Information Technology Change and Employees' Attitude:
An Empirical Examination in Small & Medium Scale Industries (SMI) in Ampara District.

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Abstract

The environment of an organization is significantly undergoing continuous, rapid changes that have far reaching effects on organizations and their management strategies. The significance of the study especially to business organization in SMI sector, which are proactive to changes in Information Technology, could be very high. SMI sector plays an important role in the economy of a country. This research focuses on two aspects: The organizational change option - Structure, Technology, Physical setting and the people in which the innovations in Information Technology (IT) as the most powerful change agent that create a big challenge for SMI sector and the importance of innovations in IT in SMI that need more and more innovative techniques in order to expand SMI sector. Many employees in developing countries such as Sri Lanka still seem dissatisfied with the available information and they are reluctant to accept the change so that they may leave the organization in due course. Retention of employees in SMI sector is the most important thing in order to maintain their survival in the industry. So, this research aims to study the employees' attitude towards IT change and the association of between coping with change and the employees' intention to remain in the SMI sector. Accordingly, the findings might be immense value to Small & Medium Scale Enterprises (SMEs) in developing countries, such as Sri Lanka, as much research has not been conducted in this regard.

Key words: Information Technology, Coping with Change, Employees' Attitude

Introduction

The environment of an organization is significantly undergoing continuous, rapid changes that have far reaching effects on organizations and their management strategies. Technological change is a constant phenomenon in contemporary organizations. How to prepare employees for technological change has increasingly become an issue in SMEs. SMI sector plays an important role in the economy of a country. Accordingly, the findings might be immense value to Small & Medium Scale Enterprises (SMEs) in developing countries, such as Sri Lanka, as much research has not been conducted in this regard.

The only constant and omnipresent happening is that of change, as change occurseverywhere and all the time (French & Bell, 1995). No one has the ability to resistchange and remain the same once change occurred. Everything is subject to change.Change will occur in organisations and for whatever reason, organisations need tochange in order to survive and to be effective in the ever-changing technologicalenvironment (Durmaz, 2007: 1).

This research focuses on two aspects:

1. The organizational change option Structure, Technology, Physical setting and the people in which the innovations in Information Technology (IT) as the most powerful change agent that create a big challenge for SMI sector.

2. The importance of innovations in IT in SMI that need more and more innovative techniques in order to expand SMI sector.

In creates in the processing of IT have dramatic implications in the overall productivity of the organizations. However many employees in developing countries such as Sri Lanka still seem dissatisfied with the available information and they are reluctant to accept the change so that they may leave the organization in due course. Retention of employees in SMI sector is the most important thing in order to maintain their survival in the industry.

Technology can be classified into three types: (1) product, (2) process, and (3) management (Osman-Gani, 1996). Product technologies are when ideas are incorporated in to a concrete object. Process technologies are the sequential steps used to produce a product or deliver a service. Management technologies are the actions taken to optimize resources to achieve business goals (Osman-Gani, 1991). It has been suggested that the greatest impact of technology has been on the nature of work and the abilities of employees to meet the new requirements (Osman-Gani& Jacobs, 2005). Responding to information technology change places a greater pressure on the strategic activities of SMEs in Sri Lanka.

So, this research aims to study the employees' attitude towards IT change and the association of

between coping with change and the employees' intention to remain in the SMI sector.

The research problem focused here is "lack of willingness to cope with information technology change. That is 'to what extend the employees remain in the organizations in SMI sector after coping with change programs in IT interventions". Accordingly the research question was "Do employees in SMI organizations remain after coping with changes in IT?

Hence, the aim of this investigation is to study empirically the relationship of the employees' intention to remain in the organization and coping with change.

Significance of the study

This research has less effort in the field of organizational change. The research issue when addressed properly and data might bring in an answer to the question of "Do employees in SMI organizations remain after coping with changes in IT? If the results of the statistical analysis enable the acceptance of the hypothesis, the findings might be of immense value for the SMI sector intending to implement planned changes mainly regarding IT.

Although the variables used in the conceptual frame work are highly qualitative ones, an effort is taken to analyze the data in a quantitative form. This will add greater objectivity to the findings rather than depending totally on qualitative factors.

The significance of the study especially to business organizations, which are proactive to changes in IT, could be very high. Accordingly, the findings might be of immense value to organizations in developing countries, such as Sri Lanka, as much research has not been conducted in this regard.

Methodology

This research was an explanatory study. The investigation of the study was the cross sectional correlation examination. The study design was the survey method using questionnaire as the research tool and unit of analysis was done with the individuals.

For this research the SMEs are referred as business entities which have below 50 employees working in the organizations. The research was conducted among a sample of non – managerial, supervisory and functional level employees in SMI sector. The sample was selected using random sampling method with the following primary business sectors, namely manufacturing, wholesale and retail businesses, Finance, service, construction, and others. The sampling frame of this studywas 300 employees from 20-30 small and medium sized organizations were selected in Ampara district. It was possible to collect 264 questionnaires form the respondents. The SPSS 16.0 student version statistical software has been used to analyze the data. And the correlation and regression analysis were done mainly to test the hypothesis.
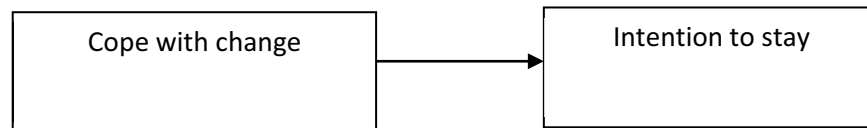
Research Framework

Organizational change is a dynamic and often chaotic process that may be characterized by a multitude of events occurring simultaneously (Schraeder, 2004). Models are valuable when used as planning instruments to guide organizational change initiatives. Employee attitudes are important, as employers and change managers are able to determine whether attitudes are negative or positive and therefore the

necessary measures to steer employee attitude towards change in a positive direction. According to Dumaz (2007) the employees may not resist the change but rather the way in which they are treated in the change process.

The model developed for the present study includes the constructs related to the attitudes towards coping with organizational change and intention to stay.

Thus, the conceptual model for this research is as follows;

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┌─────────────────────┐              ┌─────────────────────┐
│                     │              │                     │
│   Cope with change  │─────────────▶│  Intention to stay  │
│                     │              │                     │
└─────────────────────┘              └─────────────────────┘
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Hence, the following hypothesis was developed.

H1:   Coping with change in information technology is positively related to intention to stay.

Measures

This study is intended to examine the hypothesized relationship between coping with IT change as independent variable and intention to stay as dependent variable.

Measuring Coping withIT change

1. Receptivity to change:precursor to receptivity to change and therefore will influence the level receptivity to change

Coping with IT change has been operationalized as the degree to which an employee working in SME copes to IT change. That is, to what extent an employee in SME has a desire to cope with the IT change. Hence, the attitude on coping with change is a highly qualitative aspect, which has been taken in to a scale to analyze quantitatively. The overall attitude on coping is evaluated by a self developed scale under the following dimensions.

2. Readiness for change: will determine whether employees in SMEs resist or accept the IT change initiatives.

3. Trust in management:refers to the extent to which an employee may feel that trust in management on all aspects.

4. Communication of organizational change: refers to the extent to which an employee may feel that an effective communication available to access the information.

5. Training for organizational change:refers to the extent to which an employee feel that the availability for training for the intended change.

6. Change confidence: refers to the extent to which an employee may have confident on him/her to cope with the change.

Measuring Intention to stay

Intention to stay being the dependent variable is measured by a self developed scale consisting of three items on a five point scale by the following statement;

7. Need for change: refers to the extent to which an employee may feel that the need for change

8. Personal valence: refers to the extent to which an employee may feel that they will or will not benefit from the intended IT change process. Personally beneficial

9. Organizational valence: refers to the extent to which the organizations will or will not benefit from the intended change process.

Thus, 30 question items were developed to measure the 09 dimensions of this variable on a five point scale that varies from strongly disagree to strongly agree.

1. I am hesitant to leave this organization.
2. I am comfortable with the present organization.
3. I would like to remain in the organization throughout my working life.

Reliability Analysis of the Questionnaire

The questionnaires were originally developed by the researcher for this particular study. A reliability analysis was done to check the inter item consistency reliability. The Cronbach's Alpha was measured. Accordingly, the Cronbach's alpha reliability coefficients of the

independent and dependent variables were obtained. Accordingly, the alpha value for intention to stay is 0.825 and for coping with change is 0.952 which showed a good reliability. Also the reliability coefficients of the dimension of coping with change were obtained as follows:

Receptivity to change   - 1.0

Readiness for change   - 0.97

Trust in management	- 1.0	Need for change	- 0.809
Communication of organizational change	- 0.903	Personal valence	- 0.637
Training for organizational change	- 0.752	Organizational valence	- 0.873
Change confidence	- 0.727		

All constructs display good internal consistency.

Correlation of coping with IT change with Intention to stay

Observing the correlations of independent variable-coping with IT change with the dependent variable- intention to stay, there is a strong positive correlation of (r = 0.923, p =0.000) and significant at 0.01 level.

Correlations

		Coping_with_change	Intention_to_Stay
Coping_with_change	Pearson Correlation	1	.923[**]
	Sig. (2-tailed)		.000
	N	264	264
Intention_to_Stay	Pearson Correlation	.923[**]	1
	Sig. (2-tailed)	.000	
	N	264	264

Correlations

		Coping_with_change	Intention_to_Stay
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**. Correlation is significant at the 0.01 level (2-tailed).

Mean time, the correlation between the dimensions of coping with change with the intention to stay derived as follows; where p= 0.000 and significant at 0.01 level.

Receptivity to change	- 0.466	Change confidence	- 0.882
Readiness for change	- 0.911	Need for change	- 0.888
Trust in management	- 0.816	Personal valence	- 0.896
Communication of organizational change	- 0.643	Organizational valence	- 0.881
Training for organizational change	- 0.833		

The attitude towards readiness for change, trust in management, training for organizational change, change confidence, need for change, personal valence, and organizational valence have strong positive correlation with the intention to stay of the employees in SMEs while the attitude

towards communication of organizational change and receptivity to change showed a moderate correlation with intention to stay of the employees.

Regression

The overall model explains the fit for the research. R^2 in the table given below shows this aspect. This coefficient is a measure of how well the regression equation fits the data. Here, we have the R^2 is 0.852, hence, the regression equation apparently have a perfect fit with the data. So, we can predict our dependent variable (intention to stay) with the independent variable (coping with IT change). Here, P = 0.000 < 0.05. So the model is significant and model exists.

Model Summary

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.923[a]	.852	.851	.24622

a. Predictors: (Constant), Coping_with_change

Coefficients[a]

Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.
		B	Std. Error	Beta		
1	(Constant)	-.951	.127		-7.510	.000
	Coping_with_change	1.259	.032	.923	38.827	.000

a. Dependent Variable: Intention_to_Stay

at first, if we consider the constant variable in the equation. Its values; $P = 0.000 < 0.05$, hence, significant to model. Coping with change is

Hence, the following Model fit equation is derived.

Intention to stay = -0.951 + 1.259 coping with change

Hypotheses Testing

The most common policy in statistical hypothesis testing is to establish a significance level, denoted by α, and to reject H_0 when the p – value falls below it. When this policy is followed, one can

considered; $P = 0.000 < 0.05$, hence, it is significant to the model and explain the dependent variable.

be sure that the maximum probability of the type I error is α *(Policy: when P-value is less than α, reject H_0)* Here, the hypotheses are tested at 5% confidence level (α = 0.05). **P** values are denoted 'Sig.' in the above Table.

The following table shows the rejection and acceptance of the hypothesis.

Variable	Hypothesis	P - Value	α = 5%	H_0	H_A
Coping with change	H_0, H_1	0.000	0.05	Reject	Accept

Source: Survey Data

The p value is for variable coping with change is 0.000, hence, the null hypothesis is rejected and the alternative hypothesis is accepted as the P value $< α$. This means there is a positive relationship between coping with change and intention to stay. Also the result in correlation table (Correlation coefficient =0.923; p=0.000)

support this hypothesis. Thus, the attitude of the employees towards coping with change is a predictor of the intention to stay of the employees in small and medium scale enterprises.

Conclusion and Recommendation

Organizations continually embark on programmes of organizational

change(Vakla&Nikolau, 2005). Change has become a normal occurrence within organizations in everywhere. In a competitive global economy, organizations are forced to stay abreast with technological changes in order to survive. The small and medium scale enterprises are no exception as global changes will ultimately result in local changes. The change taking place is affected by the rapid advancement in technology and convergence of computing, communication and information (Visagie ,2010) Therefore only organizations that are ready for these changes will survive.

IT innovations in organizations is to a large extent sustainable by its own institutional forces, irrespective of contribution to the process of organizational change (Chrisanthi, A, 2000).

The researcher developed a conceptual model that shows the association between employees' intention to stay in the organization and their attitudes towards organizational change.

In order to improve the chances of success of an organizational change initiatives, change managers will have to provide proper change communication pertaining to the intended change initiatives. Poorly managed change communication could result in rumors, resistance to change, the exaggeration of negative aspects

Implication for Future Research

of change and ultimately a crisis (Eleving&Gravenhorst B 2009). Training will have to be provided on an ongoing basis in order to prepare employees for the intended IT change as training for change may minimize the employee fear and feeling of uncertainty.

According to the findings, it is proved that there is a significant strong positive relationship between the attitude towards coping with IT change and the intention to stay of the employees in SMEs. Accordingly, 85.2% of the variance in intention to stay in SMEs after coping with IT change programs was significantly explained by coping with change in this study, still leaves 14.8% unexplained. In other words, there are other additional variables that are important in explaining self-employment intention that have not been considered in this study. So, further research might be necessary to explain more of the variance in intention to stay after coping with change.

It is suggested that the SMEs implementing IT change should take into account the findings of the present study and attempt to address the issue of employee wellbeing by actively ensuring that the increased demands being placed on employees, as a consequence of the change process are counteracted with sufficient support. By doing

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