

## THE ROLE OF ICT ON QUALITY OF LIFE (STUDY ON INDONESIAN DOMESTIC WORKERS IN SINGAPORE)

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### ABSTRACT

Singapore was the fifth country with the most problematic number of Indonesian domestic workers (TKI). Communication problems are the most common problems faced by them. This occurs because the gap in accessing, processing, and using information. Whereas communication skills is paramount and became important to adapt and understand the cultural differences. In the era of Information and Communication Technology (ICT), a variety of technologies can be used as a tool of communication that could reduce their problem, for instance by using mobile phones and the internet. This study aims to determine the role of ICT, especially mobile phones and the Internet and its influence on quality of life of TKI in Singapore. This research is causality type which use multiple regression as data analysis technique. Data collection conducted through questionnaire distributed to 400 respondents that selected using accidental sampling approach. The results of this study indicated that simultaneously, the use of ICT intensity significantly affected the Quality of Life TKI in Singapore amounted to 36.2%. The remaining 63.8% was influenced by other variables that were not examined in this study.

**Keywords:** *Communication, Domestic workers, ICT, Quality of Life, Indonesia*

### 1. INTRODUCTION

Until the end of May 2012, Indonesia foreign exchange earnings from migrant workers reached Rp 40 trillion. The foreign exchange earnings derived from the nearly 4 million migrants who spread across several countries. The largest number of migrant workers were women and still absorbed in the informal sector such as domestic workers, female workers, nurses, operators, farm workers, laborers, drivers, construction workers, waiters, gardeners, spa therapist, cruise ship workers, cleaning service, chefs, and laundry workers.

Manpower and Transmigration Minister, Muhaimin Iskandar, explained that there is a decrease by 48% of migrant workers problematic. During the year 2012 there were 31,528 migrants troubled. Indonesian labor's problematic are most numerous in Saudi Arabia 8.940 people, Arab Emirates 5.545 people, Qatar 4.061 people, Taiwan 3.231 people, Singapore 2.380 people, Oman 1.956 people, Hong Kong 1.215 people, Syria 1.214, Bahrain 872 people, Malaysia 683 people, Kuwait 299 people, Brunei Darussalam 198 people, and in many other countries as many as 934 people. Those problems ranging from unilateral termination

documents, the employer problematic, harassment, persecution, until the communication problem. Most of the Indonesian labor's troubled experienced by domestic workers (in [www.inilah.com](http://www.inilah.com), January 29, 2013).

The complexity of the problems faced by domestic workers, according to Musni Umar, Sociologist and Research Institute for Social Empowerment and Democracy (INSED), influenced by various factors. One of them is the change of social environment caused by the Information and Communication Technology (ICT).

Media communication is very important for the society because of new forms of media have the ability to change the way people work, spend leisure time, lifestyle, social relations, cultural groups and community identity in a manner that though it is difficult but it is important to be predicted (Lee et.al.,2007). ICT policy deservedly support the growth and utilization of these technologies optimally. Therefore we need policies that can encourage the absorption of ICT in order to avoid gaps in access, process, and utilize information.

Domestic workers as marginalized people have a pattern of ICT usage in accordance with

their socio-economic environment as well as their psychological condition. The use of ICT in this study is defined as the use of cell phones and the internet. Amalia and Rachmawati (2013) stated that mobile phones and the internet nowadays is a very important thing as domestic workers's life support. Even President Susilo Bambang Yudhoyono on a limited Cabinet meeting, in Jakarta, Friday (19/11/2010), said the workers who work abroad will be equipped mobile phones. So that they can communicate with the consulate general or local embassy when getting problems (Liu, 2010).

Although that opinion drawn criticism for not being overcome the problem, especially the problem of harassment and persecution, and yet giving a cell phone could be a starting point and open channels of communication between domestic workers and the government, domestic workers with their families, and among domestic workers.

The availability of the communication channel is expected to improve the quality of life of domestic workers due to the fulfillment of the need for interaction, socialization, and feeling expression. In addition, as presented by Gasper, Anand and Van Hees (in Kivunike et al, 2009) the use of ICT allows humans to be able to keep in touch with family and relatives. The same thing with the ability to interact with others, therefore ICT is a means of support to achieve quality of life (QoL).

The opinion was reinforced by Mundlorf (in, Lee et al, 2007:460), that there is a positive relationship between ICT and quality of life. ICT could useful and effective for the promotion of the dignity and welfare of migrant workers (Primawati, 2011).

## 2. LITERATURE REVIEW

### Computer Mediated Communication

Changes and developments in technology have given someone a variety of options to communicate personally called Computer Mediated Communication (CMC). CMC is an experience of online interaction, where the human behavior and the exchange of messages or information delivered is mediated through the machine. "In the medium to communicate via the internet is not at all showing nonverbal communication, physical contexts such as facial expressions, tone of voice, the distance between the charm, posture, appearance, gestures, touch, and olfaction. (Griffin, 2006).

Computer Mediated Communication by the definition of Knapp (2002:100) is the process of human communication through the computers, engage people, to be in limited context, and related to each other in the process of forming a medium for diverse purposes. CMC is a computer mediated communication process that involves people in certain situations for a variety of purposes.

In addition to communicating by phone, Computer Mediated Communication (CMC) provides another way to interact. E-mail (electronic mail) is the most popular form of CMC, Instant Messaging and Online Chat is another medium that can be used as a means of communication for families, relatives, friends, even people who have not been previously known or strangers (Uchjana, 2003). Computer Mediated Communication (CMC) makes people not need to meet face to face directly related but instead "face to face" virtually through a network or computer screen.

### Hyperpersonal Theory

The phenomenon of communication through ICT for some people seem more interesting than communicating directly face to face. These symptoms by Walther (in Baldwin, 2004) called as hyperpersonal communication that communication with ICT intermediaries which are socially more attractive than direct communication.

Then Walther (in Wood and Smith, 2005) reveals hyperpersonal communication could be attributed to four factors: the sender, receiver, channel and feedback.

- a. Sender factor. These factors control how to present themselves to others. So one can selectively choose what will be disclosed to others about him. Senders can do "censorship" on what he wants to convey.
- b. Receiver factors. The receiver can measure the quality of a person in the communication hyperpersonal.
- c. Channel factor. Messages are transmitted over the internet is not only through space but also time. If the online communication process between two or more people running concurrently or in real time, this is called synchronous communication, for example in the form of BlackBerry Messenger. In this communication the nature of the message more informal

than the language of everyday conversation.

- d. Feedback factor. According to Walther (in Baldwin, 2004), the feedback in CMC could lead to "intensive turnaround" where the confirmation message of each communication behavior could strengthen each other's behavior.

Walther (in Baldwin, 2004) argues that hyperpersonal communication on online communication evokes the desire to socialize more intimate than face-to-face communication. Walter used hyperpersonal communication approach to label the activity through the CMC which more intimate than a romantic relationship or a friendship that physically together.

### Communication Intensity

Intensity is the quantity of a person attempt in action (DeVito, 1997). There is a certain effort of the people to get the gratification of needs. Something that is concerning action taken at a certain time has a total volume of action that is called intensity.

This study analyzed the use of ICT (internet and mobile phones) with six aspects of communication intensity according to DeVito (2009) as follows:

1. Frequency associated with a person's level of frequency in communication activities .
2. Duration is used to communicate refers to the length of time spent at the time of communication activities .
3. Attention is given to communicate current focus is defined as the communication shed by participants when communicating
4. Regularity in communication exhibited similar number of communication

events conducted routinely and regularly

5. The breadth of message refers to a wide message topics discussed and the number of people involved in communication activity
6. The depth of message refers to the exchange of messages that characterized by honesty, openness, and mutual trust among the communication participants.

### Quality of Life (QoL)

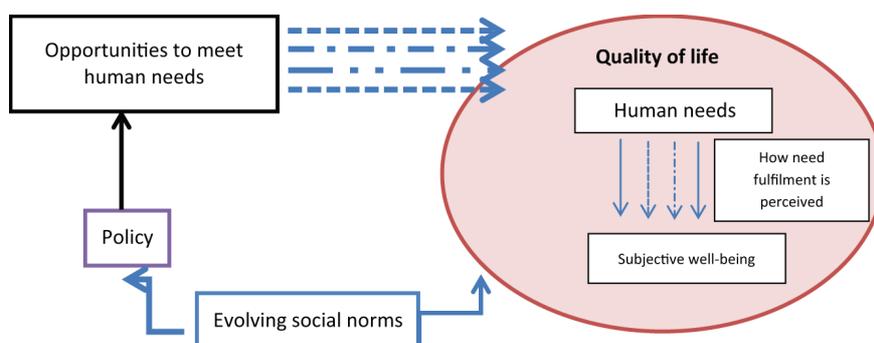
The definition of QoL is not valid in general. In addition there are other terms, such as social welfare and human development is often used as a term equivalent to QoL. For example, the UN Human Development Index is often described as one of the measurements of QoL measurement.

Meanwhile, according to the WHO, Quality of life (QoL) is defined as an individual's perception of their position in life, in the context of culture and value systems in which they live and in connection with their goals, expectations, standards and concerns. QoL is a term used to measure well-being. Welfare describes how well a person's feelings towards fulfillment and satisfaction.

QoL is not the same as the concept of living standards, which are based primarily on income. Instead, standard indicators of QoL include not only wealth and employment, but also built environment, physical and mental health, education, recreation and leisure, and the right to socialized.

According to Constanza (2008), the concept of QoL is an interaction of human needs and the subjective perception of fulfillment that mediated by the opportunities to satisfy those needs.

Picture 1 Quality of Life (QoL)





Sumber: Constanza (2008:18)

QoL has indicators studied and declared by some institutions, such as WHO, Calvert-Henderson, and others. However, in principle

these indicators are the same. In the study QoL indicators used are as follows:

Table 1. QoL Dimension

QoL Dimension	QoL Domain
Social Opportunities	1. Physical Wellbeing 2. Emotional Wellbeing 3. Social Wellbeing 4. Personal Development
Economic facilities	Material Wellbeing
Political Freedom	Rights and security

Sumber : Gasper, Anand and Van Hess  
(in Kivunike et.al 2009)

### 3. METHODOLOGY

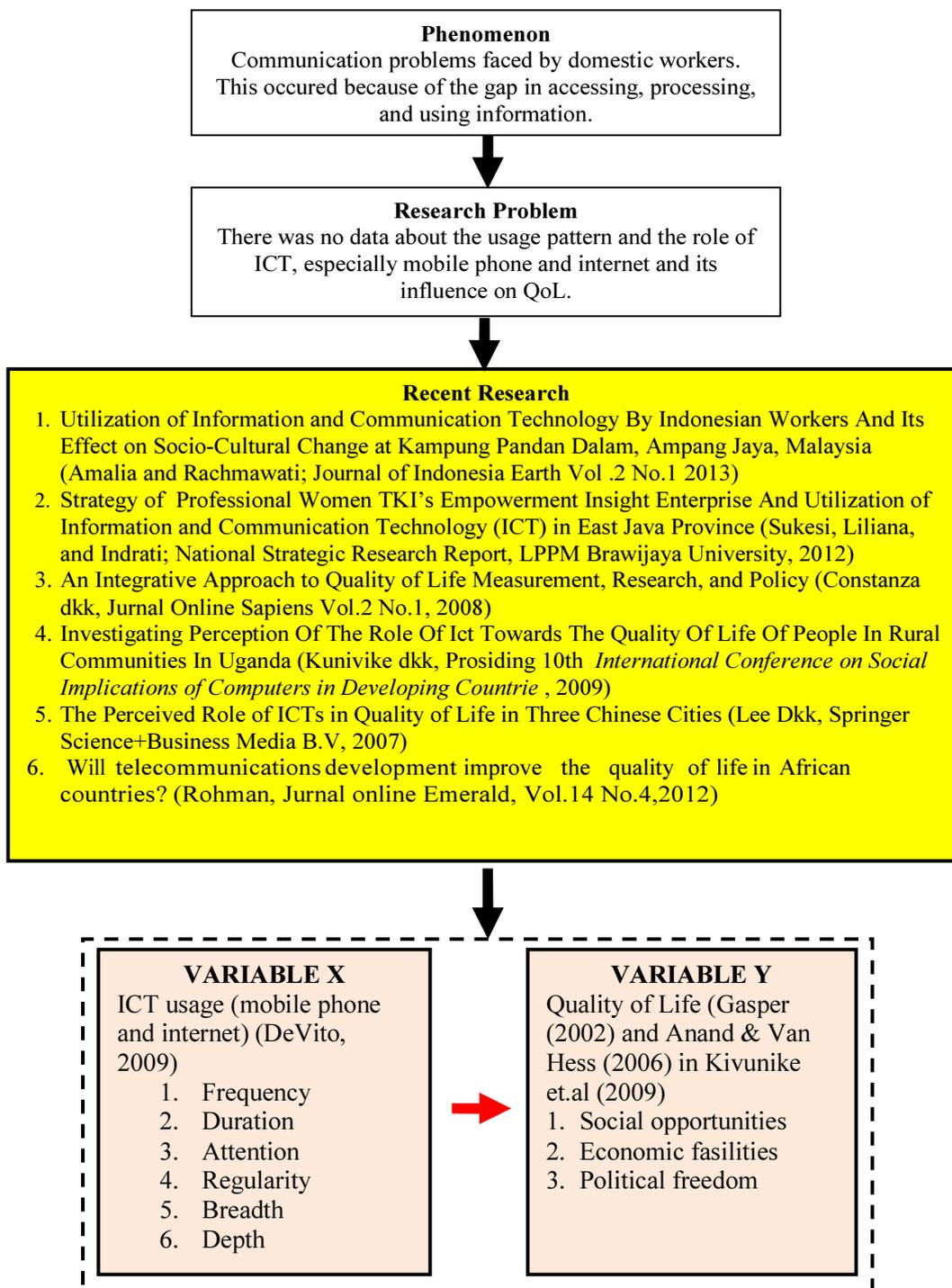
This research type is causality. Data analysis technique used in this study is multiple regression analysis, which aimed to determine the effect of a variable to another variable. Therefore Riduwan (2006) stated essentially regression analysis and correlation both have a very strong relationship. Each existing regression analysis automatically correlation analysis, but is not necessarily the reverse correlation analysis followed by regression analysis. Data collection conducted through questionnaire distributed to

400 respondents that selected using accidental sampling approach.

### 4. RAMEWORK

Based on previous research and a summary description of the above theory, the researchers compiled the following framework:

Picture 2 Framework



## 5. RESULT AND DISCUSSION

In this section will be presented the results of the regression analysis, hypothesis testing, and the coefficient of determination as well as a discussion of the research results.

### Multiple Linear Regression Analysis

Table 2. Multiple Linear Regression Analysis

#### Coefficients<sup>a</sup>

Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.
		B	Std. Error	Beta		
1	(Constant)	1.487	.134		11.089	.000
	Frequency	.166	.042	.208	3.948	.000
	Duration	.008	.033	.014	.254	.799
	Attention	.097	.042	.130	2.308	.022
	Regularity	.078	.031	.123	2.555	.011
	Breadth	.110	.041	.143	2.683	.008
	Depth	.153	.050	.175	3.073	.002

a. Dependent Variable: QoL

Multiple Linear Regression Equation :

$$Y = a + b_1 X_1 + b_2 X_2 + b_3 X_3 + b_4 X_4 + b_5 X_5 + b_6 X_6$$

$$Y = 1,478 + 0,166X_1 + 0,008X_2 + 0,097X_3 + 0,078X_4 + 0,110X_5 + 0,153X_6$$

Where :

Y = dependent variable (Customer Loyalty)

a = constant value (for Y when X = 0)

b = regression coefficient that indicates the number of increase or decrease in the dependent variable based on the independent variables. If b (+) then increase, and when b (-) then decrease

X1 = Frequency

X2 = Duration

X3 = Attention

X4 = Regularity

X5 = Breadth

X6 = Depth

Explanation of multiple linear regression equation is as follows :

a. Regression coefficient on the frequency variable has a positive influence to create QoL, or it can be concluded that any increase of one unit frequency will increase QoL by 0.166.

b. Regression coefficient on the duration variable has a positive influence to create QoL, in other words, one unit increase in the duration will increase customer loyalty by 0,008.

However, due to significance value of 0.799 > 0.05 then the effect is not significant in affecting QoL.

c. Regression coefficient on the attention variable has a positive influence to create QoL, or it can be said that each increase of one unit

attention will increase customer loyalty by 0.097.

d. Regression coefficient on the regularity variable has a positive influence to create QoL, or it can be said that each increase of one unit regularity will improve QoL by 0,078.

e. Regression coefficient on the breadth variable has a positive influence to create QoL, or it can be said that each increase of one unit breadth will improve the QoL of 0.110.

f. Regression coefficient on the depth variable has a positive influence to create QoL, or it can be said that any increase of one unit depth variable will increase QoL by 0.113.

### Hypothesis Testing

1) Simultaneous Hypothesis Testing (F Test)



Ha: There is influence of the use of ICT on Indonesian domestic worker's QoL in Singapore

Ho: There is no influence of the use of ICT on Indonesian domestic worker's QoL in Singapore

Table 3. F Test Results

**ANOVA<sup>a</sup>**

Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	48.731	6	8.122	38.660	.000 <sup>b</sup>
	Residual	82.563	393	.210		
	Total	131.294	399			

a. Dependent Variable: QoI

b. Predictors: (Constant), K Frequency, Duration, Attention, Regularity, Breadth, F Depth

It is known that F significance value is of 0.000 < 0.05 therefore H0 is rejected. It can be concluded that there is an influence of the use of ICT on Indonesian domestic worker's QoL in Singapore.

2 ) Partial Hypothesis Testing (t test )

- 1 . Ha : There is an influence of frequency on Indonesian domestic worker's QoL in Singapore.  
Ho : There is no influence of frequency on Indonesian domestic worker's QoL in Singapore.
- 2 . Ha : There is an influence of duration on Indonesian domestic worker's QoL in Singapore.  
Ho : There is no influence of duration on Indonesian domestic worker's QoL in Singapore.
- 3 . Ha : There is an influence of attention on

- Indonesian domestic worker's QoL in Singapore.  
Ho : There is no influence of attention on Indonesian domestic worker's QoL in Singapore.
- 4 . Ha : There is an influence of regularity on Indonesian domestic worker's QoL in Singapore.  
Ho : There is no influence of regularity on Indonesian domestic worker's QoL in Singapore.
  - 5 . Ha : There is an influence of breadth on Indonesian domestic worker's QoL in Singapore.  
Ho : There is no influence of breadth on Indonesian domestic worker's QoL in Singapore.
  - 6 . Ha : There is an influence of depth on Indonesian domestic worker's QoL in Singapore.  
Ho : There is no influence of depth on Indonesian domestic worker's QoL in Singapore.

Table 4 shows partial results of hypothesis testing as follows :

Table 4 . T Test Results

**Coefficients<sup>a</sup>**

Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.
		B	Std. Error	Beta		
1	(Constant)	1.487	.134		11.089	.000
	Frequency	.166	.042	.208	3.948	.000
	Duration	.008	.033	.014	.254	.799
	Attention	.097	.042	.130	2.308	.022
	Regularity	.078	.031	.123	2.555	.011
	Breadth	.110	.041	.143	2.683	.008
	Depth	.153	.050	.175	3.073	.002

a. Dependent Variable: QoL

a) Frequency (X1)

From the above table it is known that frequency variable influence QoL by 20.8 %. With a significance level of  $0.000 < 0.05$  we can conclude that  $H_a$  is rejected, which means that frequency variable significantly influence QoL.

b ) Duration (X2)

Duration variable influence QoL by 1.4 %. But even so, the value of t significance level of  $0.799 > 0.05$ , which means that  $H_a$  is accepted. Thus the duration variable does not significantly affect QoL.

c ) Attention (X3)

Attention variable influence QoL by 13%. With a significance level of  $0.022 < 0.05$  so  $H_a$  is rejected. It can be concluded that attention

variable significantly influence QoL.

d ) Regularity (X4)

Regularity variable influence QoL by 12.3 %. With a significance level of  $0.011 < 0.05$  so  $H_a$  is rejected. It can be concluded that the regularity variable significantly influence QoL.

e ) Breadth (X5)

Breadth variable influence QoL by 14.3 %. With a significance level of  $0.008 < 0.05$  so  $H_a$  is rejected. It can be concluded that the breadth variable significantly influence QoL.

f ) Depth (X6)

Depth variable influence QoL by 17.5 % on QoL. With a significance level of  $0.002 < 0.05$  so  $H_a$  is rejected . It can be concluded that depth variable significantly influence QoL.

## Coefficient of Determination

Table 5. Coefficient of Determination

**Model Summary<sup>b</sup>**

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.609 <sup>a</sup>	.371	.362	.45835

a. Predictors: (Constant), Ke Frequency, Duration, Attention,

l Regularity, Breadth, Depth

b. Dependent Variable: QoL

The results above indicate that the value of adjusted R square is equal to 0.362. It is clear that variable (X) simultaneously influencing variable (Y) significantly by 36.2 % and the remaining 63.8 % is influenced by other variables that are not used in this study.

The results showed that respondents aged 20-29 years have had a mobile phone since 2005. The device is used to communicate with partner / family / friends either by text message, telephone, and through social networking site such as Facebook. Indonesian domestic workers have a high frequency and duration of ICT (telephone and internet) use. But they still pay attention to other things and not neglecting the work given by the employer.

Meanwhile 339 respondents agree and strongly agree about the regularity in the use of telephone and internet access. Information and Communication Technology is also used to discuss many topics to many people.

In addition to communicate, Indonesian domestic workers feel comfortable to share personal problems through text messages, telephone, or social media such as facebook, chatting and email. Therefore mobile phones and the internet were utilized by respondents to tell personal problems and express themselves.

Respondents' response to QoL variables were good – with value of 75.96 %. Indonesian domestic workers in Singapore easily obtain information about healthcare, job vacancies, Singapore's migrant associations, religious matters, and entertainment. They also have the ease to obtain information about regulation, legal aspects, and easy to contact the authorities when necessary.

Based on the data analysis, QoL is influenced by the intensity of ICT usage. The

intensity of mobile phones and the internet usage facilitate the fulfillment of information needs that are part of the fulfillment of the quality of life. The easier of information searching, the more knowledge obtained. This knowledge will improve the quality of life.

## 6. CONCLUSION

The majority of respondents are 20-29 years of age and have had a mobile phone since 2005. The device is used to communicate with partner or family or friends either by text message, telephone, and through social networking site such as Facebook. They have a high frequency and duration of ICT (telephone and internet) use. But still pay attention to other things and not neglecting the work given by the employer.

Respondents also feel comfortable to share personal problems through text messages, telephone, or social media such as facebook, chatting and email. Therefore mobile phones and the internet were utilized by respondents to tell personal problems and express themselves.

These results emphasize the results of this study which indicate that the intensity of ICT usage simultaneously influence Indonesian domestic workers in Singapore's Quality of Life significantly by 36.2% and the remaining 63.8% is influenced by other variables not examined in this study.

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