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# THE ACCEPTANCE AND EFFECTIVENESS OF TELECOMMUTING (WORK FROM HOME) IN MALAYSIA

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## Abstract

Telecommuting/Telework or “Work from Home” is slogan that we hear over the times almost everywhere in the world especially in developed nation. According to WorldatWork, an international association for human resource professionals and business leaders based in USA, the key finding of Telecommuting are as follows:

- Workers Increasingly Working from Anywhere
- Employers Are Expanding Teleworking Opportunities
- Number of "At Least Once Per Year" Teleworkers Remains Steady
- Frequency of Teleworking is Growing
- Broadband Use Rises Sharply for Home-Based Teleworkers
- Teleworkers Are Far More Prevalent Users of Wireless

Home-based employees are in a situation where they are able to address both work and family demands. In contrast to non-home-based workers, home-based workers are more likely to respond to family demands (Sakamoto and Spinks, 2008). However, it has limitation especially in the form of implementation, such as a need for face-to-face interaction with colleagues and customers in the corporate world. In addition, according to Daft and Lengel (1986) with remote working, the effectiveness and the role of supervision are in doubt. Svein Bergum (2007) also noted that not all jobs and not all people are suitable for telework.

The purpose of this study is to find out what are the Critical Success Factors which can contribute to the acceptance of Telecommute Program officially in Malaysia. The critical success factors identified aims to help the organizations to implement Telecommute Program.

The primary data collected for this study will be analyzed quantitatively. Structural equation modeling (SEM) will be employed in solving the issues examined.

With the disclose of the Critical Success Factors in telecommuting program acceptance in Malaysia, the research aims to increase the deployment rate of telecommuting program and reduce the obstacle to the telecommuting program implementation.

Interestingly, two major significant success factors; (1) Job Satisfaction and Commitment Level (2) Operating Cost Reduction have been clearly identified in Malaysia context. This finding is very consistent with previous researcher Susanne and Gill (2003) who noted that cost saving related to renting cost, water & electricity bills is significant to the critical success factor in telecommuting program. Also supported by Haines et al (2002) who noted that individual has higher job satisfaction and higher level of commitment to the company due to telecommuting program

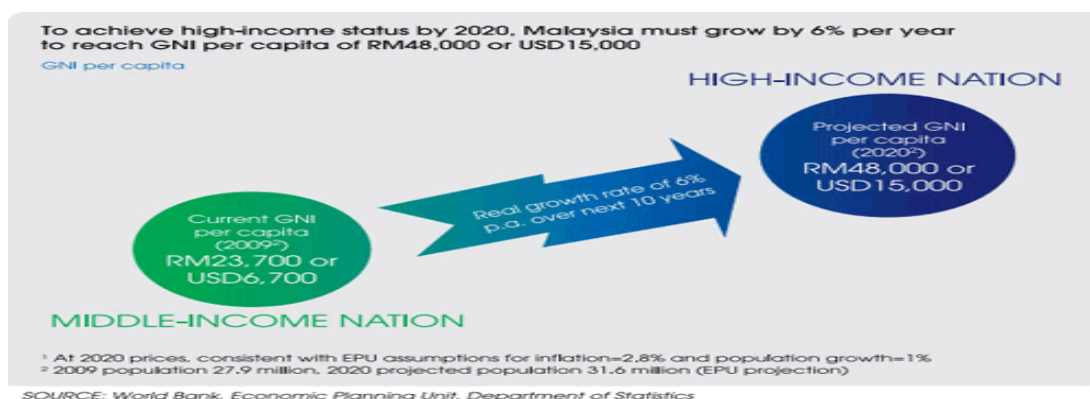
## INTRODUCTION

WorldatWork, a reputable professional association which focused on attracting, motivating, and retaining employees has come out with a report related to Telecommuting. According to them, key Telecommuting can be defined as

- Employers Are Expanding Teleworking Opportunities
- Number of "At Least Once Per Year" Teleworkers Remains Steady
- Frequency of Teleworking is Growing
- Broadband Use Rises Sharply for Home-Based Teleworkers
- Teleworkers Are Far More Prevalent Users of Wireless
- Workers Increasingly Working from Anywhere

## Research Problem/Thesis Statement

Under Economic Transformation Programme, Malaysia aims to become a developed nation by 2020. According to the following table, during the period, Malaysia will transform from middle income of RM23,700 to high nation income of RM48,000. Critically, retaining and attracting talent and expert is crucial for the success of the Economic Transformation Programme. Conjunction with it, Talent Corporation had been set up to attain the abovementioned goals but also to resolve the severe brain drain faced by Malaysia. Indeed, according the sources from well-known newspaper, The Star, approximately 784,000 of Malaysia expertise work or serve abroad with majority at Singapore, Australia and United Kingdom. Obviously, we are under uphill situation to generate a competitive, flexible and good working environment in order to lure back Malaysian expertise and retain the existing talent from moving abroad.



According to Muhammad, 2000, one of the major advantages of telecommuting is the ability of corporations to employ and retain key employees. Therefore it spur me to look into this area Telecommuting in addition Telecommuting program is getting popular in Malaysia, hence this is a right timing to conduct this research to understand the factors which are critical in acceptance of Telecommuting program.

### **Research Question**

What are the critical success factors in telecommuting acceptance and in Malaysia?

### **Research Objective**

The objectives of this research are:

- To discuss the benefits, motivation factors, problems and challenges related to the Telecommuting program
- To find out the Critical Success Factors for the Telecommuting program Acceptance

### **Significant of the Study**

This study is very essential as it focuses on finding the crucial factors which can contribute to the success of telecommuting program acceptance in Malaysia. The findings from this research would finally give a great on the acceptance of Telecommuting program.

## **LITERATURE REVIEW**

### **The benefits and motivation factors of telecommuting program**

Telecommuting can assist single parents or employees with elderly parents to have the flexibility to manage their career and child-care or their elderly parents. Balance between work and family has always been a major issue in every country in the world. Telecommute is able to help the employees to be closer to the family. Telecommuting gives employees more time to be with the family and be available for family obligations, also able to prepare children for school or day-care in the morning and pick them when they return (Diane, 2007).

As per Diane and Emilie (2007) Telecommute could motivate staffs and consistent with previous studies done by many researchers. Their finding show the demand for telecommuting was mainly justified by flexibility and quality of life, productivity and avoidance of commuting. Conjunction with that, satisfaction is said to be improved due to the improvement of productivity and concentration. In short, employees are more efficient at home than when they work at the client's office as home provides a quite and peaceful working environment with fewer disturbances which contributes to the increase of productivity.

Another researcher; Susanne and Gill (2003), pinpointed that telecommuting increased productivity, reduce estate costs and increase employee morale, while for the individual it is reported to provide benefits of increased autonomy in balancing "work" and "life" as well as cutting out annoying commuting journeys.

Samia M. Sihaet all (2006) mentioned that telecommuting is precisely the solution that can take many of those commuters out of their vehicles and out of those traffic jams. Workers will be more productive, the roads will be less congested and the air will be less polluted.

Over the times, regardless of the world economy conditions, the organisations are trying very hard to reduce costs. In a time of increased global competition and an increasing awareness on costs, it has been discovered and proven that telecommuting can have a substantial effect on an organization's competitive advantage. For instance, IBM reports a 40-60 percent reduction in real estate cost per site. With employees telecommuting, four people could share office spaces and thus reduce rental cost (Muhammad, 2000).

Another major advantage of telecommuting is the ability of corporations to employ and retain key employees. (Muhammad, 2000). Ruppel and Howard (1998) explored the factor that impact telecommuting adoption and pinpointed "competitor adoption" as a key factor that motivated firms to initiate their own telecommuting program (Samia and Richard, 2006).

As the technology is the enabler that makes telecommuting possible, Samia and Richard (2006) came out with their model based on the fundamental concept of supply (technology enable telecommuting) and demand (employee demand for telecommuting) as documented by Gray (1997). However, Gray stated that it was inadequate to assume that demand will follow just because enabling technology makes it possible o supply telecommuting opportunities.

According to (Baruch 2003, Heneman and Greenberger 2002 and Ingham 2006), when considering telecommuting, the main benefits sought by organisations relate to cost reduction in the area of physical accommodation, the streamlining of operations, increasing productivity and attracting and retaining talents through greater employee flexibility and loyalty

O'Brien and Hayden (2007) pinpointed two further factors for the promotion and development of telecommuting, first, allowing organisations to handle variable workloads to deal with peak periods of demand and second designing additional and suitable coverage over the weekends or holidays for specific business areas

Telecommuting are sometimes used as reward tools, allowing dedicated and hardworking employees to work from home, hence building trust and loyalty between staffs and management (Kurland & Egan, 1999)

### **The issues with telecommuting program**

In telecommuting practise, boundaries between work and family life will be confusing because of a shared place for the work and family life. (Yuka Sakamoto, Wendy A. Spinks, 2008). The same observation has been highlighted by (Diane-Gabrielle Tremblay at el 2007, Baine and Gelder 2003, Duxbury and Higgins, 2003, Felstread and Jewson, 2000, Tremblay, 2002 and 2003, Tremblay et al, 2006).

According to the survey on telecommuters, McCormick (1992) found that over 70 percent felt increase stress from having to deal with family responsibilities during work hours. Igbario and Guimaraes (1999) found that telecommuters are often frequently interrupted while working at home by family, friends and neighbours.

There is evidence suggesting that a need for face-to-face interaction with colleagues (subordinates, co-workers, superiors) customers and/or other persons plays a key role (Daft &

Lengel, 1986). But, telecommute will cause the absence of colleagues' and customers interaction and feedback as well as isolation because teleworkers work in an isolated area by their own (Susanne and Gill, 2003).

Svein Bergum (2007) draws a conclusion that not all jobs and not all people have a potential for telework. Some of the suitable jobs are sales, consulting, writing and research analysis, all of which can be conducted outside the traditional office environment (Ahmadi, Marilyn and Tammy 2000).

Stephen (1999) pinpointed that some personalities are better suited than others to working alone for extended periods from a remote location. Those persons must possess high self-motivation, high level of job knowledge and skills, flexibility, strong organization skills, strong communication skills, low need for social interaction, team player mentality, enjoyment of responsibility and trustworthiness and reliability.

Home-based workers are in a situation where employees are fitting to address both work and family demands. As compared to non-home-based workers, home-based workers are more likely to respond to family demands (Yuka Sakamoto, Wendy A. Spinks, 2008).

Deepro, 1999, Dewindth, 1999, Greensing-Pophal, 1999, Leighton and Syrett, 1989, McClelland, 1999, Mathias, 1999, Thomas, 1999 repeatedly stressed that the organization need to set and agree a clear goals to measure output and know progress will be assessed and communicated. (Margaret, 2002).

Based on research done by Diane and Emilie (2007), telework was not possible may be due to the client organizations refuse telework because of security of confidential data. Secondly, some clients prefer the employees to work on their work sites in case they need help or they have questions. Some clients refuse telework in order to keep an eye on independent workers and control their work. One of the interesting questions not addressed before is the challenges to manage more average skilled workers at a distance. Distance management was to be more based on trust (Svein Bergum, 2007). The workers need to first develop a relation of trust with his client before asking for telework. Otherwise, clients will tend to refuse this work arrangement in spite of its advantages for parties (Diane and Emilie, 2007).

O'Brien and Hayden (2007) highlight that the abuse of information technology and tools, such as using computer equipment for personal use or allowing family members access to such resources, is a potential downside of telecommuting if staffs are not properly managed throughout the process

O'Brien and Hayden (2007) also added that one of the most commonly cited benefits of telecommuting is work-life balance, indeed that having to address family responsibilities during work hours actually increases stress among employees.

Telecommuting only suitable for certain people, somebody find it demanding to fulfil their work functions through computer-mediated technology under telecommuting (Hunsaker & Hunsaker, 2008).

### **Critical Success Factors identified by previous researchers**

Ramsey (1997) offers managers some tips on working effectively with telecommuters:

- Find out how other managers or organizations are setting up telecommuting programs.
- Provide telecommuters with important resources, materials and supplies.
- Give technical assistance as often as possible
- To evaluate performance, the manager should look at the results accomplished rather than the amount of time spent on the project. The manager should have a record of costs and productivity of telecommuters and use it to compare it with the costs and productivity of the traditional office workers.
- Communication with the telecommuter term should be conducted daily. Phone, fax and e-mail make communication a very simple process. It is difficult to keep organizational goals in sight and mind if the employee feels isolated.
- The telecommuters should meet face-to face with managers on a regular basis. It is very important to have the support of managers and co-workers who act as a representative for the telecommuter inside the workplace.

Employee sees telecommuting program is beneficial as he can save cost related to transportation e.g. fuel and reduce the time wasted due to traffic congestion (Holt 1994, Igbaria and Guimaraes 1999). Meanwhile, employer can save cost related to the operating e.g. renting cost, water & electricity bills (Susanne and Gill, 2003)

Employee has higher job satisfaction and higher level of commitment to the company due to telecommuting program supported and encourages by the employer (Haines et al, 2002).

Staffs should equipped strong skills in self-management where employee should have self-discipline when works remotely without any face to face monitoring by the supervisor (Svein 2007, Susanne & Gill 2003, Dooley 1996). At the same time, Provides training to the staffs before the staffs are allowed to telecommute (Potter 2003, Hill et al 1998, Warner 1997)

Employee has all the equipments that can assist them to telecommuting e.g. IP Phone, Internet Service Subscription and Laptop (.Ward and Shabha2001, Dooley 1999). If not, Employer should provide all the equipments required to be used during telecommuting. The equipments are IP Phone, Internet Service Subscription and Laptop (Haines et al 2002, Ward and Shabha 2001)

Employer must trusts their employees when they work from home (Cascio, 2002).A clear goals set must be measurable and progress will be accessed.

Lardi-Nadarajan (2008) pinpoints that the necessity for a gradual transition to telecommuting, as well as both management and employee agree and support for the initiative

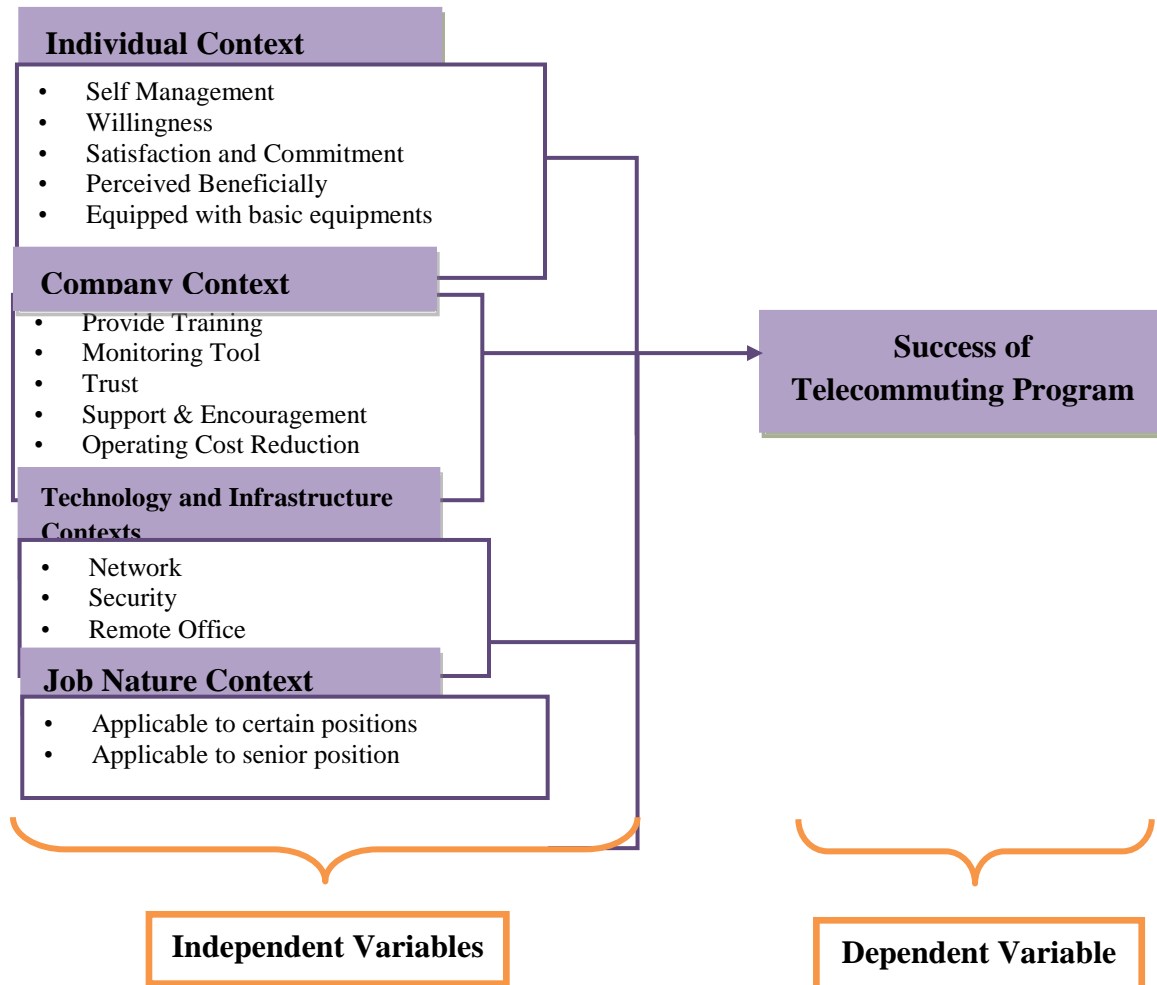
(Dwyer, 2009) noted that global multi-generational workforce results additional challenges and obstacles to management in terms of the policies, reward structures and the technology introduced to ensure success in telecommuting (Macky, Gardner & Forsyth, 2008)

Curseu et al. (2008) noted that with absence of an effective leader within a team of telecommuting, focus will be lost and the difficulties to manage workers may outweigh the benefits.

## RESEARCH METHODOLOGY

### Theoretical Framework

After the discussion and analysis from the Literature Review, following theoretical framework is designed. The framework aims to answer the question of what are the critical success factors for the telecommuting program acceptance in Malaysia.



Conjunction with the framework, a further study about the definition of the following context show as below

### Independent Variables

#### 1. Individual Perspective

Self - Management	Individual should equipped strong skills in self - management and able to work remotely without any face to face monitoring by the supervisor.
Willingness	There is a request from individuals to for telecommute. Companies cannot force individual to participate Telecommuting program. It must be a choice rather than compulsory.
Satisfaction and Commitment	Individual has higher job satisfaction and higher level of commitment to the company due to telecommuting program supported and encouraged by the employer.

Perceived Beneficially	Individual perceives telecommuting program as a beneficial program as it can save cost related to transportation e.g. fuel and reduce the time wasted due to traffic congestion.
Equipped with basic equipment	Individual has all the equipment that can help them to telecommuting e.g. IP Phone, Internet Service Subscription and Laptop.

## 2. Company Perspective

Provide Training	Training provided to the staffs and supervisors in remote supervision practice before the staffs are allowed to telecommute.
Monitoring Tool	A clear and agree on clear goals to measure deliverable and how progress will be accessed and communicated (monitoring tools).
Trust	Employer trusts their staffs when they work from home.
Support & Encouragement	Employer supports and encourages employees' decision to work from home.
Operating Cost Reduction	Employer could save cost related to the operating e.g. renting cost, water & electricity bills.

## 3. Technology

Network	Network – Data transmission rate is fast and reliable.
Security	Security – Data transferring to and accessing from office/home are in secure mode.
Remote Office	Remote Office provided to the employee who needs to travel back to the office for face to face meeting

## 4. Job Nature Context

Applicable to certain positions	Telecommuting is not suitable to certain positions like jobs in food and beverage sector.
Applicable to senior position	Telecommuting is only suitable to senior position.

### Dependent Variable

The Dependent Variable is the result of the telecommuting program acceptance relates to the acceptance of telecommuting program by the employee. According to Kellyman and Jennifer, 2005, for the telecommuting program to be successful, acceptance must come from all levels within an organization.

### Research Hypothesis

The following hypotheses are deployed to investigate whether the success critical factors in the theoretical framework can contribute to the telecommuting program acceptance.

H1a:	There is a strong relationship between Self Management skills with Telecommuting program acceptance.
H1b:	There is a strong relationship between Demand of Telecommuting from the employee



	with Telecommuting program acceptance.
H1c:	There is a strong relationship between Job Satisfaction and Commitment Level with Telecommuting program acceptance.
H1d	There is a strong relationship between Perceived Beneficially with Telecommuting program acceptance.
H1e	There is a strong relationship between Equipped with Basic Equipment with Telecommuting program acceptance.
H2a:	There is a strong relationship between Training with Telecommuting program acceptance.
H2b:	There is a strong relationship between Monitoring Tools of Telecommuting from the employee with Telecommuting program acceptance.
H2c:	There is a strong relationship between Trust from the Employer with Telecommuting program acceptance.
H2d	There is a strong relationship between Support and encouragement with Telecommuting program acceptance.
H2e	There is a strong relationship between Operating Cost Reduction with Telecommuting program acceptance.
H3a:	There is a strong relationship between Network Reliability and Telecommuting program acceptance.
H3b:	There is a strong relationship between Security Reliability and Telecommuting program acceptance.
H3c:	There is a strong relationship between Remote Office and Telecommuting program acceptance.
H4a:	There is a strong relationship between Certain Positions and Telecommuting program acceptance.
H4b	There is a strong relationship between Senior Position and Telecommuting program acceptance.

### Primary Source

The Primary Source deployed to carry out this research is Questionnaire. The Questionnaire is divided into 2 sections:

- Section A – to find out the demographic details
- Section B – to find out what are the critical factors which impacts the success of Telecommuting program acceptance

The questionnaires used Likert Scale indicates strongly disagree, disagree, neither agree/disagree, agree and strongly agree.

### Sampling Design

The primary source of data collection is questionnaire. In this context, probability Sampling - Simple Random Sampling is being used. The target respondent for this research is anyone who is currently working or has previously worked in any companies within Malaysia. Due to the large scope of people from this target respondent, Simple Random Sampling method was chosen.

The Questionnaires were being distributed to those participants who were being identified up front of which they fulfil the target respondent requirement. Some Questionnaires were distributed manually through hardcopy while some questionnaires were distributed through electronic email. Prior the Questionnaire distributed, pilot run on the Questionnaire was carried out to improve the quality of the Questionnaire. There were 10 respondents chosen for the pilot run.

## DATA ANALYSIS

500 questionnaires being distributed, there are about 238 responses collected back from the respondents. The response rate is 47.6%. The following is the summary table of Demographic Analysis. The analysis for demographic details is covered in the sections below.

No.	Variables/Characteristics	Respondent Frequency (n)	Respondents Percentage (%)
1.	<b>Respondent's Age</b>		
	Age 20 – 30	147	61.8
	Age 31 - 40	69	29
	Age 41 - 50	16	6.7
	Above Age 50	6	2.5
2.	<b>Gender</b>		
	Male	100	42
	Female	138	58
3.	<b>Organization Sector</b>		
	Education	6	2.5
	Energy/Oil and Gas	23	9.7
	Information Technology	154	64.7
	Telecommunication	16	6.7
	Others	39	16.4
4.	<b>Position</b>		
	Executive	150	63.0
	Manager	29	12.2
	Senior Manager	6	2.5
	Others	53	22.3
5.	<b>Organization Type</b>		
	Owned Business	28	11.8
	Joint Venture	4	1.7
	Public Listed Company	38	16.0
	Multinational Company	168	70.6
6.	<b>Organization Size</b>		
	<100	34	14.3
	100-500	22	9.2
	501-1000	33	13.9
	>1000	149	62.6

7.	Working Experience		
	Less than 1 year	49	20.6
	1-5 years	117	49.2
	5 - 10 years	43	18.1
	10 years and above	29	12.2

### Pearson's Correlation Coefficients

Pearson's Correlation coefficients for telecommuting program acceptance (dependent variable) portray fifteen independent variables comprises Individual Perspective, Employer Perspective, Technology and Job Nature. Result shows that most of the independent variables indicate significance positive relationship correlation with success of telecommuting program ( $p < 0.05$ ).

Individual Context	r	p-value	Relationship
Self Management skills	0.205	0.001	Positive Relationship (p-value = 0.001 < 0.05)
Demand of Telecommuting from the employee	0.184	0.002	Positive Relationship (p-value = 0.002 < 0.05)
Job Satisfaction and Commitment Level	0.242	0.000	Positive Relationship (p-value = 0.000 < 0.05)
Perceived Beneficially	0.155	0.009	Positive Relationship (p-value = 0.009 < 0.05)
Equipped with Basic Equipment	0.178	0.003	Positive Relationship (p-value = 0.003 < 0.05)
Employer Context	r	p-value	Relationship
Training	0.097	0.069	Negative Relationship (p-value = 0.069 > 0.05)
Monitoring Tools	0.150	0.011	Positive Relationship (p-value = 0.011 < 0.05)
Trust	0.105	0.054	Negative Relationship (p-value = 0.054 > 0.05)
Support and encouragement	0.152	0.010	Positive Relationship (p-value = 0.152 < 0.05)
Operating Cost Reduction	0.226	0.000	Positive Relationship (p-value = 0.000 < 0.05)

Technology & Infrastructure Context	r	p-value	Relationship
Network Reliability	0.089	0.089	Positive Relationship (p-value = 0.089 < 0.05)
Security Reliability	0.141	0.016	Positive Relationship (p-value = 0.016 < 0.05)
Remote Office	0.138	0.016	Positive Relationship (p-value = 0.016 < 0.05)
Job Nature	r	p-value	Relationship
Certain Positions	0.032	0.312	Negative Relationship (p-value = 0.312 < 0.05)
Senior Position	-0.080	0.111	Negative Relationship (p-value = 0.111 < 0.05)

### Model Summary<sup>b</sup>

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate	Change Statistics					Durbin - Watson
					R Square Change	F Change	df1	df2	Sig. F Change	
1	.373 <sup>a</sup>	.139	.080	.693	.139	2.349	15	218	.004	1.832

R-square value: 0.139 means 13.9% of telecommuting program acceptance' variation could be describe via 15 independent variables ranging from Individual Perspective (Self Management Skills, Demand of Telecommuting, Job Satisfaction and Commitment Level, Perceived Beneficially, Equipped with Basic Equipment), Employer Perspective (Training, Monitoring Tools, Trust, Support and encouragement, Operating Cost Reduction), Technology (Network Reliability, Network Reliability and Remote Office) and Job Nature (Certain Positions, Senior Position).

ANOVA<sup>b</sup>

Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	16.939	15	1.129	2.349	.004 <sup>a</sup>
	Residual	104.826	218	.481		
	Total	121.765	233			

Anova table demonstrate that F-value (2.349) is large meanwhile p-value 0.004 is less than 0.05. It indicates that at least one of the fifteen independent variables can be deployed into the model Telecommuting program as a critical success factor.

## Summary

Following is the summary of Result with Beta, t-value and p-value from Multiple Regression Testing for the hypotheses of this thesis.

ID	Hypothesis	Beta	t-value	p-value	Decision
H1a:	There is a strong relationship between Self Management skills with Telecommuting program acceptance.	0.055	0.749	0.455	Reject
H1b:	There is a strong relationship between Demand of Telecommuting from the employee with Telecommuting program acceptance.	0.67	0.972	0.332	Reject
H1c:	There is a strong relationship between Job Satisfaction and Commitment Level with Telecommuting program acceptance.	0.174	2.296	0.023	Do not Reject
H1d	There is a strong relationship between Perceived Beneficially with Telecommuting program acceptance.	0.014	0.185	0.854	Reject
H1e	There is a strong relationship between Equipped with Basic Equipment with Telecommuting program acceptance.	0.048	0.570	0.569	Reject
H2a:	There is a strong relationship between Training with Telecommuting program acceptance.	-0.15	-0.216	0.830	Reject

H2b:	There is a strong relationship between Monitoring Tools of Telecommuting from the employee with Telecommuting program acceptance.	0.077	0.997	0.320	Reject
H2c:	There is a strong relationship between Trust from the Employer with Telecommuting program acceptance.	-0.123	-1.205	0.230	Reject
H2d	There is a strong relationship between Support and encouragement with Telecommuting program acceptance.	0.041	0.402	0.688	Reject
H2e	There is a strong relationship between Operating Cost Reduction with Telecommuting program acceptance.	0.162	2.253	0.025	Do not Reject
H3a:	There is a strong relationship between Network Reliability and Telecommuting program acceptance.	-0.074	-0.625	0.534	Reject
H3b:	There is a strong relationship between Security Reliability and Telecommuting program acceptance.	0.068	0.548	0.583	Reject
H3c:	There is a strong relationship between Remote Office and Telecommuting program acceptance.	0.094	1.420	0.157	Reject
H4a:	There is a strong relationship between Certain Positions and Telecommuting program acceptance.	0.028	0.419	0.676	Reject
H4b	There is a strong relationship between Senior Position and Telecommuting program acceptance.	-0.075	-1.118	0.265	Reject

There are two significant success factors being identified; Hypothesis H2e: *There is a strong relationship between Operating Cost Reduction with Telecommuting program acceptance* and Hypothesis H1c: *There is a strong relationship between Job Satisfaction and Commitment Level with Telecommuting program acceptance.*

Hypothesis H2e: *There is a strong relationship between Operating Cost Reduction with Telecommuting program acceptance*

This hypothesis measures the relationship of the operating cost reduction and its effects on Telecommuting program acceptance.

For this hypothesis, the Multiple Regression Testing results showed (beta=0.162, t-value=2.253, p-value=0.025). In this case, Hypothesis H2e (Null Hypothesis) is accepted (t-value > 2.0, p-value < 0.05).

Hence, the operating cost reduction is positively linked with the telecommuting program implementation, thus is accepted as a critical success factor for telecommuting program implementation and consistent with the following researcher

Year	Author Name	Key Point of the Research
2000	• Muhammad	To reduce cost related to the operating e.g. renting cost, water & electricity bills.

## The Result of Hypothesis H1c

Hypothesis H1c: *There is a strong relationship between Job Satisfaction and Commitment Level with Telecommuting program acceptance.*

This hypothesis measures the association of Job Satisfaction and Commitment Level and its impact on Telecommuting program acceptance.

For this hypothesis, the Multiple Regression Testing results showed (beta=0.174, t-value=2.296, p-value=0.023). In this case, Hypothesis H1c (Null Hypothesis) is accepted (t-value > 2.0, p-value < 0.05).

The above finding revealed that there is significant relationship between job satisfaction and commitment level with Telecommuting program acceptance.

This finding is different than the finding by the researcher below.

Year	Author Name	Key Point of the Research
2002	• Haines et al,	Individual has higher job satisfaction and higher level of commitment to the company due to telecommuting program supported and encourages by the employer.

## CONCLUSION

### Specific Contributions

Telecommuting is undeniably able to bring abundant of benefit either to employees or employers. It ranges from higher satisfaction due to flexibility and work life balance (Diane 2007, DuBrin 1991,), Absence of travelling cost (Samia 2006, Kurland and bailey 1999) and finally gaining better productivity (Diane 2007)

As a result, with the disclose of the Critical Success Factors in telecommuting program acceptance in Malaysia, the research aims to increase the deployment rate of telecommuting program and reduce the obstacle to the telecommuting program implementation.

Interestingly, two major significant success factors; (1) Job Satisfaction and Commitment Level (2) Operating Cost Reduction have been clearly identified in Malaysia context. This finding is very consistent with previous researcher Susanne and Gill (2003) who noted that cost saving related to renting cost, water & electricity bills is significant to the critical success factor in telecommuting program. Also supported by Haines et al (2002) who noted that individual has higher job satisfaction and higher level of commitment to the company due to telecommuting program

### Future Work

Exiting research only comprise limited areas on critical success factors ranging from employee perspective, employer perspective, technology and job nature.

Therefore, there is a huge potential untapped area to be examined beyond the research boundary; forces like regulation, government's incentives and national culture upon the implementing telecommuting feasible to be studied.

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