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# The Challenge of Telecommuting Implementation in Malaysian Government Offices

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#### **ABSTRACT**

Telecommuting is no longer an option for organization today, as people have more choices in the type of jobs or organization they want to work with. With education, knowledge, sophisticated but affordable information and communication technology (ICT), people can now choose to work for one or more employers. Telecommuting becomes one of the choices for the employees in most organizations in developed countries. In Malaysia, telecommuting is still in its infancy. However it is hope that as ICT become more common in the country, telecommuting will be an alternative work option to Malaysians. Telecommuting can be a liberating option for physically challenged, retires, and workers who may otherwise have had to drop out from labour force due to social obligations at home or otherwise. In this study we investigate Malaysian senior government civil servants' attitudes concerning telecommuting. The study identifies the factors that support telecommuting implementation in Malaysian government offices. Using the Delphi technique, a group of senior government civil servants were asked to identify potential impact of telecommuting in government offices. The items were recorded and analyzed. The group identified seven factors determined to be very important to support the implementation of telecommuting. The factors are rules, regulation and policies, infrastructure, finance, selection, training, environment and benefits. Explanations are offered for each factor and areas for further research are also discussed.

#### 1. INTRODUCTION

Telecommuting is no longer an option for organization today, as more and more people have choices in the type of jobs or organization they want to work with. With education, knowledge, sophisticated but affordable information and communication technology (ICT), people can now choose to work for one or more employers. Telecommuting becomes one of the choices for the employees in most organizations in developed countries. In Malaysia, telecommuting is still in its infancy. However it is hope that with ICT become more common in the country, telecommuting will be an alternative work option to Malaysians. Telecommuting can be a liberating option for physically challenged, retires, and workers who may otherwise have had to drop out from labour force due to social obligations at home or otherwise.

Although the Malaysian civil services is in no danger of being undermanned with over 800,000 on the payroll, workers tend to leave after being trained by the government for a more lucrative job usually in the private sector. In a survey in a university in northern part of Malaysia, over 46.7% of top management interviewed, agreed that the university has recruitment and retainment problems of PhD academicians and agreed that telecommuting can be an option to retain some staff. Most of the lecturers surveyed showed willingness to telecommute even if the university does not pay for internet access in their homes (Wan Rozaini & Haitham, 2005). Although telecommuting is desirable to high percentage of employees, public universities or government organizations do not have rules and policy on telecommuting that can allow this alternative mode of working to be practised.

Before implementing telecommuting programs in government organizations, the organizations must carefully identify and study the successful factors. There are insufficient literatures to elaborate the criteria to guide implementing telecommuting projects in government's offices in Malaysia. Therefore, research need to be conducted to improve individual and organization's knowledge in telecommuting and help develop telecommuting program in Malaysia.

#### 2. PURPOSE OF THE STUDY

The purpose of this study is to identify criteria of factors that support telecommuting in government offices in Malaysia. In this study we investigate Malaysian senior government civil servants' attitudes concerning telecommuting. The study identifies the factors that support telecommuting implementation in Malaysian government offices.

#### 3. LITERATURE REVIEW

Telecommuting is not a new concept since the term was coined more than thirty years ago (Nilles et. al. 1976). It becomes very practical with the advent of personal computers and portable modems in early 1970s. Telecommuting means a working arrangement where individuals carry out all or part of their jobs at remote locations, usually from home by using personal computers and communications equipment and software (Fortier, 1998). There have been many studies on the benefits of telecommuting. Across a variety of telecommuting program, research studies have reported reduced absenteeism (Pratt, 1999); cost savings from higher productivity (Lupton & Haynes, 2000); higher levels of employee retention (Lupton & Haynes, 2000); and ability to attract and retain employees (Manochehri & Pinkerton, 2003).

Despite the benefits of telecommuting, there are still barriers for its implementation. Management attitudes are found to be a significant barrier to telecommuting arrangement (Nilles, 1998; and Lupton & Haynes, 2000). To adopt telecommuting concepts organizations are advised to focus on the management of five dimensions: managing people, managing teams, managing information, managing processes and managing facilities (Davenport & Pearlson, 1998). Direction, coordination, feedback, mentoring, guidance, instruction, motivation and performance appraisal are crucial to the productivity of the telecommuter (Ramsey, 1997). Well-thought telecommuting programs must carry out a number of practices including departmentalized decision making, good guidelines, telecommuting contracts, and training programs for both telecommuters and their superiors (McCune, 1998).

### 4. TELECOMMUTING IN MALAYSIA

A study on telecommuting which was funded by United Nations Development Programme (1999) suggests there is significant potential for telecommuting within the Malaysia economy. Among the major disadvantages of telecommuting identify in the study are high cost of

#### 814 2006 IRMA International Conference

hardware and software, personal interactions and the problems of supervision of telecommuters.

Results of a study on telecommuting by Abdul Azeez et. al. (1997) involving employers and employees in a major state in southern of Malaysia found that the major concern among employers of allowing their employees to telecommute are supervision, cost and lack of training to use computers and other technical tools. On the other hand, the employees are more willing to telecommute.

A recent survey on managers' perceptions of telecommuting in Kuala Lumpur found that most managers favor telecommuting. However, the managers were concerned with work issues such as the quality of work, administrative procedures and work policies (Rafidah & Abdul Razak, 2005).

#### 5. METHODOLOGY

The Delphi technique was used for data collection in this study. This technique is based on a structured process for collecting and distilling knowledge from a group of professional by means of a series of questionnaires interspersed with controlled opinion feedback. The study focused on the senior government servants who have worked and managed civil servants. Spinks and Wood (1996) telecommuting key variables were used for this study. Nineteen senior government servants were selected as an expert group to consider telecommuting as an alternative mode of working for government offices. 89.5% of the respondents were male, 47.4% with 11-20 years of working experienced and 15.8% of them had been in the current post for more than six years. All of the respondents had at least a bachelor degree. The interactions among the group were controlled by a monitor who filters out material not related to the study. The problem of group dynamics was thus completely bypassed.

# 6. RESULTS AND DISCUSSION

The group identified and ranked seven factors determined to be very important to support the implementation of telecommuting. The factors are (1) rules, regulation and policy, (2) infrastructure, (3) finance, (4) selection, (5) training, (6) environment and (7) benefits. Details discussions on each of the factors are summarized in the table below

From the respondents' perspective the details of each factor should be paid special attention to when telecommuting programs is implemented. The finding of this study is closely consistent with other studies conducted in Malaysia previously mentioned in literature review section. The findings indicate that management and economic aspects of

Table 1.0Factors Supporting Telecommuting in Malaysian Government Offices

Priority	Factors	Details of each factor
1	Rules, regulation and Policy	Precise statements and/or contract on salary, remuneration, incentives, allowances, conflict management, tax relief, empowerment, supervision and authority
2	Infrastructure	Components of information and communication technologies to support telecommuting program
3	Finance	Cost of setting up a telecommuting program and the cost of operating and maintaining a program
4	Selection	Selection of prospective workers, jobs and location for setting up a telecommuting program
5	Training	Type and level of knowledge and skills to be given to employees and employers
6	Environment	Political system, culture, awareness, and values
7	Benefits	Autonomy/independence, flexible working hours, improves time management, saving in travel time and expenses while the benefits to organization are increased productivity, increased availability of human resources/human resources sharing, increased motivation and saving in direct expenses

telecommuting is considered the most important to its adoption. The findings also indicate the need to develop specific human resources policies that will smooth the progress of telecommuting implementation

Interestingly, respondents found benefits of telecommuting as the least important factors in the development of telecommuting programs. This may be so due to the respondents may see no purpose and urgent need in offering telecommuting in their workplace. While it is encouraging to find that most of the respondents favor telecommuting as an alternative work option, the overall success of telecommuting will rest to a large degree, on the vision and commitment of top management in Malaysian government.

In addition, the emerging of other factors in Malaysia's society today such as transportation and travel problems, increase of oil prices, environmental concern, surge in women workforce, investment in road infrastructure, and information technology assets re-emphasize the need for alternative work arrangement such as telecommuting in Malaysia.

#### 7. CONCLUSIONS

Although telecommuting is relatively new concept of working to many Malaysian, it has potential for a numbers of positive consequences to the employees and organizations, such as higher productivity, increased opportunities to all level of workers. However, telecommuting can also generate problems to the organizations if not planned properly.

This study provides some useful information to government in terms of opportunities and criteria in implementing telecommuting programs among civil servants. There is an obvious need for more research in this area in order to understand the different elements of a successful telecommuting implementation. The small size of sample in this study also points to need for larger scale research on the topic. Greater exploration in this area would be of considerable value in determining a successful telecommuting implementation. Another important area of research is the impact of telecommuting programs on the workers and managers participating in such a program. Unfortunately, very low incidence of telecommuting program is in existence in Malaysia.

To conclude, this study has identified some relevant challenges to be addressed before the implementation of telecommuting in Malaysian government offices. Hence, more research on telecommuting has to be carried out in Malaysia to explore the adoptability of this work arrangement.

#### 8. REFERENCES

Abdul Azeez K.H., Oniyirimba, L.C. and Supian A. (1997). An exploratory analysis of factors toward the emergence of teleworking in Malaysia. *Proceedings of the 30th Hawaii International Conference on System Sciences*, USA, 99-109.

Davenport, T.H. & Pearlson, K. (1998, Summer). Two cheers for the virtual office. *Sloan Management Review*, pp. 53-64.

Fortier, B. (1998, September). Telework revolution: On-the Job, at-Home. Kiwanis Magazine.

Nilles, J.M., Carlson, F.R., Gray, P. & Hanneman, G.J. (1976). The telecommunications – Transportation Tradeoff. Chichester: John Wiley & Sons, Inc.

Nilles, J.M. (1998). Managing telework: strategies for managing the virtual workforce. United States of America: John Wiley & Sons, Inc.

Lupton, P and Haynes, B. (2000). Teleworking – the perception-reality gap. *Facilities*, 18 (7/8), 323-337.

Manochehri, G. and Pinkerton, T. (2003). Managing telecommuters:

Opportunities and challenges. *American Business Review*, 21(1), 9-16.

McCune, J.C. (1998, February). Telecommuting revisited. *Management Review*, pp.10-16.

Pratt, J. (1999). ITAC telework 1999: Telework America 1999 summary and key findings. Retreived August 8, 2003, from http://www.workingfromanywhere.org

- Rafidah A. R. and Abdul Razak H. (2005). Telekerja di Malaysia: Cabaran perlaksanaannya dari prespektif pengurus. Proceeding of the National Seminar SEIT-3, PPP, UUM, Malaysia, 17.
- Ramsey, R.D. (1997, April). How to supervise home workers. Supervision, 58, 1-5.
- Spinks, W.A. and Wood, J. (1996). Office-based telecommuting: An international comparison of satellite offices in Japan and North America. SIGCPR/SIGMIS '96, 338-350.
- UNU/INTECH Policy Research Project Report. (1999, April). Teleworking development in Malaysia. Integrated Report, 1. Wan Rozaini S.O. and Haitham R. (2005). Exploring the possibility of implementing telecommuting at University Utara Malaysia (UUM). Teknologist, IBA: Karachi.

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