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EDITORIAL

We are glad to publish Volume 10 Number 1 & 2 of Arth Anvesan, a Bi Annual Refereed Journal from Faculty of Management, Shri Mata Vaishno Devi University. Our objective of publishing the journal is to add value to the academic field of Management and Economics. We hope this volume would lend new insight and provide unmarked concepts in the said areas. Our sincere thanks are to the referees, authors and all others who directly or in many other ways, contributed to the publication of this volume.

The first paper in this issue authored by Dr. Neena Malhotra and Ms. Deepika Kumari examines the nexus between exports and growth using the Time series data. The study confirms long-run relationship between selected variables i.e. exports, imports, capital formation, labour and GDP per capita. The next paper by Dr. Sumangla Rathore and Dr. Avinash Panwar attempts to investigate the e-commerce website features that are perceived by the customers to be most significant in shaping the online purchase decision. The Results of the study identify three factors related to website design which are most valued by the customers viz. user-friendliness, informative value and visual appeal of the website. Ms. Preeti Mehra and Dr. Raghurib Singh attempt to classify users of micro packs and to categorize the most favored brands of micro packs in personal care, household care, food and beverages and health care product categories. Their study found that on an average, micro pack users were usually females, young and middle aged, more educated, and were mostly in service or were homemakers. The subsequent paper by Dr. Anjali Ganesh is a case Study on Manpower Recruitment and Selection with reference to Classique Hotel Ltd. The study found that the recruitment process aligned with the employee's future and the recruitment has taken care of employees' promotion and salary increments consistently. The next paper by Ms. Divya Singh Jamwal, Dr. Saurabh studies the awareness about Solid Waste Management of Hoteliers in Katra. The study found that the lack of awareness, coordination and the negligence of the stakeholders for the long term, ecological effect of solid waste may become detrimental for the pious environment. The second last paper by Hassan B. A. & Hassan O. A. investigates the disconnect between entrepreneurship education and entrepreneurial intention considering the rate of unemployment of the postgraduate students in Nigeria. The study reveals that majority of postgraduate students are unemployed and there is a positive relationship between Entrepreneurship Education Knowledge and Entrepreneurial Intention. More so, family was found to have no significant influence on Entrepreneurial Intention of the postgraduate students. The concluding paper by Dr. Rajni Singh deals with the development of strategies by the organizations in order to face the competitive environment. The study found that change management is not possible without bringing change in the structure, style, shared values, staff, strategy, system, and skill factors of the organization, which are not normally taken into consideration while implementing analytical dimensions of change.

We look forward for the original and quality research work for publishing in Arth Anvesan. Specifically we incorporate research articles, case studies, book reviews in the areas of Finance, Human Resource, Marketing, Supply Chain, Economics and any other related subject following the double blind peer reviewed method.

Dr. Sushil Kumar Mehta
Managing Editor

CONTENTS

| Sr. No. | Article | Author | Page |
|----------------|---|-------------------------------------|-------------|
| 1 | Exports and Economic Growth in Major Southeast Asian Economies: A Multivariate Analysis | Neena Malhotra and Deepika Kumari | 4-27 |
| 2 | An Empirical Investigation of Design Characteristics for E-Commerce Websites | Sumangla Rathore and Avinash Panwar | 28-34 |
| 3 | Consumer Brand Preferences for Micro Packs – An Empirical Study | Preeti Mehra and Raghbir Singh | 35-40 |
| 4 | A Case Study on Manpower Recruitment and Selection with reference to Classique Hotel Ltd | Anjali Ganesh | 41-49 |
| 5 | Solid Waste Management: Awareness among the Hoteliers in Katra, (J&K) | Divya Singh Jamwal and Saurabh | 50-57 |
| 6 | Entrepreneurship Education And Entrepreneurial Intention Disconnect: A Study of Postgraduate Students | Hassan B. A. and Hassan O. A. | 58-64 |
| 7 | Developing Competitive Strength: Biggest Challenge for the Organizations | Rajni Singh | 65-70 |

Exports and Economic Growth in Major Southeast Asian Economies: A Multivariate Analysis

Dr. Neena Malhotra*, Deepika Kumari**

Abstract

This study examines the nexus between exports and growth using the time series data for the period 1980 to 2012. Using multivariate time series framework, an attempt was made to test export-led growth (ELG) hypothesis for six Southeast Asian economies namely Indonesia, Malaysia, Philippines, Singapore, Thailand and Vietnam. The study has used Augmented Dickey-Fuller (ADF) and Phillips-Perron (PP) unit root tests to check stationarity, Johansen cointegration test for long run relationship, vector error correction model (VECM) for short run dynamics and estimating speed of adjustment towards long run equilibrium. The analysis also made use of techniques of Impulse Response Function (IRF) and Variance Decomposition Analysis (VDA) to investigate the interrelationship within the system. The empirical investigation also includes diagnostic testing for normality, heteroskedasticity, autocorrelation using Jarque-Bera Normality test, ARCH Heteroskedasticity test and Breusch-Godfrey LM test.

Keywords: Export-led Growth, Southeast Asia, time series, co integration, VECM, impulse response function, variance decomposition analysis

JEL Classification: C12, C32, F14, F43

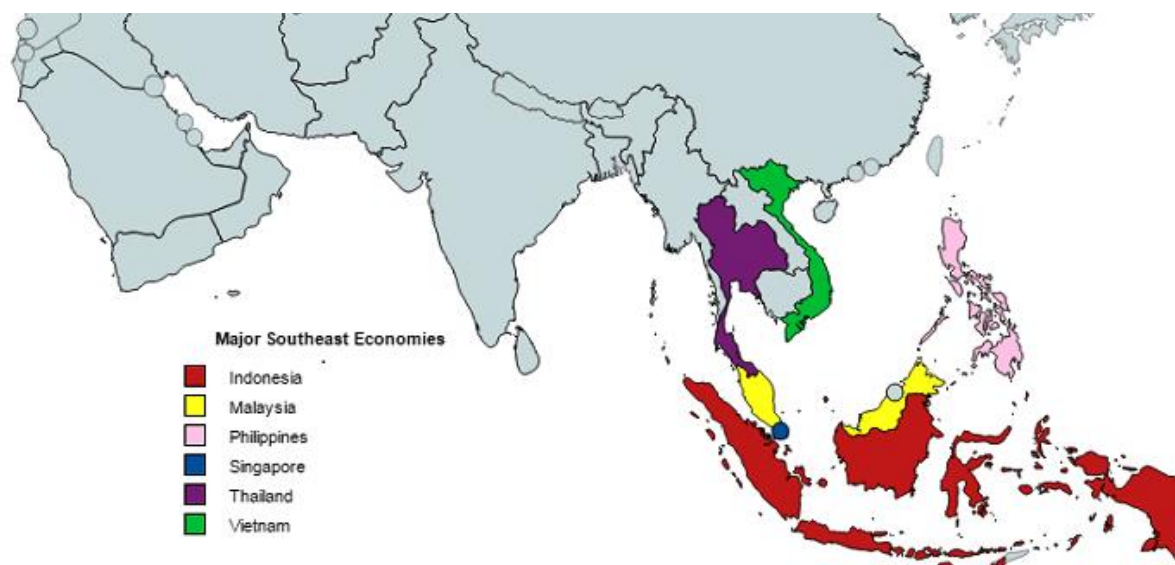
Introduction & Background

Economic growth strategies have gone through a number of changes. After Second World War, import-substitution or inward looking policy was adopted as growth strategy. This policy continued to be used as growth strategy until mid-1970s. The success of Japan and later on high growth of four 'Asian Tigers' (namely South Korea, Taiwan, Hong Kong and Singapore) fueled by exports lend support to export promotion as growth strategy (Shirazi and Manap, 2005; Yotzov, 2013). Later on, other economies like China, Indonesia, Malaysia and Thailand also experienced high growth with export promotion (Kokko, 2002). Thirwall (2000) noted that trade liberalization since 1950 has led to massive expansion in world trade relative to world output. On the one hand, world output has expanded fivefold while the volume of world trade has grown sixteen times at an average compound rate over seven percent per annum. However, Asian Financial Crisis (1997) and Global Economic Crisis (2008) interrupted progress and led to some decline in the growth.

Southeast Asian region is one of the fast growing regions in the world in terms of economic growth. Almost all the nations of the region got independence in and around 1950s (Versluis, Casanova and Azman, 2015). The main regional intergovernmental body Association of South East Asian Nations (ASEAN) has played an important role in facilitating trade among member nations. Southeast Asian economies adopted major policy changes in the mid-1980s. The economies such as Indonesia, Malaysia, Singapore and Thailand experienced high economic growth until the mid-1990s. These economies followed a similar path to development as they shifted from agricultural production dominated inward-looking economies to industrialized outward looking market-oriented economies and became open to trade and capital flows. This openness resulted in severe vulnerability during the Asian financial crisis of 1997-98. Although Asian financial crisis of 1997-98 severely hit Southeast Asian region yet the economies recovered in the beginning of decade. The region was also resilient after 2008 global economic crisis (Bersick and Pasch, 2007; Lunn *et al.*, 2011).

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Growth Performance of selected Southeast Asian Economies

Table 1 summarizes the compound growth rate of exports, imports and GDP for major Southeast Asian economies. Singapore, Thailand, Malaysia and Vietnam registered very high growth rates of exports and imports during the study period. Performance of Indonesia and Philippines is relatively mediocre. Similarly, in case of GDP growth rates, again Indonesia and Philippines registered lower growth as compare to other Southeast Asian economies.

Table 1: Comparison of Growth Performance among Southeast Asian Economies

| Year | EXPORT | | | | IMPORT | | | | GDP | | | |
|-------------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|
| | 1981-1990 | 1991-2000 | 2001-2012 | 1980-2012 | 1981-1990 | 1991-2000 | 2001-2012 | 1980-2012 | 1981-1990 | 1991-2000 | 2001-2012 | 1980-2012 |
| Indonesia | 4.44 | 4.79 | 7.99 | 5.87 | 0.03 | 4.58 | 8.42 | 5.32 | 6.13 | 3.55 | 5.62 | 5.07 |
| Malaysia | 11.22 | 11.56 | 4.33 | 9.47 | 7.02 | 9.15 | 5.68 | 9.10 | 5.28 | 6.61 | 4.99 | 6.09 |
| Philippines | 3.78 | 8.19 | 5.25 | 5.83 | 4.57 | 8.69 | 3.48 | 6.32 | 1.01 | 3.55 | 4.99 | 3.32 |
| Singapore | 10.44 | 11.32 | 8.40 | 10.18 | 9.65 | 11.32 | 8.21 | 9.84 | 6.87 | 7.04 | 6.21 | 6.68 |
| Thailand | 15.10 | 8.93 | 5.57 | 10.09 | 13.00 | 3.43 | 5.61 | 8.27 | 7.90 | 3.57 | 4.07 | 5.44 |
| Vietnam | - | 18.86 | 12.13 | 16.63 | - | 20.20 | 12.77 | 16.14 | - | 7.92 | 6.57 | 6.88 |

Source: Calculations based on data from World Development Indicators (WDI), online database.

Objective and Plan of the Study

This study empirically investigates the export-led growth hypothesis for major Southeast Asian economies. The study focuses on six major exporting economies of Southeast Asia namely Indonesia, Malaysia, Philippines, Singapore, Thailand and Vietnam.

1. Literature Review

There are many studies in the literature which have examined export-led growth in these economies. Some studies relate to individual countries while others are cross country studies. However, comprehensive studies based on

rigorous statistical analysis of export-led growth in these major Southeast Asian economies are lacking. In case of individual country analysis related to Southeast Asian nations, Ghatak, Milner and Utkulu (1997), Al-Yousif (1999), Khalafalla and Webb (2001), Keong, Yusop & Liew (2003, 2005), Sulaiman and Saad (2009), Shan and Jusoh (2012), Tang (2013) for Malaysia; Mahadevan (2009) for Singapore; Jiranyakul (2010) and Chirapant (2012) for Thailand; Bhatt (2013) for Vietnam supported export-led growth (ELG) hypothesis. While studies like Khalafalla and Webb (2001), Furuoka (2007) for Malaysia; Rahmaddi and Ichihashi (2011) for Indonesia supported growth-led exports hypothesis. The studies supporting feedback relationship include Doraisami (1996), Baharumshah & Rashid (1999), Ibrahim (2002), Mahadevan (2007), Tang (2013) for Malaysia; Amrinto (2006) for Philippines. However, Ngoc, Anh & Nga (2003) and Ballester & Sinay (2013) did not find any support for export-growth relationship for Vietnam and Philippines respectively.

In context of cross country analysis, the studies supporting export-led growth (ELG) hypothesis for Southeast Asian nations include Islam (1998), Anoruo and Ramchander (2000) for five emerging Asian economies India, Korea, Malaysia and Philippines except for Indonesia; Vohra (2001) for Pakistan, Philippines, Malaysia and Thailand except India, Thangavelu and Rajaguru (2004) for India, Malaysia, Philippines and Singapore out of nine rapidly developing Asian economies, Hsiao and Hsiao (2006) for eight rapidly developing East and Southeast Asian economies, Tang and Lai (2011) for four little dragons Hong Kong, Korea, Taiwan and Singapore and Safdari, M., M. Mahmoodi, and E. Mahmoodi (2011) for thirteen Asian Developing countries. Ismail and Harjito (2009) found feedback relationship for Indonesia & Philippines, export-led growth for Singapore and no causality for Malaysia & Thailand. Ahmad and Harnhirun (1995) found cointegration and bidirectional causality only for Singapore out of five ASEAN countries namely Indonesia, Malaysia, Philippines, Singapore and Thailand. However, Ahmad and Harnhirun (1996) found growth led exports for ASEAN countries. Nasreen (2011) found growth-led growth for Pakistan, Sri Lanka & Indonesia, export-led growth (ELG) for Malaysia & Thailand, feedback relationship for India & Philippines and no causality for Bangladesh. Ye Lim, Fahmi Ghazali and Mun Ho (2011) found feedback relationship for Malaysia & Thailand, growth-led growth hypothesis for Indonesia & no causality for Philippines.

2. Model, Database and Methodology

The aggregate production function used in the study can be expressed as -

$$Y = f(K, L, X, M) \quad (1)$$

Where Y represents real gross domestic product and K, L, X, M represent capital, labour, exports and imports respectively. This model has been used to examine the export-led growth (ELG) hypothesis for major Southeast Asian economies. The study has used annual data at the 2005 constant US dollar prices from 1980 to 2012 (except Vietnam¹). Data on real GDP per capita, real exports, real imports, real gross capital formation has been compiled from World Development Indicators (WDI) online database, World Bank, while for data on total labour force is collected from United Nation Conference on Trade and Development (UNCTAD) Statistics.

All the variables are taken in their natural logarithms to avoid the problem of heteroskedasticity (Gujarati 1995). For the application of multivariate econometric techniques, the above stated model can be expressed in the following linear logarithmic form:

$$LN\text{GDPPC}_t = \beta_0 + \beta_1 LN\text{EXP}_t + \beta_2 LN\text{IMP}_t + \beta_3 LN\text{GCF}_t + \beta_4 LN\text{LAB}_t + \varepsilon_t$$

The prefix 'LN' stands for natural logarithm. The study takes into account dummies for Asian Financial Crisis (1997) and Global Economic Crisis (2008). The study also included dummy for Philippines balance of payment crisis during 1983-84. Due to serious balance of payments problem in 1983, Philippines banned repayment of its external debts which caused external shocks to economy and resulted in recession with inflation in 1984 (Canlas, 1985).

• Unit Root Test

To get reliable & unbiased results the variables of model must be stationary (free from unit root). The non-stationarity of variables can cause 'spurious regression' problem discussed in Granger and Newbold (1974) & Al-Yousif (1999). Augmented Dickey Fuller (ADF) and Phillips & Perron (PP) tests have been carried out to determine the order of integration of each time series used in the analysis so as to determine the appropriate technique that can be used to find out relationship among variables.

¹ For Vietnam, data have been used for the period 1986-2012

- **Cointegration Test**

The purpose of the cointegration test is to determine whether a group of non-stationary series is cointegrated or not. The presence of a cointegrating relation forms the basis of the Vector Error Correction (VEC) specification. VAR-based cointegration tests have been implemented here using the methodology developed by Johansen (1991, 1995). In the Johansen framework, VAR of order p is considered as:

$$y_t = A_1 y_{t-1} + \dots + A_p y_{t-p} + Bx_t + \varepsilon_t \quad (7)$$

where y_t is a k -vector of non-stationary I(1) variables, x_t is a d -vector of deterministic variables, and ε_t is a vector of innovations. As most of economic time series are found to be non-stationary therefore VAR model is generally estimated in first difference form. Hence, above stated VAR can be rewritten as,

$$\Delta y_t = \Pi y_{t-1} + \sum_{i=1}^{p-1} \Gamma_i \Delta y_{t-i} + Bx_t + \varepsilon_t \quad (8)$$

$$\Pi = \sum_{i=1}^p A_i - I, \quad \Gamma_i = - \sum_{j=i+1}^p A_j \quad (9)$$

Granger's representation theorem states that if the coefficient matrix Π has reduced rank $r < k$, then there exist $k \times r$ matrices α and β each with rank r such that $\Pi = \alpha\beta'$ and $\beta'y_t$ is I(0). r is the number of cointegrating relations (the cointegrating rank) and each column of β is the cointegrating vector. The elements of α are known as adjustment parameters in the VEC model. Two types of test statistics are reported. The first block reports trace statistics and the second block reports the maximum Eigen value statistics.

Trace Statistics

The trace statistic reported in the first block tests the null hypothesis of cointegrating relations against the alternative of k cointegrating relations, where k is the number of endogenous variables, for $r=0, 1, \dots, k-1$. The alternative of k cointegrating relations corresponds to the case where none of the series has a unit root and a stationary VAR may be specified in terms of the levels of all of the series. The trace statistic for the null hypothesis of r cointegrating relations is computed as:

$$LR_{tr}(r|k) = -T \sum_{i=r+1}^k \log(1 - \lambda_i), \quad (10)$$

Where λ_i is the i -th largest Eigen value of the matrix in (9) which is reported in the second column of the output table.

Maximum Eigen value Test Statistic

The second block of the output reports the maximum Eigen value statistic which tests the null hypothesis of r cointegrating relations against the alternative of $r+1$ cointegrating relations. This test statistic is computed as:

$$LR_{max}(r|r+1) = -T \log(1 - \lambda_{r+1}) \quad (11)$$

Lag Length

An important preliminary step in cointegration analysis is the selection of the VAR lag order. The most commonly used five criteria are sequential modified Likelihood Ratio (LR) test statistic, Final prediction error (FPE), Akaike information criterion (AIC), Schwarz information criterion (SC), Hannan-Quinn information criterion (HQ). The study constructed the VAR system along with dummies to test for lag length criteria.

- **Vector Error Correction Model**

Vector error correction model estimates the short-run dynamics (or the direction of causality among variables). The objective here is to examine whether or not the export-led growth, growth driven exports or both hold true for Southeast economies. The error correction representation of the model in case of five variables is written as:

$$\Delta LNGDPPC_t = \beta_1 + \sum_{k=1}^m [\theta_{1k} \Delta LNGDPPC_{t-k} + \gamma_{1k} \Delta LNEXP_{t-k} + \phi_{1k} \Delta LNIMP_{t-k} + \alpha_{1k} \Delta LNGCF_{t-k} + \delta_{1k} \Delta LNLAB_{t-k}] + \lambda_1 EC_{t-1} + \varepsilon_1$$

$$\begin{aligned}\Delta LNEXP_t &= \beta_2 + \sum_{k=1}^m [\theta_{2k} \Delta LNGDPPC_{t-k} + \gamma_{2k} \Delta LNEXP_{t-k} + \phi_{2k} \Delta LNIMP_{t-k} + \alpha_{2k} \Delta LNGCF_{t-k} + \delta_{2k} \Delta LNLAB_{t-k}] + \lambda_2 EC_{t-1} + \varepsilon_2 \\ \Delta LNIMP_t &= \beta_3 + \sum_{k=1}^m [\theta_{3k} \Delta LNGDPPC_{t-k} + \gamma_{3k} \Delta LNEXP_{t-k} + \phi_{3k} \Delta LNIMP_{t-k} + \alpha_{3k} \Delta LNGCF_{t-k} + \delta_{3k} \Delta LNLAB_{t-k}] + \lambda_3 EC_{t-1} + \varepsilon_3 \\ \Delta LNGCF_t &= \beta_4 + \sum_{k=1}^m [\theta_{4k} \Delta LNGDPPC_{t-k} + \gamma_{4k} \Delta LNEXP_{t-k} + \phi_{4k} \Delta LNIMP_{t-k} + \alpha_{4k} \Delta LNGCF_{t-k} + \delta_{4k} \Delta LNLAB_{t-k}] + \lambda_4 EC_{t-1} + \varepsilon_4 \\ \Delta LNLAB_t &= \beta_5 + \sum_{k=1}^m [\theta_{5k} \Delta LNGDPPC_{t-k} + \gamma_{5k} \Delta LNEXP_{t-k} + \phi_{5k} \Delta LNIMP_{t-k} + \alpha_{5k} \Delta LNGCF_{t-k} + \delta_{5k} \Delta LNLAB_{t-k}] + \lambda_5 EC_{t-1} + \varepsilon_5\end{aligned}$$

Where m is the lag length and EC_{t-1} is the error correction term. The coefficient of error correction term reveals whether past value of observed variables affect the current values of the variable under study. The magnitude and statistical significance of error correction term measures the tendencies of each variable towards equilibrium. A significant value of the coefficient indicates the significant role of past equilibrium errors in determining current outcomes.

- **Impulse Response Function (IRF)**

A shock to the i -th variable not only directly affects the i -th variable but is also transmitted to all of the other endogenous variables through the dynamic (lag) structure of the VAR. An impulse response function traces the effect of a one-time shock to one of the innovations on current and future values of the endogenous variables. For example a certain change in the error term in the GDP equation will change GDP in the current as well as future periods and will also affect the other endogenous variables (Eviews, 2006; Afzal and Hussain, 2010).

- **Variance Decomposition Analysis (VDA)**

While impulse response functions trace the effects of a shock to one endogenous variable on to the other variables in the VAR, *variance decomposition* separates the variation in an endogenous variable into the component shocks to the VAR. Thus, the variance decomposition provides information about the relative importance of each random innovation in affecting the variables in the VAR. In other words, it depicts the amount of a change in a variable is due to its own shock and how much due to shocks to other variables. In the short-run, most of the variation is due to own shock. However, as the lagged variables' effect starts kicking in, the percentage of the effect of other shocks increases over time (Eviews, 2006; Evans, 2013).

- **Diagnostic Tests**

The models were tested for normality, heteroskedasticity and serial correlation. The study employed Jarque-Bera Normality test, ARCH Heteroskedasticity test and Breusch-Godfrey serial correlation LM test for diagnostic checking.

- **Chow test**

Apart from that Chow breakpoint test has been used to confirm the existence of structural break. Dummy variables have been incorporated in the model for knowing the effect of Asian Financial crisis in 1997-98 and Global Economic Crisis in 2008. The Chow breakpoint test compares the sum of squared residuals obtained by fitting a single equation to the entire sample with the sum of squared residuals obtained when separate equations are fit to each subsample of the data. The F -statistic is based on the comparison of the restricted and unrestricted sum of squared residuals and in the simplest case involving a single breakpoint, is computed as:

$$F = [(RSS_n - RSS_{UR})/k] / [(RSS_{UR}) / (n_1 + n_2 - 2k)] \sim F_{[k, (n_1 + n_2 - 2k)]}$$

K is the number of parameters in the equation.

3. Results of Multivariate Analysis

Unit Root Results

Stationarity results for Southeast Asian economies have been presented in table 2. Augmented Dickey- Fuller (ADF) test and Phillip- Perron (PP) test (including constant with trend) for five variables namely LNGDPPC, LNEXP, LNIMP, LNGCF & LNLAB revealed all series were integrated of order one or I(1) except few cases. Taking in view the robustness of PP test, variables have been included or excluded accordingly. However, the variable integrated of order two or I (2) has been dropped from the model.

Table 2: Results of Unit Root tests for variables

| Countries | Variables | ADF (Test Statistics) | | Order of Integration | PP (Test Statistics) | | Order of Integration |
|-------------|-----------|-----------------------|------------------|----------------------|----------------------|------------------|----------------------|
| | | Level | First Difference | | Level | First Difference | |
| Indonesia | LNGDPPC | -1.933 | -4.101** | I(1) | -1.806 | -4.101** | I(1) |
| | LNEXP | -2.233 | -7.086* | I(1) | -2.136 | -7.188* | I(1) |
| | LNIMP | -2.500 | -5.624* | I(1) | -2.652 | -5.624* | I(1) |
| | LNGCF | -2.130 | -3.880** | I(1) | -1.902 | -3.880** | I(1) |
| | LNLAB | -2.422 | -4.968* | I(1) | -0.638 | -5.996* | I(1) |
| Malaysia | LNGDPPC | -1.635 | -4.604* | I(1) | -1.838 | -4.604* | I(1) |
| | LNEXP | 0.278 | -5.245* | I(1) | 0.278 | -5.245* | I(1) |
| | LNIMP | -1.126 | -4.240** | I(1) | -1.453 | -4.240** | I(1) |
| | LNGCF | -1.863 | -4.685* | I(1) | -2.042 | -4.685* | I(1) |
| | LNLAB | 0.538 | -4.228** | I(1) | 0.201 | -4.228** | I(1) |
| Philippines | LNGDPPC | -0.975 | -7.418* | I(1) | -1.279 | -3.823* | I(1) |
| | LNEXP | -2.961 | -6.700* | I(1) | -2.961 | -6.700* | I(1) |
| | LNIMP | -1.838 | -3.821** | I(1) | -2.164 | -3.821** | I(1) |
| | LNGCF | -3.857** | - | I(0) | -2.735 | -4.290* | I(1) |
| | LNLAB | -5.791* | - | I(0) | -5.791* | - | I(0) |
| Singapore | LNGDPPC | -1.655 | -5.861* | I(1) | -1.655 | -5.406* | I(1) |
| | LNEXP | -1.100 | -4.784* | I(1) | -1.320 | -4.784* | I(1) |
| | LNIMP | -1.445 | -5.440* | I(1) | -1.445 | -5.440* | I(1) |
| | LNGCF | -2.908 | -6.676* | I(0) | -2.908 | -6.676* | I(1) |
| | LNLAB | -3.397*** | - | I(0) | -1.885 | -4.026** | I(1) |
| Thailand | LNGDPPC | -1.744 | -3.502** | I(1) | -1.395 | -3.502** | I(1) |
| | LNEXP | -0.443 | -5.524* | I(1) | -0.443 | -5.524* | I(1) |
| | LNIMP | -1.511 | -4.675* | I(1) | -1.713 | -4.675 | I(1) |
| | LNGCF | -1.708 | -4.430* | I(1) | -1.896 | -4.430* | I(1) |
| | LNLAB | -4.277** | - | I(0) | -3.021 | -3.088 | I(2) |
| Vietnam | LNGDPPC | -2.738 | -4.908* | I(1) | -2.845 | -4.447* | I(1) |
| | LNEXP | -2.266 | -6.887* | I(1) | -2.161 | -8.396* | I(1) |
| | LNIMP | -1.967 | -4.105** | I(1) | -2.295 | -4.105** | I(1) |
| | LNGCF | -1.652 | -4.132** | I(1) | -2.049 | -4.132** | I(1) |
| | LNLAB | -1.772 | -5.385* | I(1) | -1.729 | -5.385* | I(1) |

Note: *, ** and *** indicate significance at the 1%, 5% and 10% respectively.

Values in the parentheses show p-values.

For Thailand, Variable Labour was stationary at second difference -6.232*

Chow Test Results

Time series plotting of the variables indicated the presence of structural breaks. Hence, Chow test was used to verify those structural breaks. The results affirmed the presence of structural break in dataset. Asian crisis of 1997 had severe impact on Indonesian, Malaysian and Thailand's economy. Table 3 shows structural break in series for Philippines only in 1984. In the year 1984, Philippines suffered from worst balance of payments crisis. The results showed the presence of structural break for Malaysia, Singapore and Thailand's in dataset for 2008. No structural break was observed for Vietnam.

Table 3: Results of Chow Breakpoint Test

| Indonesia | | | |
|--|--------|------------------|-------|
| Chow Breakpoint Test: 1997 | | | |
| Null Hypothesis: No breaks at specified breakpoints | | | |
| Equation Sample: 1981 2012 | | | |
| F-statistic | 2.861 | Prob.F | 0.037 |
| Log likelihood ratio | 15.960 | Prob. Chi-Square | 0.007 |
| Wald Statistic | 14.305 | Prob. Chi-Square | 0.013 |
| Malaysia | | | |
| Chow Breakpoint Test: 1997 & 2008 | | | |
| Null Hypothesis: No breaks at specified breakpoints | | | |
| Equation Sample: 1981 2012 | | | |
| F-statistic | 19.621 | Prob.F | 0.000 |
| Log likelihood ratio | 54.819 | Prob. Chi-Square | 0.000 |
| Wald Statistic | 98.109 | Prob. Chi-Square | 0.000 |
| F-statistic | 2.963 | Prob.F | 0.033 |
| Log likelihood ratio | 16.410 | Prob. Chi-Square | 0.005 |
| Wald Statistic | 14.817 | Prob. Chi-Square | 0.011 |
| Philippines | | | |
| Chow Breakpoint Test: 1997 & 2008 | | | |
| Null Hypothesis: No breaks at specified breakpoints | | | |
| Equation Sample: 1981 2012 | | | |
| F-statistic | 5.215 | Prob.F | 0.003 |
| Log likelihood ratio | 20.022 | Prob. Chi-Square | 0.000 |
| Wald Statistic | 20.861 | Prob. Chi-Square | 0.000 |
| F-statistic | 0.561 | Prob.F | 0.693 |
| Log likelihood ratio | 2.836 | Prob. Chi-Square | 0.585 |
| Wald Statistic | 2.244 | Prob. Chi-Square | 0.690 |
| Singapore | | | |
| Chow Breakpoint Test: 2008 | | | |
| Null Hypothesis: No breaks at specified breakpoints | | | |
| Equation Sample: 1981 2012 | | | |
| F-statistic | 3.984 | Prob.F | 0.009 |
| Log likelihood ratio | 20.588 | Prob. Chi-Square | 0.001 |
| Wald Statistic | 19.921 | Prob. Chi-Square | 0.001 |
| Thailand | | | |
| Chow Breakpoint Test: 1997 & 2008 | | | |
| Null Hypothesis: No breaks at specified breakpoints | | | |
| Equation Sample: 1981 2012 | | | |
| F-statistic | 6.987 | Prob.F | 0.000 |
| Log likelihood ratio | 24.765 | Prob. Chi-Square | 0.000 |
| Wald Statistic | 27.950 | Prob. Chi-Square | 0.000 |
| F-statistic | 3.786 | Prob.F | 0.015 |
| Log likelihood ratio | 15.629 | Prob. Chi-Square | 0.003 |
| Wald Statistic | 15.145 | Prob. Chi-Square | 0.004 |

VAR Lag Order Selection Criteria

The next step involves investigation of the long run relationship among variables. Before applying Johansen cointegration procedure appropriate lag length must be set. In table 4, the results of VAR lag order selection criteria have been presented. Schwarz information criterion was adopted to estimate cointegration and unrestricted VAR.

Table 4: Results of VAR Lag Order Selection Criteria

| Indonesia | | | | | | |
|---|----------|-----------|----------|----------|----------|--|
| Endogenous variables: LNGDPPC LNEXP LNIMP LNGCF LNLAB | | | | | | |
| Exogenous variables: C DUMMY Sample: 1980 2012 | | | | | | |
| Lag | LR | FPE | AIC | SC | HQ | |
| 0 | NA | 1.39e+34 | 92.806 | 93.278 | 92.954 | |
| 1 | 185.434* | 1.79e+31 | 86.102 | 87.752* | 86.619 | |
| 2 | 34.816 | 1.60e+31* | 85.778 | 88.607 | 86.664 | |
| 3 | 18.179 | 3.58e+31 | 85.987 | 89.995 | 87.242 | |
| 4 | 22.253 | 3.69e+31 | 84.532* | 89.719 | 86.157* | |
| Malaysia | | | | | | |
| Endogenous variables: LNGDPPC LNEXP LNIMP LNGCF LNLAB | | | | | | |
| Exogenous variables: C DUMMY1 DUMMY2 Sample: 1980 2012 | | | | | | |
| Lag | LR | FPE | AIC | SC | HQ | |
| 0 | NA | 3.51e-12 | -12.188 | -11.487 | -11.964 | |
| 1 | 206.373* | 1.67e-15 | -19.902 | -18.034* | -19.304* | |
| 2 | 33.073 | 1.61e-15* | -20.181 | -17.145 | -19.209 | |
| 3 | 24.728 | 2.03e-15 | -20.575* | -16.371 | -19.230 | |
| Philippines | | | | | | |
| Endogenous variables: LNGDPPC LNEXP LNIMP LNGCF | | | | | | |
| Exogenous variables: C DUMMY Sample: 1980 2012 | | | | | | |
| Lag | LR | FPE | AIC | SC | HQ | |
| 0 | NA | 4.35e-08 | -5.599 | -5.225 | -5.479 | |
| 1 | 193.752 | 4.03e-11 | -12.605 | -11.484* | -12.247 | |
| 2 | 30.5617 | 2.76e-11 | -13.067 | -11.198 | -12.469 | |
| 3 | 29.532* | 1.56e-11* | -13.846* | -11.230 | -13.009* | |
| Singapore | | | | | | |
| Endogenous variables: LNGDPPC LNEXP LNIMP LNGCF LNLAB | | | | | | |
| Exogenous variables: C DUMMY Sample: 1980 2012 | | | | | | |
| Lag | LR | FPE | AIC | SC | HQ | |
| 0 | NA | 4.09e-13 | -14.337 | -13.870 | -14.187 | |
| 1 | 197.269* | 4.26e-16* | -21.247 | -19.612* | -20.724* | |
| 2 | 18.466 | 9.79e-16 | -20.606 | -17.804 | -19.710 | |
| 3 | 34.514 | 6.15e-16 | -21.594* | -17.624 | -20.324 | |
| Thailand | | | | | | |
| Endogenous variables: LNGDPPC LNEXP LNIMP LNGCF | | | | | | |
| Exogenous variables: C DUMMY1 DUMMY2 Sample: 1980 2012 | | | | | | |
| Lag | LR | FPE | AIC | SC | HQ | |
| 0 | NA | 5.45e-09 | -7.679 | -7.118 | -7.499 | |
| 1 | 143.927* | 3.13e-11 | -12.870 | -11.562* | -12.451* | |
| 2 | 22.932 | 3.03e-11* | -13.010* | -10.955 | -12.353 | |
| 3 | 12.816 | 4.82e-11 | -12.798 | -9.995 | -11.901 | |
| Vietnam | | | | | | |
| Endogenous variables: LNDGDPPC LNEXP LNIMP LNGCF LNLAB | | | | | | |
| Exogenous variables: C Sample: 1986 2012 | | | | | | |
| Lag | LR | FPE | AIC | SC | HQ | |
| 0 | NA | 9.57e-07 | 0.329 | 0.576 | 0.391 | |
| 1 | 199.441 | 7.19e-11 | -9.228 | -7.747 | -8.856 | |
| 2 | 75.616 | 1.67e-12 | -13.356 | -10.640 | -12.673 | |
| 3 | 39.830* | 1.65e-13* | -16.872* | -12.922* | -15.879* | |

* indicates lag order selected by the criterion
LR: sequential modified LR test statistic (each test at 5% level)
FPE: Final prediction error
AIC: Akaike information criterion
SC: Schwarz information criterion
HQ: Hannan-Quinn information criterion

Cointegration Results

To analyze long run relationship Johansen cointegration procedure has been employed. The results of both trace and max eigen value tests indicated that there was long run equilibrium relationship among variables namely LNGDPPC, LNEXP, LNIMP, LNGCF & LNLAB. Therefore, the results of both tests confirmed the existence of long run relationship (Table 5).

Table 5: Johansen Co-integration Test Statistics for the variables

| Countries | Unrestricted Cointegration Rank Test (Trace) | | | | | Unrestricted Cointegration Rank Test (Maximum Eigenvalue) | | | | |
|-------------|--|------------|---------|---------------------|---------|---|------------|---------|---------------------|---------|
| | Hypothesized No. of CE(s) | Eigenvalue | Trace | Critical Value 0.05 | Prob.** | Hypothesized No. of CE(s) | Eigenvalue | Trace | Critical Value 0.05 | Prob.** |
| Indonesia | None * | 0.770 | 96.936 | 79.341 | 0.001 | None * | 0.770 | 45.560 | 37.163 | 0.004 |
| | At most 1 | 0.593 | 51.576 | 55.245 | 0.105 | At most 1 | 0.593 | 27.914 | 30.815 | 0.108 |
| | At most 2 | 0.395 | 23.462 | 35.010 | 0.478 | At most 2 | 0.395 | 15.614 | 24.252 | 0.445 |
| | At most 3 | 0.209 | 7.847 | 18.397 | 0.698 | At most 3 | 0.209 | 7.270 | 17.147 | 0.683 |
| | At most 4 | 0.018 | 0.576 | 3.841 | 0.447 | At most 4 | 0.018 | 0.576 | 3.841 | 0.447 |
| Malaysia | None * | 0.789 | 104.543 | 88.803 | 0.002 | None * | 0.789 | 48.278 | 38.331 | 0.002 |
| | At most 1 | 0.558 | 56.265 | 63.876 | 0.184 | At most 1 | 0.558 | 25.312 | 32.118 | 0.268 |
| | At most 2 | 0.419 | 30.953 | 42.915 | 0.446 | At most 2 | 0.419 | 16.873 | 25.823 | 0.468 |
| | At most 3 | 0.316 | 14.080 | 25.872 | 0.651 | At most 3 | 0.316 | 11.794 | 19.387 | 0.434 |
| | At most 4 | 0.071 | 2.286 | 12.517 | 0.948 | At most 4 | 0.071 | 2.286 | 12.517 | 0.948 |
| Philippines | None * | 0.822 | 109.800 | 63.876 | 0.000 | None * | 0.822 | 53.596 | 32.118 | 0.000 |
| | At most 1 * | 0.576 | 56.203 | 42.915 | 0.001 | At most 1 * | 0.576 | 26.604 | 25.823 | 0.039 |
| | At most 2 * | 0.449 | 29.599 | 25.872 | 0.016 | At most 2 | 0.449 | 18.516 | 19.387 | 0.066 |
| | At most 3 | 0.300 | 11.083 | 12.517 | 0.085 | At most 3 | 0.300 | 11.083 | 12.517 | 0.085 |
| Singapore | None* | 0.777 | 95.140 | 88.803 | 0.016 | None* | 0.777 | 46.635 | 38.331 | 0.004 |
| | At most 1 | 0.534 | 48.504 | 63.876 | 0.481 | At most 1 | 0.534 | 23.705 | 32.118 | 0.368 |
| | At most 2 | 0.342 | 24.799 | 42.915 | 0.799 | At most 2 | 0.342 | 12.976 | 25.823 | 0.805 |
| | At most 3 | 0.207 | 11.823 | 25.872 | 0.824 | At most 3 | 0.207 | 7.195 | 19.387 | 0.887 |
| | At most 4 | 0.138 | 4.627 | 12.517 | 0.650 | At most 4 | 0.138 | 4.627 | 12.517 | 0.650 |
| Thailand | None * | 0.931 | 148.220 | 63.876 | 0.000 | None * | 0.931 | 83.170 | 32.118 | 0.000 |
| | At most 1 * | 0.693 | 65.050 | 42.915 | 0.000 | At most 1 * | 0.693 | 36.631 | 25.823 | 0.001 |
| | At most 2 * | 0.528 | 28.418 | 25.872 | 0.023 | At most 2 * | 0.528 | 23.281 | 19.387 | 0.012 |
| | At most 3 | 0.152 | 5.137 | 12.517 | 0.576 | At most 3 | 0.152 | 5.137 | 12.517 | 0.576 |
| Vietnam | None * | 0.989 | 216.303 | 88.803 | 0.000 | None * | 0.989 | 109.244 | 38.331 | 0.000 |
| | At most 1 * | 0.917 | 107.059 | 63.876 | 0.000 | At most 1 * | 0.917 | 59.998 | 32.118 | 0.000 |
| | At most 2 * | 0.699 | 47.060 | 42.915 | 0.018 | At most 2 * | 0.699 | 28.820 | 25.823 | 0.019 |
| | At most 3 | 0.460 | 18.240 | 25.872 | 0.328 | At most 3 | 0.460 | 14.819 | 19.387 | 0.203 |
| | At most 4 | 0.132 | 3.420 | 12.517 | 0.823 | At most 4 | 0.132 | 3.420 | 12.517 | 0.823 |

Note: * indicate significance at the 5% level respectively.

Normalized cointegrating equation for GDPPC has been given in table 6. The equation for Indonesia reveals that in the long run imports, gross capital formation and labour had positive and significant influence on GDPPC. But the exports were found to be negative and significant too. Cointegrating equation normalized on GDPPC revealed that all the variables except labour positively and significantly affected GDPPC in the long run for Malaysia. In case of Philippines, the equation indicated that in the long run exports and gross capital formation positively affected GDP per capita. However, imports were found to be negative and significant too. The equation for Singapore revealed that in the long run exports, imports and labour had positive and significant influence on GDPPC. Although the variable of gross capital formation hold negative sign but it was found to be insignificant. For Thailand, the equation indicates that imports have positive and significant effect on GDPPC. Although the variable of exports has positive sign but it was found to be insignificant. Gross capital formation was found to be negative and statistically significant in GDPPC equation. In case of Vietnam, the equation reveals that in the long run exports, imports and labour have positive influence on GDPPC. But the gross capital formation was found to be negative and significant too.

Table 6: Normalized Cointegrating Coefficients for GDPPC Equation

| Indonesia | | | | |
|--------------|--------------------|---------------------|--------------------|---------------------|
| LNGDPPC(-1) | LNEXP(-1) | LNIMP(-1) | LNGCF(-1) | LNLAB(-1) |
| 1.000000 | 0.465* (0.066) | -0.316* (0.047) | -0.314* (0.030) | -0.601* (0.165) |
| Malaysia | | | | |
| LNGDPPC(-1) | LNEXP(-1) | LNIMP(-1) | LNGCF(-1) | LNLAB(-1) |
| 1.000000 | -0.118* (0.023) | -0.190* (0.022) | -0.091* (0.012) | 0.708* (0.078) |
| Philippines | | | | |
| LNGDPPC(-1) | LNEXP(-1) | LNIMP(-1) | LNGCF(-1) | LNLAB(-1) |
| 1.000000 | -0.505* (0.111) | 0.637* (0.078) | -0.152* (0.045) | - |
| Singapore | | | | |
| LNGDPPC(-1) | LNEXP(-1) | LNIMP(-1) | LNGCF(-1) | LNLAB(-1) |
| 1.000000 | -1.991* (0.565) | -2.176* (0.602) | 0.081 (0.085) | -2.599* (0.415) |
| Thailand | | | | |
| LNGDPPC(-1) | LNEXP(-1) | LNIMP(-1) | LNGCF(-1) | LNLAB(-1) |
| 1.000000 | -0.009 (0.051) | -0.716* (0.067) | 0.364* (0.040) | - |
| Vietnam | | | | |
| LNDGDPPC(-1) | LNEXP(-1) | LNIMP(-1) | LNGCF(-1) | LNLAB(-1) |
| 1.000000 | -8.574 (13.974) | -10.142 (12.081) | 15.510* (0.049) | -19.705 (15.405) |

Note: * indicate significance at the 1% level.

VECM Short Run Causality Results

VECM results comprise the estimate of the speed of adjustment coefficients and short run properties of series. Table 7 explained short run and long run dynamics using VECM. The result for Indonesia exhibits that coefficient of error correction term (ECT) was significant for exports equation. However, the sign was negative (correct) in both equations. It indicates the existence of significant adjustments towards long run equilibrium in any disequilibrium situation. Further, short run coefficient of first difference of LNGDPPC lagged one period for exports equation was found to be positively significant which indicates the presence of short run unidirectional causality from GDP per capita to exports or growth led exports for Indonesia. The dummy variable was found bearing negative sign and was also significant in GDP per capita equation. The results for Malaysia depicted that coefficient of error correction term was not significant for GDPPC equation however the sign was negative (correct) whereas for exports equation,

the error correction term was significant but the sign was positive (incorrect). Thus, the results indicated absence of significant adjustments towards long run equilibrium in any disequilibrium situation. The short run coefficients of first difference of LNEXP lagged one period for GDPPC equation and first difference of LNGDPPC lagged one period for export equation was negative and insignificant. Thus, the results didn't give evidence for short run causality between these two variables. For Philippines, the coefficients of error correction terms (ECT) with GDPPC and exports as dependent variable were negative but former was statistically significant at 5% level of significance indicating there was convergence from short dynamics towards long run equilibrium. The adjustment coefficient was found to be 0.42 percent implying that speed of adjustment was 42 percent towards long run equilibrium in case of disequilibrium situation. The short run coefficients of first difference of LNEXP lagged one period for GDPPC equation was found to be positive and significant implying short run unidirectional causality from exports to economic growth or export-led growth whereas first difference of LNGDPPC lagged one period for export equation was positive but insignificant. The dummy variable was found bearing negative sign and significant in GDPPC equation. In case of Singapore, the coefficient of error correction terms (ECT) with GDPPC equation was significant and negative whereas coefficient of error correction terms (ECT) with exports equation was neither negative nor significant. The short run coefficients of first difference of LNEXP lagged one period for GDPPC equation was found to be positive and significant implying short run unidirectional causality from exports to economic growth or export-led growth whereas first difference of LNGDPPC lagged one period for export equation was positive but insignificant. The dummy variable was found bearing negative sign and significant in GDPPC equation. The results for Thailand depicted that coefficient of error correction term was significant for GDPPC equation and sign was negative (correct) whereas for exports equation, the error correction term was neither significant nor negative. The coefficient measuring speed of adjustment in GDPPC equation was 0.49 percent implying that speed of adjustment of any disequilibrium towards long run equilibrium was about 49 percent. No short run causality was found between GDPPC and exports. Dummy variable for Asian crisis (DUMMY1997) was negative in both equations and was significant for GDPPC equation. Dummy variable for Global crisis (DUMMY2008) was also negative in both equations but found to be insignificant. For Vietnam, the results exhibit that coefficient of error correction term (ECT) was negative in both cases for GDPPC and exports. But ECT was found significant in exports equation indicating the presence of significant adjustments towards long run equilibrium in any disequilibrium situation. In the short run, coefficient of first difference of LNEXP lagged one period for GDPPC equation was found to be statistically insignificant and coefficient of first difference of LNGDPPC lagged one period for exports equation was found to be statistically significant which indicates the presence of short run unidirectional causality from GDPPC to exports or growth led exports for Vietnam.

Table 7: Short Run Causality Results VECM

| Variables | Indonesia | | Malaysia | | Philippines | | Singapore | | Thailand | | Vietnam | |
|---------------|--------------------|--------------------|----------------------|---------------------|--------------------|----------------------|----------------------|-------------------|---------------------|-------------------|--------------------|--------------------|
| | D(LNGDPPC) | D(LNEXP) | D(LNGDPPC) | D(LNEXP) | D(LNGDPPC) | D(LNEXP) | D(LNGDPPC) | D(LNEXP) | D(LNGDPPC) | D(LNEXP) | D(DGDPPC) | D(LNEXP) |
| ECT | -0.101 (0.688) | -1.583* (0.004) | -1.120 (0.216) | 0.603 (0.671) | -0.424* (0.000) | -0.108 (0.759) | -0.317*** (0.074) | 0.046 (0.892) | -0.492* (0.000) | 0.142 (0.613) | -0.056 (0.397) | -0.009* (0.000) |
| D(LNGDPPC) | -0.076 (0.807) | 2.157* (0.001) | 0.540 (0.370) | -0.049 (0.958) | 0.973* (0.000) | 0.758 (0.329) | 0.019 (0.946) | 0.445 (0.446) | 0.749** (0.056) | 0.538 (0.617) | 0.004 (0.985) | 0.008** (0.046) |
| D(LNEXP) | -0.004 (0.948) | -0.185 (0.202) | -0.442 (0.119) | -0.464 (0.297) | 0.239* (0.000) | 0.862* (0.003) | 1.565*** (0.067) | 1.155 (0.489) | 0.004 (0.960) | -0.227 (0.408) | 3.839 (0.732) | 0.007 (0.963) |
| D(LNIMP) | -0.059 (0.339) | -0.188 (0.130) | 0.448*** (0.089) | 0.705*** (0.093) | 0.205* (0.006) | 0.951** (0.020) | -1.482*** (0.073) | -1.178 (0.466) | 0.009 (0.909) | 0.235 (0.317) | -20.704 (0.295) | -0.332 (0.261) |
| D(LNGCF) | 0.039 (0.691) | -0.083 (0.680) | -0.305*** (0.076) | -0.378 (0.162) | -0.131* (0.002) | -0.398*** (0.074) | 0.052 (0.649) | -0.071 (0.759) | -0.210** (0.040) | -0.206 (0.462) | 12.988 (0.450) | 0.363 (0.165) |
| D(LNLAB) | 0.416 (0.389) | 1.216 (0.209) | -0.316 (0.670) | -0.641 (0.588) | - | - | 0.729 (0.283) | 0.310 (0.818) | - | - | 0.832 (0.993) | -0.666 (0.663) |
| DUMMY 1997 | -0.096* (0.004) | -0.009 (0.876) | -0.004 (0.867) | -0.102** (0.036) | - | - | | | -0.157* (0.000) | -0.000 (0.997) | - | - |
| DUMMY 2008 | | | 0.014 (0.524) | -0.049 (0.196) | - | - | -0.095** (0.012) | -0.050 (0.485) | -0.017 (0.293) | -0.036 (0.449) | - | - |
| DUMMY 1984 | | | | | -0.098* (0.000) | 0.065 (0.559) | | | | | | |

Note: *, ** and *** indicate significance at the 1%, 5% and 10% level respectively.

Table 8: Summary of Results

| Country | Cointegration Results | VECM Results (For Short Run Causality) | Impact of Dummies |
|-------------|-----------------------|--|-------------------|
| Indonesia | Cointegrated | GLE | Significant |
| Malaysia | Cointegrated | No causality | Significant |
| Philippines | Cointegrated | ELG | Significant |
| Singapore | Cointegrated | ELG | Significant |
| Thailand | Cointegrated | No causality | Significant |
| Vietnam | Cointegrated | GLE | - |

Impulse Response Function and Variance Decomposition Analysis Results

The results of Impulse Response function and Variance Decomposition Analysis are presented in Appendix figures 1-6 and Appendix tables 1-6. For Indonesia, impulse response function indicated that one positive shock to GDPPC, gross capital formation and labour bring positive response of GDPPC. No other variable was found responsible for positive response in GDPPC. In case of exports, one positive shock to all selected variables results in positive response of exports. Variance decomposition analysis highlighted that whole variance in GDPPC is described by its own variance. After ten years, no significant change was noticed as GDPPC (96.12 percent) shock explained almost whole variance in GDPPC. Except for labour (1.95 percent) and imports (1.06 percent), contribution of other variables was below one percent. In case of exports, major variance in exports is explained almost by its own variance (97.62 percent). After ten years, exports (57.12 percent), GDPPC (22.86 percent), labour (11.03 percent), gross capital formation (8.07 percent) and imports (0.90 percent) account for exports variability. In case of Malaysia, impulse response function indicated one positive shock to GDPPC, exports and imports attributed positive response of GDPPC. In case of exports, its own positive shock and shock to GDPPC results in positive response of exports. Looking at VDA results, GDPPC shock assumed to account for whole variance of GDPPC in the first year. In the tenth year, GDPPC (87.01 percent), gross capital formation (8.18 percent), imports (1.90 percent), exports (1.68 percent) and labour (1.21 percent) contributed to variation in GDPPC. However, the variation in exports is accounted for mainly exports (50.14 percent) and GDPPC (49.85 percent) shocks. This proportion didn't change much over time as after ten years, exports (53.42 percent), GDPPC (40.23 percent) and gross capital formation (5.81 percent) are important source of exports variability. For Philippines, impulse response function shows positive response of GDPPC to its own shock whereas the response of exports to its own shock and GDPPC shock was positive. Variance decomposition analysis highlighted that whole variance in GDPPC is described by its own variance. After ten years, imports (69.75 percent), GDPPC (18.98 percent) and exports (10.45 percent) shock explained almost whole variance in GDPPC. For exports, almost whole variance in exports is explained by its own shock (50.94 percent) and GDPPC (49.05 percent). After ten years, exports (56.87 percent), GDPPC (39.55 percent) and gross capital formation (3.12 percent) are important source of export variability. With respect to IRF results for Singapore, it can be seen that a positive shock to all variables except imports results in positive response of GDPPC whereas a positive shock to GDPPC and exports results in positive response of exports. Variance decomposition analysis (VDA) depicted that GDPPC shock assumed to account for whole variance of GDPPC in first year. After ten years, GDP per capita (75.31 percent), labour (14.99 percent), imports (7.88 percent) and gross capital formation (1.00 percent) are the main source of variability in GDP per capita. For exports, in first year GDPPC (65.78 percent) and exports (34.21 percent) shocks account for variance of exports. This proportion predicted to change over time as after ten years, GDP per capita (55.06 percent), exports (38.31 percent) and imports (5.34 percent) shocks found to be important source of export variability. For Thailand, impulse response function shows positive response of GDPPC to its own unit shock only. No other variable was found responsible for positive response in GDPPC. In case of exports, one positive shock to GDPPC and exports results in positive response of exports. No significant response was observed from other variables. Variance decomposition analysis highlighted that whole variance in GDPPC is described by its own variance. After ten years, GDPPC (87.30 percent) and gross capital formation (12.54 percent) shocks explained almost whole variance in GDPPC. The contribution of other variables was below one percent. In case of exports, the whole variance in exports is explained almost by its own variance (52.42 percent) and GDPPC (47.57 percent). After ten years, GDPPC (57.94 percent) and exports (40.21 percent) mainly account for exports variability. In case of Vietnam, impulse response function

indicated one positive shock to GDPPC brings positive response of GDPPC. No other variable contributed to positive response in GDPPC. In case of exports, one positive shock to imports, gross capital formation and its own shock results in positive response of exports. Variance decomposition analysis highlighted that whole variance in GDPPC is described by its own variance. After ten years, no significant change was noticed as GDPPC (97.74 percent) shock explained almost whole variance in GDPPC. Except for gross capital formation (1.52 percent) contribution of other variables was below one percent. In case of exports, the whole variance in exports is explained almost by its own variance (97.86 percent). After ten years, exports (61.37 percent), imports (22.19 percent), GDPPC (3.17 percent), labour (0.11 percent), account for exports variability in Vietnam (see appendix).

Diagnostic Tests

The models were tested for normality, heteroskedasticity and serial correlation. Diagnostic tests were carried out on the data revealed that models were well specified. Diagnostic tests also indicated that the residuals were normally distributed, homoskedastic and serially uncorrelated. However for Malaysia, Jarque- Bera normality test depicted non normality. Mcdonald (2014) noted that deviation from normality in case of parametric tests is not very sensitive. Wooldridge (2012) pointed out that non-normality of errors is not a serious problem with large sample size.

Table 9: Diagnostic Tests

| Diagnostic Tests | Indonesia | Malaysia | Philippines | Singapore | Thailand | Vietnam |
|-------------------------------------|------------------|-------------------|------------------|------------------|------------------|------------------|
| Jarque-Bera Normality Test | 1.743 (0.418) | 12.683 (0.001) | 1.171 (0.556) | 0.572 (0.751) | 0.182 (0.912) | 0.342 (0.842) |
| ARCH Heteroskedasticity Test | 1.250 (0.263) | 0.016 (0.897) | 0.779 (0.377) | 1.497 (0.221) | 0.518 (0.471) | 1.008 (0.315) |
| Breusch-Godfrey LM test | 0.190 (0.662) | 0.160 (0.688) | 2.751 (0.097) | 1.067 (0.301) | 0.472 (0.491) | 0.351 (0.553) |

Note: p-values are reported in parentheses.

4. Conclusion & Policy Implications

In the literature during the past three decades, there has been greater focus on the critical role of exports as a vehicle to accelerate economic growth. Most economists have argued that Export-led growth is an effective strategy of achieving faster growth. Also, there is scope for reverse causality i.e. GDP growth leads to exports growth. The study has empirically examined the causal link between exports and economic growth for six major Southeast Asian economies by conducting Johansen cointegration and causality test in VECM framework by incorporating dummy variables for the period 1980-2012. The empirical analysis provided diverse results. The results of both trace and max Eigen value tests based on Johansen Cointegration procedure indicated that there was long run equilibrium relationship among variables. The VECM results affirmed short run unidirectional causality from GDPPC to exports i.e. growth led exports for Indonesia. For Malaysia, the results didn't provide evidence for short run causality for GDPPC and exports. The results indicated short run unidirectional causality from exports to GDPPC implying export-led growth for Philippines. In case of Singapore, the findings showed short run unidirectional causality from exports to GDPPC i.e. export-led growth. No short run causality was found between GDPPC and exports in case of Thailand. For Vietnam, the results exhibited short run causality from GDPPC to exports i.e. growth led exports. Hence, ELG hypothesis was found valid for Philippines, Singapore and Thailand, however, reverse causation i.e. growth led exports (GLE) was confirmed for Indonesia and Vietnam in short run. No short run causality in any direction between exports and economic growth was observed in case of Malaysia.

The present study gives strong support to the findings of Rahman and Mustafa (1997) and Ye Lim, FahmiGhazali and MunHo (2011) for long run and short run results in case of Indonesia. The study supported Rahmaddi and Ichihashi (2011) for short run causality results. In case of Malaysia, the study supported the study conducted by Ismail and Harjito(2009) for short run results. For Philippines, the study supported Anoruo and Ramchander (2000) cointegration and VECM results for long run and short run relationship while it strongly contradicts the study conducted by Ye Lim, FahmiGhazali and MunHo (2011). The study partially supported the study conducted by Rahman and Mustafa (1997) for long run unidirectional causality from exports to economic growth in case of Philippines. For Singapore, the cointegration and VECM results are consistent to the study conducted by Ismail and

Harjito(2009), Tang and Lai (2011) whereas it contradicts Rahman and Mustafa (1997) for long run results. The study gives support to the study conducted by Rahman and Mustafa (1997) particularly for long run whereas it contradicts the study of Chirapant (2012) for Thailand. The study partially supported the study conducted by Bhatt (2013) for Vietnam as the cointegration test confirmed long run relationship.

This study confirms long-run relationship between selected variables i.e. exports, imports, capital formation, labour and GDP per capita. The study also finds evidence of long run relationship between exports and per capita income growth in all the countries except Thailand and Vietnam. Thus, exports have played an important role in economic growth of better performing economies. Hence, the economies need to continue with their export promoting policies for optimal growth. Secondly, for export promotion certain level of growth is a pre-requisite. It helps in attaining efficient resource allocation and economies of scale which lowers the cost of export products and make them more competitive. Hence, the economies can reap the benefits of comparative advantage.

Limitation and Further scope of the Study

The limitations associated with the study include lack of sectoral analysis. Due to the non-availability of appropriate time series sectoral data, analysis remained limited to aggregate level. Therefore, there is further scope of disaggregate analysis by examining sectoral contribution of major export categories towards economic growth for more comprehensive coverage. As indicated by Hesse (2008) and Ye Lim, Fahmi Ghazali and MunHo (2011) variable real export is very general and does not account for export diversification. Hence, within same area further research can be carried out by examining the relationship between exports diversification and economic growth.

References

- Afzal, M. and I. Hussain (2010):‘Export-led Growth Hypothesis: Evidence from Pakistan’, *Journal of Quantitative Economics*, Vol. 8, No. 1, pp. 130-147.
- Ahmad, J., and S. Harnhirun (1995): ‘Unit Roots and Cointegration in Estimating Causality between Exports and Economic Growth: Empirical Evidence from the ASEAN Countries’, *Economics letters*, Vol. 49, No. 3, pp. 329-334.
- Ahmad, J., and S. Harnhirun (1996): ‘Cointegration and Causality between Exports and Economic Growth: Evidence from the ASEAN Countries’, *The Canadian Journal of Economics*, Vol. 29, No. 2 (April), pp. S413-S416.
- Al-Yousif, Y. K. (1999):‘On the Role Exports in the Economic Growth of Malaysia: A Multivariate Analysis’, *International Economic Journal*, Vol. 13, No. 3, pp. 67-75.
- Amrinto, L. E. (2006): ‘A Semiparametric Assessment of Export-led Growth in the Philippines’, (Doctoral dissertation, Louisiana State University), (Cited on August 14, 2015), Available from: <http://etd.lsu.edu/docs/available/etd-04072006-101336/>.
- Anoruo, E. and S. Ramchander (2000):‘Exports and Economic Growth: An Error Correction Model’, *Department of Management Science and Economics, Coppin State College*, (Cited on August 20, 2015), Available from: https://www.researchgate.net/profile/EmmanuelAnoruo/publication/228452753_Export_and_economic_growth_an_error_correction_model/links/0c96051e6c5a072908000000.pdf.
- Baharumshah, A. Z. and S. Rashid (1999):‘Exports, Imports and Economic Growth in Malaysia: Empirical Evidence Based on Multivariate Time Series’, *Asian Economic Journal*, Vol. 13, No. 4, pp. 389-406.
- Ballester, R., & J. Sinay (2013): ‘An Empirical Analysis of the Export-Led Growth (ELG) Hypothesis in the Philippines’, *Philippine Review of Economics*, Vol. 50, No. 1, pp. 83-110.
- Bersick, S. and P. Pasch (2007): ‘Southeast Asia: The Future of German Foreign Relations’, Friedrich-Ebert-Stiftung, Department for Development Policy, (Cited on April 15, 2016), Available from: http://www.fes.de/kompass2020/pdf_en/SoutheastA.pdf.
- Bhatt, P. R. (2013):‘Causal Relationship between Exports, FDI and Income: The Case of Vietnam’, *Applied Econometrics and International Development*, Vol. 13, No. 1, pp. 161-176.
- Canlas, D. B. (1985): ‘The Balance of Payments Crisis and the Economy’, *Development Research News*, Philippines Institute for Development Studies, Vol. 3, No. 2, pp. 1-7.
- Chirapant, B.(2012):‘Does the Export-led Growth Hypothesis hold for Thailand?Testing for Granger Causality in a bivariate VAR Model’, (Cited on November 23, 2015), Available from: https://www.academia.edu/4122805/Does_the_Export-

led Growth Hypothesis hold for Thailand Testing for Granger Causality in a bivariate VAR model.

- Doraisami, A. (1996): 'Export Growth and Economic Growth: A Reexamination of Some Time-Series Evidence of the Malaysian experience', *The Journal of Developing Areas*, Vol. 30, No. 2, pp. 223-230.
- Evans, O. (2013): 'Testing Finance-Led, Export-Led and Import-Led Growth Hypotheses on Four Sub-Saharan African Economies', *MPRA Paper No. 52460*, University Library of Munich, Germany.
- Eviews(2006): Eviews User's Guide (II), ©1994-2007 Quantitative Micro Software.
- Furuoka, F. (2007): 'Do Exports act as "Engine" of Growth? Evidence from Malaysia', *Economics Bulletin*, Vol. 6, No. 37, pp. 1-14.
- Ghatak, S., C. Milner and U. Utkulu (1997): 'Exports, Export Composition and Growth: Cointegration and Causality Evidence for Malaysia', *Applied Economics*, Vol. 29, No. 2, pp. 213-223.
- Granger, C. W. and P. Newbold (1974): 'Spurious Regressions in Econometrics', *Journal of Econometrics*, Vol. 2, No. 2, pp. 111-120.
- Gujarati, D.N. (1995): *Basic Econometrics* (3rd ed.), New York, Tata McGraw-Hill.
- Hesse, H. (2006). Export diversification and economic growth, *World Bank, Washington, DC*.
- Hsiao, F. S. and M. C. W. Hsiao (2006): 'FDI, Exports, and Growth in East and Southeast Asia: Evidence from Time-Series and Panel Data Causality Analyses', *In 2006 International Conference on Korea and the World Economy V* (pp. 7-8).
- Ibrahim, M. H. (2002): 'An Empirical Note on the Export-Led Growth Hypothesis: The Case of Malaysia', *Economic Analysis and Policy*, Vol. 32, No. 2, pp. 221-232.
- Islam, M. N. (1998): 'Export Expansion and Economic Growth: Testing for Cointegration and Causality', *Applied Economics*, Vol. 30, No. 3, pp. 415-425.
- Ismail, A. G. and D. A. Harjito (2009): 'Exports and Economic Growth: The Causality Test for ASEAN Countries', *Economic Journal of Emerging Markets*, Vol. 8, No. 2, pp. 89-95.
- Jiranyakul, K. (2010): 'Recent Evidence of the Validity of the Export-led Growth Hypothesis for Thailand', *Economics Bulletin*, Vol. 30, No. 3, pp. 2151-2159.
- Johansen, S. (1991): 'Estimation and Hypothesis Testing of Cointegration Vectors in Gaussian Vector Autoregressive Models', *Econometrica: Journal of the Econometric Society*, Vol. 59, No. 6, pp. 1551-1580.
- Johansen, S. (1995): *Likelihood-based Inference in Cointegrated Vector Autoregressive Models*, Oxford: Oxford University Press, New York.
- Keong, C. C., Z. Yusop and V. K. S. Liew (2003): 'Export-led Growth Hypothesis in Malaysia: An Application of Two-Stage Least Square Technique', *International Finance*, Vol. 3, (Cited on August 6, 2015), Available from: <http://citeseerx.ist.psu.edu/viewdoc/download?doi=10.1.1.475.1469&rep=rep1&type=pdf>
- Keong, C. C., Z. Yusop and V. K. S. Liew (2005): 'Export-led Growth Hypothesis in Malaysia: An Investigation Using Bounds Test', *Sunway Academic Journal*, Vol. 2, pp. 13-22.
- Khalafalla, K. Y. and A. J. Webb (2001): 'Export-led Growth and Structural Change: Evidence from Malaysia', *Applied Economics*, Vol. 33, No. 13, pp. 1703-1715.
- Kokko, A. (2002): 'Export-Led Growth in East Asia: Lessons for Europe's Transition Economies', *Working Paper No. 142*, (Cited on August 7, 2015), Available from: <http://citeseerx.ist.psu.edu/viewdoc/download?doi=10.1.1.578.8828&rep=rep1&type=pdf>
- Lunn, J., G. Thompson, O. Bennett and M. Oshikoya (2011): '*Southeast Asia: A Political and Economic Introduction*', House of Commons Library, (Cited on August 7, 2015), Available from: researchbriefings.files.parliament.uk/documents/RP11-78/RP11-78.pdf
- McDonald, J.H. (2014): *Handbook of Biological Statistics* (3rd ed.), Sparky House Publishing, Baltimore, Maryland, pp. 133-136, (Cited on August 27, 2015), Available from: <http://www.biostathandbook.com/normality.html>
- Mahadevan, R. (2007): 'New Evidence on the Export-led Growth Nexus: A Case Study of Malaysia', *The World Economy*, Vol. 30, No. 7, pp. 1069-1083.
- Mahadevan, R. (2009): 'The Sustainability of Export-led Growth: The Singaporean Experience', *The Journal of Developing Areas*, Vol. 43, No. 1, pp. 233-247.
- Nasreen, S. (2011): 'Export-Growth Linkages in Selected Asian Developing Countries: Evidence from Panel Data Analysis', *Asian Journal of Empirical Research*, Vol. 1, No. 1, pp. 1-13.
- Ngoc, P. M., N. T. P. Anhand and P. T. Nga (2003): 'Exports and Long-run Growth in Vietnam, 1975-2001', *ASEAN Economic Bulletin*, Vol. 20, No. 3, pp. 211-232.

- Rahmaddi, R. and M. Ichihashi (2011): 'Exports and Economic Growth in Indonesia: A Causality Approach based on Multi-Variate Error Correction Model', *Journal of International Development and Cooperation*, Vol. 17, No. 2, pp. 53-73.
- Rahman, M. and M. Mustafa (1997): 'Dynamics of Real Exports and Real Economic Growth in 13 Selected Asian Countries', *Journal of Economic Development*, Vol. 22, No. 2, pp. 81-95.
- Safdari, M., M. Mahmoodi, and E. Mahmoodi (2011): 'The Causality Relationship between Export and Economic Growth in Asian Developing Countries', *American Journal of Scientific Research*, Vol. 25, pp. 40-45.
- Shan, L. H., and Z. Jusoh (2012): 'Is The Export-Led Growth Hypothesis Valid for Malaysia?', *Journal of the Department of Statistics Malaysia*, Vol. 2, pp. 1-14.
- Shirazi, N. S. and T. A. A. Manap (2005): 'Export-led Growth Hypothesis: Further Econometric Evidence from South Asia', *Developing Economies*, Vol. 43, No. 4, pp. 472-488.
- Sulaiman, M. and N. M. Saad (2009): 'An Analysis of Export Performance and Economic Growth of Malaysia using Co-integration and Error Correction Models', *The Journal of Developing Areas*, Vol. 43, No. 1, pp. 217-231.
- Tang, C. F. (2013): 'A Revisitation of the Export-Led Growth Hypothesis in Malaysia using the Leveraged Bootstrap Simulation and Rolling Causality Techniques', *Journal of Applied Statistics*, Vol. 40, No. 11, pp. 2332-2340.
- Tang, C. F. and Y. W. Lai (2011): 'The Stability of Export-led Growth Hypothesis: Evidence from Asia's Four Little Dragons', *MPRA Paper* (27962), pp. 1-13.
- Thangavelu, S. M. and G. Rajaguru (2004): 'Is there an Export or Import-led Productivity Growth in Rapidly Developing Asian countries? A multivariate VAR Analysis', *Applied Economics*, Vol. 36, No. 10, pp. 1083-1093.
- Thirlwall, A. P. (2000): 'Trade, Trade Liberalisation and Economic Growth: Theory and Evidence. African Development Bank', *Economic Research Papers No. 63*, (Cited on April 20, 2016), Available from: <http://www.afdb.org/fileadmin/uploads/afdb/Documents/Publications/00157660-FR-ERP-63.PDF>
- Versluis, A., V. Casanova and I. Azman (2015): *Southeast Asia's Economic Outlook – The Big Picture*, (Cited on April 20, 2016) Available from: https://www.rolandberger.com/media/pdf/Roland_Berger_TAB_Southeast_Asia_Economic_Outlook_20151125.pdf
- Vohra, R. (2001): 'Export and Economic Growth: Further Time Series Evidence from Less-Developed Countries', *International Advances in Economic Research*, Vol. 7, No. 3, pp. 345-350.
- Wooldridge, J. (2012): *Introductory Econometrics: A Modern Approach*. Cengage Learning, Nelson Education.
- Ye Lim, S., M. Fahmi Ghazali and C. Mun Ho (2011): 'Export and Economic Growth in Southeast Asia Current Newly Industrialized Countries: Evidence from Nonparametric Approach', *Economics Bulletin*, Vol. 31, No. 3, pp. 2683-2693.
- Yotzov, V. (2013): 'Economic Growth and External Sector', *Proceedings in ARSA-Advanced Research in Scientific Areas*, Vol. 2, No. 6, pp. 173-178.

Appendices

Figure 1: Indonesia

Response to Cholesky One S.D. Innovations

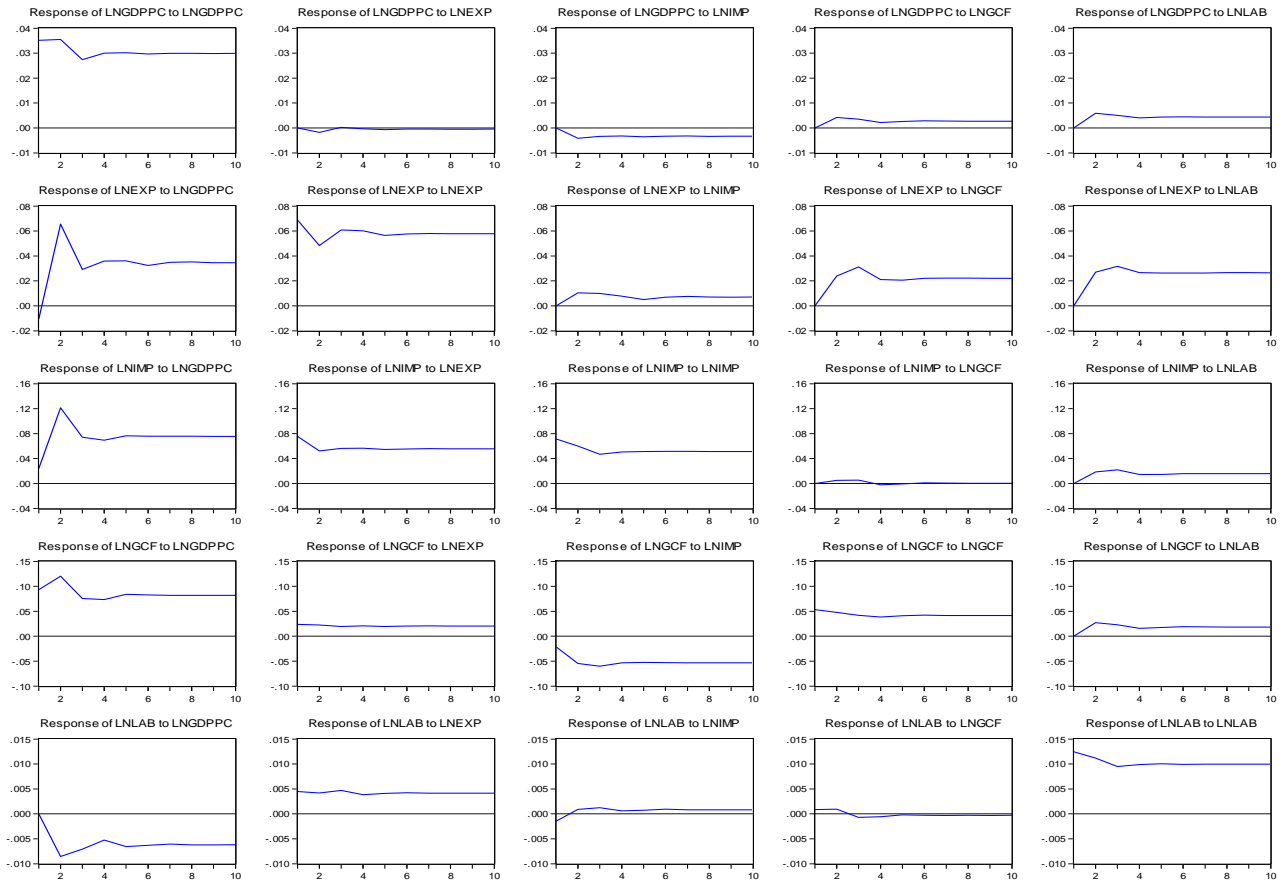


Figure 2: Malaysia

Response to Cholesky One S.D. Innovations

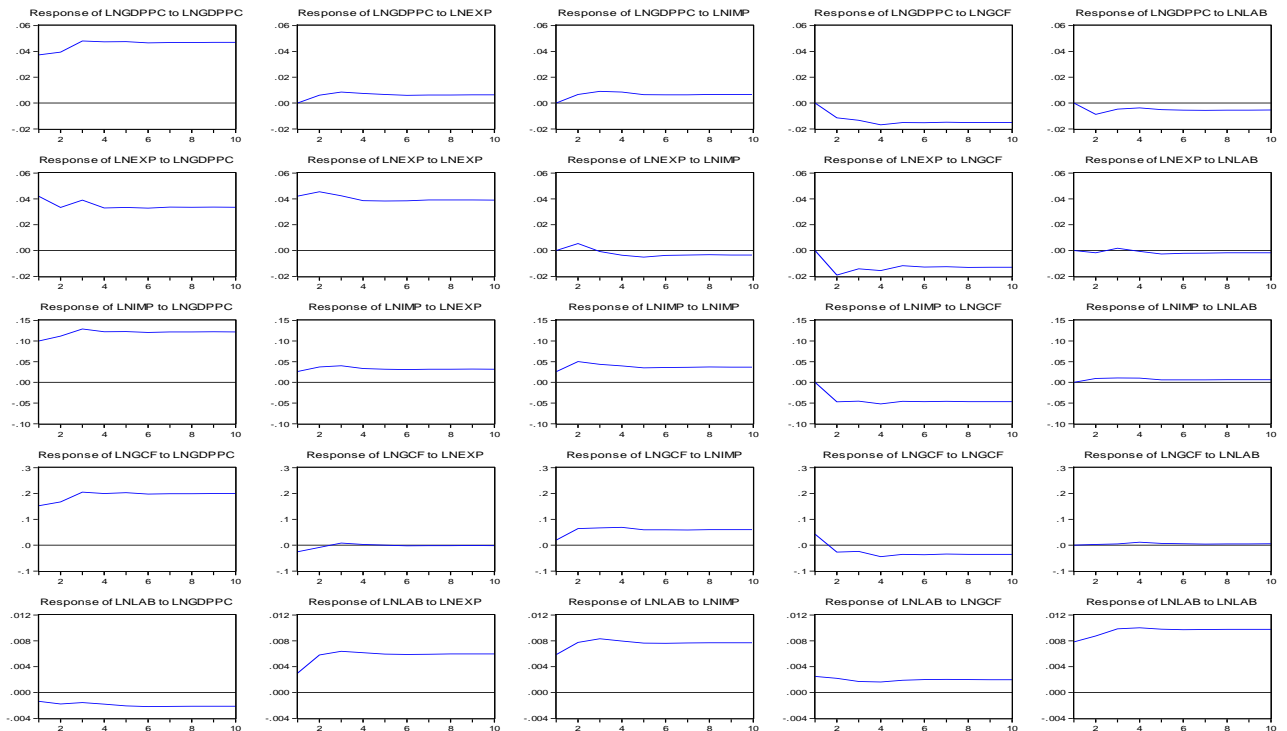


Figure 3: Philippines

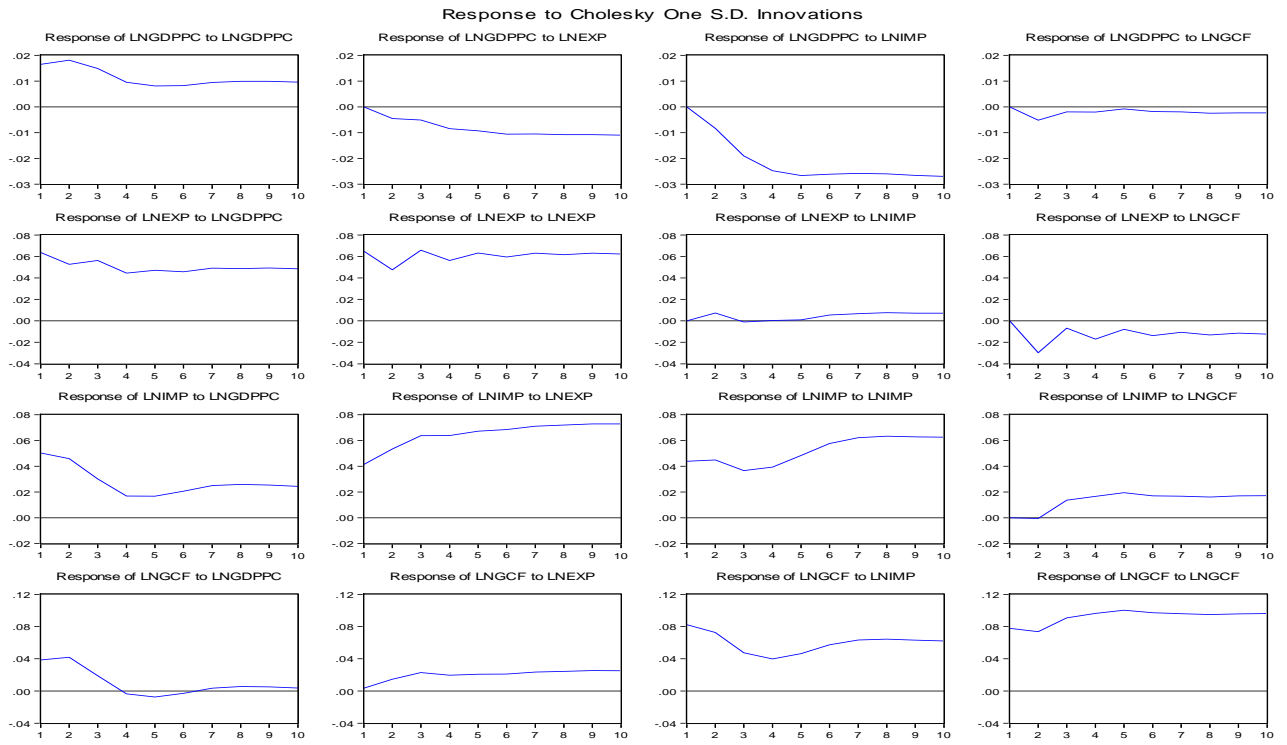


Figure 4: Singapore

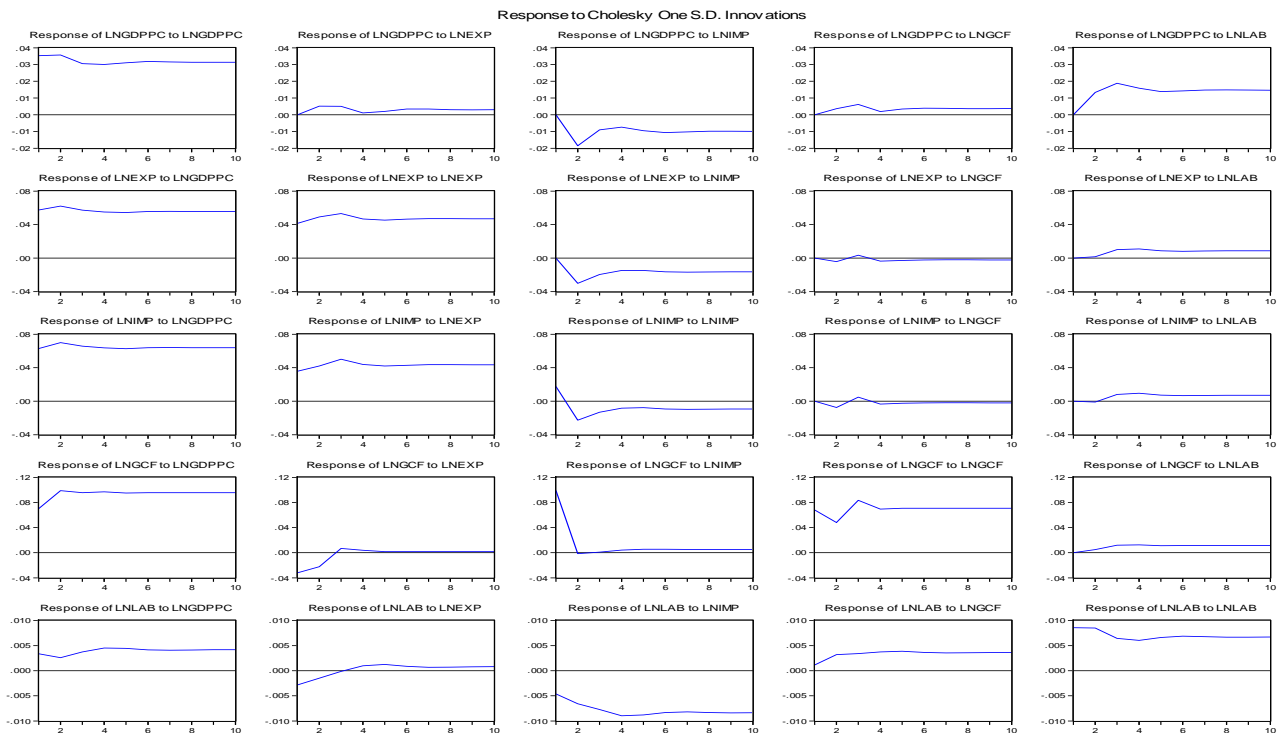


Figure 5: Thailand

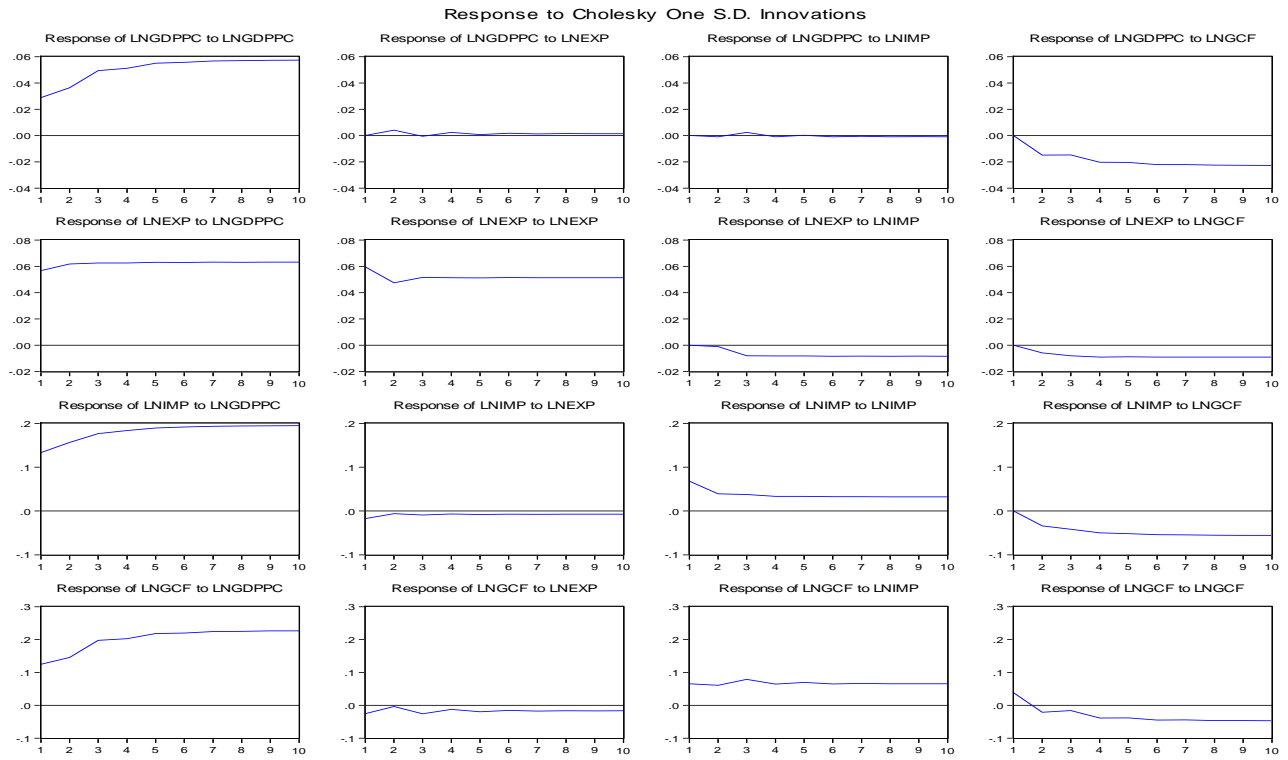
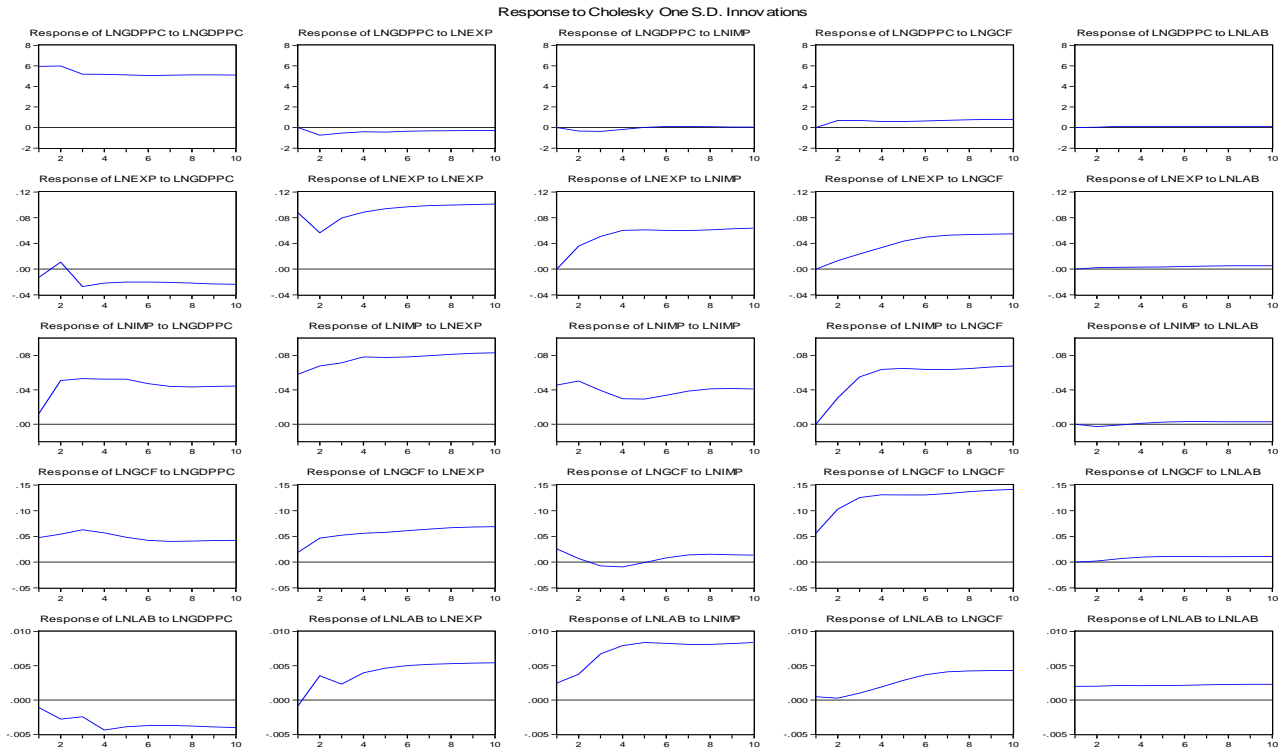


Figure 6: Vietnam



Indonesia

Appendix Table 1: Variance Decomposition Analysis

| Variance Decomposition of LNGDPPC: | | | | | |
|------------------------------------|---------|-------|-------|-------|-------|
| Period | LNGDPPC | LNEXP | LNIMP | LNGCF | LNLAB |
| 1 | 100.00 | 0.00 | 0.00 | 0.00 | 0.00 |
| 2 | 97.14 | 0.12 | 0.66 | 0.69 | 1.37 |
| 3 | 96.35 | 0.09 | 0.84 | 0.88 | 1.81 |
| 4 | 96.40 | 0.07 | 0.90 | 0.81 | 1.80 |
| 5 | 96.32 | 0.07 | 0.97 | 0.79 | 1.83 |
| 6 | 96.24 | 0.06 | 1.00 | 0.80 | 1.88 |
| 7 | 96.20 | 0.05 | 1.01 | 0.80 | 1.90 |
| 8 | 96.17 | 0.05 | 1.03 | 0.80 | 1.92 |
| 9 | 96.14 | 0.05 | 1.05 | 0.80 | 1.94 |
| 10 | 96.12 | 0.04 | 1.06 | 0.80 | 1.95 |

| Variance Decomposition of LNEXP: | | | | | |
|----------------------------------|---------|-------|-------|-------|-------|
| Period | LNGDPPC | LNEXP | LNIMP | LNGCF | LNLAB |
| 1 | 2.37 | 97.62 | 0.00 | 0.00 | 0.00 |
| 2 | 34.28 | 54.80 | 0.83 | 4.43 | 5.63 |
| 3 | 26.99 | 55.20 | 1.06 | 7.89 | 8.84 |
| 4 | 25.58 | 56.14 | 1.04 | 7.73 | 9.49 |
| 5 | 25.12 | 56.25 | 0.93 | 7.68 | 9.99 |
| 6 | 24.15 | 56.73 | 0.92 | 7.83 | 10.35 |
| 7 | 23.69 | 56.88 | 0.93 | 7.92 | 10.56 |
| 8 | 23.40 | 56.92 | 0.91 | 7.99 | 10.76 |
| 9 | 23.10 | 57.03 | 0.90 | 8.03 | 10.91 |
| 10 | 22.86 | 57.12 | 0.90 | 8.07 | 11.03 |

Malaysia

Appendix Table 2: Variance Decomposition Analysis

| Variance Decomposition of LNGDPPC: | | | | | |
|------------------------------------|---------|-------|-------|-------|-------|
| Period | LNGDPPC | LNEXP | LNIMP | LNGCF | LNLAB |
| 1 | 100.00 | 0.00 | 0.00 | 0.00 | 0.00 |
| 2 | 91.15 | 1.15 | 1.33 | 4.02 | 2.33 |
| 3 | 89.17 | 1.85 | 2.11 | 5.20 | 1.65 |
| 4 | 87.60 | 1.91 | 2.30 | 6.86 | 1.31 |
| 5 | 87.42 | 1.86 | 2.14 | 7.32 | 1.24 |
| 6 | 87.24 | 1.79 | 2.04 | 7.68 | 1.23 |
| 7 | 87.20 | 1.74 | 1.97 | 7.83 | 1.23 |
| 8 | 87.11 | 1.71 | 1.94 | 7.98 | 1.22 |
| 9 | 87.06 | 1.70 | 1.92 | 8.08 | 1.22 |
| 10 | 87.01 | 1.68 | 1.90 | 8.18 | 1.21 |

| Variance Decomposition of LNEXP: | | | | | |
|----------------------------------|---------|-------|-------|-------|-------|
| Period | LNGDPPC | LNEXP | LNIMP | LNGCF | LNLAB |
| 1 | 49.85 | 50.14 | 0.00 | 0.00 | 0.00 |
| 2 | 40.42 | 54.04 | 0.40 | 5.08 | 0.039 |
| 3 | 41.34 | 53.03 | 0.27 | 5.28 | 0.05 |
| 4 | 40.73 | 52.95 | 0.31 | 5.94 | 0.048 |
| 5 | 40.68 | 53.02 | 0.42 | 5.78 | 0.08 |
| 6 | 40.47 | 53.17 | 0.43 | 5.81 | 0.09 |
| 7 | 40.41 | 53.27 | 0.43 | 5.77 | 0.10 |
| 8 | 40.32 | 53.34 | 0.42 | 5.79 | 0.10 |
| 9 | 40.28 | 53.38 | 0.42 | 5.80 | 0.10 |
| 10 | 40.23 | 53.42 | 0.42 | 5.81 | 0.10 |

Philippines

Appendix Table 3: Variance Decomposition Analysis

| Variance Decomposition of LNGDPPC: | | | | |
|------------------------------------|---------|-------|-------|-------|
| Period | LNGDPPC | LNEXP | LNIMP | LNGCF |
| 1 | 100.00 | 0.00 | 0.00 | 0.00 |
| 2 | 83.61 | 2.87 | 9.72 | 3.78 |
| 3 | 61.65 | 3.52 | 32.49 | 2.32 |
| 4 | 43.09 | 5.63 | 49.60 | 1.66 |
| 5 | 32.77 | 6.92 | 59.09 | 1.20 |

| | | | | |
|----|-------|-------|-------|------|
| 6 | 27.13 | 8.27 | 63.56 | 1.01 |
| 7 | 24.01 | 9.09 | 65.97 | 0.91 |
| 8 | 21.92 | 9.72 | 67.47 | 0.88 |
| 9 | 20.32 | 10.12 | 68.71 | 0.84 |
| 10 | 18.98 | 10.45 | 69.75 | 0.80 |

| Variance Decomposition of LNEXP: | | | | |
|----------------------------------|---------|-------|-------|-------|
| Period | LNGDPPC | LNEXP | LNIMP | LNGCF |
| 1 | 49.05 | 50.94 | 0.00 | 0.00 |
| 2 | 47.94 | 45.47 | 0.37 | 6.21 |
| 3 | 45.86 | 49.62 | 0.24 | 4.26 |
| 4 | 43.99 | 51.32 | 0.19 | 4.48 |
| 5 | 42.36 | 53.64 | 0.16 | 3.82 |
| 6 | 41.38 | 54.66 | 0.21 | 3.73 |
| 7 | 40.73 | 55.53 | 0.27 | 3.44 |
| 8 | 40.28 | 56.00 | 0.35 | 3.35 |
| 9 | 39.89 | 56.49 | 0.40 | 3.20 |
| 10 | 39.55 | 56.87 | 0.44 | 3.12 |

Singapore

Appendix Table 4: Variance Decomposition Analysis

| Variance Decomposition of LNGDPPC: | | | | | |
|------------------------------------|---------|-------|-------|-------|-------|
| Period | LNGDPPC | LNEXP | LNIMP | LNGCF | LNLAB |
| 1 | 100.00 | 0.00 | 0.00 | 0.00 | 0.00 |
| 2 | 81.83 | 0.85 | 11.11 | 0.42 | 5.77 |
| 3 | 76.55 | 1.15 | 9.38 | 1.14 | 11.75 |
| 4 | 76.07 | 0.93 | 8.36 | 0.96 | 13.65 |
| 5 | 76.14 | 0.82 | 8.14 | 0.95 | 13.93 |
| 6 | 75.92 | 0.82 | 8.16 | 0.98 | 14.09 |
| 7 | 75.65 | 0.83 | 8.11 | 1.00 | 14.38 |
| 8 | 75.49 | 0.81 | 8.01 | 1.00 | 14.66 |
| 9 | 75.39 | 0.79 | 7.93 | 1.00 | 14.86 |
| 10 | 75.31 | 0.78 | 7.88 | 1.00 | 14.99 |

| Variance Decomposition of LNEXP: | | | | | |
|----------------------------------|---------|-------|-------|-------|-------|
| Period | LNGDPPC | LNEXP | LNIMP | LNGCF | LNLAB |
| 1 | 65.78 | 34.21 | 0.00 | 0.00 | 0.00 |
| 2 | 58.60 | 33.77 | 7.44 | 0.15 | 0.02 |
| 3 | 55.46 | 36.94 | 6.87 | 0.16 | 0.55 |
| 4 | 55.20 | 37.48 | 6.21 | 0.17 | 0.91 |
| 5 | 55.29 | 37.68 | 5.83 | 0.17 | 1.01 |
| 6 | 55.29 | 37.83 | 5.67 | 0.16 | 1.03 |
| 7 | 55.20 | 38.00 | 5.57 | 0.14 | 1.06 |
| 8 | 55.13 | 38.14 | 5.48 | 0.13 | 1.09 |
| 9 | 55.09 | 38.24 | 5.40 | 0.13 | 1.12 |
| 10 | 55.06 | 38.31 | 5.34 | 0.12 | 1.14 |

Thailand

Appendix Table 5: Variance Decomposition Analysis

| Variance Decomposition of LNGDPPC: | | | | |
|------------------------------------|---------|-------|-------|-------|
| Period | LNGDPPC | LNEXP | LNIMP | LNGCF |
| 1 | 100.00 | 0.00 | 0.00 | 0.00 |
| 2 | 89.91 | 0.69 | 0.03 | 9.35 |
| 3 | 90.75 | 0.33 | 0.13 | 8.76 |
| 4 | 89.01 | 0.28 | 0.09 | 10.61 |
| 5 | 88.68 | 0.20 | 0.06 | 11.05 |

| | | | | |
|----|-------|------|------|-------|
| 6 | 88.11 | 0.17 | 0.05 | 11.65 |
| 7 | 87.85 | 0.14 | 0.04 | 11.94 |
| 8 | 87.60 | 0.13 | 0.04 | 12.22 |
| 9 | 87.44 | 0.11 | 0.03 | 12.39 |
| 10 | 87.30 | 0.11 | 0.03 | 12.54 |

| Variance Decomposition of LNEXP: | | | | |
|---|----------------|--------------|--------------|--------------|
| Period | LNGDPPC | LNEXP | LNIMP | LNGCF |
| 1 | 47.57 | 52.42 | 0.00 | 0.00 |
| 2 | 54.68 | 45.03 | 0.00 | 0.27 |
| 3 | 55.93 | 43.21 | 0.34 | 0.51 |
| 4 | 56.55 | 42.23 | 0.50 | 0.69 |
| 5 | 57.05 | 41.54 | 0.60 | 0.78 |
| 6 | 57.32 | 41.12 | 0.68 | 0.86 |
| 7 | 57.55 | 40.79 | 0.73 | 0.91 |
| 8 | 57.70 | 40.56 | 0.77 | 0.95 |
| 9 | 57.83 | 40.36 | 0.80 | 0.98 |
| 10 | 57.94 | 40.21 | 0.82 | 1.01 |

Vietnam

Appendix Table 6: Variance Decomposition Analysis

| Variance Decomposition of LNGDPPC: | | | | | |
|---|----------------|--------------|--------------|--------------|--------------|
| Period | LNGDPPC | LNEXP | LNIMP | LNGCF | LNLAB |
| 1 | 100.00 | 0.00 | 0.00 | 0.00 | 0.00 |
| 2 | 98.43 | 0.75 | 0.16 | 0.65 | 0.00 |
| 3 | 97.94 | 0.83 | 0.25 | 0.95 | 0.01 |
| 4 | 97.94 | 0.78 | 0.22 | 1.01 | 0.02 |
| 5 | 97.94 | 0.77 | 0.18 | 1.06 | 0.02 |
| 6 | 97.92 | 0.73 | 0.16 | 1.14 | 0.03 |
| 7 | 97.88 | 0.68 | 0.14 | 1.23 | 0.03 |
| 8 | 97.83 | 0.64 | 0.13 | 1.34 | 0.03 |
| 9 | 97.78 | 0.61 | 0.12 | 1.44 | 0.03 |
| 10 | 97.74 | 0.58 | 0.11 | 1.52 | 0.03 |

| Variance Decomposition of LNEXP: | | | | | |
|---|----------------|--------------|--------------|--------------|--------------|
| Period | LNGDPPC | LNEXP | LNIMP | LNGCF | LNLAB |
| 1 | 2.13 | 97.86 | 0.00 | 0.00 | 0.00 |
| 2 | 2.24 | 86.28 | 10.09 | 1.33 | 0.04 |
| 3 | 4.45 | 75.37 | 16.92 | 3.18 | 0.05 |
| 4 | 4.15 | 69.80 | 20.85 | 5.13 | 0.06 |
| 5 | 3.73 | 66.72 | 22.11 | 7.36 | 0.06 |
| 6 | 3.45 | 64.89 | 22.25 | 9.32 | 0.07 |
| 7 | 3.28 | 63.70 | 22.12 | 10.79 | 0.08 |
| 8 | 3.20 | 62.78 | 22.07 | 11.83 | 0.09 |
| 9 | 3.18 | 62.01 | 22.11 | 12.57 | 0.10 |
| 10 | 3.17 | 61.37 | 22.19 | 13.13 | 0.11 |

An Empirical Investigation of Design Characteristics for E-Commerce Websites

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ABSTRACT

Website design quality is considered to be one of the most important determinants that influence the purchase decision of online customers. However, there has been a wide gap between the customer expectations and reality when it comes to e-commerce websites. Hence it is important to explore the website design features that are most valued by the customers when the website is used as an interactive medium of marketing. The purpose of this study is to investigate the e-commerce website features that are perceived by the customers to be most significant in shaping the online purchase decision. The study helps in identifying three factors related to website design which are most valued by the customers viz. user-friendliness, informative value and visual appeal of the website.

Keywords: e-commerce, website design, online purchase decision, Internet, user-friendliness, informative value, website visual appeal.

JEL Classification: M10, M15, M30

1. INTRODUCTION

Internet is “an enabling technology, a powerful set of tools that can be used, wisely or unwisely, in almost any industry and as part of almost any strategy” (Porter, 2001). Marketers are viewing Internet as an easy and cheaper mechanism for businesses to communicate electronically with the outside world, including their customers, suppliers, channel members and other general public. The Internet and the World Wide Web will change many aspects of business with the greatest implications being for marketing (Settles, 1995). Web 2.0 is the latest buzzword that has been embraced widely by organizations worldwide. It is an expanded version of the Web that enhances its capabilities by adding more interactivity and social connectivity through networking and collaboration among a variety of human groups; it provides an immediate response to users' queries and needs by providing better search facilities; and provides an efficient, convincing and engaging user search ability (Kim et al., 2009).

All these functionalities of the Web are represented through the websites, or in other words, it is the website that acts as an interface between the buyers and sellers in the cyberspace. It is similar to any other computing environment where humans interact with computers through a user interface. The web interface in the case of e-commerce is a major success factor that determines the extent to which a buyer sticks to a website, revisits and finally buys through it (Turban and Gehrke, 2000). Despite the increasing importance of considering website design quality as one of the determinants that influence the purchase decision of online customers, it has been found that there exists a wide gap between the content that is presented to the customer and the information that he/she expects; which has caused e-businesses to lose large amounts of potential income online (Creative Good, 1999). Hence it is important to understand the website design features that are most valued by the customers. The purpose of this study is to investigate the most important website design features that are significant in shaping the online purchase decision. The following sections describe a review of related research, research methodology, data analysis, conclusions and recommendations.

2. REVIEW OF LITERATURE

The emerging field of e-commerce has always been a topic of interest to several researchers which has offered innumerable avenues for research work; and website design being one of them. The most interesting aspect of web-design related studies amounts to the fact that the web-experience is not just governed by the technical design of a web-site but also by the human cognition element involved in the design that jointly influences the perception towards the website and its role in shaping the online consumer behavior. The research article by Constantinides (2004) presents a literature review that helps in identifying the web experience components and their role as the first step in shaping the online consumer's behavior. He has identified three main categories of factors (functionality, psychological

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and content factors) which can be considered as the building blocks of the web experience. Functionality includes Usability and Interactivity dimensions, psychological factors are mostly explained by the trust in a website and the online vendor and the content factors include website aesthetics and marketing mix adopted by the online marketer. Constantinides (2004) has provided an account of the number of references for each of these factors. It is interesting to note that most of the references are for usability and trust factor, followed by marketing mix, interactivity and aesthetics. Ballantine (2005) has explored the effects of interactivity and the amount of product information provided by an online shopping website on consumer satisfaction. He conducted a web-based experiment wherein respondents were exposed to a simulated online retail store and concluded that interactivity and product information had a substantial effect on the consumer satisfaction.

Another experimental study conducted by Song and Zinkhan (2008) identifies the factors that have an impact on user perceptions of interactivity in an online communication system in which consumers communicate by sending instant messages to an e-store. In order to study the link between a website's interactivity features and a consumer's perception of interactivity, an experimental set up was created in which consumers indulge in online chat for gathering information and solving problems related to a website. The authors were able to demonstrate that personalization of message strongly influences the interactivity perceptions, with higher levels of such influence when a customer is complaining rather than inquiring about the services.

Tangibility in a website environment also remains an important aspect of the purchase process of Internet shoppers. Melian-Alzola and Padron-Robaina (2006) conducted a research study to explore the relevance and significance of the tangible elements of online shopping in business to consumer (B2C) e-commerce, and its effect on overall customer attitude and perceptions regarding quality. They concluded that the tangible aspects of online commerce are demonstrated by four attributes viz. navigation, signposting, tools and explanation, out of which design was found to be an important predictor of overall perceived quality and the disposition to further recommend the e-commerce website to others.

Everard and Galletta (2006) in an experimental study with 272 undergraduate and graduate student volunteers studied the application of impression formation in electronic commerce environment. Their research model was based on the hypotheses that the users' perception regarding quality of an online store is inversely related to errors, poor style, and incompleteness of information and directly related to users' trust in the store and, eventually, to users' purchases intentions regarding the store. Further, the authors also concluded that the relationship between the selected factors and perceived quality was mediated by the perception of the flaws. Interestingly, it was found that the perception of flaws rather than the actual flaws had an influence on users' perception of quality.

The experts' opinion on the website quality factors may be different from the quality perception of the online customers. This was further substantiated by an exploratory study conducted by Turban and Gehrke (2000) where they identified the most important characteristics of website design from two different perspectives: the online users and the experts. The results indicated that the customers' point of view on the importance of web design characteristics was completely different from the experts' opinion. For example, the technical issues that rated as of high importance for experts were not so important for the customers. Similarly, 'security' which was considered by customers as very important, received least citations from experts.

3. RESEARCH METHODOLOGY

As relationship among different website design variables was to be explored; descriptive research design was considered to be the most appropriate design for the study. Since the study is concerned with a sample of elements from a given population, the present study can be further categorised under cross-sectional descriptive study (Beri, op cit p). In order to gather information about the behaviour, intentions, attitudes, demographic and lifestyle characteristics of the Internet shoppers, survey method was found to be most appropriate. The data collection process was further standardized by using a structured instrument in which the questions were asked in a pre-determined order.

For the purpose of this study, Internet buyers having at least three transactions on Internet in a year were considered for inclusion in the sample. As the study is cross-sectional, primary data were

collected from a sample of 318 web shoppers through a structured pre-tested questionnaire. Where ever necessary Likert scale type questions were used to measure the responses on a five point scale.

4. DATA ANALYSIS

Data and information were collected from 318 respondents. However, at the time of data entry 34 questionnaires were rejected for being incomplete or inconsistent responses. Therefore 284 filled- in questionnaires formed the basis of this study. The sample was biased in favour of younger people (86.6 percent) because most Internet users are young in age. It was found that very few people above the age of 56 years really use Internet for shopping.

Review of literature suggested that features of web design play a very important role in attracting the customers and influencing their purchase decisions. Therefore, to ascertain the role of website design features in influencing the purchase decision, an inventory of seven important features, extracted from review of literature, was prepared and data were collected from the respondents by using a five point Likert type scale. The features listed in the questionnaire included the following:

- Contents of web page
- Presentation
- Interactivity
- Ease of navigation
- Search facility
- Security
- Richness of the media

It was decided to perform a factor analysis to reduce these 7 variables (features of website design) into two or three better identifiable groups of variables. Factor analysis was considered to be an appropriate technique for data analysis in this study as it helps to denote a set of variables in the form of a reduced number of hypothetical variables (Lewis and Beck: 1994).

As the first step, KMO and Bartlett's tests were carried out to test the suitability of the data generated from fieldwork for factor analysis. The KMO measure of sampling adequacy which indicates the appropriateness of data for factor analysis was between .5 and 1.0. These high values indicated that factor analysis can be used in the given study. The Bartlett's test of Sphericity tests the hypothesis that the selected variables are uncorrelated in the population i.e. each variable has a correlation with itself but is not correlated with other variables (Malhotra, 2003).

The Table I below shows the results of KMO test. The KMO value for the data set is .726 indicating that the sample size is adequate and factor analysis is suitable in this situation. The significance value of 0.00 in the Bartlett's test indicates that there is a correlation among the variables and thus factor analysis can be applied on the given dataset.

Table I: KMO and Bartlett's Test

| | | |
|--|--------------------|---------|
| Kaiser-Meyer-Olkin Measure of Sampling Adequacy. | | .726 |
| Bartlett's Test of Sphericity | Approx. Chi-Square | 236.835 |
| | Df | 21 |
| | Sig. | .000 |

There are two main approaches for performing factor analysis: principal component analysis and common factor analysis. The difference between principal component analysis (PCA) and common factor analysis approach is that PCA considers the total variance in the data whereas the latter method estimates the factors only on the basis of common variance. PCA is used when primary objective is to identify minimum number of factors that will explain maximum variance in the data. According to Punniyamurthi(2006), the PCA method uses a linear combination or weighted components of the variables in the data set to estimate the factors. Mathematically, it can be represented as:

$$PC_1 = W_{11} X_1 + W_{12} X_2 + W_{13} X_3 + \dots + W_{1p} X_p$$

Where,

PC₁ = Principal component

W₁₁, W₁₂, W₁₃ = Weights of the respective variables.

Considering the objectives of the study the PCA method was selected.

Table II shows the mean values and standard deviations of different variables included in the study. The mean values of all the variables are more than 3.5 on a 0-5 scale, indicating that all these variables are considered as important by the respondents. The standard deviations for these variables are less than half of their mean values suggesting that there is no excess variance among the data. The data are therefore suitable for any multivariate analysis.

Table II: Descriptive Statistics

| | Mean | Std. Deviation | Analysis N |
|----------------------|------|----------------|------------|
| Web features-Content | 4.22 | .758 | 283 |
| Presentation | 3.99 | .748 | 283 |
| Interactivity | 3.67 | .997 | 283 |
| Ease of Navigation | 3.84 | .939 | 283 |
| Search facility | 4.02 | .881 | 283 |
| Security | 3.94 | 1.120 | 283 |
| Richness of media | 3.55 | 1.042 | 283 |

Communality scores are used to measure the amount of variance that is shared by a variable with all the other variables. It can also be described as the proportion of variance explained by the common factors. The low values for communality indicate that the variable doesn't combine with other variables. The SPSS output for communalities is given in Table iii. All the variables in the table excepting one have the extracted communality value of more than .50 indicating their ability to club with other variables i.e. data are suitable for factor analysis.

Table III: Communalities

| | Initial | Extraction |
|----------------------|---------|------------|
| Web features-Content | 1.000 | .819 |
| Presentation | 1.000 | .541 |
| Interactivity | 1.000 | .430 |
| Ease of Navigation | 1.000 | .624 |
| Search facility | 1.000 | .540 |
| Security | 1.000 | .556 |
| Richness of media | 1.000 | .844 |

Extraction Method: Principal Component Analysis.

As the data are suitable for factor analysis the next step in the process was to decide about the number of factors to be extracted from the given variables. The *Scree Plot* generated by SPSS helps in deciding the number of factors found by depicting the eigen values against the number of factors in sequence of extraction. The shape of the plot helps in determining the number of factors extracted. (Malhotra, op cit: 2003, p593).

Scree plot obtained from SPSS output is shown in the Figure i. In the *Scree plot* obtained, gradual trailing was noticed after three components, therefore a three factor solution was considered to be appropriate. Accordingly the SPSS programme was run for factor analysis with a priory decision of extracting three factors. The computer output is presented in the Table IV. The table indicates that about 62 percent variance is explained by the three factors extracted from the data using the PCA approach.

Figure I: Scree plot

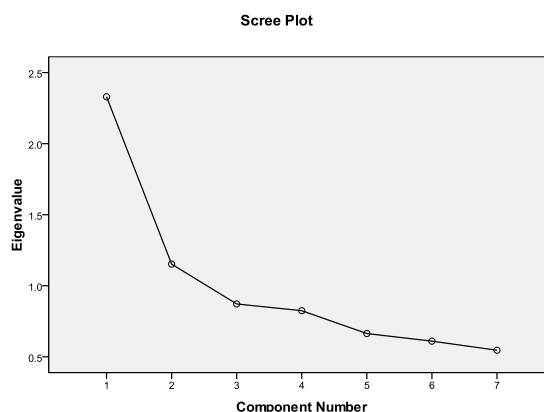


Table IV: Total Variance Explained

| Component | Initial Eigen values | | | Extraction Sums of Squared Loadings | | | Rotation Sums of Squared Loadings | | |
|-----------|----------------------|---------------|--------------|-------------------------------------|---------------|--------------|-----------------------------------|---------------|--------------|
| | Total | % of Variance | Cumulative % | Total | % of Variance | Cumulative % | Total | % of Variance | Cumulative % |
| 1 | 2.330 | 33.285 | 33.285 | 2.330 | 33.285 | 33.285 | 1.911 | 27.302 | 27.302 |
| 2 | 1.152 | 16.464 | 49.750 | 1.152 | 16.464 | 49.750 | 1.254 | 17.915 | 45.217 |
| 3 | .872 | 12.458 | 62.208 | .872 | 12.458 | 62.208 | 1.189 | 16.991 | 62.208 |
| 4 | .825 | 11.781 | 73.989 | | | | | | |
| 5 | .664 | 9.484 | 83.473 | | | | | | |
| 6 | .610 | 8.719 | 92.193 | | | | | | |
| 7 | .547 | 7.807 | 100.000 | | | | | | |

Extraction Method: Principal Component Analysis.

The rotated component matrix with factor loadings is shown in the Table v. The rotation was performed using the Varimax method. If we look at the factor loadings in the table, it is evident that the four variables namely, interactivity (.562), ease of navigation (.715), search facility (.700) and security (.742) are heavily loaded on the first factor. All these features of the web design make the site user friendly and safe for the customer, therefore we may call this factor as “**User friendliness**” of web design. This single factor explains about 27 percent variance in ability of the website to attract the customer. Other two variables, content (.904) and presentation (.576) are loaded on the second factor. Looking to the variables constituting the factor, it may be named as “**Informative value**” of the site. The second factor explains 18 percent variance in customer preference. The third factor includes only one variable ‘richness of media’, explaining about 17 percent variance. We name this factor as “**Visual appeal**” factor.

Table V: Rotated Component Matrix^a

| | Components | | |
|-----------------------|------------|------|------|
| | 1 | 2 | 3 |
| Web features-Contents | | | |
| Presentation | | .904 | .416 |
| Interactivity | .562 | .576 | |
| Ease of Navigation | .715 | | .312 |
| Search facility | .700 | | |
| Security | .742 | | |
| Richness of media | | | .910 |

Extraction Method: Principal Component Analysis.

Rotation Method: Varimax with Kaiser Normalization.

a. Rotation converged in 4 iterations.

Therefore the three factors which make a website attractive for Internet shoppers are: *User friendliness of web design, its Informative value and visual appeal.*

5. CONCLUSION AND AGENDA FOR FUTURE RESEARCH

The study aimed at understanding the key website characteristics that are perceived to be significant by customers in influencing their online purchase decision. It was successful in identifying and categorizing these characteristics into three major categories namely user friendliness, informative value and visual appeal factors:

1. **User friendliness:** The study helped in identifying four variables namely, interactivity, ease of navigation, search facility and security that make the site user friendly for the customers. These variables were named as “**User friendliness**” of web design. It was considered to be the most important factor by majority of Internet shoppers.
2. **Informative value:** It was defined by the website content and their presentation. It was found that customers consider informative value as an important attribute of website, which stimulated them into purchasing online.
3. **Visual appeal:** Considering the fact that customers also look for additional media such as videos, animations and creative graphics besides the basic product information, the study also attempted to understand the influence of presence of such media as a website characteristic that may influence the purchase decision; and it emerged as the third most important factor.

The current study offers several avenues for future research. The study was conducted in a smaller geographic domain, and this limits the extent to which the findings can be generalized, especially considering the relatively dynamic nature of electronic commerce. Hence, a broader sample of online customers can be adopted to improve the generalization of the findings.

Fields like human-computer interaction are rapidly evolving and consequently the website characteristics are also changing. However, basic design principles tend to last over relatively long periods of time (Pearrow, 2000). The development in technology is a significant contributor to the ever increasing end-user requirements. Hence, the same study can be further enhanced and extended by including the specific design features and their impact on the online purchase decision.

Previous studies have suggested that industry and product categories play a prominent role in shaping the e-commerce ventures (Zeng and Reinartz, 2003) and have concluded that web-based e-commerce is more suited for products which are more information intensive than the products where physical attributes are more important. Customers find it much easier to make a purchase decision for such products where physical attributes are not significant and information alone is sufficient to describe the attributes of the products. Hence, the level of interactivity that is required for accurately describing a product with more information intensity would be different from the interactivity that would be needed to describe a product with more physical attributes due to the inherent difficulties of accurately describing such attributes online. Customer may require additional interaction with the organization to clarify some of the more physical attributes of these products before they make their final purchase decision. However the scope of the present study did not permit to explore these differences, hence an industry or product specific study would help in investigating the influence of product categories on the website design in an e-commerce environment.

References

- Ballantine, P W(2005):“Effects of interactivity and product information on consumer satisfaction in an online retail setting”, *International Journal of Retail & Distribution Management*, Vol33(1), pp.461-471
- Beri, G C(2008):“Marketing Research”, 4e. New Delhi: Tata McGraw Hill Publishing Company.
- Constantinides, E (2004):“Influencing the online consumer’s behavior: the web experience”, *Internet Research*, Vol14(2), pp.111-126
- Creative Good(1999):“Customer experience white paper” [online]. Available online at: <http://www.creativegood.com/publications.html> [Accessed 3 December 2010].
- Everard, A and Galletta, D F(2006):“How Presentation Flaws Affect Perceived Site Quality, Trust, and Intention to Purchase from an Online Store”, *Journal of Management Information Systems*, Vol22(3), pp.55–95.
- Kim J D, Yue, K, Hall, P S and Gates, T (2009):“Global Diffusion of the Internet XV: Web 2.0 Technologies, Principles, and Applications: A Conceptual Framework from Technology Push and

Demand Pull Perspective”, Communications of the Association for Information Systems, 24, Article 38 - Available at: <http://aisel.aisnet.org/cais/vol24/iss1/38>

- Lewis & Beck(1994):“Factor Analysis and related techniques”, Singapore: SAGE Publications, pp.3
- Malhotra, N K (2003):“Marketing Research- An applied orientation”, 3rd edition, New Delhi: Pearson Education, pp. 588, 593, 595.
- Melián-Alzola, L and Padrón-Robaina, V (2006): “Tangibility as a quality factor in electronic commerce B2C”, Managing Service Quality, Vol16(3), pp.320-338
- Pearrow, M (2000):“Web site usability”, Rockland, MA: Charles River Media
- Porter, M E (2001):“Strategy and the Internet”, Harvard Business review, March, p.64
- Punniyamurthy, M (2006):“Data analytics for business decisions”, unpublished monograph, NIT, Tiruchirappalli, Vol. 97,pp.142.
- Settles, C(1995):“Cybermarketing: Essentials for Success”, Emeryville, CA: Ziff-Davis Press.
- Song, J, HandZinkhan, G M (2008):“Determinants of Perceived Web Site Interactivity”, Journal of Marketing, Vol72, pp.99–113
- Turban and Gehrke(2000):“Determinants of e-commerce Website”, Human Systems Management, Vol19, pp.111-120.
- Zeng, M and Reinartz W (2003):“Beyond Online Search: The Road to Profitability”, California Management Review, Vol45(2), pp.107–130.

Consumer Brand Preferences for Micro Packs – An Empirical Study

Preeti Mehra* and Dr. Raghbir Singh**

Abstract

The purpose of this paper is to classify users of micro packs and to categorize the most favored brands of micro packs in personal care, household care, food and beverages and health care product categories. An endeavor has also been made to pinpoint the factors behind the preference of these brands. In order to attain these objectives a sample of 500 consumers of micro brands was drawn by using convenience sampling. The sample was drawn from three districts of Punjab (Jalandhar, Amritsar and Ludhiana) and union territory of Chandigarh. A structured and non-disguised questionnaire was used to collect the data from the sample. It was however, found that on an average, micro pack users were usually females, young and middle aged, more educated, and were mostly in service or were homemakers. The results also suggested that a majority of the respondents strongly felt that 'Previous Usage' 'Company Image' and 'Brand Image' were the prime reasons behind a micro pack being their most preferred one.

Key Words: Micro Packs, FMCGs, Brand Preference.

JEL Classification: M10, M30, M37

Introduction

If a person can make a choice between two or more courses leading to as many possible outcomes, then this person is said to have a preference (Woods, 1981). There has been an enduring interest from marketers to comprehend how consumers form their preferences regarding a specific brand. Consumer preference is closely related to choice that can enable consumer decision-making and stimulate purchase (Ebrahim, 2011). Apart from product attributes, beliefs about brand attributes are also significant in building consumer preferences. Consumers may also have an already established preference and settle for a brand that possesses the brand attributes that endorse their preferences. Most of the early studies focused on the importance of brand attributes in the building of consumer preferences (e.g. Fishbein, 1965). Lately, it has been suggested that apart from attributes and features, it is the experience that creates a preference. Experiences are a significant driver in constructing consumer preferences. As a result of experiences, the consumer forms expectations and the possible results of his expectations are characterized in his attitude.

Marketers need to understand how consumer knowledge, attitude and beliefs shape their brand preferences. Knowledge is the predecessor of brand preferences (Keller, 1993). Consumers develop beliefs and then use these to form brand preferences. Brand preferences are a strong assessor of consumer intents and upcoming acquisition decisions (Bagozzi, 1982). Brand values in consumers' minds can be separated by attributes connected to the product as well as related attributes like price, image, symbols and appearance (Erdem et al., 1999). The factors leading to formation of brand preferences need to be understood in order to determine their impact on future decisions. An attempt has been made in the paper to study the brand preferences of consumers and reasons behind their formation in context of micro packs.

Fast Moving Consumer Goods Sector (FMCG_s) adopted a new concept called 'Micro Packs', after the sector faced a collapse in the sales of its products. In this strategy, companies launched smaller-sized forms of their premium and mid-priced products by providing variety, which improved affordability (Gupta and Mehra, 2010). FMCGs offer sachets in various product categories (Trend watching, 2003). Micro-packs are an inventive way of marketing consumer goods in developing countries (Krishnan, 2006). Micro packs are available in the form of single use sachets or small bottles and cost only around Rs. 0.50 to Rs.10. For consumers, small packs made abundant sense, as they cost less than their big counter brands in all product categories (Bhatnagar, 2005). Buyers are saving more if they were buying sachets in place of big packs (Krishnan, 2006).

Review of Literature

There is a dearth of experimental studies in the country regarding the buying behaviour of consumers

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regarding Micro-Packs. Therefore, we have reviewed some studies based on consumer behaviour and articles directly or indirectly related to micro packs. Certain researchers suggest that exists a need to investigate the unseen motivations and attitudinal considerations of a consumer, in order to establish their preferences towards different brands. We have attempted to explore the influence of factors such as price and packaging of a brand that help in framing consumer attitude and motivations.

Few researchers have attempted to understand the absolute purchase behaviour of a consumer. Scott (1978) stressed on how consumers behaviour in a particular time phase, shaped the basis for his succeeding actions and attitudes. Srivastava (1981) outlined that choice is a function of product attributes and customer individualisms. He suggested that viewpoints based on products and customers were helpful but not necessarily adequate to form preferences.

Certain researchers also explored the impact of price in framing brand preferences. Park (1982) stressed that price related information assists informing choice behaviour and preferences. Heath (1994) observed that consumers usually allocate a specific budget to an expense and then monitored that expense throughout the process of forming preferences about a product and procuring it. Laplaca (1974) pointed out that where consumers assumed that there was little variation among brands, they were uniformly satisfied with all. There was one factor; price that assisted them in selecting a brand and usually they resorted to picking the product with the lowest price.

Researchers have also investigated the role of packaging in influencing brand preferences. Ampuera and Vila (2006) suggested that packaging played a big role in influencing consumer perceptions and helped in making opinions about a brand. Bhatt (2007) was of the opinion that the package size was one of the most important determinants of a product in today's era. Kumar (2014) endorsed innovation in packing. He suggested that an attractive package captures a consumer's attention and goes a long way in framing brand preferences.

To make the strategy of micro packs a success it is essential to first identify what is the target market for micro packs? Who are the users of micro packs? What brands do they prefer in different product categories? What are the reasons behind preferring these specific brands? These are some of the queries that have remained unexplored and have been investigated in this study. This study can help the marketers in targeting the right segment and planning micro pack positioning strategies.

Objectives of the study

The specific objectives of the study are:

1. To identify users of micro packs.
2. To ascertain the brand preference for product available in micro packs in personal care, household care, food and beverages and health care categories.
3. To identify the factors behind a brand being the most preferred one.

Methodology

The sample of the study was planned as 500 respondents belonging to three cities of Punjab: Amritsar and Ludhiana and Jalandhar and Union territory of Chandigarh. These cities were chosen to represent the three geographical regions of Punjab - Amritsar representing Majha region, Ludhiana representing Malwa and Jalandhar representing Doaba region. Capital city being more cosmopolitan was chosen. The sample was selected with the help of convenience sampling. However, efforts were made to include the respondents belonging to various demographic characteristics. Data were collected through a structured, pre-tested and non- disguised questionnaire.

Analysis and Interpretation

1.1: Identification of Users of Micro-packs.

The respondents' total sample size, which was fit for analysis was found to be 500. Out of these 500 respondents, it was purposefully pre-decided that more than 75% of the sample size should be females, because they are the ultimate buyers or those who influence the purchase decision in a family. In the present study, however it was found that 75.8% of the respondents were females, whereas the rest were

males. The entire sample, comprising of males and females were decision makers being the head of family or otherwise. Respondents from all age groups were taken into consideration, in anticipation of a rational response. Table I displays the demographic profile of the respondents.

Table I: Demographic profile of respondents

| GENDER | | | | | | | |
|---------------------------|--|-------------|--|------------------|--|--------------------|--|
| MALE | | | | FEMALE | | | |
| Frequency | | % | | Frequency | | % | |
| 121 | | 24.2 | | 379 | | 75.8 | |
| AGE | | | | | | | |
| Upto 20 years | | 20-40 years | | 40-60 years | | 60 years and above | |
| Frequency | | % | | Frequency | | % | |
| 12 | | 2.4 | | 226 | | 45.2 | |
| | | | | 171 | | 34.2 | |
| | | | | 91 | | 18.2 | |
| EDUCATIONAL QUALIFICATION | | | | | | | |
| MATRIC | | 10+2 | | BACHELORS DEGREE | | | |
| Frequency | | % | | Frequency | | % | |
| 30 | | 6 | | 37 | | 7.4 | |
| | | | | | | 207 | |
| | | | | | | 41.4 | |
| MASTER'S DEGREE | | | | Others | | | |
| Frequency | | % | | Frequency | | % | |
| 187 | | 37.4 | | 39 | | 7.8 | |
| OCCUPATION | | | | | | | |
| SERVICE | | BUSINESS | | PROFESSIONAL | | | |
| Frequency | | % | | Frequency | | % | |
| 153 | | 30.6 | | 38 | | 7.6 | |
| | | | | | | 82 | |
| | | | | | | 16.4 | |
| RETIRED | | STUDENT | | HOMEMAKER | | | |
| Frequency | | % | | Frequency | | % | |
| 48 | | 9.6 | | 19 | | 3.8 | |
| | | | | | | 160 | |
| | | | | | | 32.0 | |

Demographically, micro pack users were mostly females, diversely spread across all taken age brackets, educational levels and occupations. It was however, found that on an average, micro pack users were usually females, young and middle aged, more educated, and were mostly in service or were homemakers.

1.2: Brand Preferences for Products Available in Micro Packs

In an attempt to identify the most purchased brands of a micro pack, the respondents were asked to mention one brand, which was their first choice while buying a micro pack. In order to determine their preference on micro packs of various types of products, four product categories were identified: 'Personal Care Products Category' (which includes products like shampoo, facial cream, bathing soap, toothpaste, talcum powder, and hair oil); 'Food and Beverages Products Category' (which covers eatables like biscuits, instant noodles, candies/ chocolates, chips, tea leaves, coffee, jams and sauces); 'Household Care Products Category' (which includes detergents and dish wash) and 'Health Care Products category' (which covers ointments and tablets). The respondents were questioned about their preference regarding the products under these four categories. The responses have been tabulated in tables II to V.

Table II represents the responses of respondents regarding their brand preference for product available in micro pack in personal care products category.

Table II: Most Preferred Brands of Micro Packs in Personal Care Products Category

| Product | Most Preferred Brand | Percentage |
|---------------|----------------------|------------|
| Shampoo | Sunsilk | 23.4 |
| Facial Cream | Ponds Whitening | 39.6 |
| Bathing Soap | Dettol | 21.2 |
| Toothpaste | Colgate | 47.1 |
| Talcum Powder | Ponds | 32.6 |
| Hair Oil | Dabur Amla | 15.2 |

A glance at Table II reveals that in the Personal Care Products Category, the most bought brand in 'Shampoo' is 'Sunsilk' (23.4%). 39.6 per cent of the respondents prefer buying 'Ponds Whitening' in the product category 'Facial Creams' whereas 21.2 per cent prefer opting for 'Dettol' brand when buying 'Bathing soaps'. 'Colgate' (47.1%), 'Ponds' (32.6%) and 'Dabur Amla' (15.2%) are the most bought brands in 'Toothpaste', 'Talcum' and 'Hair Oil' product categories. Due to the availability of

many brands in certain product categories like Oils and Facial Creams, even the most preferred product has a low percentage.

Table III represents the responses of respondents regarding their brand preference for product available in micro pack in food and beverages products category.

Table III: Most Preferred Brands of Micro Packs in Food and Beverages Products Category

| Product | Most Preferred Brand | Percentage |
|---------------------|----------------------|------------|
| Biscuits | Tiger | 30.8 |
| Instant Noodles | Maggi | 67.4 |
| Candies/ Chocolates | Munch | 19.1 |
| Chips | Lays | 45 |
| Tea Leaves | Marvel | 34.6 |
| Coffee | Nescafe | 80.1 |
| Jams | Kissan | 57.6 |
| Sauces | Kissan | 42.5 |

Table III highlights that in the Food and Beverages Products Category, the most bought brand in 'Biscuits' is 'Tiger' (30.8%). 67.4 per cent of the respondents prefer buying 'Maggi' in the product category 'Instant Noodles' whereas 19.1 per cent prefer 'Munch' brand when buying 'Candies/Chocolates'. The most bought 'Chips' brand is 'Lays' with 45 per cent of the respondents admitting to buy it. 'Marvel' (34.6%), 'Nescafe' (80.1%) and 'Kissan' (57.6%) and 'Kissan' (42.5%) are the most bought brands in 'Tea Leaves', 'Coffee', 'Jams' and 'Sauce' product categories. Due to availability of many chocolates and candies in the marketplace, the most preferred Chocolate 'Munch' although being the most opted one is bought only by 19.1 per cent of the respondents.

Table IV represents the responses of respondents regarding their brand preference for product available in micro pack in household care products category.

Table IV: Most Preferred Brands of Micro Packs in Household Care Products Category

| Product | Most Preferred Brand | Percentage |
|------------|----------------------|------------|
| Detergents | Nirma | 19.8 |
| Dish Wash | Vim | 43.2 |

Table IV shows that in the Household Care Products Category, the most bought brand in 'Detergents' is 'Nirma' (19.8%). However, 43.2 per cent of the respondents prefer buying 'Vim' in the product category 'Dish Wash'.

Table V represents the responses of respondents regarding their brand preference for product available in micro pack in health care products category.

Table V: Most Preferred Brands of Micro Packs in Health Care Products Category

| Product | Most Preferred Brand | Percentage |
|-----------|----------------------|------------|
| Tablets | Hajmola | 33.2 |
| Ointments | Moov | 39.6 |

A glance at Table V reveals that in the Health Care Products Category, the most bought brand in 'Tablets' is 'Hajmola'. Whereas in the product category 'Ointments' 39.6 per cent of the respondents prefer buying 'Moov'.

1.3 Reasons behind a brand being the most preferred one

Understanding consumer expectations and shopping behaviour are critical to the growth of the industry's overall strategy. As the products become more complex and the marketplace more crowded, consumers do not choose micro packs only on the basis of the "price", as similar products surface easily due to natural competition. Features like convenience of usage, easy handling, convenient storage and availability of different quantity assortments, aid a customer to pick a pack that is most suited to his need and his spending capacity. In order to have an insight into the reasons for brand preference, six factors were used; 'Previous usage', 'strong advertising', 'regular availability', 'premium packaging', 'company image' and 'brand image' and the respondent were asked to tick the

various reasons for preferring a brand of micro pack. The overall, as well as income wise responses are presented in Table VI.

Table VI: Reasons for Brand Preferences of micro packs (Overall and income-wise distribution)

| Sr.no | Reasons | Overall | I ₁ | I ₂ | I ₃ | I ₄ |
|-----------|----------------------|---------------|----------------|----------------|----------------|----------------|
| 1 | Previous Usage | 357 (71.4) | 72 (56.6) | 101 (64.7) | 114 (95.0) | 70 (72.1) |
| 2 | Strong Advertising | 172 (34.4) | 36 (28.3) | 32 (20.5) | 52 (43.3) | 52 (53.6) |
| 3 | Regular Availability | 248 (49.6) | 42 (33.0) | 40 (25.6) | 86 (71.6) | 80 (82.4) |
| 4 | Premium Packaging | 246 (49.2) | 104 (81.8) | 98 (62.8) | 24 (20.0) | 20 (20.6) |
| 5 | Company Image | 333 (66.6) | 76 (59.8) | 81 (51.9) | 89 (74.1) | 87 (89.6) |
| 6 | Brand Image | 298 (59.6) | 98 (77.1) | 86 (55.1) | 74 (61.6) | 40 (41.2) |
| Total (N) | | 500 | 127 | 156 | 120 | 97 |

Note: Figures in parenthesis represent percentages

Figures in Percentages are more than 100 because of multiple responses.

The table reveals that a majority of the respondents strongly feel that 'Previous Usage' (71.4%), 'Company Image' (66.6%) and 'Brand Image' (59.6%) are the prime reasons behind a brand being the most preferred one. Almost an equal percentage of respondents (49%) feel that 'Regular Availability' and 'Premium Packaging' are the parameters that lead them to favouring a brand. Only 34.4 per cent of the respondents think that 'Strong Advertising' affects their brand preference.

Income-wise analysis reveals that respondents belonging to category I₁ (lower income) agree that apart from 'Premium Packaging' (81.8%) it is the 'Brand Image' (77.1%) that helps them in selecting a brand. For respondents belonging to income category I₂, 'Premium Packaging' (62.8%) and 'Previous Usage' (64.7%) are the most important criteria for choosing a brand. Respondents of income category I₃ admit that 'Previous Usage' (95%) and 'Company Image' (74.1%) are the significant reasons of preferring a particular brand. Meanwhile for respondents belonging to category I₄ (higher income), 'Company Image' (89.6%) emerged as the most significant reason.

Summing up, it is observed that respondents of lower income categories such as I₁ (81.8%) and I₂ (62.8%) consider 'Premium packaging' as an important reason for preferring a brand in comparison to the respondents belonging to higher income categories I₃ (20%) and I₄ (20.6%). Reasons like 'Previous usage, 'strong advertising' and 'regular availability' are more preferred with respondents of higher income categories I₃ and I₄.

Conclusions

The above results highlighted that on an average, micro pack users tend to be young and middle aged, well educated, mostly females, homemakers and servicemen/women and could be found across the population. This information shall help marketers in targeting the prospective users of micro packs.

The study identified the brands that are most popular in their respective product category. Marketers need to identify the brands that are less popular and need to make efforts to make them eminent. Use of advertisements (print and electronic) and other supplements that could reinforce branding at the points of sale needs to be done for keeping the brand in the consumers' mind. For this purpose, the companies need to advertise in time slots where target demographics would tune in. Advertisements of micro packs of food and beverages can be done more on children's channels, which is viewed by the mothers as well. Personal care category and Household care category packs can be advertised more on family and travel channels.

While selecting a micro pack for purchase the consumer takes into consideration factors like previous experiences with the brand, company image and brand image. However, the study depicts that the consumer is most comfortable with an already used micro pack brand as he gets to spend minimal time and cognitive effort in choosing from a wide assortment of brands. Therefore, the marketers must provide utmost quality micro packs, which are able to create a loyal base of customers. This must be backed up by a sound persuasive advertising campaign aimed at building a good brand and company

image. The study depicts that respondents tend to evaluate the previous performance of a micro pack as use it as a parameter to rate it as a successful brand.

The concept of Micro-Packs has evolved very well but new dimensions should be added to this promising model. Generating a low-unit and low priced product for end users is one aspect and making it available to them is another. These Micro-Packs if made accessible to every household dwelling in every corner of the country can certainly thrust up the sales of FMCG's. The study reveals that consumers are quite adaptive towards micro packs. Consumers believe that micro packs provide value for money and in certain cases, if this does not happen they are willing to shell out more money per ml also. The full potential of micro packs can only be realised as long as per unit costs for the sachet is lower than that for the bigger packs. This calls for further research on the packaging know-how and distribution competences.

References

- Ampuero, O. & Vila, N. (2006). "Consumer Perceptions of Product Packaging". *Journal of Consumer Marketing*, Vol.23, no. 2, pp. 100-112.
- Bagozzi, R.P. (1982). "A Field Investigation of Causal Relations Among Cognitions, Affect, Intentions, and Behaviour", *Journal of Marketing Research*, Vol.19, no. 4, pp. 562-684.
- Bhatnagar, M (2005): - "FMCG sector set to revive", (cited on Jan 02, 2005). Available on <http://domain-b.com>.
- Curry, S. and Heath, C. (1994), "Mental accounting and consumer spending", *Advances in Consumer Research*, 21, eds. Chris T. Allen and Deborah Roedder John, Provo, UT: Association for Consumer Research, pp. 119-126.
- Gupta, S. and Mehra, P. (2006): "Micro Branding – A Bane or Boon for Customer", *Marketing Masterminds*, Vol.9, no.2, pp. 44-8.
- Gupta, S. and Mehra, P. (2010): "Micro Branding- A key tool of FMCG pull strategy", *Indian Journal of Marketing*, Vol.40, no.6, pp. 18-23.
- Ebrahim, R. (2011): "A Study of Brand Preference: An Experiential View", Doctoral Symposium, Brunel Business School.
- Erdem, T., Swait, J., Broniarczyk, S., Chakravarti, D., Kapferer, J., Keane, M., Roberts, J., Steenkamp, J.E.M. and Zettermeyer, F. (1999): "Brand Equity, Consumer Learning, and Choice", *Marketing Letters*, Vol.10, no.3, pp. 301-318.
- Keller, K.L. (1993). "Conceptualizing, Measuring, and Managing Customer-Based Brand Equity", *Journal of Marketing*, Vol.57, no.1, pp. 1-22.
- Park, C. W. (1982): "The elusive role of price in brand choice behaviour", *Advances in Consumer Research*, 9, eds. Andrew Mitchell, Ann Arbor: Association for Consumer Research, pp. 201-5.
- Laplaca, P.J. (1974): "The effect of unit pricing on product demand and perceived product satisfaction", *Advances in Consumer Research*, 1, pp. 9-16.
- "Sachet Marketing", (cited on 2003): Available at <http://trendwatching.com/trends/sachet-marketing.htm>.
- Scott, C. A. (1978): "Self Perception processed in consumer behaviour", *Advances in Consumer Research*, 5, eds. Kent Hunt, Ann Arbor: Association for Consumer Research, pp. 714-20.
- Srivastava, R. K. (1981): "Usage-situational influences on perception of product markets: Theoretical and empirical issues", *Advances in Consumer Research*, 1, eds. Kent B. Monroe, Ann Arbor: Association for Consumer Research, pp. 268-79.
- Woods, Walter A (1981): "Consumer Behaviour: Adapting and experiencing". Elsevier North Holland, Inc., New York.

A Case Study on Manpower Recruitment and Selection with reference to Classique Hotel Ltd

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Abstract

Manpower recruitment and selection are two most important functions of Human Resource Management. It is not enough if sufficient number of manpower gets recruited but the challenging part also lies in selecting the fit applicants, or eliminating the unfit applicants or combination of both. With a view to understand the process and effectiveness of manpower recruitment and selection process the Classic Group of Hotel, unit of BABINA Healthcare & Hospitality Industries Pvt. Ltd., was chosen and aforesaid study was conducted. It was understood that the recruitment process aligned with the employee's future and the recruitment has taken care of employees' promotion and salary increments consistently. Since the recruitment process uses scientific methods it has enabled in motivating the people drastically.

Key words

Human Resource Management, Promotion, Salary increments, Applicants, Scientific methods

JEL Classification: M12, M51

Introduction

Manpower recruitment and selection are the two most important functions of Human Resource Management. The obvious guiding policy in selection is to choose best qualified and suitable job candidate for each of the unfilled vacancies. It is not enough if sufficient number of manpower gets recruited but the challenging part also lies in selecting the fit applicants, or eliminating the unfit applicants or combination of both. The hospitality sector requires efficient human resources who can interact and build a rapport with the consumers it has to follow appropriate recruitment and selection process. Therefore, it is interesting to know manpower recruitment and selection process followed by taking the case of BABINA Healthcare & Hospitality Industries Pvt. Ltd., the unit of Classic Group of Hotel units, Imphal.

Background and Inception of the Company

All the Classic Group of Hotels owes its origin to BABINA group of companies. BABINA Diagnostics, Imphal had a humble beginning in November, 1983. Over the years, from a small scale Clinical Laboratory, the centre grew to a full-fledged diagnostic laboratory in 1995. It has been managed as a partnership firm until 2007. Now, BABINA Diagnostics is the most reputed, first NABL Accredited Laboratory and largest Diagnostic centre in the North East India. In 2007 the centre became one of the units of **BABINA Healthcare & Hospitality Industries Pvt. Ltd.**, and marked the diversification of the activities from diagnostic (healthcare) to Hospitality sector. Currently, there are two different companies under the BABINA GROUP as follows -

- BABINA Healthcare and Hospitality Industries Pvt. Ltd.
- BABINA Hospitalities Pvt. Ltd.

Formation of a third company, BABINA Healthcare Pvt. Ltd., is under process and its main purpose is to look after all the healthcare related activities. BABINA Healthcare & Hospitality Industries Pvt. Ltd., is the overarching company with the following units of Classic Chain of Hotels and Restaurants and Training Institute under its fold.

The Classic Hotel

The Classic Hotel is located in the central part of Imphal City. It overlooks the historic Kangla Fort, which was the ancient administrative capital of Manipur in the heydays of the Maharajas of Manipur, until it came under the British Rule in 1891. Bestowed with modern amenities and pleasant surroundings, the hotel welcomes you to host special meetings and rest and dine as well. Out here we intend to make it a point to create positive and lasting impressions. The Classic Hotel, a three Star Category and an ISO 22000:2005 certified hotel is a unit of BABINA Healthcare and Hospitality

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Industries Pvt. Ltd. It is established on 9th November, 2009. It endeavours to provide premium hospitality services and world class food and stay. Equipped with the best facilities, your comfort and convenience is given top priority. The Hotel offers traditional handloom and handicraft boutique that could be bought as souvenirs to share the fond memories of visit. The hotel is just 8 km from the Imphal International Airport and it is only few minutes' drive to government offices, cultural centres and the Inter-State bus station. The guests who visit the hotel will experience and appreciate the special treatment and personalised services provided by classic hotel.

Literature Review

Recruitment begins with the identification of the vacant job positions within the organization by filling up the Manpower Requisition form which showcases the requirement for the number and type of people inclusive of qualifications, experience and competencies (Pooja Khanna, 2014). Recruitment is a constructive process and selection being a dissentious affair that enables enterprises to develop when talented pools of people are recruited and hired. Literature gives an idea regarding the existing studies conducted in the relevant area by identifying the research gap.

The process of manpower management includes recruitment, selection, training and development of employees. It motivates the employees to perform their best. The effective utilization of employee's skill and capability is possible only if they are trained properly. To this extent the training and development of employees in tourism is very important because the customers are experiencing and consuming the quality of service Clare (A.J Gunn, Taylor & Francis, 1988).

Recruitment is the process of searching for qualified employees and inspiring them to apply for the job. Recruitment helps the management in attracting a large number of qualified candidates. A suitable candidate can be located from different sources like, advertisement, campus interview, and employment exchanges. In tourism industry, hotels can approach the hotel management institutes for selecting qualified candidates. They can also approach employment exchange for new professionals. Another source of recruitment is promotion of existing employees. The process of screening the recruited candidates is called selection. It is the choosing of suitable person to fill the existing job vacancies. The bio data of the candidates are put in to scrutiny and those who fulfill the requirements are called for interview. The organization may conduct written test, group discussions and problems solving exercises, presentations or interviews for completing the selection process (Leela Shelley,1991).

Induction is the process of introducing a new employee in the organization. It is the technique by which an employee is rehabilitated into the changed surroundings and policies and procedures of the organization. He or she should be properly welcomed in the organization, introduced to colleagues, given details about the organization, made to know his position acquainted with company's rules, regulations and working conditions (Ravi Bushan Kumar, 1995). Information and up gradation of knowledge is the key to success in tourism sector and all employees must have updated knowledge.

Lockyer & Scholarios, (2004) stated the nature of best practice recruitment and selection in the hotel sector. Data from a sample of Scottish hotels indicated a reliance on informal methods, particularly in smaller hotels. In larger and chain hotels, structured procedures, including references, application forms and panel interviews, were evident, but, here too, these methods seemed inadequate for dealing with recruitment and quality problems, especially in meeting temporary staffing needs. Case study evidence contrasted two alternative strategies: a successful holistic strategy based on management of social processes important for selection, and a more conventional bureaucratic strategy. Each strategy depended on a complex interrelationship between business and labour market considerations, the ownership and management structure of the hotel, and the tenure and experience of those responsible for selection. This evidence indicated that, for the hotel industry, the holistic strategy is an alternative to conventional notions. Mohinder Chand & Anastasia A. Katou, (2007) conducted a study that had a two-fold purpose: to investigate whether some specific characteristics of hotels affected organizational performance in the hotel industry in India; and to investigate whether some HRM systems affect organisational performance in the hotel industry in India.

A total of 439 hotels, ranging from three-star to five-star deluxe, responded to a self-administered questionnaire that measured 27 HRM practices, five organizational performance variables, and ten demographic variables. The results indicated that hotel performance was positively associated with

hotel category and type of hotel (chain or individual). Furthermore, hotel performance was positively related to the HRM systems of recruitment and selection, manpower planning, job design, training and development, quality circle, and pay systems. This shows the importance of recruitment and selection in the hospitality sector in particular and any other industry in general.

Dora Scholarios, Cliff Lockyer, Heather Johnson, (2003) stated that recruitment and selection experiences were part of a process of pre-entry organizational socialization, also known as anticipatory socialization. They found that graduates were susceptible to such effects as their socialization through exposure to professional employers began during training. Employers' practices were thought to contribute to the formation of realistic career expectations and the initial psychological contract between graduates and employers. The authors found that students in traditional professions reported greater exposure to employers than students in an emerging profession through work activities, more proactive engagement in recruitment events, and more extensive experience of selection processes at similar stages of study. Greater activity, in turn, was related to career expectations, including varying levels of commitment to an interest in the profession and career clarity.

Timothy Clark, (1992) focused wholly on the activities of external executive recruitment consultancies. Author suggested five alternative evaluative standards. Results were presented from two major surveys on the use of selection methods by such consultancies: in general they use low validity techniques, primarily unstructured interviews and references. Low validity selection methods may be used because validity was not the primary evaluative standard.

Jonathan Bergwerk, (1988) stated what should recruiters be looking for when they were selecting managers or potential managers. Standard methods of recruitment were examined and new ways were recommended, based on the author's experience of four major needs: the needs of the job itself, the current needs of the team that will work with the jobholder, the needs of the organization and the needs of the future.

Carolyn Wiley, (1992) stated that changes in the capabilities and composition of the American workforce which will occur within the next ten years will create some of the most encompassing challenges ever faced by the United States. The main challenge for companies was to rethink and restructure their recruiting activities in order to attract competent employee's vis-a vis decreasing educational credentials and dramatic demographic changes in the workforce entrants. Such a challenge broadens the scope of recruiting and requires multifaceted recruitment strategies. The study revealed how nontraditional (corporate involvement in public education) and improved traditional recruiting strategies and could enable businesses to continue to attract and retain capable employees from different genders, marital statuses and ethnic backgrounds. Strategies which proved effective in the past continued to work in the future as long as companies were willing to adapt their messages and their workplaces to meet the needs and demands of this changing workforce.

Roderick Evans, (1991) stated the importance of equal opportunities in recruitment and selection. The author expressed that equal opportunities could improve recruitment and selection while at the same time maximizing opportunities for groups who had previously suffered from discrimination.

David Knights, Carlo Raffo, (1990) expressed that a critical case approach was used to examine whether the recruitment practices and procedures advocated by social scientists within the personnel field were realised in practice. The critical case selected was the graduate recruitment known as the milkround, where scientific techniques in theory stand the best chance of being used. In practice a major discrepancy between theory and practice was found, which was explained in terms of the preoccupation with material and symbolic security that conditions the actions of personnel managers in competitively co-ordinated employment establishments.

Giovanni Russo, Piet Rietveld, Peter Nijkamp, Cees Gorter, (1995) stated that in the last two decades the economic literature has devoted significant attention to the mechanisms behind firms' recruitment strategies as a possible way of reducing (un)employment problems. At the work floor many efforts had also been made by firms to develop strategies that both alleviate conflicts with employees and at the same time lead to acceptable levels of productivity. This effort has resulted in the broad acceptance of the personnel management function in the firm. Authors examined how successful this approach has been by focusing on the gap between practice and theory in recruitment, by investigating the extent to which and the way in which experiences and findings from actual recruitment (personnel management) had been incorporated in economic theory.

Nigel Meager, Hilary Metcalf (1988) articulated that since the early 1970s, many studies had examined employers' recruitment practices and how they vary over time, with the unemployment level and between labour markets, occupations and types of employer. The authors stated the approaches to recruitment and selection.

Sohel Ahmad, Roger G. Schroeder, (2002) stated that the behavioral traits of employees could play an important role in the success of total quality management (TQM). Using an international dataset, the present study investigated the impact of quality management practices on plant competitiveness; and the moderating effect of an employee selection process on the relationship between quality management practices and plant competitiveness. Results show that quality management practices positively impact plant competitiveness. Furthermore, the behavioral traits of employees seem to have a significant impact on the effectiveness of quality management practices. This implied that managers should pay close attention to prospective employees' behavioral traits and their fit with the TQM philosophy. Managers should not limit their attention to potential employees' technical skills.

Noreen Heraty, Michael Morley (1998) mentioned about contemporary thinking on recruitment and selection in organizations. They drew upon data from a 1992 and a 1995 survey to explore the nature of then recruitment and selection practices in Ireland with particular reference to managerial jobs. Policy decisions on recruitment were examined, recruitment methods were reviewed, and the influence of ownership, size, unionization and sector on the methods chosen was presented. Selection techniques employed were identified and the situations in which they were most likely to be utilized were highlighted.

Jerry Hallier (2001) stated that the recruitment of young, green workers has long been recognised as a defining characteristic of the Greenfield site. Mentioned about how person-centred recruitment, with its emphasis on employee acceptability, disadvantages the older Greenfield applicant. Whether it be a new high commitment or customer service site, worker's age was shown to combine with the conventional recruitment criteria of skill, class and gender to constitute an excluded labour segment. In its superior capacity to shape workforce composition, Greenfield person-centered recruitment was shown to be important to understanding the ways in which managerial control was pursued and exercised more widely than within the labour process. The author concluded that person-centered recruitment should be studied as a critical feature of greenfield workplace politics and practices.

Sharon Ifill and Neil Moreland (1999) written in their article an account of an audit on the recruitment and selection systems and procedures in place within a printing company based in the West Midlands (England). A human resource audit (HRA) of generic benchmarks was developed from a literature review. The audit subsequently was applied to establish the current position of the company in the areas of recruitment and selection. The empirical investigation process primarily consisted of content analysis of documents and the interviewing of 13 staff within the company. As a result of the audit, the recruitment and selection processes, systems and procedures were identified as ineffective. Consequently, an action plan was developed as part of a quality improvement process and preparation for Investors in People Award. As a result of the implementation of the recommendations, the culture of the company and the staff became more focused, systematic and of a higher quality.

Francesca Spinelli Souza and Jay J. Zajas (1995) explored the dimensions of recruiting executives from an organizational and conceptual perspective. Authors discussed several key topics such as selecting team players, internal and external recruitment and identifying career requirements. Authors identified factors fostering organization values, and the selection interview.

Sonal Sisodia and Nimit Chowdhary (2012) inferred that illustration in recruitment advertisement of service organization created tangible representation and challenge the application to presume the intended significance of the illustrative appeal. It was suggested that service employers should use visual communication to initiate relationship with prospective employees. French ray and Rumbles sally (2010) articulated the important role of recruitment and selection in the process of leading, managing and developing people.

Not many studies have been done to understand the process of recruitment and selection with reference to hospitality sector. Thus in order to fill the gap in the relevant area the present study on, Manpower Recruitment and Selection with reference to Classique Hotel Ltd was taken up.

Statement of the Problem

Recruitment and selection are very important elements necessary for the smooth functioning of an organization. Most of the organizations do not follow the manpower recruitment and selection process in a transparent manner leading to problems with the management of human resource. Therefore, with a view to understand the process and effectiveness of manpower recruitment and selection process the Classic Group of Hotel, unit of BABINA Healthcare & Hospitality Industries Pvt. Ltd., was chosen and aforesaid study was conducted. The study was carried on with the objectives mentioned below.

Objectives of the Study

- To understand the process of manpower recruitment and selection in Classic Group of Hotel
- To understand whether manpower recruitment and selection process is in line with the employees' future career prospects and potential
- To understand the influence of age on response regarding manpower recruitment and selection in line with the future career prospects
- To understand the gender on the effectiveness of manpower recruitment and selection process
- To identify the efficiency of manpower recruitment and selection in enhancing organizational success
- To suggest remedies to improve manpower recruitment and selection based on the findings

Research Methodology and Sampling

Collecting data is one of the most important tasks of the research, which is based on primary and secondary data. In order to understand the Manpower Recruitment and Selection with reference to Classique Hotel Ltd., a well-structured questionnaire was prepared and data was collected from the employees working in different departments of the hotel in Imphal. The study is confined to the Classic hotel ltd, Imphal regarding manpower recruitment and selection process. Study includes the opinion of workers along with the study of present Manpower Recruitment and Selection process followed in the chosen hospitality industry. Sample size refers to the number of elements to be included in the study. The total employees at The Classic Group of Hotels were more than 400 on a routine basis. However, 400 employees were considered as full time employees out of whom 150 respondents were taken as the sample for study making it 37.5 percent of the population from different divisions of the company. The samples of 150 employees were picked based on their availability and convenience. The data was collected from 98 front office staff (71 Men & 27 women) and 52 back office staff (36 men & 16 women) to understand whether manpower recruitment and selection process was in line with the employees' future career prospects and potential. The data was collected to understand the efficiency of manpower recruitment and selection at Classic Hotel Ltd.

Table 1.1: Showing total selected sample from different divisions of classic hotel Ltd.

| Divisions | Men | Women | Total | Percentage |
|--------------|-----|-------|-------|------------|
| Front office | 71 | 27 | 98 | 65.33 |
| Back office | 36 | 16 | 52 | 34.67 |
| Grand total | 107 | 43 | 150 | 100 |

Findings

1. Process of manpower recruitment and selection in Classic Group of Hotels: Classic Group of Hotels – a unit of Babina Healthcare & Hospitality Industries Pvt. Ltd has maintained fair and transparent process in Manpower Recruitment and Selection. The following are the findings through the survey at Classic Group of Hotels.

- Classic Group of Hotels provides employees' referral for internal recruitment.
- Classic Group of Hotels prefers to fill up the vacancies by the internal employees through promotion instead of hiring from outside.
- The organization conducts job posting method of recruitment in which notices of available jobs are posted in the central locations throughout the organization and employees are given a specified

period of time to apply for the available jobs. Job posting can enhance the probability that the firm's most qualified employees will be considered for the job.

- The hotel uses internal circular to fill the vacancies in the organization. The circular of vacancies are circulated initially, within the departments/groups of departments.
- In order to ensure that the employees perform at a high level Classic Group of Hotels provides transfer method to its employees. This also ensures job satisfaction of the existing employees.
- Classic Group of Hotels uses method of recruiting people from outside through newspaper advertisement. Many rounds of interviews are conducted before a candidate is offered the employment. Different relevant questions are asked in interview process. The Hotel provides employment purely on merit basis. The qualified individuals with the graduation in Hotel Management stand a high chance of getting selected according to their job specification.
- Internal Recruitment-The study revealed that 17.33 per cent of the respondents were recruited through employee referral, 8 per cent of the respondents through promotion, 4.67 per cent of the respondents through job posting, and 61.33 per cent of the respondents through internal circular, and 8.67 per cent of the respondents by means of transfer.
- External Recruitment- The study revealed that 48 per cent of the respondents were recruited through newspaper advertisement, 42 per cent of the respondents through recruitment consultant, and 10 per cent of the respondents were selected through display on recruitment portal.
- Internal vacancies: Out of 150 employees 24.67 per cent of the respondents strongly agreed and 47.33 per cent of the respondents agreed substantially that recruitment was based on the vacancies that arise internally at Classic Group of Hotels, 19.33 per cent of the respondents were neutral, and remaining 8.67 per cent of the respondents disagreed that recruitment was based on the vacancies that arose internally at Classic Group of Hotels. The people who disagreed for the recruitment based on internal vacancies felt that recruitment was also demand and supply driven other than just need based.

2. Recruitment and selection in line with employees' future: It is clear from the information that 55.33 per cent of the respondents strongly agreed that recruitment and selection process at Classic Group of Hotels was in line with employees' future, whereas 34.67 per cent of the respondents were neutral, and remaining 10 per cent of the respondents disagreed that recruitment and selection process at Classic Group of Hotels was in line with employees' future. The people who have agreed that the recruitment process aligns with the employee's future felt that the effective recruitment has taken care of employees' promotion and salary increments consistently. People who have disagreed might not have a good performance record and as a result the chances of career advancement may be difficult for them unless they show their effectiveness. 68.36 percent of the people felt that the job has absorbed the right individuals and since the recruitment process uses scientific methods is has enabled in motivating the people drastically.

3. Influence of age on employees' response regarding 'manpower recruitment and selection in line with the future career prospects': Out of 150 respondents chosen for the study, 86 Employees belong to the age group of 20-30 years, 57 Employees belong to the age group of 31-40 years and 7 Employees belong to the age group of 41-50 years. A question was asked to understand whether manpower recruitment and selection was in line with the future career prospects. With a view to understand if age has any influence in employees' response regarding manpower recruitment and selection in line with the future career prospects ANOVA was used and the results are presented in Table 1.2

Table: 1.2: ANOVA showing the influence of age and the employees' response regarding Recruitment and selection process is in line with employees' future

| | Sum of Squares | df | Mean Square | F | Sig. |
|----------------|----------------|-----|-------------|------|------|
| Between Groups | .427 | 2 | .213 | .210 | .810 |
| Within Groups | 148.933 | 147 | 1.013 | | |
| Total | 149.360 | 149 | | | |

The output of the table shows that $F=0.210$, $df=2$, $P=0.810 > \alpha 0.05$ and there is no significant difference between the age of the respondents and their response regarding 'Recruitment and selection process is in line with employees' future' The Post Hoc test interpretation in the table also states that there is no significant difference between the responses of the employees' age of less than 20-30 and above 41-50 as the value is $P=0.953 > 0.05$

4. Influence of gender on employees' response regarding 'manpower recruitment and selection in line with the future career prospects': Out of 150 respondents chosen for the study, 107 were male employees and 43 were female. With a view to understand if gender has any influence in employees' response regarding manpower recruitment and selection independent sample t-test was used and the results are shown in Table 1.3 and 1.4.

Table 1.3: Group Statistics

| | Gender | N | Mean | Std. Deviation | Std. Error Mean |
|--|--------|-----|------|----------------|-----------------|
| Manpower recruitment and selection is very effective | male | 107 | 3.56 | .815 | .079 |
| | female | 43 | 3.88 | .851 | .130 |

Table 1.4: Independent Sample t-Test showing the relationship between gender of the Employees and their response towards 'recruitment and selection is very effective'

| | | Levene's Test for Equality of Variances | | t-test for Equality of Means | | | | | | |
|--|-----------------------------|---|------|------------------------------|--------|-----------------|-----------------|-----------------------|---|-------|
| | | F | Sig. | t | df | Sig. (2-tailed) | Mean Difference | Std. Error Difference | 95% Confidence Interval of the Difference | |
| | | | | | | | | | Lower | Upper |
| Manpower recruitment and selection is very effective | Equal variances assumed | 3.760 | .054 | -2.168 | 148 | .032 | -.323 | .149 | -.617 | -.029 |
| | Equal variances not assumed | | | -2.127 | 74.622 | .037 | -.323 | .152 | -.625 | -.021 |

Interpretation: The mean value of the Female respondents is on the higher side (3.88 ±0.851) than male respondents (3.56±0.815) (Strongly agree =5, Agree=4, Neutral=3, Disagree=2, Strongly disagree=1) the test shows that t=-2.168, df=148, P=0.054, $\alpha=0.05$ P=0.054>0.05 and there is no impact of gender in giving response to Manpower recruitment and selection at Classique Hotel Ltd. It was further tested by Chi-square test with a view to understand the association between the gender and their response which is shown in Table 1.5.

Table 1.5: Chi-square Test showing that association between the gender and their response to Recruitment and selection process is in line with employees' future

| | Value | df | Asymp. Sig. (2-sided) | Monte Carlo Sig. (2-sided) | | | Monte Carlo Sig. (1-sided) | | |
|------------------------------|---------------------|----|-----------------------|----------------------------|-------------------------|-------------|----------------------------|-------------------------|-------------|
| | | | | Sig. | 95% Confidence Interval | | Sig. | 95% Confidence Interval | |
| | | | | | Lower Bound | Upper Bound | | Lower Bound | Upper Bound |
| Pearson Chi-Square | 11.605 ^a | 4 | .021 | .013 ^b | .000 | .032 | | | |
| Likelihood Ratio | 12.540 | 4 | .014 | .013 ^b | .000 | .032 | | | |
| Fisher's Exact Test | 11.679 | | | .000 ^b | .000 | .020 | | | |
| Linear-by-Linear Association | 4.585 ^c | 1 | .032 | .027 ^b | .001 | .052 | .020 ^b | .000 | .042 |
| N of Valid Cases | 150 | | | | | | | | |

a. 4 cells (40.0%) have expected count less than 5. The minimum expected count is 1.15.

A question was asked to understand whether manpower recruitment and selection was in line with the future career prospects. Since 4 cells (40.0%) have expected count less than 5, Fisher's exact test value 11.679 is considered. P value is 0.000 is smaller than α 0.05 and is significant. Thus it is understood that there is an association between the gender of the respondents and their response to their motivation. Depending upon the type of work either female are motivated more than the male.

5. Understanding the relation between the effectiveness of Manpower recruitment and selection in enhancing organizational success: The relationship between the effectiveness of Manpower recruitment and selection in enhancing organizational success was analyzed with the help of Correlation and the results are depicted in Table 1.6. The test reveals that and the Pearson r=.578 $\alpha=0.01$ P=.000<0.01 and which shows that it is significant and a positive correlation between

manpower recruitment and selection in enhancing the organizational success. The study interprets that greater the effectiveness of recruitment and selection more effective it will be in enhancing organizational success.

Table 1.6: Correlation test to understand the relationship between Manpower recruitment and selection in enhancing organizational success

| | | Manpower recruitment and selection is very effective | Manpower recruitment and selection helps in enhancing organizational success |
|--|---------------------|--|--|
| Manpower recruitment and selection is very effective | Pearson Correlation | 1 | .578** |
| | Sig. (2-tailed) | | .000 |
| | N | 150 | 150 |
| Manpower recruitment and selection helps in enhancing organizational success | Pearson Correlation | .578** | 1 |
| | Sig. (2-tailed) | .000 | |
| | N | 150 | 150 |

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

There is a moderate correlation and in order to understand the influence of independent variable on dependant variable (recruitment and selection on organizational success) Regression analysis was also used and the results are depicted in Table 1.7, Table 1.8 and Table 1.9. The dependent variable organizational success is reliant on different factors such as productivity of the employees who have undergone recruitment and selection based on scientific procedures.

Table 1.7: Model Summary

| Model | R | R Square | Adjusted R Square | Std. Error of the Estimate |
|-------|-------------------|----------|-------------------|----------------------------|
| 1 | .578 ^a | .334 | .329 | .764 |

a. Predictors: (Constant), Manpower recruitment and selection is very effective

Table 1.8: ANOVA

| Model | | Sum of Squares | df | Mean Square | F | Sig. |
|-------|------------|----------------|-----|-------------|--------|-------------------|
| | Regression | 43.192 | 1 | 43.192 | 74.070 | .000 ^b |
| | Residual | 86.302 | 148 | .583 | | |
| | Total | 129.493 | 149 | | | |

Dependent Variable: Manpower recruitment and selection helps in enhancing organizational success

b. Predictors: (Constant), Manpower recruitment and selection is very effective

Table 1.9: Coefficients

| Model | Unstandardized Coefficients | | Standardized Coefficients | t | Sig. |
|--|-----------------------------|------------|---------------------------|-------|------|
| | B | Std. Error | Beta | | |
| (Constant) | 1.819 | .281 | | 6.481 | .000 |
| Manpower recruitment and selection is very effective | .645 | .075 | .578 | 8.606 | .000 |

a. Dependent Variable: organizational success

Application of regression analysis test results state that R squared is .334 which indicates that 33.4% of the organizational success has been explained and adjusted r squared value is .329 which is close to the r squared value .334. This level of predictability is low as organizational success is affected by many other variables and there could be .334 variability of data response around its mean. The test shows that the equation $Y=a+bx$ is interpreted as organizational success = 1.819+.645 times of process of recruitment and selection which indicates that the level of organizational success is influenced by manpower recruitment and selection to the extent of 1.819+.645 times.

Suggestions based on findings

Proper data must be maintained by the Classique Hotel Management about the candidates who are not short listed at any of the stage of recruitment, as this will strengthen their database, which could be referred to when the future requirement arises for the similar or different job profiles. Respondents suggested improving recruitment and selection activities of the organization by providing the job description when advertisement about the job is published. While selecting the candidate the selection decision must be based on the candidate's potential skills which could be further groomed by

providing him by training rather than just going by his qualification. Language skills are also the most important skills one has to possess in order to communicate well with the guests. Therefore before selecting a candidate his/her language skills must also be tested. Designing an effective system for conducting Employee Background check is a must. Recruiter should be trained for carrying out recruitment and selection activities or should hire a professional who is an expert in recruiting and selecting good candidates. More attention must be paid on the feedback as it gives necessary inputs for improving the recruitment process in the future.

Conclusion

Since Recruitment and selection are the important Human Resource functions it must be taken very seriously by the organizations of all types. Manpower recruitment and selection at Classique Hotel Ltd has proven the fact that its' manpower recruitment and selection process is transparent and unbiased. The recruitment process should make a humble attempt in rejecting unsuitable candidates by encouraging large number of candidates for a job by any organization. Recruitment and selection become elementary function in targeting on the skilled and high performing people to fulfill the requirement of competent human resources.

References

- Ahmad, S., & Schroeder, R.G. (2002). The importance of recruitment and selection process for sustainability of total quality management. *International Journal of Quality & Reliability Management*, 19 (5), 540 – 550.
- Bergwerk, J. (1992). Recruiting Strategies for Changing Times. *International Journal of Manpower*, 13 (9), 13 – 22.
- Clark, T. (1992). Management Selection by Executive Recruitment Consultancies: a survey and explanation of selection methods. *Journal of Managerial Psychology*, 7 (6), 3 – 10.
- Clare. A.J Gunn, Taylor, Francis. (1988). Tourism Planning, New York.
- Cliff Lockyer, Dora Scholarios. (2004). Selecting hotel staff: why best practice does not always work. *International Journal of Contemporary Hospitality Management*, Vol. 16 Iss: 2, pp.125 - 135
- Evans, R. (1991). Surviving the skills shortage: equal opportunities in recruitment and selection. *Library Management*, 12 (2), 4 – 14.
- French, G. R. (2012). Recruitment and Selection. *Leading, Managing and Developing* , 3 (6), 12-32.
- Hallier, J. (2001). Greenfield recruitment and selection: Implications for the older worker. *Personnel Review*, 30 (3), 331 – 351.
- Ifill, S. & Moreland, N. (1999). Auditing recruitment and selection using generic benchmarking: a case study. *The TQM Magazine*, 11 (5), 333 – 341.
- khanna, Pooja. (2014). Recruitment and Selection: A need of the hour for organization success. *International Journal of Research in Management and Technology*, 4(3), 2249-9563.
- Knights, D., & Raffo, C. (1990). Milkround Professionalism in Personnel Recruitment: Myth or Reality. *Personnel Review*, 19 (1), 28 – 37.
- Leela Shelley. (1991). Tourism Development in India – A study of hospitality Industry, Pointer Publishers, Jaipur.
- Meager, N., & Metcalf, H. (1988). Employers' Recruitment Practices And The Long-Term Unemployed. *Personnel Review*, 17 (5), 12 – 18.
- Mohinder Chand, Anastasia A. Katou.(2007).The impact of HRM practices on organisational performance in the Indian hotel industry. *Employee Relations*, Vol. 29 Iss: 6, pp.576 – 594.
- Noreen Heraty, N., & Morley, M. (1998). In search of good fit: policy and practice in recruitment and selection in Ireland. *Journal of Management Development*, 17 (9), 662 – 685.
- Ravi Bushan Kumar (1995).Coastal Tourism and Environment, APH Publishing Corporation, New Delhi.
- Russo, G., Rietveld, P., Nijkamp, P., & Gorter, C. (1995). Issues in recruitment strategies: an economic perspective. *International Journal of Career Management*, 7 (3), 3–13.
- Sonal Sisodia, N. C. (2012). Use of illustrations in recruitment advertising. *Journal of Services Research* ,12 (2), 123-138
- Souza, F. S., & Zajjas, J. J. (1995). Recruiting executives in business: an organizational and conceptual perspective. *Executive Development*, 8 (3), 23 – 27.

Solid Waste Management: Awareness among the Hoteliers in Katra (J&K)

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ABSTRACT

Solid Waste Management (SWM) has emerged as a worldwide challenge for urban dwellers and planners for the reason of rapid urbanization, unplanned growth of cities, lack of awareness amongst its stakeholders, insufficiency of the resources with the agencies dealing with waste management and non-availability of basic services for managing waste. For Katra (J&K), the issue of SWM is very crucial as the town witnesses the huge footfall of pilgrims from all over the world to have the *Darshans* of the Holy Shrine of Shri Mata Vaishno Devi from all over the world. The boarding and lodging facilities for tourists are provided by various hotels, guesthouses, and *dharamshalas*, and thus it becomes crucial on the part of service providers to know the various aspects of SWM to curtail down the ill effects of solid waste generated and managed in their surroundings. Also, owing to the uncontrolled system of tourist inflow and inefficient management of solid waste the town can be seen crowded with the heaps of waste dumped along roadside, polluted water resources, bunged up drains, false odor, and wandering stray animals. The present study is based upon the primary research survey conducted at Katra town during June'2015 to October' 2015 for the purpose of analyzing the level of awareness of various hoteliers of Katra town towards the SWM.

Keywords: Solid waste management, Stakeholders of Solid waste management, Awareness Level of hoteliers.

JEL Classification: M00, M10, M30

INTRODUCTION

Jammu & Kashmir is one amongst the 29 states of India which is has diverse and extensive geographic, agro-climate and topographic features. Tourism is reflected as a growth instrument for the state as it grasps the potential of generating employment prospects for various segments of the society. The major set of tourist inflow in the state is conferred to the pilgrims of Shri Mata Vaishno Devi Shrine in Katra. Every year the rate of floating population in Katra city is increasing which therein lead towards the increase in the consumption patterns in the region with a more focus upon the rented stay arrangements (through hotels, lodges/Dharamshalas) and the food (packaged food, restaurants etc.). Therefore, the mix of both local population and floating population has resulted into alarming rise of waste quantities both in solid and liquid form in Katra.

However, it has been found that the municipal committee constituted in 1935, is responsible for providing the basic amenities, and is still fighting hard for taking on a systematic process and upgraded technology for managing the solid waste generated in the region due to sheer lack of consciousness and awareness in the various stakeholders (households, commercial establishments, hoteliers and pilgrims). As the inhabited and floating population is increasing day by day it has resulted in massive upsurge in the economic activity and thus, leading towards alarming and unplanned growth of solid waste in Katra. During the field survey it was explored that the hoteliers dump their hotel waste mainly in community bins or keep on stacking the waste in front of their premises which is collected once in a day by the municipal committee and ultimately dumped into the landfill site. Recyclables like cardboards, empty plastic bottles, cans etc. are collected by the *Rag-pickers* and sold out to scrap dealers in the town.

SOLID WASTE MANAGEMENT AND ITS CURRENT STATUS IN KATRA

SWM is one of the most important services provided by the municipal establishments in our country. The basic objective of SWM is segregation, collection, transportation, and disposal of solid waste in an environment friendly manner by segregating the biodegradable waste, recyclables and reduction in the quantity of waste to be dumped in the landfill. In India SWM is the primary responsibility of municipalities but unfortunately it is one among the most poorly rendered services. The benchmark for waste collection is 100%, in metros and big cities 70-79% of waste is collected whereas in case of smaller cities and towns the collection of waste is less than 50% out of the collected solid waste more than 90% of municipal waste generated is exposed directly on land in an unsatisfactory manner (K.A Ranjith, 2012 Das, D., Srinivasan., 1998).

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Sustainable solid waste management can be attained with the application of strategic planning, fiscal benefits, economical feasible technologies, public private partnerships etc. Strategic planning should be based on long term goals of serving the local needs effectively on the basis of 3R approach i.e. Reduce, Reuse and Recycle with stakeholders participation accompanied with proper financial, human resource management. The ultimate objective of SWM is to reduce the quantum of solid waste disposed off on land after recovering the recyclables and other forms of resources that can be extracted after processing the solid waste in a eco-friendly and cost effective method (MoeF, 2010; PPP in SWM, 2009).

The existing status of SWM in Katra city explains that the stakeholders are less aware about the segregation of solid waste generated and there is no system for primary collection of solid waste generated at the various levels. The waste is disposed openly by various stakeholders and is later collected by the sanitation workers of Katra Municipal Committee (KMC) while street sweeping and thus, by far street sweeping is the only method of primary collection in Katra. Rag pickers recovers the plastic bottles, cans and cardboards while wandering all day along the road in the crowded areas, and in case of hotels the lower level staff recovers plastic bottles, cans etc. for exchange.

On the basis of the field survey and informal interviews with various stakeholders of the waste management system following facts are observed:

- No segregation and storage of solid waste generated at source.
- No system of door to door collection of waste.
- Irregular service of street sweeping
- Transportation of waste in open vehicles
- Low level of Recycling Activities
- Poor Treatment and Disposal of waste

The study however pictured a very clear sign to a severe dilemma -- the massive overflowing of garbage being flushed out of hotels, households and commercial establishments

LITERATURE REVIEW

There are number of studies conducted at national and international level that supports the various facets of SWM. The various aspects like waste generation, collection, transportation, recycling, disposal methods and problems generating through inefficient SWM have been discussed in the literature. There have been a number of studies conducted in reference to SWM in India in fact in a study conducted by (Fu, Ho, Sui, & Li, 2010) India was ranked 5th amongst the top 20 most productive countries for producing articles on solid waste research during 1993-2008. In this study it was found that there is deficiency of steadiness in research carried on solid waste. Also there is found to be extensive inconsistency in research focus in solid waste. 'Municipal Solid Waste' or 'Solid Waste' is the top most repeatedly used keyword in literature explored. There are substantial literature available in reference to Recycling, landfill, (leachate, leaching, and land-filling), composting and Waste-to-Energy (WTE) (fly ash, incineration and pyrolysis), other common methods, and best practice case studies in SWM. However, due to the specificity of the issue the literature review includes the papers which have been cited significantly related to the definition of solid waste and management contexts in variables associated to it, techniques and methods as well as the best practices.

There are many studies describing the concerns associated with the waste management particularly in the developing countries due population explosion, socioeconomic crisis, high inflation, prolonged recession, unrestrained generation of municipal and industrial waste, lack of inter municipal coordination for creating awareness regarding sanitary education, absence of personnel management program, lack of funds, organizational weakness of municipal SWM, lack of planning, scavenging by rodents and vectors, lost and damaged trash can lids, inhabitants with no adequate waste storage facilities, technical problems, shortage of disposal land, crude dumping etc. (Idris, Inanc, & Hassan, 2004)(Rahardyan , Matsuto , Kakuta, & Tanaka, 2004)(Anand, 1999)(Baud, Grafakos, Hordijk, & Post, 2001)(Giusti, 2009)(Jha, Singh, Singh, & Gupta, 2011)(Upadhyay, Prashad, Srivastav, & Singh, 2005).

There have been studies describing the extremity of municipal solid waste because of increasing population and uncontrolled urbanization. The studies have identified the substandard ways of collection as well as the disposal of waste particularly by municipal corporations in India (Sharholi, Ahmad, Vaishya, & Gupta, 2007). The use of substandard dumping in landfill without following the disposal regulations often results in release of toxic gases like methane, sulfurous compounds, through cracks, openings and intracellular spaces of debris present in ground. The literature also accounts for the complaints of server failure, breakdown of electronic appliances, and corrosion of fabric paints and adverse impacts of mismanagement of solid waste on human health (Sahu, 2007)(Idris, Inanc, & Hassan, 2004).(Giusti, 2009).

The studies also provide an input towards the financial constraints in SWM. One of the studies refers to the optimal routing model like GIS based transportation model which provides the most cost and distance proficient collection routes for the transportation of waste to the dumpsite (Ghose, Dikshit, & Sharma, 2006). The other efficient and cost effective methods for sustainable SWM advocated are using 3R approach- Reduce, Reuse and Recycle for the purpose of reducing the exposure of waste to the landfill site (Position Paper on Solid Waste Management Sector in India, Public Private Partnerships in India, 2009)(TEI & Sasaki , 2006). Recycling reduces the burden on landfill sites, environment and proves to be beneficial in monetary terms. Recyclable contents in solid waste are paper, glass and plastic, about 45-60% of plastic waste generated from thrown away computer chips boards to polythene bags are recycled. The advantages of recycling plastic are reduction in the volume of MSW, reduction of carbon dioxide, nitrogen oxides, and sulphur dioxide emissions in environment, financial benefits etc. The cost of converting reprocessed/recycled material into new products is frequently lesser than fresh or virgin material. In terms of recycling cost can be taken as a balance sheet entry, future cost of replacing landfills and waste technologies, or environmental cost (Al-Salem, Lettieri, & Baeyens, 2009)(Field & Sroufe, 2007)(Lombrano, 2009).

One of the important study emphasizes that waste minimization should be the main target of SWM and can be carried through waste reduction by avoiding waste generation at source and recycling with the purpose of preventing the usable material from entering the waste stream (Visvanathan & Trankler, 2003). Other problems addressed in literature are ineffectiveness of waste collection, financial limitations accompanied with insufficient planning and dearth of research on varying complexities of solid waste (Wilson, Rodic, Scheinberg, Velis, & Alabastar, 2012).

There are studies which provide insight into the SWM strategies. SWM strategies are said to effective if all the stakeholders get involved and take the responsibility of Municipal SWM as generator, regulators and legislators through awareness and participation of community, private sector, Non-governmental organizations, informal sector (rag pickers, collectors, scavengers, sweepers etc.). Solid waste increases with an increase in income of a family or individual. Studies have shown that increase in Rs 1000/month of income of an individual or family increase the solid waste generation of 1 kg waste/month. There exists a positive relationship between waste generated and average income(Baud, Grafakos, Hordijk, & Post, 2001)(Visvanathan & Trankler, 2003). The SWM strategies are based on consumer inclusivity, supplier inclusivity, economic sustainability and organizational coherence with indicators; amount of consumer and supplier inclusivity, population using and paying for collection and degree of organizational coherence (Wilson, Rodic, Scheinberg, Velis, & Alabastar, 2012).

There are certain studies on SWM with reference to J&K which have tried to measure the level of awareness and environmental knowledge, bio-medical waste management and practices followed by the households, students and hospital staff. However one can identify the gap towards the SWM literature in terms of strategic planning process for SWM particularly for Jammu and Kashmir (Ganai & Zaragar, 2013)(Kumar & Singh, 2013)(Waseem, Hassan, Wani, Baba, & Kadri, 2007).

RESEARCH METHODOLOGY

In this study, various sources are explored for the collection of data related to various aspects of SWM followed and practiced in Katra region. The study was carried on in three main steps:

Step 1: Firstly, a desk study in which mainly secondary sources of data available in various documents and records relating to municipal SWM, as well as, socio-economic planning, were studied to obtain background information.

Step 2: Secondly, a questionnaire was formulated and a field survey was carried out on 87 randomly selected hotels of Katra. A questionnaire was prepared to obtain data about the awareness level of the hoteliers. The data collected from the survey was analyzed using SPSS to analyze a set of 30 questions.

Step 3: Along with the field survey conducted in the hotels of Katra, a site visit was conducted to Katra dumping ground where a few people involved in scavenging were interviewed at random to know the situation of solid waste in the region. Various hoteliers/owners were also interviewed. The questions enquired during the interviews were tailored to draw the information on:

- (a) The level of awareness regarding solid waste;
- (b) Status of SWM
- (c) Methods followed to reduce SWM problems.

The study was conducted specifically in Katra town and was based upon primary data. Thereafter, the factorial design was used to reach to the conclusion. The instrument used for gathering data was questionnaire. Random sampling method was used to get the information about SWM in Katra city. The responses were extracted by using a structured and well-framed questionnaire and on the basis of questionnaire a random sample 87 hoteliers in Katra region was drawn. In order to gain further insight

in to the research problem, interviews regarding their awareness towards general aspects of SWM were conducted. The questionnaire was then tested on the basis of reliability by performing Cronbach's test. The tool to measure the central tendency is captured through SPSS 22 and factor analysis was carried out to factorize the statements.

ANALYSIS AND INTERPRETATION

The analysis is done on a sample size of 87 hoteliers. A set of 30 questions on a Likert scale (where 1 corresponds to least awareness and 10 accounts for maximum awareness) were analyzed through various tools such as mean, standard deviation, factor analysis, Cronbach's alpha test, Bartlett's test.

Reliability Test

Cronbach's alpha is applied as the most common measure of internal consistency better known as 'reliability'. The questionnaire consisted of 30 statements which was in a Likert scale where the respondents were asked to rate their awareness level and practices on least to most scale. The questionnaire scale was subjected to the test of reliability wherein the Cronbach's alpha was found to be 0.941 for 30 items.

Table 1: Reliability Test

| Cronbach's Alpha | Cronbach's Alpha based on Standardized Items | N of Items |
|------------------|--|------------|
| .941 | .941 | 30 |

This indicates a high level of internal consistency of scale with the specific sample.

Values of Mean and Standard Deviation of Hoteliers

In the study, the measure of central tendency is calculated on 87 respondents of hoteliers through SPSS 22 and is shown below:

Table 2: Mean & Standard Deviation of Hoteliers

| S.No. | Statements | Mean | Std. Deviation | N |
|-------|---|------|----------------|----|
| 1 | Kitchen waste and garden waste can be recycled as compost (Fertilizer) | 5.95 | 2.79 | 87 |
| 2 | Tetra Packs are recyclable | 5.97 | 2.53 | 87 |
| 3 | People will cut less trees if paper is recycled | 6.06 | 3.06 | 87 |
| 4 | Burning of household waste creates air pollution | 6.11 | 2.87 | 87 |
| 5 | Dumping wet waste on soil create leachate which is poisonous and causes water and soil pollution | 6.13 | 2.65 | 87 |
| 6 | Heaps of waste are reasons behind many diseases like typhoid, dengue, malaria, plague etc. | 6.44 | 2.79 | 87 |
| 7 | Heaps of waste invites stray animals like cows and dogs, that increases their number in your locality | 6.60 | 2.68 | 87 |
| 8 | Dumping waste in drains causes clogging that can lead to floods | 6.96 | 2.42 | 87 |
| 9 | Use of polythene bags is banned | 6.90 | 2.84 | 87 |
| 10 | Burning of polythene bag creates air pollution | 7.00 | 2.79 | 87 |
| 11 | Polythene bags are non- biodegradable | 6.79 | 2.67 | 87 |
| 12 | Various discarded batteries are hazardous and should not be disposed with general waste | 6.59 | 2.69 | 87 |
| 13 | Expired and other medicines should not be mixed with general waste | 6.45 | 2.64 | 87 |
| 14 | Diapers and sanitary napkins must not be drained as they can clog the drains | 7.03 | 2.45 | 87 |
| 15 | Segregation of waste can reduce the load on landfill | 6.74 | 2.53 | 87 |
| 16 | Various resources like metals, paper, plastic bottles etc. can be recovered by segregation of waste | 6.93 | 2.38 | 87 |
| 17 | Various heaps of waste, clogged drains, wandering animals , mosquitoes and flies can degrade the image of your locality and its residents | 6.91 | 2.33 | 87 |
| 18 | Putting the waste in the community dustbins makes your locality healthy and clean | 7.03 | 2.66 | 87 |
| 19 | Daily street sweeping facility is provided by the municipality | 6.95 | 2.79 | 87 |
| 20 | Municipality is responsible for providing community bins | 7.06 | 2.69 | 87 |
| 21 | There is a designated ward officer for every ward | 6.72 | 2.68 | 87 |
| 22 | Construction and demolition waste can be collected by a municipality | 6.47 | 2.75 | 87 |
| 23 | Littering of waste is prohibited | 6.87 | 2.44 | 87 |
| 24 | Open burning of waste is prohibited | 6.91 | 2.41 | 87 |
| 25 | Legal action can be taken if someone found littering or burning the solid waste | 6.94 | 2.41 | 87 |
| 26 | Municipality has a complaint redressal mechanism in which any citizen can file a complaint regarding the issues related to SWM of a particular area | 7.06 | 2.18 | 87 |
| 27 | Municipality conducts awareness programs about SWM through | 6.71 | 2.43 | 87 |

| | | | | |
|----|---|------|------|----|
| | hoardings in public area, advertisements in print and electronic media | | | |
| 28 | It is the moral duty of each citizen to keep its surrounding clean and healthy | 8.41 | 1.84 | 87 |
| 29 | SWM programs for healthy and clean society can be conducted at ward or <i>mohalla</i> level without the inference of municipal body | 7.47 | 2.19 | 87 |
| 30 | Your active contribution in the area of SWM can bring a positive change in the current environment | 7.71 | 1.79 | 87 |

After calculating the mean score from the data, it is found that the values generated are fine and the calculation of standard deviation shows that there is less deviation from mean score which concludes that the maximum number of hoteliers in Katra region is aware about the practices and orientation of SWM. However, highest deviation is 3.06 regarding paper recycling which indicates that people are less aware about the particular subject matter.

Also, it was found that the minimum deviation is 1.79 which states high level of awareness regarding active participation of people to bring a positive change in the environment.

Factor Analysis

The factor analysis of the given study experienced that 74.4% of the data is explained into six factors. Iteration of 30 statements was reduced to 29 statements, more successfully distributed into six factors. Based upon the literature review and understanding, the following could be the six identified factors with expressions.

Factor 1: Waste leading to Physical Diseases

This factor explains that the solid waste leads to various physical diseases due to dumping of waste usually polythene bags in the locality and in drains which then leads to clogging. The statements which fall under this factor are heaps of waste are reasons behind many diseases like typhoid, dengue, malaria, plague etc. with factor loading (.647), heaps of waste invites stray animals like cows and dogs that increases their number in your locality with factor loading (.725), dumping waste in drains causes clogging that can lead to floods with factor loading (.777), use of polythene bags is banned with factor loading (.780), burning of polythene bag creates air pollution with factor loading (.768) and polythene bags are non- biodegradable with factor loading (.668). The relationship of these statements with the factor signifies that the people will experience more health issues with the use of polythene bags and burning of such waste will generate health diseases like asthma etc. which will ultimately play havoc with the health of the local residents.

Factor 2: Involvement of Municipality in SWM

This factor encompasses the level of Municipality involvement in awareness and managing the solid waste and it also explains the legal actions required to be taken against prohibited activities. The statements that fall under this factor are there is a designated ward officer for every ward with factor loading (.642), construction and demolition waste can be collected by a municipality with factor loading (.785), littering of waste is prohibited with factor loading (.815), open burning of waste is prohibited. With factor loading (.751), legal action can be taken if someone found littering or burning the solid waste with factor loading (.766), municipality has a complaint redressal mechanism in which any citizen can file a complaint regarding the issues related to SWM of a particular area with factor loading (.791) and municipality conducts awareness programs about SWM through hoardings in public area, advertisements in print and electronic media with factor loading (.768). The relationship of these statements with the factor states that the more number of hoteliers thinks that municipality plays a significant role in managing the solid waste.

Factor 3: Waste leading to Pollution

This factor takes into consideration those statements that lead to pollution due to dumping and burning of waste in the environment. The set of statements that collapse in this factor includes kitchen waste and garden waste can be recycled as compost (Fertilizer) with factor loading (.829), tetra Packs are recyclable with factor loading (.814), people will cut fewer trees if paper is recycled with factor loading (.753), burning of household waste creates air pollution with factor loading (.659) and dumping wet waste on soil creates leachate which is poisonous and causes water and soil pollution with factor loading (.696). The relationship between these set of statement with the factor explains that dumping of waste without segregation at the source will lead to creation of pollution in the environment.

Factor 4: Importance of Segregation of Waste

This factor takes into account the importance of segregation of waste so that various resources like metals, plastic bottles, glass bottles etc. can be recovered. Therefore, the statements that fall under this factor are expired and other medicines should not be mixed with general waste with factor loading (.821), diapers and sanitary napkins must not be drained as they can clog the drains with factor loading (.783), segregation of waste can reduce the load on landfill with factor loading (.831) and various resources like metals, paper, plastic bottles etc. can be recovered by segregation of waste with factor loading (.675). The relationship of these statements with the factor signifies that it is essential to segregate the waste at the source in order to avoid clogging and pressure on landfills.

Factor 5: Number of Community Bins describes the health of the Society

This factor explains the relationship between community bins and the society. More community bins by municipality shows that the people are putting the waste in the bins and thus makes the locality look healthy and clean. The set of statements that collapse under this factor are various heaps of waste, clogged drains, wandering animals, mosquitoes and flies can degrade the image of your locality and its residents with factor loading (.610), putting the waste in the community dustbins makes your locality healthy and clean with factor loading (.725), daily street sweeping facility is provided by the municipality with factor loading (.696) and municipality is responsible for providing community bins with factor loading (.732). The relationship of these statements with the factor signifies that the community bins enhance the surroundings by making the locality healthy and clean.

Factor 6: Society's Participation in managing the solid waste

This factor takes into consideration society's awareness and participation in managing the solid waste to keep the surrounding clean and healthy. Thus, the statements that found under this factor are it is the moral duty of each citizen to keep its surrounding clean and healthy with factor loading (.700), SWM programs for healthy and clean society can be conducted at ward or mohalla level without the inference of municipal body with factor loading (.690) and your active contribution in the area of SWM can bring a positive change in the current environment with factor loading (.757). The relationship of these statements with the factor signifies that the active participation of hoteliers and commercial establishment owners contributes to the well-being of the society by bringing a positive change in the current setup.

FINDINGS AND SUGGESTIONS

It was found during the research that the main challenge in improving the services of waste management in Katra is ineffective coordination amongst the various stakeholders (e.g., local residents, NGO's, state authorities, etc.). After analyzing the data it was found that the hoteliers are more aware about the concept of SWM. The reason may be the nature of work and the amount of waste generated. It was also established after analyzing the data that the hoteliers have more number of dustbins with them and they more frequently dispose their waste in the community bin through private waste collector. Many of the hoteliers are unaware about what is done to the solid waste after it is being disposed by them. Moreover, it was also observed during the survey that the more number of hoteliers pay monthly charges for the collection of waste and are hence willing to pay in future for the collection of waste from the hotel.

However, hoteliers willing to work together in coordination with the concerned municipal body for the better waste management. Based upon the factors analyzed, it is therefore suggested that the various areas of Katra are need to be sanitize and initiatives are required to be made to increase the level of awareness and to improve the waste management services. It is also suggested that there should be a robust Social Audit System for hotels in order to successfully manage the solid waste, thus, the actions taken have to be reliable, apparent, socially justifiable and, convenient and practical.

CONCLUSION

The city of Katra is witnessing a paradigm of change in terms of social and economic activities due to its location and increase in the pilgrimage. The residential and floating population is influencing a change in lifestyle in consumption pattern and hence the generation of waste. A major obstacle in improvising the services of solid waste management for this city lies in operational coordination among the various stakeholders (e.g., residents, hoteliers, NGO's, commercial establishments, state Authorities, etc.) of solid waste. The lack of awareness, coordination and the negligence of the stakeholders for the long term, ecological effect of solid waste may become detrimental for the pious

environment. Thus, Shri Mata Vaishno Devi Shrine (SMVDS) Board along with the residents, shopkeepers, hotels and other commercial and non-commercial establishments need to come together for creating the awareness and providing innovative mechanism to the practices towards SWM.

Generally the efficient management of municipal solid waste depends upon the active participation of all its stakeholders, awareness about the various aspects of SWM are required in order to avoid the social, economic and environmental loss beard by all the sections of society. The perception and attitudes of stakeholders towards the solid waste can be positively altered by educating them about the ill-effects of the practices of open littering, burning, and draining of waste. Thus, by building awareness programme and by innovating the existing practices we can come with a right approach to start with for a small but significant step in direction of effective SWM and healthy and clean environment full of divinity.

REFERENCES

- Aji, A. T., Sobha, V., Emmanuel, J., & Nair, A. (2007, July). Quantification, characterization and management of solid wastes at Sabarimala Pilgrimage Centre, Kerala. *Indian Journal of Environmental Protection*, 27(7), 585-589.
- Al-Salem, S. M., Lettieri, P., & Baeyens, J. (2009). Recycling And Recovery of Plastic Solid Waste (PSW): A Review. *Journal of Waste Management*, 29, 2625-2643.
- Anand, P. B. (1999). Environment and Urbanization. *Journal of Environment & Urbanization*, 22(2), 162-176.
- Annepu, R. K. (2012, January 10). *Sustainable SWM in India*. Retrieved from http://www.seas.columbia.edu/earth/wtert/sofos/Sustainable%20Solid%20Management%20in%20India_Final.pdf
- Baud, I., Grafakos, S., Hordijk, M., & Post, J. (2001). Quality of Life and Alliances in SWM: Contribution to Urban Sustainable Development. *Journal of Cities*, 18(1), 3-12.
- Census of India. (2011). Jammu and Kashmir, India: Directorate of Census Operations.
- Chung, S., & Lo, C. (2008). Local Waste Management Constraints and Waste Administrators in China. *Journal of Waste Management*, 28, 272–281.
- Das, D., Srinivasu, M., & Bandopadhyay, M. (1998). Solid Sstate Acidification of Vegetable Waste. *Indian Journal of Environmental Health*, 40(4), 333–342.
- (2009). *Developing Integrated SWM Plan*, , Volume 4. United Nations of Environment Program.
- Field, J. M., & Sroufe, R. P. (2007). The Use of Recycled Materials in Manufacturing: Implications for Supply Chain Management and Operations Strategy. *International Journal of Production Research*, 45, 4439-4463.
- Fu, H., Ho, Y., Sui, Y., & Li, Z. (2010). A Bibliometric Analysis of Solid Waste Research During the Period 1993-2008. *Journal of Waste Management*, 30, 2410-2417.
- Ganai, M. Y., & Zaragar, S. S. (2013). Assesment of environmental knowledge, awareness and practices of college students in Government Sheikhu Alam Degree college, Budgam. *Journal of Academia Arena*, 5(1), 38-41.
- Giusti, L. (2009). A Review of Waste Management Practices and their Impact on Human Health. *Journal of Waste Management*, 29(8), 2227–2239.
- (2008). *Handbook of Service Level Benchmarking*. Ministry of Urban Development, Government of India. Retrieved from <http://www.urbanindia.nic.in>
- Hosetti, B. B. (2006). *Prospects and Perspectives of SWM*. New Age Publishers.
- Idris, A., Inanc, B., & Hassan, M. N. (2004). Overview of Waste Disposal and Landfills/ dumps in Asian countries. *Journal of Master Cycles Management*, 6, 104-110.
- Jago-on , K. B., Bianet, Kaneko, S., Fujikura, R., Fujiwara, A., Imai, T., . . . Taniguchi, M. (2009). Urbanization and subsurface environmental Nos: An attempt at DPSIR model application in Asian Cities. *Journal of Science of the Total Environment*, 3089-3104.
- Jha, A. K., Singh, A. K., Singh, G. P., & Gupta, P. K. (2011). Sustainable Municipal SWM in Low Income Group Cities: A Review. *Journal of Tropical Ecology*, 52(1), 123-131.
- Klundert , A. D., & Anschutz, J. (2001). Integrated Sustainable Waste Management - the Concept, Tools for Decision-makers. *Experiences from the Urban Waste Expertise Programme (1995-2001)*. Retrieved from <http://www.rainfoundation.org/tools/downloads/too>
- Kumar, A., & Singh, S. (2013). Domestic solid waste generation- A Case Study Of Semi Urban Area Of Kathua District Jammu, J&K, India. *Journal of Scientific & Research Publication*, 3(5), 1-5.

- Lombrano, A. (2009). Resources, Conservation and Recycling. *Journal of Resources Conservation and Recycling*, 53, 601-611.
- Marshall , R. E., & Farahbaksh, K. (2013). Systems Approaches to Integrated SWM in Developing Countries. *Journal of Waste Management*, 33, 988- 1003.
- (2009). *Position Paper on SWM Sector in India, Public Private Partnerships in India*, . Department of Economic Affairs. Ministry of Finance, Government of India.
- Rahardyan , B., Matsuto , T., Kakuta, Y., & Tanaka, N. (2004). Resident's Concerns and Attitudes Towards SWM Facilities. *Journal of Waste Management*, 24(5), 437-451.
- Ramachandra, T. V., & Bachamanda, S. (2007). Environmental audit of Municipal SWM', Vol. 7, No. 3/4, pp. . *International Journal of Environmental Technology and Management*, 7(3/4), 369-391.
- (2010). *Road Map on Mangement of Waste in India*. Ministry of Environment and Forest, The Government of India. Retrieved 01 26, 2014, from <http://moef.nic.in/sites/default/files/Roadmap-Mgmt-Waste.pdf>
- Saha, J. K., Panwar, N., & Singh, M. V. (2010). An Assessment Of Municipal Solid Waste Compost Quality Produced in Different Cities of Indian In The Perspective of Developing Quality Control. *Journal of Waste Management*, 30, 192-201.
- Sahu, A. K. (2007). Present Scenario of Municipal Solid Waste (MSW) Dumping Grounds in India. *International Conference on Sustainable SWM*, (pp. 327-333).
- Sharholly, M., Ahmad, K., Mahmood, G., & Trivedi, R. C. (2008). Municipal SWM in Indian Cities- A Review. *Journal of Waste Management*, 28, 459-467.
- Sharholly, M., Ahmad, K., Vaishya, R. C., & Gupta, R. (2007). Municipal Solid Waste Characteristics and Management in Allahabad, India. *Journal of Waste Management*, 27, 490-496.
- Sharma, A., & Raina, A. K. (2014, June). Environmental Impacts of Tourism in Katra Town (J&K)'. *International Journal of Innovative Research in Science, Engineering and Technology*, 3(6).
- Srivastava, P. K., Kulshreshtha, K., Mohanty, C. S., Pushpangadan, P., & Singh, A. (2005). Stakeholder-based SWOT analysis for Successful Municipal SWM in Lucknow, India. *Waste Management*, 25, 531-537.
- Srivastava, V., Ismail, S. A., Singh, P., & Singh, R. P. (2015). Urban SWM in the Developing World with Emphasis on India: Challenges and Oppurtunities. *Reviews in Environmental Science and Bio-technology*, 14(2), 317-337.
- (2011). *Statistical Yearbook for Asia and Pacific*. Retrieved from <http://www.unescap.org/stat/data/syb2011/I-People/Urbanisation.asp>
- (2012). *Status Report on Municipal SWM*. Ministry of Environment and Forest.
- Svarstad, H., Petersen, L. K., Rothman, D., Seipel, H., & Watzold, F. (2008). Discursive Biases of The Environmental Research Framework DPSIR. *Journal of Land and Use Policy*, 25(1), 116-125.
- Tanskanen, J.-H. (2000). Strategic Planning of Municipal SWM. *Resources, Conservation and Recycling*, 30, 111-133.
- TEI , & Sasaki . (2006). Better Practice of Waste Management in Thailand'. *APFED Expert Meeting on the 3Rs in Asia, Bangkok, Thailand*, (pp. 1-17).
- (2009). *Thirteenth Finance Commission Report (2010-2015)*. Ministry of Finance. Retrieved from <http://fincomindia.nic.in/ShowContentOne.aspx?id=28&Section=1>
- (2002). *Twenty Year Perspective Plan for Sustainable Development of Tourism in Jammu & Kashmir*. Ministry of Tourism, Government of India.
- Upadhyay, V. P., Prashad, M. R., Srivastav, A., & Singh, K. (2005). Eco Tools for Urban Waste Management in India. *Journal of Human Ecology*, 18(4), 253-269.
- Visvanathan, C., & Trankler, J. (2003). Municipal SWM in Asia-A Comparative Analysis. *Workshop on Sustainable Landfill Management*, (pp. 3-15).
- Waseem, Q., Hassan, G., Wani, N. A., Baba, A., & Kadri, S. (2007). Awareness Of Bio Medical Waste Management Among the Staff of the Government SMHS Hospital Srinagar, A Territory Level Hospital In Kashmir Valley. *Journal of JK Practioner*, 14(1), 60-61.
- Wilson, D. C., Rodic, L., Scheinberg, A., Velis, C. A., & Alabastar, G. (2012). Comparative Analysis of SWM in 20 Cities. *Waste Management and Research*, 30(3), 237-254.

Entrepreneurship Education and Entrepreneurial Intention Disconnect: A Study of Postgraduate Students

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Abstract

This study investigated, using descriptive survey design, the disconnect between entrepreneurship education and entrepreneurial intention considering the rate of unemployment of the postgraduate students. The sample comprised Four hundred Postgraduate students selected using stratified and simple random sampling technique. The respondents were stratified into Old and New Postgraduate students and gender categories before simple random sampling technique was used to select two hundred respondents from each stratum. A self-constructed and validated test on Entrepreneurship Education Knowledge with reliability coefficient 0.78 was administered on the respondents and an adapted, re-validated Entrepreneurial Intention Level Questionnaire (EILQ), with reliability coefficient of 0.85 was also administered to collect data from the respondents. Data were analyzed using frequency counts, percentages, charts, t-test of significance and Pearson Product Moment Correlation. Findings revealed that majority of postgraduate students are unemployed, also the result revealed a positive relationship between Entrepreneurship Education Knowledge and Entrepreneurial Intention. More so, family was found to have no significant influence on Entrepreneurial Intention of the postgraduate students. The study recommends the need for school administrators to take entrepreneurship education beyond knowledge level rather encourage its practicability while still on the course of program in the school. Also, postgraduate students should be sensitized, educated and encouraged on the advantages of been self-employed.

Keywords: Postgraduate student, Unemployment, Entrepreneurial Intention, Family Business.

JEL Classification: M10, M13

Introduction

The introduction of entrepreneurship education into the curricular of higher institution in Nigeria is a right step in the right direction. This becomes necessary and urgent considering the need of our society. One of the basic needs of the society is the preparation of its youth for future economic self-reliance. The youths are the engine room of development of any nation. It is a popular assertion that when youths energy are channeled towards a positive cause, the better for self-development and the nation as a whole. The betterment of any educational system is its ability to nurture its citizens especially youth towards self-sustenance and self-financial independence and not probably depending on government for provisions of jobs. However, it is no longer news that the rate of unemployment in Nigeria is calling for urgent attention considering its implication on the nations teeming youths and economy of the nation as a whole.

The unemployment rate in Nigeria has been on the increase over three decades now without adequate remedy to salvage the situation, different measures put in place to curtail this anomalies have yield little or no positive contribution. The National Office of Statistics in 1985 put the unemployment rate of the labour force at 4.3 percent, this increased to 5.3 percent in 1986 and 7.0 percent in 1987. It however fell back to 5.1 percent in 1988. Oye, Inuwa & Muhammad (2011) posit that most of the unemployed were city dwellers, as indicated by urban jobless rates of 8.7 percent in 1985, 9.1 percent in 1986, 9.8 percent in 1987, and 7.3 percent in 1988. The increase in the situation was further confirmed by World Bank (1992) that the rate of unemployment in Nigeria was around 28%.

The unemployment rate did not spare the graduates, as Federal Bureau of Statistics (2008) reported that, about 1.6 million persons, mostly young adults, graduate annually from Nigeria higher institutions of learning out of which 60-65% of them are not employed. The report further analysed that, about number, about 3.8 million others are youths that have no tertiary education, or have completed primary or secondary school, and, or dropped out from tertiary institutions who annually join the already saturated labour market.

In April 2009, Director of the National Planning Commission of Nigeria put the rate of youth unemployment in Nigeria at between 60% and 70% (World Bank). According to Oli (2009), of all graduates produced by Nigeria Higher institutions, only 10% can be absorbed in the Nigerian Labour Market. This leaves one with the question of the faith of the remaining 90% Furthermore, National Bureau of Statistics (2011) in its analysis reported that unemployment rate increased from 12.6% in 2002 to 23.9% in 2011.

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The increase in unemployment rate is always accompanied with increased poverty in the country. But a cursory look at Nigeria abundant resources, in terms of human and materials will make one to conclude that the country has no business with poverty. This is evident in the report of Buba, Ayuba, & Rimamnde (2015) who compared Nigeria to countries like Japan, Malaysia and Indonesia, and came to a conclusion that due to the positive attitude and high level commitment towards Entrepreneurship, these other countries were able to break the vicious circle of poverty and made standard of living in their countries better than ever before.

In the bid to tackle this unemployment menace and its companion (poverty), the Nigerian government through the National Universities Commission (NUC) introduced Entrepreneurial courses and made them compulsory for every undergraduate student as one of the criteria to satisfy before graduation. Entrepreneurship education (E.E) seeks to prepare the educated youths with entrepreneurial skills as a means of breaking the market with new and novel ideas to solve needs of the immediate society. The introduction of E.E is with the mindset that such curricular will positively shape the Entrepreneurial intention of the students and facilitate entrepreneurial activities in the nation such that upon graduation, youths would have acquired the requisite knowledge and the skills needed to be self-employed and contribute meaningfully to the development of the nation. When entrepreneurship education is well delivered, students are able to identify opportunities and enhance trainees' creativity, innovative abilities, beliefs and recombination skills (Sofoluwe, 2007; Fuduric, 2008).

Entrepreneurial Intention (E.I) which has gained different definitions due to its popularity refers to the orientation, mindset, feeling and ambition to establish one's own business with the skills of facing attendant risks. McStay, (2008) refers to entrepreneurial intention as the intent to perform entrepreneurial behaviour/activities. To Zhao Zhao, Hills and Seibert, (2005) it is the intention to start a new business. The definition of Douglas and Shepherd (2002) also agrees with that of Zhao Zhao, Hills and Seibert (2002). They defined it as the intention to be self-employed.

The gains of entrepreneurship to individual and the society remains unquestionable especially considering the economic hardship of developing nation like Nigeria. It is expected that students who underwent entrepreneurial courses would have entrepreneurial knowledge and have positive orientation towards being self-employed. However, the rate at which unemployed graduates enroll for postgraduate studies has become a concern. The researcher observed that some of the postgraduate students were not gainfully employed. This calls attention to what has happened to the entrepreneurial knowledge acquired while in school.

Literature has not shown that the issues of unemployment in Nigeria favours a particular gender, hence entrepreneurial need should cut across both gender. However, Zeidan and Bahrami, (2011) observed that women entrepreneurs may face additional barriers due to lack of skills, accessibility of funds, as well as cultural challenges in certain developing countries. Yordanova and Tarrazan (2010) opined that women lack entrepreneurial intent. Also, in Africa to be precise, the role of family is essential and could affect one's choice of career too. Carr and Sequeira, (2007) reported that younger generation of the family whose attitudes and behavioral norms towards different career options are influenced by family, hence, affecting their entrepreneurial intent. They further explained that exposure to family business allows other family members to gain the confidence, experience, skills and values which would serve as key resource in building the behavioral skills and informational requirements needed for self-employment. Parents and their businesses can be a potential influential factor for their children in developing their entrepreneurial intention (Altinay & Altinay, 2006; Gurel, Altinay, & Daniele; 2010). Therefore, family businesses can be considered as "business incubators" for future Start-ups as they help train other family members (Carr & Sequeira, 2007).

It is in this regard that this study seeks to investigate the disconnect between entrepreneurship education and the entrepreneurial intention of postgraduate students who have received entrepreneurial courses at their undergraduate programmes with the moderating effect of gender and family form of business.

Literature Review

Several studies highlighted the role of entrepreneurial intention to be a valid predictor for future entrepreneurial activities (Covin & Slevin, 1991; Krueger & Carsrud, 1993; Lumkin & Dess 1996; Elenurm, Ennulo & Laar, 2007). Kakkonen (2010) finding revealed that taking entrepreneurship education course has positive effects on entrepreneurial career choice of students and the effects are significant. Frank and Luthje (2004) stated that lack of entrepreneurship education leads to low level of entrepreneurial self-efficacy and intention. This is also the view of Izedonmi and Okafor (2010) who found that entrepreneurship education significantly influence the intention of students to become entrepreneurs. Furthermore, Dickson, George, Solomon and Weaver (2008) suggested that there is a

positive link between entrepreneurship education, choice of becoming an entrepreneur as well as entrepreneurial success. Albert, Fournier, and Marion (1991) explained that 25% of higher education students who completed an entrepreneurship support program ended up starting their own businesses. The comparative study by Saini and Bhatia (1996) revealed that entrepreneurs who took a training on entrepreneurship showed higher performance levels in sales and job creation compared with those who did not get a training at all. Contrary to popular findings, Mitchell and Jessely (2006) found that attending a course on entrepreneurship will not necessarily guarantee an entrepreneurial orientation, provide entrepreneurial abilities or result in students choosing entrepreneurship as a career

Research questions

1. What type of relationship exists between Entrepreneurial intention and entrepreneurship education?
2. What is the profile of postgraduate students who are currently unemployed?

Hypotheses

Ho₁: There is no significant difference between in the Entrepreneurial intention of postgraduate students whose parents are entrepreneur and those whose parents are not.

Ho₂: There is no significant difference between old and new postgraduate students on their entrepreneurial intention.

Ho₃: There is no significant difference between male and female postgraduate students on their Entrepreneurial intention.

METHODOLOGY

This study employed survey design. The population consists of all postgraduate students of Olabisi Onabanjo University, and University of Lagos for the 2014/2015 academic session. Sample comprised 400 postgraduate students (Academic Master) selected using purposive, stratified and simple random sampling techniques. Purposive sampling technique was used to select one Federal and one State University in south west Nigeria. Postgraduate students were stratified into old and new. For the purpose of this study, the old postgraduate students were those who graduated from University prior the introduction of entrepreneurship education into tertiary education as a compulsory requirement for graduation while the new postgraduate students are those who offered entrepreneurship education in school. Respondents were also stratified into gender sub-group. Simple random sampling technique was used to select 200 postgraduate students from each institution and 100 students from each stratum (old & new). Two instruments were used for the purpose of data collection. Postgraduate Students entrepreneurship education knowledge performance test was administered. The test contains 20 items multiple choice questions. The test was self-constructed and validated with the assistance of two Senior Lecturers small business and entrepreneurship. It was trial tested on 40 postgraduate students of Lagos State University who have also offered courses on entrepreneurship education and the result obtained was used to determine reliability coefficient of 0.78 using test-retest method within two weeks. Entrepreneurial intention questionnaire (EILQ) adapted from Wouter (2008) was administered on the students. The instrument is a four points Likert scale with 15 items. The instrument was trial tested on postgraduate students outside the sample. The result obtained was used to establish reliability coefficient of 0.85 on Cronbach Alpha.

The test and the questionnaire were administered on the postgraduate students under a conducive and friendly environment taking into consideration their status. Respondents were guaranteed anonymity to forestall test anxiety. The researcher and two assistants supervised and monitored the conduct to avoid misplacement of instrument. The test and all the 400 completed questionnaires were retrieved, sorted and used for data analysis. The total score of all the items in the test and questionnaire was taken as the index of entrepreneurial education knowledge and Entrepreneurial intention level. Data were analyzed using descriptive and inferential statistics, specifically frequency counts, percentages, mean scores independent t-test at .05 level of significance and Pearson product moment correlation.

Result

Research question one

What type of relationship exists between Entrepreneurial intention and entrepreneurship education knowledge?

Table 1: Relationship Between Entrepreneurial Intention and Entrepreneurship Education Knowledge

| Postgraduate Students' | N | Mean | S.D. | Pearson (r) | Sig... |
|---------------------------|-----|-------|------|-------------|--------|
| Ent Edu Knowledge | 400 | 45.46 | 5.49 | 0.146* | 0.42 |
| Entrepreneurial Intention | 400 | 43.87 | 8.02 | | p=0.05 |

*Significant at 0.5 level.

The result in table 1 reveals a significant outcome ($r=0.146$, $p<0.05$), this implies that the relationship between the two variables is statistically significant. An r -value of 0.146 is an indication of positive relationship. The results indicate that there is positive relationship between offering entrepreneurship education course and intention to become entrepreneurs. This finding further corroborates the finding of Kakkonen (2010) whose finding revealed that taking entrepreneurship education course has positive effects on entrepreneurial carrier choice of students and the effects are significant. But this finding is at variance with Mitchell and Jesselyn (2006) who found that attending a course on entrepreneurship did not necessarily guarantee an entrepreneurial orientation, provide entrepreneurial abilities or result in students choosing entrepreneurship as a career

Research question two

What is the profile of postgraduate students who are currently unemployed?

Table2: Distribution of respondent employment status

| Employment status | No of responses | Percent (%) |
|-------------------|-----------------|-------------|
| Unemployed | 250 | 62 |
| Employed | 150 | 38 |
| Total | 400 | 100 |

The table 2 shows that 250 (62%) of the respondents are unemployed while 210 (38%) are employed. Hence, the majority of the postgraduate students are unemployed. This has negative implication on the objectives of Entrepreneurship education. It implies that Entrepreneurship education knowledge acquired at the undergraduate level especially the new postgraduate students was not probably converted into use. Probably there are other factors missing, like attitude of the society to entrepreneurship, capital or the ease of establishing business. Onugu (2005) have argued against non-availability of capital as the prime problem of entrepreneurship development. Now that they have offered another entrepreneurship education course at the postgraduate level, one will expect that upon graduation they will be able to lay their hands on something worthwhile doing and be self-employed instead of waiting to be employed.

Hypothesis one

There is no significant difference between the Entrepreneurial intention of postgraduate students whose parents are entrepreneur and those whose parents are not

Table 3: Difference in Respondents based on parents' status (Entrepreneur and Non Entrepreneur)

| Parents | N | Mean | SD | df. | T | Sig. of t |
|------------------|-----|-------|--------|-----|-------|----------------|
| Entrepreneur | 129 | 57.58 | 11.114 | 398 | 1.131 | .230 P=0.05 |
| Non-Entrepreneur | 271 | 56.28 | 9.958 | | | |

The result in Table 3 reveals a non-significant outcome ($t=1.131$, $p>0.05$). This implied that the observed difference between students whose parents are entrepreneur and students whose parents are not entrepreneur on their entrepreneurial intention level is not statistically significant. Hence, the null hypothesis of no significant difference the Entrepreneurial intention level of postgraduate students whose parents are entrepreneur and those whose parents are not is retained.

This further implies that students who have their parent as entrepreneurs have not been significantly influenced by their parent status of been an entrepreneur. It is also possible that entrepreneurial parents who faced challenges in the business formation may not want their offspring to face such challenges

hence advised them to look for government jobs. This may even account for the reason why we have more unemployed postgraduate students. This finding is not in consonance with Carr and Sequeira (2007) who reported that children are positively influenced by family business in choice of career of developing entrepreneurial intent.

Hypothesis two

There is no significant difference between old and new postgraduate students on their entrepreneurial intention.

Table 4: Difference in Old and New postgraduate student on Entrepreneurial intention level

| Students | N | Mean | SD | df. | t | Sig. of t |
|----------|-----|-------|--------|------|------|----------------|
| Old | 200 | 57.40 | 10.929 | .493 | .622 | .832 P=0.05 |
| New | 200 | 56.92 | 10.651 | | | |

The result in Table 4 reveals a non-significant outcome ($t=.622$, $p>0.05$). This implied that the observed difference between Old and New postgraduate students on their entrepreneurial intention level is not statistically significant. Hence, the null hypothesis of no significant difference between old and new postgraduate students on their entrepreneurial intention level is retained. The result is quiet unexpected. It is assumption is that those who have undergone Entrepreneurship education (new) at the undergraduate level and still have offered it at the postgraduate level will differ significantly from those who are just offering it for the first time (old). This may be because they have not really imbibed the entrepreneurial culture. Also, where students only perceive entrepreneurship education as a course to pass only and not to internalized may affect their entrepreneurial intention. Further, students who failed the course for whatever reason may not have the course shaping his orientation.

Hypothesis three

There is no significant difference between male and female postgraduate students on their Entrepreneurial intention level.

Table 5: Difference in respondents' Entrepreneurial intention based on gender

| Gender | N | Mean | SD | df. | T | Sig. of t |
|--------|-----|-------|-------|-----|-------|----------------|
| Male | 178 | 55.87 | 9.362 | 398 | 1.972 | .736 P=0.05 |
| Female | 222 | 54.03 | 9.186 | | | |

The result in Table 5 reveals a non-significant outcome ($t=1.972$, $p>0.05$). This implied that the observed difference between male and female postgraduate students on their entrepreneurial intention level is not statistically significant. Hence, the null hypothesis of no significant difference between male and female postgraduate students on their Entrepreneurial intention level hereby retained. This may be as results of the gender equality campaign in all sectors, hence female too are rising to the challenge. What a man can do, a woman can do better has become a popular dictum among Nigerian females. This is contrary to the report of Yordanova and Tarrazan (2010) who found women showed lack entrepreneurial intent. Also, Joseph and Sylvanus (2013) found out that female student are identified by the study to have innate entrepreneurship tendencies and intentions than their male counterparts.

Conclusion and Recommendation

The findings in this study showed that there is a positive relationship between Entrepreneurship education and Entrepreneurial intention, hence is expected that those took entrepreneurship education will have significant positive Entrepreneurial intention. But on the contrary the study found no difference between postgraduate students who have once offered entrepreneurship education at the undergraduate level and those who did not. It was also that students who have their parent has entrepreneurs were not influenced by the status of their parent. Further no significant difference was found on the gender of postgraduate students on their entrepreneurial intention level.

To this end, it is recommended that entrepreneur parents and non-entrepreneur parents should encourage their children and even adult to be become an entrepreneur. Even, those who are gainfully employed should still be encouraged to choose entrepreneurship as alternative career path due to the level of dismissal from service ravaging every sector of the economy and to prepare for retirement.

Also, it is recommended that entrepreneurship education should go beyond cognitive testing but application of the knowledge acquired. This can be done by setting up micro entrepreneurship task or skills display. Furthermore, if entrepreneurship is to shape intention positively, then there must be good environment to support or facilitate entrepreneurial business such that intention can translate to actual behavior, hence government should provide an enabling environment that will be conducive to encourage young entrepreneurs.

Further study can consider other moderation variable like culture, self-concept and availability of resources.

References

- Altinay, L., & Altinay, E. (2006). Determinants of ethnic minority entrepreneurial growth in the catering sector. *The Service Industries Journal*, 26(2), 203-221.
- Benjamin, L. (2014). Entrepreneurship education as a tool for reducing unemployment in Nigeria. Unpublished M.sc. thesis Usman danfodio University sokoto.
- Buba Musa,P. Ayuba, A. A.,& Rimamnde, R.(2015) .The effects of entrepreneurship education on university students' attitude and entrepreneurial intention. *European Journal of Business and Management, Vol.7, No.20, 2015*.
- Carr, J.C & Sequeira, J.M (2007), Prior family business exposure as intergenerational influence and Entrepreneurial intent: A theory of planned behavior approach *.Journal of business research, 60, 1090-1098*.
- Covin, J. G., & Slevin, D. P. (1991). A conceptual model of entrepreneurship as firm behavior. *Entrepreneurship theory and practice*, 16(1), 7-25.
- Douglas, E.J. & Shepherd, D.A. (2002) Self-employment as a Career Choice: Attitudes, Entrepreneurial Intentions, and Utility Maximization, *Entrepreneurship Theory and Practice*, 26, 3, pp.81-90.
- Elenurm, T., Ennulo, J., & Laar, J. (2007). Structures of Motivation and Entrepreneurial Orientation in Students as the Basis for Differentiated Approaches in Developing Human
- Franke, N. & C. Luthje. (2004). "Entrepreneurship intentions of business students: A benchmarking study." Retrieved October 23, 2015 from www2.wu.wien.ac.at/entrep/modules/entrepreneurial_spirit.pdf.
- Gurel, E., Altinay, L., & Daniele, R. (2010).Tourism students' entrepreneurial intentions. *Annals of Tourism Research*, 37(3), 646-669.
- Izedonmi P. F., & Okafor C. (2010). The Effect Of Entrepreneurship Education On Students' Entrepreneurial Intentions. *Global Journal of Management and Business Research. Vol. 10 Issue 6, Ver 1.0, pp 49 -60*.
- Kakkonen (2010). International business students' attitudes of entrepreneurship. *Advances in Business-Related Scientific Research Journal (ABSRJ) Volume 1 (2010), Number 1*
- Krueger Jr, N. F., Reilly, M. D., & Carsrud, A. L. (2000).Competing models of entrepreneurial intentions. *Journal of business venturing, 15(5), 411-432*.
- Krueger, N. F., & Carsrud, A. L. (1993). Entrepreneurial intentions: applying the theory of planned behaviour. *Entrepreneurship & Regional Development*, 5(4), 315-330.
- Lumpkin, G. T., & Dess, G. G. (1996). Clarifying the entrepreneurial orientation construct and linking it to performance. *Academy of Management Review*, 21(1), 135-172.
- McStay D. (2008). An investigation of undergraduate student self-employment intention and the impact of entrepreneurship education and previous entrepreneurial experience, School of Business, Bond University. The Australia.
- Mitchel.B, Jesselyn ,Co, (2006). Entrepreneurship Education in South Africa: a nationwide survey *.Educ. rain. 48 (5)348-359*
- Owusu-Ansah, W. A. (2004). The Impact of entrepreneurship education on career intentions and aspiration of tertiary students in Ghana. A paper presented at the 49th World Conference of International Council for Small Business, 20th to 23rd June 2004, Johannesburg, South Africa.
- Oye,N.D. Inuwa, I., & Muhammad,S. (2011).Unemployment in Nigeria: implication on the gross domestic product (gdp) over the years. Muhammad Shakil Ahmad et.al., *Int. J. Eco. Res.*, 2011, 2(1), 66-71

- National Bureau of Statistics (2011). Annual Socio Economic Survey: Unemployment; 2011. Accessed, September 2016. Available: nigerianstat.gov.ng
- Oli AN.(2000). The Concept and Nature of Curriculum in Nigeria. Lagos: Macmillan Publishers Ltd;.
- Omotosho J, Idowu A, EsereM,Arewah M.(2009) Problems and counselling needs of unemployed youth in Nigeria. The Open Area Studies Journal. 2009;2 :1-6.
- Saini, J.S and Bhatia, B.s, (1996) Impact of Entrepreneurship development programs, *The journal of entrepreneurship* .Vol5,no.pp 65-80
- Sofoluwe A.O. (2007) University Education and youth entrepreneurship in Nigeria, *International Journal of Educational management (IJEM)* 5 (1) 117-126 University of Ilorin, Nigeria Department of Educational Management, University of Ilorin, Nigeria
- World Bank(2009).Youth employment a major challenge for African countries;. Accessed December, 2015.Available:<http://web.worldbank.org>
- Wouter,S., (2008) Entrepreneurial Intention among FDEWB Students. *Frontiers of entrepreneurship research, Volume,28 (7)*
- Yordanona, D. & Tarrazon, M. (2010). Gender Differences in Entrepreneurial Intentions: Evidence from Bulgaria. *Journal of Developmental Entrepreneurship*, 15(3): 245.
- Zeidan, S & Bahrami, S. (2011). Women Entrepreneurship in GCC: A Framework to Address Challenges and Promote Participation in a Regional Context. *International Journal of Business and Social Science*, 12(2): 20:34
- Zhao, H., Hills, G.E.,& Seibert, S. (2005). The mediating role of self-efficacy in the development of entrepreneurial intentions. *Journal of Applied Psychology*, 90, 6, 1265-1272.

Developing Competitive Strength: Biggest Challenge for the Organizations

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Abstract

The globalization of economy has led the business environment to be more dynamic with unprecedented challenges of market place, technology and human resources. Organizations have realized the need for change. This paper deals with the development of strategies by the organizations in order to face the competitive environment. The paper focuses on developing strategies which could synchronize organizational goals with individual goals. It emphasizes on the importance of the need to change for facing competition. Change management is not possible without bringing change in the structure, style (leadership), shared values, staff, strategy, system, and skill factors of the organization, which are not normally taken into consideration while implementing analytical dimensions of change. While implementing changes for facing competition, organizations must take care of fulfilling their employee's higher order needs of job enrichment and must also provide work life balance to their employees. Man power is the most important resource within the organizations with which all wars can be won hence; proper attention must be paid on their quality of work life. Paper discusses on developing all the important strategies of winning the game like effective change implementation and developing all the measures which can protect the psychological and physical well being of the employees. In order to give practical guidance and advice to the managers for developing competitive strategies I have shared examples of some organizations which are implementing these competitive strategies.

Keywords: organizational change, competitive strategies, organizational goals, work life balance.

JEL Classification: M10, M12, M59

Introduction

A major challenge facing organizations in the recent past is the need to manage change in response to the changing environment. This paper emphasizes to adopt certain strategies which could be beneficial for the organizations in the long run. First strategy which has been suggested in the paper is to adopt McKinsey's 7S model while implementing organizational changes. Change management is not possible without bringing change in the style/ culture, staff, strategy, system, shared values, structure and skill factors of the organization. Implementation of 7S model at Infosys has been shared in the paper.

Other strategies discussed in the paper are for the well-being of the employees, which in turn will result into the well being of the organization as a whole. Various researches in the past proved that by fulfilling higher order needs of employees and by providing work life balance to them, employees can be made more productive. In other words productivity of an employee is directly proportional to the fulfillment of higher order needs and their work life balance. So, second strategy suggested in the paper is about fulfilling the higher order needs of the employees which can be done through the process of job enrichment. Job enrichment is one of the techniques of empowerment which can fulfill the higher order needs of employee's i.e., the need to grow, to explore potentials and to face challenges. Motivated and satisfied employees ultimately show good performance. Research conducted on the employees of Allied Nippon Ltd. Sahibabad, has been shared in this paper, which shows that job enrichment enhances the performance and productivity of the employees.

Third strategy advocated in the paper is work life balance, which is an issue generally not considered by most of the organizations. For maintaining work life balance some steps must be taken both by the organizations as well as by the employees. Examples of certain reputed organizations like Yamaha and IBM, providing work life balance in the form of some flexible rules to their employees has been discussed in the paper.

All the three strategies are needed to be focused by the organizations in order to handle the competitive pressures in the globalised economy.

Research methodology

The paper is conceptualized and is based on both primary and secondary data. Primary data has been collected from Allied Nippon Limited (Auto parts manufacturing unit) situated at Sahibabad (U.P.). The sample from the company was selected with the help of **Stratified Sample Technique**. The total sample for the study constitutes 120 employees. Data was collected with the help of Questionnaire

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(Likert's 5 point rating scale). Secondary data was collected through various sources like journals, different companies' websites, news papers, business magazines etc.

Review of literature

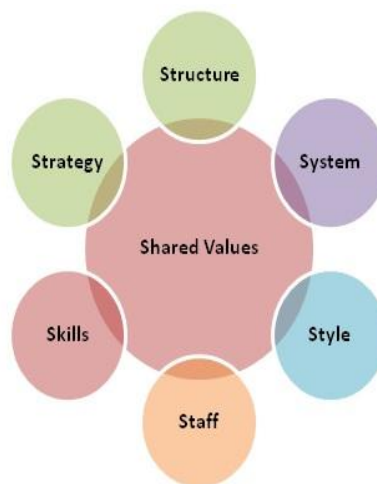
Extant literature has been reviewed about the most important interventions of Human Resource Management like McKinsey's 7S model, Job enrichment and Work Life Balance.

I Strategy- McKinsey's 7S model

A major challenge facing organizations in the recent past is the need to manage change in response to the changing environment. Paper examines McKinsey's 7S model and gain insights into how this model can help managers in implementing organizational changes. In this paper I have reviewed implementation of 7S model at Infosys to identify some critical issues relating to implementation of changes inside the organization. According to Ravanfer M M (2015), 7 S model of McKinsey plays an important role in the analysis of the organizational structure or framework of any organization.

The name McKinsey's 7S framework was given after the name of a consulting company, McKinsey and Company, which was involved in the area of conducting research in business and industry (Pascale and Athos 1981; Peters and Waterman 1982). In 1980s this model was used in over seventy large organizations. Research was conducted by McKinsey and Company to know that how Japanese industry had been so successful. McKinsey 7S framework was developed to analyse the effectiveness of these organizations.

Figure 1: McKinsey's 7S framework



Description of 7 Ss

Structure, strategy, systems, skills, style, staff and shared values are the 7Ss of McKinsey 7S framework. **Structure** describes the organizational chart of the organization or the existing hierarchy within an organization. **Strategy** is the course of action taken by the organization in allocating the organizational resources in order to achieve organizational goals in time. The **systems** are the routine processes being followed in an organization. **Staff** determines the human resources within an organization (e.g. engineers), whereas the **skills** variable refers to the capabilities or potentials of the staff within the organization. **Style** determines the leadership style or behaviour which managers adopt for achieving their goals. This variable has a great impact on the cultural style of the organization. The **shared values** are the guiding concepts that organizational members share. Shared values can be compared to a thread running through the beads. (Peters and Waterman, 1982).

Infosys and McKinseys 7S model

7 Ss model is used as a tool for managerial analysis so that the organization's problem can be traced and a strategy can be developed and implemented for problem solving. Infosys is successfully able to link their hard variables (structure, strategy and systems) with the soft variables (shared values, staff, skill and style).

Leadership style-

Infosys believes that leadership plays a very important role in organizational success. Chairman N R Narayanmurthy is a successful leader with all the leadership traits. Leadership is required to be based on high business vision and supportive leadership style. At Infosys there is emphasis on developing leadership qualities among employees, for which it has established "Infosys Leadership Institute". Top management emphasizes on open door policy, continuous sharing of information, transparency, employee involvement in decision making and building personal rapport with employees.

Staff (Human Resources)

Infosys focuses on the quality of human resources as it is in knowledge based industry. Out of total employees, about 20% are engineers. At the entry level it emphasizes on selecting candidates who have excellent academic records, technical skills and learning ability. There is also emphasis on training and development of its employees on continuous basis for which it spends about 2.65% of revenues on up-gradation of employee's skills.

Strategy

Infosys has adopted a client focused strategy to achieve growth. Rather than focusing on numerous small organizations it focuses on limited number of large organizations throughout world. In order to cater its clients, the company emphasizes on custom – build softwares. Another differentiating factor for Infosys is that it commands premium margins. Company does not negotiate over margins beyond a certain limit and sometimes prefer to walkout rather than compromise on quality for low cost contracts. This has helped in building an image for quality driven model rather than cost differentiating model.

Increase business from existing and new clients-

Infosys has focused on expanding the nature and scope of engagements for the existing clients by increasing the size and number of projects and by extending service offerings. For new clients it provides value added solutions by leveraging its in-depth industry expertise. It increases its recurring business with clients by providing software re-engineering, maintenance, infrastructure management and business process management services which are long term in nature and require frequent client contact.

Expand geographically-

Infosys plans to establish new sales and marketing offices, representative offices and global developmental centers to expand geographically. It plans to increase its presence in China through Infosys China, in the Czech Republic and Eastern Europe directly and through Infosys BPO, in Australia through Infosys Australia and in Latin America, through Infosys Mexico.

Enhance Solution Set- Infosys focuses on emerging trends, new technologies, specific industries and business issues that confront our clients. In recent years, it has added new services like consulting, business process management, systems integration and infrastructure management, which are major contributors to its growth.

Develop deep industry knowledge-

Infosys has specialized industry expertise in the financial services, manufacturing, telecommunication, retail, transportation and logistics industries.

Enhance brand visibility-

Infosys invests in the development of its premium brand identity in the market place by participating in media and industry analyst events, sponsorship of and participation in targeted industry conferences, trade shows, recruiting efforts, community outreach programs and investor relations.

Shared values- Values are important part of Infosys organizational culture. The core values are- Leadership, Integrity and transparency, Fairness and Pursuit of excellence

Organizational structure

The company has adopted a free form organization devoid of hierarchies. Everyone is known as associates irrespective of his position in the company. Software development is undertaken through teams and the constitution of teams is based on the principle of flexibility. A member, who might have been team leader in one project, may be replaced by another member of the same team for another project. This system not only helps in creating the feeling of equality but also helps in developing project leaders.

Skills

From last year Infosys has made it mandatory for every employee about predefined certifications, domain as well technical, in order to be eligible for appraisal. This is just one of the initiatives taken by Infosys which signifies the efforts taken for building competencies. Apart from internal initiatives like knowledge management, Infosys has been CMM level 5 certified for its process capabilities. Infosys has entered the Balanced Score Card hall of fame for executing strategy for achieving breakthrough performance results using the Balanced Score Card (BSC).

II Strategy – Job Enrichment

Job enrichment is the problem which every supervisor and manager has to face while managing and making their subordinates work (Pride, Huges and Kapoor 2013, Davoudi and Mehdi, 2013). One of the major challenges of HR is to maintain and retain talents within their organizations. *Today educated and creative employees demand well designed jobs.* They wanted to have challenge, growth and recognition in their job. Hence the prevailing need of the organization is to design such a job which can match the organizational goals with the individual goals of growth, learning and recognition. Job enrichment is one of the best methods of job design. Job enrichment gives employees more autonomy and responsibility in terms of planning, directing and controlling their own performances. Job enrichment also gives recognition and it is the vertical loading of the job. Job enrichment is an attempt to motivate employees by giving them the opportunity to use the range of their abilities. It is an idea that was developed by the American psychologist Frederick Herzberg in the 1950s.

This paper emphasizes the significance of change management which is not possible without job enrichment. Whenever organizations plan for implementing changes inside the organizations they are required to do job enrichment as it helps in increasing the performance of the employees.

From the above discussion it has been analysed that to remain competitive organizations are required to implement changes. Change is the only thing which remains permanent. Change can be better implemented inside the organizations by giving employees more autonomy and responsibility.

Findings at ANL-

Data was collected from ANL to check the significance of job enrichment during change implementation i.e. job enrichment increases the performance of employees or not during change implementation.

Two categories for the employees have been made from the sample of one hundred and twenty (120) respondents. One is job enrichment feelers (employees who are in favour of job enrichment) and another one is non job enrichment feelers (employees who are not in favour of job enrichment). Job enrichment feelers are those who support job enrichment and consider it important for increasing job performance of the employees and non-job enrichment feelers are those who do not found any importance of job enrichment in increasing job performance of the employees. They also have a fear of increased accountability and responsibility.

From all the one hundred and twenty (120) respondents, fifty (50) were the job enrichment feelers and seventy (70) were non job enrichment feelers.

Out of the 50 job enrichment feelers, 33 have shown their performance ranging from very good to outstanding while out of the 70 non job enrichment feelers, 44 respondents have shown bad performance, 26 respondents have shown their performance ranging from good to outstanding. Mean of job enrichment feelers is high which comes as 3.96 as compared to the mean of non job enrichment feelers which is 1.21.

Also standard deviation for job enrichment feelers is 0.78 which is very low as compared to the standard deviation of non job enrichment feelers which is 2.26.

Results shows that the employees whose jobs were enriched have shown high level of performance than those employees whose jobs were not enriched.

By the results and observations we can conclude that “job enrichment increases the performance of the employees”. Or in other words, we can say that if job enrichment is high than the performance of the employee will also be high and if the job enrichment is low than the performance of the employee will be low.

III Strategy - Work Life Balance

Work life balance employer survey series explored that employees request their employers for making alternative working patterns (BIS, 2013). In order to maintain “quality of work life” a balance is required to be maintained between work and family life. Quality of work life is concerned about the impact of work on people as well as on organizational effectiveness. Work life and personal life are interconnected and interdependent. Equilibrium is required to be maintained in both the professional and personal life. If one of the lives disturbs it automatically have an impact on the other one. This results into stressful life with lot of physical and mental problems. In the race of over shining and proving others both the employees and organizations neglects the most important aspect of work life balance. Proper attention must be paid on this critical issue of life because once there is imbalance between work and personal life it results into severe consequences both for the employees as well as for the organizations.

In order to overcome work life imbalance efforts must be made by both the employees and the employers in every organization. Initiatives taken by some of the reputed organizations for maintaining work life balance of their employees have been studied in this paper. This paper would help both the organizations as well as their employees in maintaining work life balance. A balanced person is more creative, energetic and innovative.

Different scholars have defined Work-life balance in a different manner. Clark (2000) defines balance as “satisfaction and good functioning at work and at home with a minimum of role conflict”. Baylin (1977) was of the opinion that work life balance is important for bringing quality of work life and for bringing sense of involvement inside the employees. Greenhaus (2002) defined work –life balance can be created by giving satisfaction to the employee at work with role clarity which results into satisfaction at home. In the UK, Green (2001) was of the opinion that work life balance is not only important for the employees but it is equally important for the organizations to create a balance between the work and family life of employees in order to have good organisational performance.

Every company wanted to over-shine and prove itself. This has resulted into increased work pressure over the employees which creates work life imbalance. No doubt workload has been increased but few companies have realized the need for creating work life balance for their employees.

Steps taken by Yamaha for WLB

The Yamaha Group has taken a lot of initiatives for giving a work life balance to their employees. They had reduced the working hours as well as they had developed improved child care and nursing care facilities for their staff. Company also gives awareness about the importance of work life balance to their employees by conducting various seminars and also by giving information on intranet. Employees after getting such information as well as various facilities of shorten working hours and childcare facilities are able to maintain a balance between their personal and work life.

Yamaha formed a “Work-Life Balance Committee” in the year 2006, to support their employees in sorting out the issues of employees regarding family and work and to allow them to enjoy both their work and family life.

Steps taken by IBM for WLB

IBM offered their employees “*Dependent Care Initiative*” in order to help their employees to fulfill their personal responsibilities. It is a child care initiative formed with the aim of supporting their children from birth till they grow into adults. In 2001, IBM developed the Global Work/Life Fund so as to provide social security to its employees. Employees can deposit upto \$5000 each year. This also helps in saving tax. “*Dependent Care Initiative*” and Global Work/Life Fund is active in 42 countries where their employees are working. Company is further working on improving dependent care services.

Company also has a program of “*Life Works*” a free program with the help of which they can refer and get solution to their personal and professional problems. Life works help employees in time management, provides a better child care facility like good day cares, helps in planning their funds, counsel employees during change implementation at workplace, elder care facilities etc.

Initiatives required to be taken by Employees for having WLB-

Although organizations are taking a lot of initiatives to maintain work life balance but that's not sufficient, individual employees must also take certain initiatives on their own to bring a balance in their personal and professional lives. In order to develop work life balance employees can adopt certain measures like they can develop a *positive philosophy of life* like Nishkam Karma which can help in minimising stress, prioritising work wisely and doing regular exercises along with yoga and meditation. Deep breathing and yoga helps us to rejuvenate ourselves, as all our red blood cells gets oxygenated and gives us spiritual peace and a sound mind.

Conclusions and Suggestions

With globalization challenges and increased competition there is a definite need for organizations to bring some changes inside the organization. These changes are required to be followed by the organizations in order to survive and compete with other organizations. Companies are required to make certain changes so as to make equilibrium between the internal and external environment of the company. Quality of people with initiative and drive determines the competency and enables the organization to manage the change effectively. HR plays a vital role in managing the complexities of mind, retaining and developing talent to take the organization forward. All the three strategies discussed in the paper- McKinsey's 7 S model, job enrichment and work life balance must be adopted by the organizations to win battle with their competitors.

References

- Baylin, L. (1977). "Involvement and accommodation in technical careers: An inquiry into the relation to work at mid-career". In J. van Maanen (ed). *Organizational Careers: some New Perspectives*. London: Wiley.
- Bhattacharyya, Dipak Kumar (2011), "McKinsey's 7-S framework", *Organizational Change and Development*, Oxford University Press, India, Vol.1, pp. 128-131,394.
- BIS, 2013, Research, the fourth Work life balance employer survey and labour market reform, BIS research paper no. 184, December 2014
- Bose, S.K.Group cohesiveness and productivity, *Psychology studies*, 3, 20 – 28, 1958. Chhabra, T.N.,Principles and Practice of Management. Dhanpat Rai and Company, 7th Ed., 459-489, 2000.
- Boyle, S. (2007) "Impact of Changes in Organizational Structure on Selected Key Performance Indicators for Cultural Organizations", *International Journal of Cultural Policy*, Vol. 13 (3), pp.319–334.
- Clark, S.C. (2000). "Work/family border theory: A new theory of work/life balance". *Human Relations*, 53, 6, 747-770.
- Feder, B.J. 2000, "F.I. Herzberg, 76, Professor and Management Consultant", *New York Times*, Feb 1, 2000, pg. C26. Available from: Pro Quest Historical Newspapers The New York Times (1851–2003). [28 October 2006].
- Pride, Huges and Kapoor 2013, *Business*, South Western Cengage Learning, 12th edition, pg 244, 2013
- Ravander M M (2015), *Analysing Organisational Structure based on 7S Model of McKinsey*, *Global Journal of Management and Business Research: A Administration and Management*, Volume 15, issue 10, 2015
- Monappa Arun, *Personnel Management*, Tata McGraw-Hill Publishing Co. Ltd.5th Ed., 350 – 375, 1999.
- <http://www.infosys.com/sustainability/diversity/pages/index.aspx>
- www.yamaha.com
- www.ibm.com

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