Manager Journal. 11, 1:65-91. pp:27. DOI: 10.1080/10887150801967134.
- Manssour, A. B. B. 2003. Flow in Journalistic Telework. Cyber Psychology & Behavior. 6,1:31-39.
- Newell, E. 2004. Telework Hang-Ups. Government Executive. 36,15:30-31.
- Norfleet, N. 2010. For some, it's been business as usual. Washington Post, The. ISSN: 01908286
- O'Keefe, E. 2011. Telework centers' funding is sliced. Washington Post, The. ISSN: 01908286
- $\mbox{O'Keefe},\mbox{ E.}$  and Yoder, E. 2011. Workers finding out if they can telework. Washington Post, The.
- PA Times. 2008a. Study Reveals \$13.9 Billion Annual Fed. Telework Deficit. 31, 3:10-10.
- PA Times. 2008b. WTS WhereThings Stand. 31, 9:13-13.
- PA Times. 2008c. Feds to Increase IT Investments to Support Telework. 31,5:1-12.

- PR Newswire. 2011. Federal Telework Growing, but Still Faces Barriers. FedScoop-IT-report:US. http://eserv.uum.edu.my/login?url=http://search.ebscohost.com/login.aspx?direct=true&db=bwh&AN=201111160830PR.NEWS. USPR.DC07353&site=ehost-live&scope=site
- Ramstack, T. 2001. Government Missing Its `Telework' Goals. Washington Times. http://eserv.uum.edu.my/login?url=http://search.ebscohost.com/login.aspx?direct=true&db=bwh&AN=2W60515218992&site=ehost-live&scope=site
- Rosenberg, A. 2008. Why Commute If You Can Keyboard? National Journal. 40, 23.
- Rosenberg, A. 2008a. Time for Telework. Government Executive. 40,10:48-54.
- Rosenberg, A. 2008b. Save a Tree, Work From Home. National Journal. 40, 8:23-23.
- Samenow, J, and O'Keefe, E. 2011. NWS warns of 'dangerous travel conditions during rush hour'; feds may leave two hours early. Washington Post, The. ISSN: 01908286.
- Shoop, T, 2010. Get Out of Town. Government Executive. 42,9:4-4. ISSN: 00172626.
- Silver, D. 2010. Washington Tapping Into Telework For More Flexibility. Workforce Management. 89,11:10-10. ISSN: 15475565.
- Telework Exchange. 2011. Federal Telework Progress Report Reveals Rise in Telework and Agency Confidence to Meet the Telework Enhancement Act Requirements. http://eserv.uum.edu.my/login?url=http://search.ebscohost.com/login.aspx?direct=true&db=bwh&AN=bizwire.c34600785&site=ehost-live&scope=site
- The FactPoint Group. 2008. The FactPoint Group white paper on 10
  Trends and technologies driving Secure Telecommuting White
  paper. http://www.sonicwall.com/downloads/WP-ENG024\_Telecommute-Trends.pdf
- Walker, D. M. 2006. Continuity of Operations: Agencies Could Improve Planning for Telework during Disruptions: GAO-06-740T. GAO Reports.