

## **DISASTROUS IMPACT: SHORTAGE OF KNOWLEDGE WORKERS AND TELECOMMUTING IN ORGANIZATION<sup>1</sup>**

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### **Abstract**

*Shortage of knowledge workers in manning the organization can substantially impair the overall performance of the organization. Malaysian organizations need to prepare themselves towards the shortage of knowledge workers in the coming years. With the current development of the technology, the shortage of knowledge workers in Malaysia can be minimized with the implementation of the telecommuting concept. Therefore in order to mitigate the shortage of the knowledge workers, organizations need to look into ways of attracting and retaining the workers to work with the organization through telecommuting. This paper will focus on the factors that lead the knowledge workers to telecommute, further attracting and retaining them towards the success of the organization's mission and minimizing the disastrous impact due to the shortage of knowledge workers.*

### **INTRODUCTION**

In relation to the Malaysia's Prime Minister vision towards the year 2020 that Malaysia to be an industrialize nation, organizations in Malaysia need to have a pool of knowledge workers in order to ensure the vision is achieved. Therefore, any shortage of knowledge workers in manning the organization can substantially impair the overall performance of the organization. Malaysian organizations need to prepare themselves towards the shortage of knowledge workers in the coming years.

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With the current development of the technology, the shortage of knowledge workers in Malaysia can be minimized with the implementation of the telecommuting concept. Today's work force is drastically different from years ago, thus the differences have created tremendous challenges for the managers of today's organizations (Buhler, 1997). Further, the current work force is more diverse, is organized differently and not always even geographically located together. Therefore in order to mitigate the shortage of the knowledge workers, organizations need to look into ways of attracting and retaining the workers to work with the organization.

This paper will focus on the factors that encourage the knowledge workers to telecommute from anywhere, anytime using portable technology which allows them to perform their job from customers locations, their home, their vehicle, etc (Robertson, 1998). Further, organizations can make use of these factors given in attracting and retaining the knowledge workers towards the success of their organization's mission and minimizing the disastrous impact on the shortage of knowledge workers.

## **LITERATURE REVIEW**

Again, Malaysia needs to look forward in ways to overcome the shortage of knowledge workers by virtue of telecommuting concept. Thus, telecommuting concept is one of the ways to ensure the Prime Minister's vision to be materialized by the year 2020.

### **Knowledge Workers**

Knowledge workers have been defined as having high levels of education, experience, and organizational status (Bentley and Yoong, 2000; Sulek and Maruchek, 1994). Moreover as indicated by Peter Drucker the "knowledge society," knowledge (information) is the key currency of economic exchange (Price, 1997). On the other hand, organizations are changing to address the needs of knowledge workers. Since knowledge work is based on specialized knowledge and the ability to leverage information, the focus on repetitive operations and inflexible working conditions is diminishing. As indicated by Price (1997) that working arrangements, and workspace concepts and designs, all have been modified to fit the person of today's changing worker (Price, 1997).

Knowledge work is focused primarily on using specialized knowledge and manipulating information for value-added problem solving (Price, 1997). Moreover, knowledge workers are needed as the nation needs higher-level cognitive skills focused on collaborative problem solving. Organizations are competing on the basis of their ability to acquire, manipulate, interpret, and use information effectively. Further, autonomy may be the most critical concern in knowledge worker teams, as knowledge workers prefer autonomy more than any other job characteristic (Cheney, 1984; Goldstein & Rockart, 1984).

In the case of Malaysia, the government had established various universities in order to produce pools of knowledge workers. These knowledge workers will be the mover of the

future Malaysia as the industrialized nation. Price (1997) indicated that the information age has changed the nature of work just as the industrial revolution changed early nineteenth-century work. In essence, the content of work and the means of producing products and services have changed. Therefore, Malaysia will need thousands of numbers of knowledge workers by the year 2020.

In summary, knowledge workers are people who are highly educated with skills in their area of specialization. Further, their knowledge and skills are need by organizations in handling and solving complex problems towards the organization's competitiveness in this dynamic business environment.

### **Telecommuting Concept**

Telecommuting has been introduced way back in the 1950s and became popular in the 1970s. The concept started to receive consideration in the USA during the oil crisis with the effort to reduce the fuel consumption as a trade-off with working from home (Lupton and Haynes, 2000). Further, interest in telecommuting started in the early 80s as ways to improve worker productivity, to improve quality of work life, and to conserve energy (Khalifa and Etezadi, 1997).

Telecommuting can be defined as the capability of individuals to work at home and communicate with the office by using personal computers and communications equipment and softwares (Shelly et al., 1998). Moreover, telecommuting also refers to employees who work from a remote location using telecommunication tools and technology of personal computer and portable modem. Further, organizations and knowledge workers have more flexibility in the way work is performed (Buhler, 1997).

Meanwhile, Khalifa and Etezadi (1997) refers telecommuting as a work arrangement allowing an employee to perform required tasks from his/her choice of location, usually home or a satellite center, by using telecommunications equipment. Telecommuting means the capability of individuals to work at home and communicate with their offices by using personal computers and communications equipment and software (Shelly et al., 1998). Further, employees who work predominantly outside of their home office are considered telecommuting (Knight and Westbrook, 1999).

Further, centralization of resources and was prominent during the Industrial Revolution. Then, futuristic view gave people freedom and individual autonomy in their work; envisage as freeing people from the geographical restriction of being at a specified place of work (Lupton and Hayes, 2000; Toffler, 1980).

The information age is changing the nature of work, how wealth is created, and the fabric of society. Today's leaders and managers now must face the new business realities and decide on the fate of worker and workplace. With annual "seat costs" at approximately \$7,200 per employee, facilities planners will be asked to "create more with less and manage more for less." Let's hope the value of their knowledge work is appreciated (Price, 1997).

Telecommuting concept can be concluded that a worker who work with the use of technology and telecommunications away from his/her traditional office.

## FACTORS TOWARDS TELECOMUTING

Organizations in Malaysia need to consider seriously the benefits from the implementation of telecommuting concept in this era. Moreover, the factors listed can be the impetus towards reducing the shortage of knowledge workers and subsequently minimizing the management disastrous. Further, based on various literature reviews, telecommuting can provide substantial competitive advantages in workforce recruitment and retention, productivity, real estate and office overhead, customer service, and corporate image and goodwill (Anonymous, 1998).

### Retention and job flexibility

In order to retain knowledge workers, organizations should allow people to telecommute from home, whether on a part-time or full-time basis. Fister (1999) indicated that telecommuting has become a valuable tactic in the fight to hire and retain knowledge workers.

Greater emphasis has been placed on hiring and retaining knowledge workers, which often means dipping into a labor pool that requires flexibility such as working parents and people with limited mobility (Knight and Westbrook, 1999). Moreover, Knight and Westbrook (1999) indicated that telecommuting helps attract new employees especially those who need flexibility, increases retention rates, reduces sick time and absenteeism, increases productivity, and increases job satisfaction.

Meanwhile, Kurland and Bailey (1999) mentioned another reason to implement telecommuting is that it widens the talent pool available to the organization. It also may stem turnover by providing workers with flexibility that allows them to keep their jobs in the face of external demands or desires.

### Job satisfaction

Telecommuters typically work longer hours and more workdays than the average employee does (Langhoff, 1996). Even there were times when telecommuters were too sick to come in to the office but were not too sick to work from home.

Fitzgerald (1995) discovered that the number of companies going mobile is impressive. He stressed that it is the challenge for an organization to provide support for the road warrior and telecommuter who required job flexibility and job satisfaction.

### Productivity

Kurland and Bailey (1999) mentioned home-based telecommuting provides an opportunity to improve workplace productivity. Because telecommuting employees schedule flexibility, they can work when they prefer, and thereby improve their productivity. Further, Kurland and Bailey (1999) stated popular press accounts of successful telecommuting programs often report that telecommuters take fewer sick days,

are absent less, have higher job satisfaction, and have higher work performance ratings. These factors may positively affect productivity.

Telecommuters have relatively distraction-free environments, as they are more open to receiving interruptions while at the traditional office (Kurland and Bailey, 1999). Together, these factors, relating to the location of work, the timing of work, and the quality of work life, can increase productivity.

Productivity of a company improved substantially due to telecommuting. Subsequently, telecommuting will improve productivity on the jobs (Fister, 1999; Ervin, 1998; Fortier, 1998; White Paper, 1997; Shellenbarger, 1997; Janal, 1991). The improvement ranges between 20 to 70 percent as claimed by Ervin (1998). This also supported by Hawkins et al. (1997), CNN (1996), Langhoff (1996) and Pacholczyk et al. (1995) as they stated that telecommuting improved productivity and their organizations benefit from the practice.

Hill et al. (1998) in his study indicated that qualitative analyses revealed the perception of greater productivity, higher morale, increased flexibility and longer work hours due to telework, as well as an equivocal influence on work/life balance and a negative influence on teamwork.

Besides, productivity was measured by reduced incidental absence, increased performance, and increased quality and quantities of assignments completed during the trial period (White Paper, 1997). Moreover, Sullivan (1992) indicated that with telecommuting your absence from the office as trouble free as possible.

Sullivan (1992) in his study showed that you could be more productive than you are in the office. Further, coworkers should be able to reach you easily, and you should receive information and deliver work to the office without causing unusual disruptions of work patterns (Sullivan, 1992). He also mentioned that it is not hard to show a productivity gain; since you'll have fewer distractions, you'll produce more.

#### Real estate and office overhead

Telecommuting saves companies money (Schilling, 1999). Employers initiate a telework program to save on leasing costs (Gage, 1998). Robertson (1998) indicated that mobile teleworkers are able to help the organization improve their level of customer service by reducing cost associated with office space and daily travel to the corporate office. Therefore, employees give up costly office space and communicate with the company and their customers remotely by telephone, computer or other technological tools.

Fortier (1998) indicated telework can help alleviate the office space crunch and are a great alternative to expensive new buildings. Further, Girard (1997) discovered that companies should save as they implement telecommuting. This supported by Martin (1994) as he indicated that expense reduction for the corporation has been a major impetus for this large increase in the virtual office.

### Work transfer and relocation

Factor of location of work and long commutes may cause workers to reconsider relocating. Then telecommuting may saves employees from the associated expenses and upheaval of such major change (Kurland and Bailey, 1999). Schilling (1999) mentioned of his view on telecommuting as an added benefit, employees are less likely to switch jobs, reducing the company's recruiting and training efforts. This supported by Lovelace (1995), as he indicated that home base teleworking also eliminate relocation and associated expenses and accommodates people who would be reluctant to disrupt their lives by moving.

### Personal and family matters

Fortier (1998) stated that telework could help reduce absenteeism due to illness, childcare, eldercare, and the need to be home to take care of personal business – all of which can average several days per year. Further, he stated that telework could mitigate business disruption during strikes, floods, bad weather, and other emergencies.

In addition, CNN (1996) mentioned that those who could benefit most are women. By the turn of the century, an estimated four out of five women of childbearing age will be in the work force. Telecommuting and new technologies could help those women to better adjust their work schedules with motherhood.

### Environmental issues

Telecommuting programs enable firms to comply with regulations such as the Clean Air Act and the Americans with Disabilities Act (Kurland and Bailey, 1999). An application of telecommuting is becoming an attractive option for both employees and employers. Employees want a working environment in which they can concentrate and be more productive (Lovelace, 1995). Further, he added that telecommuting could avoid long commutes on congested highways or city streets, and to adjust their workday according to their needs, unbounded by traditional office hours.

## **DISCUSSIONS & CONCLUSIONS**

For knowledge workers, their concern on the quality of life and work need to be addressed by the organizations. Considering all the above factors that lead to telecommuting, organizations can use the telecommuting concept in attracting and retaining knowledge workers within the organization. Moreover in this era, knowledge workers are looking for an organization that can give them the quality of life and work as they grow with the organization.

Moreover, telecommuting concept's implementations can be regarded as an appreciation towards knowledge workers. As indicated by Price (1997) that today's leaders and

managers now must face the new business realities and decide on the fate of worker and workplace. Let's hope the value of their knowledge work is appreciated.

Therefore as organizations are adapting to the telecommuting concept, they can be assured that the phenomenon of shortage of knowledge workers can be reduced and further be eliminated. Further, the disastrous implications on the management due to the shortage of knowledge workers on the organization can be managed.

Further research need to be carried out in exploring the organization's considerations and preparations towards adapting the telecommuting concept towards retaining knowledge workers.

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