SKYLINE
BUSINESS JOURNAL

A Research Publication of Skyline University College, Sharjah, United Arab Emirates.

Volume VIII-Issue 1-2012-2013

CONTENTS

SKYLINE BUSINESS JOURNAL

www.skylineuniversity.ac.ae

EDITORIAL

At the outset, I take this opportunity to congratulate and thank all the members of the Editorial Board, Reviewers and Authors for the patience they have shown in the unavoidable but long process of reviews and revisions. The editorial team was very focused on the laid-out process of blind peer review. Every paper, that was submitted, had to go through the drill and only upon final approval from the reviewers and editors, was it accepted for publication and in the process may have disappointed a few colleagues. It is a necessary bench mark that we have set for ourselves and we will continue to follow it as a commitment to the academia of which we are a part of.

Skyline Business Journal is a research publication for business and management streams of academia catering to a diversified field of studies. Being a broad-based business journal, we are open to experiments on themes and methodology of a research paper. Multidisciplinary and Interdisciplinary approaches that enrich the body of established knowledge in areas of business and management are encouraged. The editors are also ready to go beyond the established qualitative–quantitative framework, as far as methodology is concerned, and will accept researches that challenge the stereotypes. Any research methodology that serves the purpose of a meaningful research leading to reasonable conclusions is welcome provided, it withstands the test of scientific enquiry. Research, to my mind, is inquiry, a profound threadbare inquiry, which leads to solutions of an identified issue.

This issue of Skyline Business Journal is the eighth volume and has seven research papers and one book-review. There are three papers that can be loosely categorized in the area of Human Resource Management and Leadership, though the issues dealt with in each of these papers are quite different. One of the papers discusses 'employee suggestion schemes', its evolution and growth. These schemes are one of the ways to ascertain employee involvement and provide opportunity for creativity and innovation within the organization. An empirical study on the role of Quality of Work Life in teaching faculty at Oman Higher Education Institutions is the focus of the other study, while 'expression of dissatisfaction in relation to managerial leadership strategies and its impact on information technology organizations' is the theme of another paper in this category which generally concludes that there is a constructive impact of strategic leadership on IT employees.

A paper on 'effects of technology' on economic growth of the UAE, with its empirical evidences and methodologically sound analysis, brings out the relationship to the fore and concludes with very interesting results. Another UAE focused paper is about 'consumer experiences in regard to vanity toll-free numbers'. There is a paper on 'volatility of foreign exchange market in Bangladesh' and another on 'life style factors on real estate prices in India'. Looking at the variety of themes and geographical coverage it seems that the scope of the Journal is now truly global.

Dr. Amitabh Upadhya
Editor-in-Chief

Effects of Technological Progress and Productivity on Economic growth in United Arab Emirates

Jimmy Alani

Abstract:

The study focused on the effects of technological progress and productivity on economic growth in United Arab Emirates (UAE) between 1970 and 2010. Empirical statistical tests were conducted after running regressions and deriving relevant econometric models. The study came up with four findings. Firstly, growth in technological progress resulted in economic growth, employment generation and capital accumulation.

Second, increase in capital productivity gave rise to reduction in economic growth because more productive capital could have resulted in more idle capacity; thus causing depletion of output through reduction in capital employed in production. Third, increase in labor productivity gave rise to reduction in economic growth because more labor productivity might have caused workers to enjoy more leisure instead of working more; thus causing depletion of output through reduction in labor used in production.

Lastly, technical progress in UAE was labor deepening, stimulated exports, but had a negative influence on imports.

Keywords: *Technical, Productivity, Economics, Growth.*

Objectives of the Study
The study aimed at estimating the following:
(a) The effects of technological progress, growth in capital stock and growth in labor stock on economic growth in United Arab Emirates (UAE).
(b) The effects of growth in labor productivity and capital productivity on economic growth in the UAE.
(c) The effects of technical progress, labor productivity and capital productivity on input growth in the UAE.
(d) Whether technical progress in the UAE was capital or labor deepening.
(e) Determining the influence of technological progress and labor productivity on aggregate exports and import levels of UAE.

Literature Review
Schiller (2006) contends that for economic growth in the US to continue, average productivity per worker must be increased further. Moreover, Schiller (2006) argues that between 1978 and 1984 growth in productivity slowed dramatically and prevented GDP growth. To Schiller (2006) growth in productivity gives rise to economic growth (Schiller, 2006: pp. 359-340).

The argument Schiller (2006) is advancing is contrary to the ideas that this study is putting forward that growth in labor productivity causes (a) decline in economic growth, (ii) reduction in capital accumulation and (iii) unemployment, the reason being that growth in productivity prompts labor to trade off leisure for work and that when productivity of a worker grows he would accomplish his regular (daily) tasks within a shorter period of time and spends the rest of the time he has spared to do his own work or enjoy leisure. Otherwise, increase in productivity would result in faster depletion of output in terms of raw materials which ought to be paid for if production is to continue.

Like Schiller (2006), Gomez-Salvador et al. (2006) contends

that "productivity gains are a key factor driving long-run growth". This study refutes the claim by Gomez-Salvador et al. (2006), but supports their argument that slowdown in labor productivity growth appear to be strongly related to employment growth particularly in US and EURO area.

Gomez-Salvador et al. (2006) adds that productivity growth is a primary source of growth in real output per capita. In fact, in their empirical analyses they found that from 1950 to 2005 US and EURO area there was an inverse labor productivity and economic growth (Gomez-Salvador, 2006: pp. 1-133). Hence, there is need to empirically test whether growth in productivity causes capital accumulation, employment and economic growth.

Theoretical Framework
The theoretical models 1 and 2 below were developed from the Cobb-Douglas production function given by

$$Y = A^\lambda K^\alpha L^\beta$$

Where Y is output (GDP), A is level of technology, K is capital stock, L is labor stock, λ is coefficient on level of technology, and α and β are parameters of returns to scale. Manipulating the Cobb-Douglas production function given above provides the Equations 1 and 2 given below.

The production function given was rewritten as given below

$$\frac{dY}{Y} = \frac{1}{1-\alpha-\beta}\left[\lambda\frac{dA}{A} + \alpha\frac{dK}{K} + \beta\frac{dL}{L}\right] \ldots\ldots\ldots (1)$$

implying growth in level of technology, capital accumulation and employment result in economic growth.

Technical Progress Creates Employment but Labor Productivity Growth Lead to Unemployment
The mathematical Equation 2 below implies that productivity

growth dLp/Lp causes growth in unemployment (i.e. reduction in employment), whereas both technical progress dA/A and capital accumulation dK/K result in labor employment growth dL/L.

$$\frac{dL}{L} = \frac{1}{1-\beta}\left[\lambda\frac{dA}{A} - \frac{dL_P}{L_P} + \alpha\frac{dK}{K}\right] \ldots\ldots\ldots (2)$$

We take the economy to be operating under decreasing returns to scale i.e. $0 < \alpha + \beta < 1$ because the economy is operating within the feasible region of production.

The parameters λ, α, β are all positive. Similarly, the variables L, A, Lp, K are all positive, but their growth rates may be either positive or negative. Increase in capital productivity may result in unemployment because a rise in productivity may cause laborers to substitute leisure for work.

Technology refers to knowledge required to produce the goods and services and as a result increase in technical progress cause labor to be more skillful and innovative and able to perform many tasks well within a given period. Capital stock refers to goods used to produce other goods implying that increase in capital stock provides labor with more tools to work with to produce more goods and services.

Technical Progress Creates Economic Growth Whereas Productivity Growth Results in Decline in Capital Accumulation

As depicted by Equation 3, increase in technical progress (i.e. applied knowledge to produces capital goods) results in more capital accumulation. Whereas, growth in capital productivity brings about reduction in capital accumulation because it may lead to faster depletion of the existing capital in order to acquire more raw materials required to produce more capital.

Raising the level of labor to produce more capital goods brings about faster accumulation of capital. It is labor that produces capital. Therefore, the more labor is engaged in the production of capital goods the faster is the capital accumulation.

$$\frac{dK}{K} = \frac{1}{1-\alpha}\left[\lambda\frac{dA}{A} - \frac{dK_P}{K_P} + \beta\frac{dL}{L}\right] \ldots\ldots\ldots (3)$$

where $0 < \alpha, \beta < 1$ a phenomenon of constant returns to scale.

Technical Progress Creates Employment, Whereas Both Capital and Productivity Growth Result in Unemployment

To capture both the influence of both capital and capital productivity on unemployment we take labor supply to be a function of technical progress, labor productivity and capital productivity as given by

Manipulation of the above function provides a linear equation given by

$$\frac{dL}{L} = \frac{\partial L}{\partial A}\frac{A}{L}.\frac{dA}{A} - \frac{\partial L}{\partial LP}\frac{Lp}{L}.\frac{dLp}{Lp} - \frac{\partial L}{\partial Kp}\frac{Kp}{L}\frac{dKp}{Kp}$$

$$\ldots\ldots\ldots\ldots\ldots\ldots\ldots\ldots\ldots\ldots\ldots\ldots\ldots\ldots\ldots\ldots\ldots\ldots\ldots\ldots\ldots\ldots\ldots\ldots\ldots$$
(4)

$K = f(A, Lp, Kp)$ or

$$\frac{dK}{K} = \frac{\partial K}{\partial A}\frac{A}{K}.\frac{dA}{A} - \frac{\partial K}{\partial Lp}\frac{Lp}{K}.\frac{dLp}{Lp} - \frac{\partial K}{\partial Kp}\frac{\partial Kp}{K}.\frac{dKp}{Kp}$$

$$\ldots\ldots\ldots\ldots\ldots\ldots\ldots\ldots\ldots\ldots\ldots\ldots\ldots\ldots\ldots\ldots\ldots\ldots\ldots\ldots\ldots\ldots\ldots\ldots$$
(5)

Where the coefficients represent the respective elasticity of labor supply.

Technological Progress Promotes Capital Accumulation Whereas Both Capital and Productivity Growth Result in Reduction in Capital Accumulation

To capture both the influence of both capital and capital productivity on capital accumulation we take capital stock to be a function of technical progress, labor productivity and capital productivity as given by

$$dY/Y.$$

$$\frac{dY}{Y} = \left[\lambda\frac{dA}{A} - \alpha\frac{Kp}{Kp} - \beta\frac{Lp}{Lp}\right]/(1-\alpha-\beta)\ldots\ldots (6)$$

where the respective coefficients represent a given elasticity of capital stock.

Technical Progress Causes Economic Growth, Whereas Capital and Labor Productivity Growth Result in Reduction in Economic Growth

Expansion in applied knowledge to produce goods and services (i.e. technical progress) give rise to economic growth, whereas increase in productivity results in faster depletion of output and trade off of leisure for work resulting in reduction in economic growth .

Expressing Theory of Labor Productivity

If some given mount of labor can take amount of hours to produce Q units of output in a day then their labor productivity equals Q/a units of output per hour. Similarly, if the same amount of labor is employed for b hours to produce Q units of output per day then its daily output equals . Q/b. If $b < a$ then the labor becomes more productive when its productivity is Q/b than when its productivity is . Q/a.

Implying that laborers will save $a - b$ hours for their leisure when labor productivity has increased by $\frac{Q}{b} - \frac{Q}{a}$.

Thus labor productivity $Lp = (\frac{Q}{b} - \frac{Q}{a})$ becomes a function of leisure Z and is given by

$$Z = (a-b) = f(Lp) \text{ or } Z = f\left[Q\left(\frac{a-b}{ab}\right)\right].$$

Therefore, if daily amount of hours of work L plus daily hours of leisure Z equals H hours, then labor function becomes $L = H - Z = H - Z(Lp)$.

Or $\frac{\partial L}{L} = -\left(\frac{\partial Z}{\partial Lp}.\frac{Lp}{L}\right)\frac{\partial Lp}{Lp} = -\gamma\frac{\partial Lp}{Lp}$.

The labor growth and labor productivity growth relationship derived from the theory of excess capacity (i.e. leisure) is in agreement with the same relationship that can be derived from the definition of labor stock in terms of output and labor productivity.

Here we define labor as output per unit of labor productivity i.e. $L = \dfrac{Q}{Lp}$ or growth in labor stock is

growth in output less growth in labor productivity i.e.

$$\frac{dL}{L} = \frac{dQ}{Q} - \frac{dLp}{Lp}.$$

Substituting labor productivity growth for labor growth in the Cobb-Douglas production function enables us to determine the potential influence of labor productivity on economic growth.

Expressing Theory of Capital Productivity
Suppose that a firm operating at full capacity can produce Q units of output in a day by employing K_2 units of capital, then daily capital productivity of the firm equals Q/K_2 units of output per unit of capital. If the capital productivity increased to Q/K units of output per unit of capital per day, then the same amount of output could be produced by Q/b in a day. Such a production process generates excess capacity (i.e. idle capital stock) amounting to $K_2 - K$ units daily and capital productivity goes up by

$$\frac{Q}{K_2} - \frac{Q}{K}.$$

As a result the idle capacity $K_1 = K_2 - K$ becomes a function of capital productivity as given by . $K_1 = K_1(Kp)$. Total capital stock (i.e. full capacity assumed to be constant) equals idle capital stock K_1 plus active capital stock K and is expressed by

Or $K = K_2 - K_1 = K_2 - K_1(kP)$.

By differentiating the active capital stock function with respect to time we get:

$$\frac{\partial K}{\partial t} = -\frac{\partial K_1}{\partial Kp} \cdot \frac{\partial Kp}{\partial t}.$$

Or $\dfrac{\partial K}{K} = -\left(\dfrac{\partial K_1}{\partial Kp} \cdot \dfrac{Kp}{K} \right) \dfrac{\partial Lp}{Kp} = -\mu \dfrac{\partial Kp}{Kp}$.

Hence, increase in capital productivity results in depletion of the active capital stock. The capital growth and productivity growth relationship derived from the theory of excess capacity is in agreement with the same relationship that can be derived from the definition of capital stock in terms of output and capital productivity. Here we define capital as output per unit of capital productivity i.e.

$$\frac{dK}{K} = \frac{dQ}{Q} - \frac{dKp}{Kp}$$

or growth in capital stock is growth in output less growth in capital productivity i.e. $K = \dfrac{Q}{Kp}$

Substituting capital productivity growth for capital growth in the Cobb-Douglas production function enables us to determine the potential influence of capital productivity on economic growth.

Methodology
Econometric Models
Econometric models were developed in accordance with the five theoretical models given above.

Growth in technology level, capital accumulation and employment result in economic growth.

$$\frac{dYt}{Yt} = \beta_1 \frac{dAt}{At} + \beta_2 \frac{dKp_t}{Kp_t} + \beta_3 \frac{dLt}{Lt} + \varepsilon_t \,\text{...........} \,(7)$$

Labor productivity growth leads to unemployment, whereas both growth in technological progress and capital stock cause increase in labor supply as portrayed by Model (8).

$$\frac{dLt}{Lt} = \beta_1 \frac{dAt}{At} + \beta_2 \frac{dLp_t}{Lp_t} + \beta_3 \frac{dKt}{Kt} + \varepsilon_t \,\text{.........} \,(8)$$

Where $\beta_1 > 0$, $\beta_2 < 0$, $\beta_3 > 0$ and ε is the disturbance term.

Capital productivity growth results in decline in capital accumulation, whereas both growth in labor stock and technical progress result in capital accumulation as given by model (9).

$$\frac{dKt}{Kt} = \beta_1 \frac{dAt}{At} + \beta_2 \frac{dKp_t}{Kp_t} + \beta_3 \frac{dLt}{Lt} + \varepsilon_t \,\text{...........} \,(9)$$

Where $\beta_1 > 0, \beta_2 < 0, \beta_3 > 0$ and ε is the disturbance term.

Both capital and productivity growth result in unemployment, whereas technical progress leads to increase in employment. See model (10).

$$\frac{dLt}{Lt} = \beta_1 \frac{dAt}{At} + \beta_2 \frac{dLp_t}{Lp_t} + \beta_3 \frac{dKp_t}{Kp_t} + \varepsilon_t \,\text{.......} \,(10)$$

Where $\beta_1 > 0, \beta_2 < 0, \beta_3 > 0$ and ε is the disturbance term.

Both capital and productivity growth result in reduction in capital accumulation, whereas technical progress leads to increase in capital accumulation. See model (11).

$$\frac{dKt}{Kt} = \beta_1 \frac{dAt}{At} + \beta_2 \frac{dLp_t}{Lp_t} + \beta_3 \frac{dKp_t}{Kp_t} + \varepsilon_t \,\text{........} \,(11)$$

Where $\beta_1 > 0, \beta_2 < 0, \beta_3 < 0$ and ε is the disturbance term.

Both capital and labor productivity growth, result in reduction in economic growth, whereas technical progress leads to increase in economic growth. See model (12) given below.

$$\frac{dYt}{Yt} = \beta_1 \frac{dAt}{At} + \beta_2 \frac{dLp_t}{Lp_t} + \beta_3 \frac{dKp_t}{Kp_t} + \varepsilon_t \ldots\ldots\ldots$$

(12)

where $\beta_1 > 0$, $\beta_2 < 0$, $\beta_3 < 0$ and ε is the disturbance term.

Taking Logarithm or Differencing as a Solution to Heteroscedasticity

The problem of heteroscedaticity is that variance of the random variable u_t is not constant. Symbolically this problem of heteroscedasticity can be expressed as:

$Var(u_t) = \sigma_{ut}^2$ is not constant,

Where the subscript implies that individual variances may be different at any time t.

If the σ_{ut}^2 is not constant and its value depends on the value of the dependent variable Y_t then

$\sigma_{ut}^2 = f(Y_t)$,

where $t = 1,2,3,....,n$ (Koutsoyainnis 2001, pp. 181-182). Alternatively, if there is heteroscedasticity we can symbolically write it as

$E(u_t^2) = \dfrac{1}{n}\sum\limits_{t=1}^{n} u_t^2 = \sigma_{ut}^2$ is not constant

(Gujarati 2003: p. 283).

Taking logarithm is one obvious solution to solving the problem of heteroscedasticity. Differencing is also one of the ways of solving the heteroscedasticity problem.

Proof: Let the variance of u_t be written as

$$\sigma_{ut}^2 = \frac{1}{n}\sum_{t=1}^{n} u_t^2 = f(Y_t) = a + b\hat{Y}_t \ldots\ldots\ldots\ldots (13)$$

Differencing Equation (1) requires two sets of expressions as follows:

$$\sigma_{ut}^2 = \frac{1}{n-1}\sum_{t=2}^{n} u_t^2 = f(Y_t) = a + b\hat{Y}_t \ldots\ldots\ldots (14)$$

$$\sigma_{ut-1}^2 = \frac{1}{n-1}\sum_{t=1}^{n-1} u_t^2 = f(Y_{t-1}) = a + b\hat{Y}_{t-1} \ldots\ldots (15)$$

Where a and b are constants.

Subtracting Equation (15) from Equation (14) is equivalent to differencing Equation 13 as given below.

$$\sigma_{\bar{u}t}^2 - \sigma_{ut-1}^2 = \frac{1}{n-1}(u_n^2 - u_1^2) = f(Y_t) - f(Y_{t-1}).$$

Thus $E[\sigma_{\bar{u}t}^2 - \sigma_{\bar{u}t-1}^2] = \dfrac{1}{n-1}E(u_n^2 - u_1^2).$

Or $(n-1)E[\sigma_{\bar{u}t}^2 - \sigma_{\bar{u}t-1}^2] = \sigma_{un}^2 - \sigma_{u1}^2 \ldots\ldots\ldots (16)$

Also $E[\sigma_{\bar{u}t-1}^2 - \sigma_{\bar{u}t-2}^2] = \dfrac{1}{n-2}E(u_n^2 - u_2^2).$

Or $(n-2)E[\sigma_{\bar{u}t-1}^2 - \sigma_{\bar{u}t-2}^2] = \sigma_{un}^2 - \sigma_{u2}^2 \ldots\ldots\ldots (17)$

Thus subtracting Equation 17 from Equation 16 provides

$$E[\sigma_{ut}^2 - \sigma_{ut-1}^2] = \sigma_{u2}^2 - \sigma_{u1}^2 \ldots\ldots\ldots\ldots\ldots (18)$$

$\therefore$ Equation 16 implies that $E(\sigma_{ut}^2 - \sigma_{un-1}^2)$ is constant.

$\therefore E[\sigma_{ut}^2 - \sigma_{ut-1}^2] = E[\sigma_{un-1}^2 - \sigma_{ut-2}^2]$ is constant.

Proof: After differencing we have the following equations

$$\sigma_{ut}^2 - \sigma_{ut-1}^2 = a + b_t\ddot{Y}_t - (a - b\ddot{Y}_{t-1}) \ldots\ldots \ldots\ldots\ldots (19)$$

$$\sigma_{ut-1}^2 - \sigma_{ut-2}^2 = a + b\hat{Y}_{t-1} - (a - b\hat{Y}_{t-2}) \ldots\ldots\ldots .. (20)$$

Implying that

$$\sigma_{ut}^2 - \sigma_{ut-1}^2 = b(\hat{Y}_t - \hat{Y}_{t-1}) \ldots\ldots\ldots\ldots\ldots\ldots (21)$$

$$\sigma_{ut-1}^2 - \sigma_{ut-2}^2 = b(\hat{Y}_{t-1} - \hat{Y}_{t-2}) \ldots\ldots\ldots\ldots\ldots\ldots (22)$$

We take the growth rate of the variable in the question to be constant in the long run (i.e. along it long run path).

$$\therefore \frac{\sigma_{ut}^2 - \sigma_{ut-1}^2}{\sigma_{ut-1}^2 - \sigma_{ut-2}^2} = \frac{b(\hat{Y}_t - \hat{Y}_{t-1})}{b(\hat{Y}_{t-1} - \hat{Y}_{t-2})} = 1.$$

Or $\sigma_{ut}^2 - \sigma_{ut-1}^2 = \sigma_{un-1}^2 - \sigma_{ut-2}^2.$

Or $E[\sigma_{ut}^2 - \sigma_{ut-1}^2] = E[\sigma_{un-1}^2 - \sigma_{ut-2}^2]$

is constant as given above in Equation 16.

Finally, differentiating Equation 18 with respect to time provides

$2\sigma_{u2} - 2\sigma_{u1} = 0.$ Or $\sigma_{un-1}^2 = \sigma_{ut-2}^2.$

Furthermore, differentiating Equation (13) with respect to σ_{ut}^2 provides

$$1 = \frac{1}{n}\sum_{t=1}^{n} 2u_t = f'(Y_t).$$

Or $1 = \dfrac{2}{n}\sum\limits_{t=1}^{n} u_t \ldots\ldots\ldots\ldots\ldots\ldots\ldots (23)$

Differencing Equation (23) once gives

$$0 = \frac{2}{n-1}\sum_{t=1}^{n}(u_n - u_1) = \frac{2}{n-1}\sum_{t=1}^{n}\Delta u_t.$$

Or $\sum\limits_{t=1}^{n} \Delta u_t = 0 \ldots\ldots\ldots\ldots\ldots\ldots\ldots\ldots (24)$

Differentiating Equation (13) with respect to time provides

$$2\sigma_{ut} = \frac{2}{n}\sum_{t=1}^{n} u_t = f'(Y_t)$$

Or $\sigma_{ut} = \dfrac{1}{n}\sum\limits_{t=1}^{n} u_t \ldots\ldots\ldots\ldots\ldots\ldots (25)$

Differencing Equation (19) and equating it Equation (18) gives

$$\sigma_{un} - \sigma_{u1} = \frac{1}{n-1}\sum_{t=1}^{n}\Delta u_t = 0 \ldots\ldots\ldots\ldots (26)$$

Implying that $\sigma_{un} = \sigma_{u1}$. Or $\sigma_{u1}^2 = \sigma_{un}^2.$

Therefore, we can deduce from Equations (16) and (18) that

$$\sigma_{u1}^2 = \sigma_{u2}^2 = ... = \sigma_{un}^2 \text{ is constant.}$$

Moreover, from Equations 16 and 17 we find that if $u_1, u_2, ..., u_n$ is a random sample from density $f(Y_t)$ where $t = 1, 2, ..., n$ then

$$S^2 = \frac{1}{n-1} \sum_{i=1}^{n} (u_i - \bar{u})^2 \text{ for } n. > 1 \text{.........(27)}$$

Could be defined by the sample variance

$$E(S^2) = E(\sigma_{ut}^2) = E(\sigma_{t-1}^2) = \sigma_u^2 \text{..........(28)}$$

Where σ_u^2 is the population variance.

Implying that

$$E(\sigma_{ut}^2) - E(\sigma_{ut-1}^2) = \sigma_u^2 - \sigma_u^2 = 0 \text{........(29)}$$

Also $E(\sigma_{ut-1}^2) - E(\sigma_{ut-2}^2) = 0 \text{.............(30)}$

$$\therefore \sigma_{u1}^2) = E(\sigma_{u2}^2) = ... = \sigma_{un}^2 = 0 \text{........(31)}$$

(Mood at el.1986: pp. 229-230; Kmenta 1971: pp. 137-139) Hence, differencing a time series before running a egression causes the unstable variance of the error term to become constant. Thus, since differencing and taking logarithms are employed in the analyses, the heteroscedasticty was not found to be a problem in the analyses of the study.

Tests of Hypotheses

Using data from UAE from 1970 to 2010 consisting of 40 to 41 observations after adjusting endpoints we obtained the regression models given below. In all the regression results the $F - Statistic = 0.000000, \ p - value = 0.0000$. The $p - value$ is the probability of obtaining a value of t test statistic as much as or grater than the computed t value. In other words the $p - value$ is the lowest significance at which the null hypothesis can be rejected. Therefore with a $p - value = 0.0000$ the null hypothesis can be rejected with absolute confidence.

Also for 36 degrees of freedom at 0.001 level of significance the t value were all greater in absolute terms than all the computed t values obtained. Hence, under the null hypothesis that a given coefficient value was zero we, rejected the null hypothesis.

All the computed F values were greater than the critical F value and they followed F distribution with 3 and 36 degrees of freedom in the numerator and denominator respectively. (Note that there are 37 observations and three explanatory variables). From the table we found that in all regressions cases the F value was significant at 1 percent level of significance.

Therefore, form all the regressions results we rejected the null hypotheses that in each case the three independent variables jointly had no effect on the dependent variable. Also, in each of the five regression results, the $p - statistic$ of obtaining the respective F value as much as or greater than the one from a given result was almost zero i.e. 0.000000 leading to the rejection of the hypothesis that together the three variables had no effect on the independent variable.

In each of the fifteen results given below, the coefficient of multiple determination, R^2 and adjusted R^2 (i.e. $\bar{R}^2$) a meas-

ure of the proportion of variations in the independent variable explained by the regression line, showed that the independent variables together could explain over 93 percent of the variations in the dependent variable. In all the five regression results with 37 degrees of freedom the computed Durbin-Watson statistic $D.W.$ was greater than the table $D.W. = d_U = 1.60$ at 5 percent level of significance, confirming that there was no serial correlation (i.e. autocorrelation) problem.

Koenker–Bassett (KB) test for Heteroscedasticity was used to test whether the models used in making conclusions were homoscedastic (i.e. having constant variance). The KB test for heteroscedasticity is based on squared residuals i.e. $\hat{u}_t^2$.

In the KB test the squared residuals are regressed on the squared estimated values of the regressand. In the KB test the original model is usually specified as

$$Y_t = \beta_1 + \beta_2 X_{2t} + \beta_3 X_{3t} + ... + \beta_k X_{kt} + \hat{u}_t.$$

After estimating the model is got and the estimate becomes

$$\hat{u}_t^2 = \alpha_0 + \alpha_1 (\hat{Y})^2 + v_t.$$

Where $\hat{Y}_t$, are estimated values of Y_t in form of the original model. The null hypothesis is that $\alpha_2 = 0$.

When the null hypothesis is accepted we conclude that there is no heteroscedasticity. Otherwise, when the null hypothesis is rejected we conclude that there is presence of heteroscedaticity in a model. The null hypothesis is tested by employing the usual t test or F test. If the model is double log then the residuals are regressed on $(\log \hat{Y})^2$.

One advantage of the KB test is that it is applicable even if the error term in the original model is not normally distributed (Gujarati 2003, p. 415). Finally the advantage of differencing, taking logarithms or using growth rates caused all the models used in making the empirical analyses to become homoscedastic.

Empirical Findings And Discussions

Due to serial correlation the returns to scale on capital was estimated by regressing on as provided by results in Table 1 where was disposable income and was aggregate level of exports.

were got by regressing d(Y/E) on and as provided in Table 2.

1st Set of Regression Results

N=40	Dependent Variable d(Yd/E)	Sample Period: 1970-2010
Variable	Coefficient	t-statistic
d(K/E)	0.142902	10.6215
R-Squared		0.740593
Adjusted R-Squared		0.740593
Durbin Watson Statistic		1.865191

Table 1. Estimating returns to scale on capital

Returns to scale on capital was found to be 0.142902. Implying that returns to scale on labor was (1-0.142902) = 0.857098.

N=40	Dependent Variable d(Y/E)	Sample Period: 1971-2010
Variable	Coefficient	t-statistic
d(K/E)	0.076456	5.128662
D(L/E)	0.438835	3.872108
R-Squared		0.849510
Adjusted R-Squared		0.845550
Durbin Watson Statistic		1.712160
F-Statistic		214.5085

This model was constructed on assumption that disposable income was a function of capital and labor only. Thus the model derived was given by

N=40	Dependent Variable d(Y)	Sample Period: 1971-2010
Variable	Coefficient	t-statistic
d(A)	384876.0	7.604102
D(K)	0.071505	2.775273
D(L)	0.556511	6.142769
R-Squared		0.663547
Adjusted R-Squared		0.645360
Durbin Watson Statistic		2.085467
F-Statistic		36.48538

Table 3. Effects of change in levels of technology, capital and labor on change in output

$Yd = K^{0.142902}L^{0.857098}$. The capital stock series K used was derived from the annual series of investments levels I using the expression $K_t = K_{t-1} + I_t$.

Having derived both the capital and labor stock series the coefficients on both labor and capital and respectively, the parameters were employed in deriving the series for level of technology

$A = Y/(K^{0.076456}L^{0.438835})$ in accordance with the celebrated Cobb-Douglas production function.

In Table 3 we deduced that one unit change in the level of technology was found to have caused output to change by 384876 units. Whereas one unit change in capital or labor could have caused output to change by 0.071505 units or 0.556511respectively within the given period.

N=40	Dependent Variable d(Y)/Y(-1)	Sample Period: 1970-2010
Variable	Coefficient	t-statistic
d(A)/A	1.954890	21.74010
d(Kp)/Kp	-0.214294	-3.492763
d(Lp)/Lp	-0.694072	-18.98961
R-Squared		0.903705
Adjusted R-Squared		0.898500
Durbin Watson Statistic		1.865191
F-Statistic		173.6178

Table 4. Effects of technical progress and capital and both labor productivity on economic growth

From Table 4 we concluded that in one way or the other one percent increase in technical progress could have caused aggregate output to grow by 1.954890 percent, capital productivity to fall by 0.214294 and labor productivity to go down by 0.694072 percent within the 1971 to 2010 period.

N=40	Dependent Variable d(K)/K	Sample Period: 1972-2010
Variable	Coefficient	t-statistic
d(A(-1))/A(-1)	1.657569	27.44905
d(Kp(-1))/Kp(-1)	-0.953122	-23.03494
d(Lp(-1))/Lp(-1)	-0.586167	-2392952
R-Squared		0.860072
Adjusted R-Squared		0.852298
Durbin Watson Statistic		1.801747
F-Statistic		110.6377

Table 5. Effects of technical progress and growth in labor and capital productivity on capital growth

According to results in Table 5, the study found out that one percent growth in technological could have stimulated growth in capital accumulation by 1.657559 percent whereas growth in capital productivity could have reduced both capital accumulation and employment growth by 0.953122 and 0.586167 respectively.

Likewise, according to the findings revealed in Table 8, it appears as if the same amount by which technical progress promoted labor growth was the same amount by which labor productivity growth reduced capital growth, since one percent increase in technical progress was accompanied by 1.782006 percent rise in economic growth whereas one percent growth in labor productivity was accompanied by 1.782006 percent decline in labor stock.

N=41	Dependent Variable log(K)	Sample Period: 1970-2010
Variable	Coefficient	t-statistic
log(A)	1.082783	925408.1
log(Kp)	-1.082785	-1224265
log(L)	0.475165	762461.7
R-Squared		1.000000
Adjusted R-Squared		1.000000
Durbin Watson Statistic		2.278880
F-Statistic		8.81E+12

Table 6. Effects of growth in levels of technology, capital and labor on economic growth in UAE

Furthermore, one percent growth in employment could have caused capital accumulation to rise by 0.136246 per annum within the given period. From Tables 7 and 8 we deduced that employment had a grater influence on capital accumulation then the capital had on employment.

N=41	Dependent Variable log(L)	Sample Period: 1970-2010
Variable	Coefficient	t-statistic
log(A)	2.063093	15494511
log(Kp)	-0.157736	-191438.4
log(Lp)	-1.905358	-1583002
R-Squared		1.000000
Adjusted R-Squared		1.000000
Durbin Watson Statistic		2.198066
F-Statistic		6.75E+12

Table 7. Effects of technical progress, and growth in labor and capital productivity on labor growth

Thus increase in either capital or labor productivity could have depleted output by increasing more idle labor or capital stock.

Similarly, as depicted by Table 6 the study found out that one percent growth in technological could have stimulated growth in capital accumulation by 2.063093 percent whereas growth in capital productivity could have reduced both capital accumulation and employment growth by 0.157736 and 1.905358 respectively. Thus increase in either capital or labor productive could have depleted output by increasing more idle labor or capital stock.

According to the findings revealed in Table 7, it appears as if the same amount by which technical progress promoted capital growth was the same amount by which capital productivity reduced capital growth, since one percent increased in technical progress was accompanied by 1.082783 percent in economic growth whereas one percent growth in capital

productivity was accompanied by 1.082785 percent decline in capital stock.

Furthermore, one percent growth in employment could have caused capital accumulation to rise by 0.475165 per annum within the given period.

Likewise, according to the findings revealed in Table 8, it appears as if the same amount by which technical progress promoted labor growth was the same amount by which labor productivity growth reduced capital growth, since one percent increase in technical progress was accompanied by 1.782006 percent rise in economic growth whereas one percent growth in labor productivity was accompanied by 1.782006 percent decline in labor stock. Furthermore, one percent growth in employment could have caused capital accumulation to rise by 0.136246 per annum within the given period. From Tables 7 and 8 we deduced that employment had a grater influence on capital accumulation then the capital had on employment.

N=41	Dependent Variable log(L)	Sample Period: 1970-2010
Variable	Coefficient	t-statistic
log(A)	1.782006	1275469
log(Lp)	-1.782006	-1183318
log(K)	0.136246	218317.6
R-Squared		1.000000
Adjusted R-Squared		1.000000
Durbin Watson Statistic		2.221774
F-Statistic		8.78E+12

Table 8. Effects of growth in technology, labor productivity and capital on labor growth

In accordance with Table 9 we found out that in the short-run within the feasible region growth in capital productivity resulted in depletion of capital productivity by inducing idle capital.

N=40	Dependent Variable d(K)/K	Sample Period: 1971-2010
Variable	Coefficient	t-statistic
d(Y)/Y	0.976767	145.4020
d(Kp)/Kp	-0.893439	-127.8096
R-Squared		0.994702
Adjusted R-Squared		0.994562
Durbin Watson Statistic		1.779555
F-Statistic		7134.041

Table 9. The short-run feasible influence of capital productivity and economic growth on capital growth

Similarly, in accordance with Table 10 we found out that in the short-run within the feasible region growth in labor productivity resulted in depletion of labor productivity by inducing idle capital.

N=40	Dependent Variable d(L)/d(E)	Sample Period: 1971-2010
Variable	Coefficient	t-statistic
d(Y)/d(E)	0.708708	9.193842
d(Lp)/d(E)	-1.64E+10	-3.951146
R-Squared		0.704951
Adjusted R-Squared		0.697187
Durbin Watson Statistic		1.819561
F-Statistic		90.79226

Table 10. The short-run feasible influence of labor productivity growth on employment growth

From Tables 5 and 6 we discovered that technical progress contributed significantly to capital accumulation (i.e. growth in capital stock in the UAE within the 1972 to 2010 period i.e. 1 percent increase in level of technology could have caused capital stock to grow by 1.66 percent.

Similarly, from Tables 7 and 8 we found that technological advancement contributed greatly towards employment generation (i.e. increase in labor stock) in UAE within the afore-mentioned period i.e. 1 percent growth in level of technology could have caused labor stock to grow by 2.06 percent. Technological progress appears to result in either capital accumulation or employment generation because technical progress leads to dramatic increase in economic growth and part of the earnings derived from output sold could be used in hiring more labor or purchase of more capital goods.

N=40	Dependent Variable d(Y)/d(L)	Sample Period: 1971-2010
Variable	Coefficient	t-statistic
C	0.854521	6.798913
d(K)/d(L)	0.029972	7.766313
d(A)/d(L)	558961.6	33.40668
R-Squared		0.987379
Adjusted R-Squared		0.986696
Durbin Watson Statistic		1.817446
F-Statistic		1447.270

Table 11. Determining whether technical progress of UAE was capital deepening by using marginal

The rate at which capital productivity was deleting capital stock was found to be equal to the level of technological progress. Similarly, the rate at which labor productivity was deleting labor stock was found to be equal to the level of technological progress.

N=40	Dependent Variable d(E)/E	Sample Period: 1971-2010
Variable	Coefficient	t-statistic
d(A)/A	1.468556	10.70031
d(L)/L	0.486941	5.579231
R-Squared		0.731826
Adjusted R-Squared		0.724769
Durbin Watson Statistic		1.833158
F-Statistic		103.6989

Table 12. Effects of technological progress and growth in labor on growth in exports

The result could mean that increase in productivity is always accompanied by productivity since productivity comes about due to use of new and more efficient techniques of production.

According to Table 11 technical progress in the UAE was found to be labor deepening because marginal product of labor was found to have risen faster than that of capital. Marginal product of labor rose by 0.854521 per annum whereas that of capital rose by 0.029972 per annum.

As depicted by Table 12, 13 and 14 both employment growth and technical progress were found to be promoting export growth.

Whereas from results in Table 13 we could deduce that labor productivity growth was causing decline in export growth.

N=40	Dependent Variable d(E)/E	Sample Period: 1971-2010
Variable	Coefficient	t-statistic
d(A)/A	2.135923	9.749968
d(Lp)/Lp	-0.584247	-5.784842
R-Squared		0.740594
Adjusted R-Squared		0.733767
Durbin Watson Statistic		1.789503
F-Statistic		108.4884

Table 13. Effects of technological progress and labor productivity on export growth of UAE

From results in Tables 14 and 15 we could deduce that export and import growth were reinforcing each other. Imports might have increased exports via increase in imported raw and increase in production of more goods for exports. Also increase in exports could have increased the capacity of the UAE to imports more goods and services within the given period.

N=40	Dependent Variable d(E)	Sample Period: 1971-2010
Variable	Coefficient	t-statistic
d(A)	416043.0	9.433015
D(M)	0.604525	12.63482
R-Squared		0.836862
Adjusted R-Squared		0.832568
Durbin Watson Statistic		2.002388
F-Statistic		194.9309

Table 14. Effects of change in level of technology and imports on change in exports

However, as depicted by results in Table 15 technological progress was found to be an important factor in reduction of imports growth. That could have been the case because technical progress might have made the UAE to produce more goods both for her home consumption and exports.

15th Set of Regression Results

N=40	Dependent Variable d(M)/M(-1)	Sample Period: 1971-2010
Variable	Coefficient	t-statistic
d(A)/A(-1)	-1.756122	-8.958690
D(E)/E(-1)	1.490136	11.27934
R-Squared		0.701596
Adjusted R-Squared		0.693744
Durbin Watson Statistic		2.284002
F-Statistic		89.34428

Table 15. Effects of technological progress and exports on imports of UAE

Conclusion

Theoretical models developed were empirically tested after transforming them into the relevant econometric models. The macroeconomic data on UAE collected from the United Nations Statistics were used in conducting the relevant hypothesis tests and empirical analyses. The study found that in United Arab Emirates (UAE) between 1970 and 2010 the following happened:

(1) Growth in technological progress resulted in economic growth.

(2) Increase in either capital productivity or labor productivity gave rise to reduction in economic growth.

Either capital or labor productivity could have caused reduction in economic growth because labor productivity growth might have caused workers to enjoy more leisure instead of working more or growth in capital productivity could have made capital more efficient and resulted in more idle capacity; thus causing depletion of output through reduction in the amount of capital or labor used in production.

(3) Within the feasible region of production either capital productivity or labor productivity had a negative influence on growth.

(4) In the short-run and within the infeasible region of production either capital productivity or labor productivity had positive influence on economic growth.

(5) Growth in either labor or capital productivity could have influenced economic growth through the growth in either capital or labor.

(6) Technical progress in UAE was labor deepening within the given because rise in the marginal product of labor was found to be greater than that of marginal product of capital.

(7) Technological progress in the UAE stimulated export growth, whereas it had a negative influence on imports. Growth in exports and exports reinforced one another, probably because, increase in imported raw materials stimulate more production of export goods, while earnings from exports can be used to more raw materials for production of goods for exports.

References

Carlaw, K. I. and Lipsey, R. G. (2003), "Productivity, Technology and Economic Growth: What is the Relationship?", Journal of Economic Surveys Vol. 17, No. 3, pp. 457-487. Oxford: Blackwell Publishing Ltd.

Desai, A. (1984), "India's Technological Capacity: An Analysis of Its Achievements and Limits", Research Policy, Vol.13, No.5, pp.303-310.

Gomez – Salvador, R. et al. (2006), "Labor Productivity and Development in EURO Area", European Central Bank, Occasional Paper Series No. 53, October 2006.

Gujarati, D.N. (2003), Basic Econometrics. New Delhi: Tata McGraw-Hill Publishing Company Ltd.

Hobday, M. (1991), "Semiconductor Technology and Newly Industrializing Countries: The Diffusion of ASICs (Application Specific Integrated Circuits", World Development, Vol.19, No.4, pp.375-397; Printed in Britain: Pergmon Press.

Hornstein, A. and Krusell, P. (1996), "Can Technology Improvements Cause Productivity Slowdowns?", NBER Macroeconomics Annals, Vol. 11, pp. 209-259: University of Chicago Press.

Kmenta, J. (1971), Elements of Econometrics. New York: MacMillan Publishing Co. Inc.

Koutsoyiannis, A. (1979), Modern Microeconomics (2nd edition). India: Thomas Press Ltd.

Parthasarathi, A. (1990), "Science and Technology in India's Search for Sustainable and Equitable Future", World Development, Vol.18, No.12, pp.1693-1701; Printed in Britain: Pergmon Press.

Schiller, B. R. (2006), The Macroeconomy Today (Tenth Edition). Boston: McGraw-Hill Irwin.

Teiltel, S. (1987), "Science and Technology Indicators, Country Size and Economic Development: An International Comparison", World Development, Vol.15, No.9, pp.1225-1235; printed in Britain: Pergamon Press.

Jimmy Alani
Gulu University
P. O. Box 166
Gulu – Uganda
E-mail: j.alani@gu.ac.ug

Dollar Based Exchange Rate System and Foreign Exchange Market Volatility in Bangladesh

Taslim Hasan

Abstract:

This paper tries to find out the real causes of volatility in foreign exchange market in Bangladesh. For this purpose, performance of dollar based fiat currency regime compared to gold standard regime is analyzed, furnishing statistical data. Fixed, Pegged or floating exchange rate regime in this country have been behaving identically over the last forty years after independence and the dollar appreciated about 1200% during this period. The dollar based monetary system which is not backed by any real value makes the economy over a bubble one due to its unstable nature of inflation and interest rate. As a result, changing exchange rate system, government intervention or nonintervention is not the answer to this instability. Gold based stable currency is the perfect solution as it holds intrinsic value and makes the exchange rate smooth in international trade.

Keywords: *Forex Market, Fiat Currency, Gold Standard, Pegged System, Floating Exchange Rate and Bretton Woods.*

1. Introduction

From 1947 until independence in 1971, the present territory of Bangladesh was part of Pakistan. The exchange rate of the Pakistani rupee was fixed with the dollar in the early 1960s and remained unchanged until April 1972. In 1972 the exchange rate of taka, which replaced the rupee as the currency of the newly independent Bangladesh, was fixed against the pound sterling. However, because of the Bretton Woods exchange rate agreement, the taka also quasi-floated against the dollar through its link to sterling. Exchange rate was pegged to pound sterling from 1972-1979, peg to currency basket, with pound sterling as intervention currency from 1980-82 and peg to currency basket, with dollar as intervention currency from 1983-2002.

Bangladesh adopted a freely floating regime on May 30, 2003 by abandoning the adjustable pegged system. During floating exchange rate regime the exchange rate has been determined by the demand and supply of the dollar. When the dollar supply is favorable the rate stays in favor of the Bangladeshi Taka (BDT) and vise-versa. This system is continuing and the market mechanism determines the exchange rate.

1.1 Objective of the Study

The main focus of this study is to analyze the volatility in foreign exchange market in Bangladesh. The study will explain the reasons of this volatility which persists over the last few decades and the reasons of recent extreme unusual behavior of the market.

However, the specific objectives of this study are as follows:
- To find out the real causes of volatility in foreign exchange market.
- To analyze and compare existing fiat currency regime and gold standard regime.
- To recommend some measures to make the market stable permanently.

1.2 Methodology of the Study

This article is descriptive in nature. Most of the data used in this article is secondary. Some primary data are collected through formal and informal interview of different top level financial experts. Bangladesh bank, newspaper reports and different other financial institutions are the sources of secondary data. Economic data during gold standard regime and the data of dollar regime indicate the instability and its degree. Gold standard and dollar standard are the basis on which exchange rate is determined. To analyze the gold standard regime, data is taken from economy of Britain as the gold standard regime was ended before the birth of Bangladesh. After the independence of Bangladesh data is available which is under dollar regime (pegged to pound or dollar). Data of exchange rate was taken from 1974 as the country was liberated in December 16, 1971. After independence the market was not structured, so data was not available before 1974. Data showing 1971-1974 is also the data of 1974. Data before and after the introduction of the floating exchange rate were taken and analyzed to show the causes of currency instability under the dollar regime.

1.3 Scope and limitation of the study

- This study analyzes the subject matter from gold and dollar standard point of view, The Advantage or disadvantage of fixed or floating regime is not regarded in the analysis.
- Most of the private financial institutions in Bangladesh were formed after 1990, so the primary data was limited and very few experts were found who have adequate information regarding exchange rate. There was limited secondary literature on the gold based international trade and exchange rate system.

1.4 Literature Review

There has been extensive literature written on foreign exchange market and its behavior in Bangladesh. Hossain (2002) investigates the exchange rate responses to inflation in Bangladesh for the period 1973-1999. He finds that the effect of devaluation on inflation during the fixed exchange rate regime was not significant, and he claims the results to be robust for the whole sample period. Rahman and Basher (2001) have estimated the equilibrium real exchange rate as well as exchange rate misalignment for the period 1977-1998. They find that trade liberalization and increase in debt service burden result in a real depreciation of the currency; while increase in capital inflow, improvement in terms of trade, and increase in government consumption of non-tradable result in a real appreciation of the currency.

Some recent studies try to explain the behavior of nominal exchange rates of Bangladesh after its transition to the floating rate regime. By doing a correlation analysis, Rahman and Barua (2006) explore the possible explanation of the exchange rate movement. Younus and Chowdhury (2006) made an attempt to analyze Bangladesh's transition to floating regime and its impact on macroeconomic variables. They also find that currency depreciation boosted export growth in the floating regime. Chowdhury and Siddique (2006) have analyzed the exchange rate pass-through to domestic inflation in Bangladesh. Analyzing the data for the period 1997:07 to 2005:03, they have not found any significant pass-through effect of exchange rate in Bangladesh. The findings however, appear to have been affected by measurement errors.

Hossain and Ahmed (2009) classified Bangladesh as a managed floating regime. They analyzed both the behavior of the nominal exchange rate and the real exchange rate. They claim, although Bangladesh was committed to maintaining a freely floating regime, its exchange rate policies were not consistent with the characteristics of freely exchange rate policies. He argued, Bangladesh pursues a managed floating rate regime. Shoaib (2009) identified significant and negative relationship between exchange rate volatility and international trade growth in Bangladesh. He used different quantitative techniques by considering the data from May 2003 to December 2008.

All of the studies were conducted on exchange rate under dollar based fiat currency framework. The problem of the dollar as a fiat currency is not identified in any research. In this study the author attempts to identify the dollar based system as a main cause of volatility.

2. Exchange Rate System in Bangladesh

Historically, Bangladesh had been maintaining various pegged exchange rate regimes, such as pegged to pound sterling (£):1972-1979; pegged to a basket of major trading partners' currencies (£ as the intervening currency) 1980-1982; pegged to a basket of major trading partners' currencies (US$ as the intervening currency): 1983-1999; crawling band: 2000-2003; floating exchange rate: May 30, 2003- Present.
The Bangladesh Bank (BB) set foreign currency exchange rate band free from any regulation on May 29, 2003. It came into effect, officially from June 1, Saturday, when banks started to fix buying and selling rates of dollar and other currencies according to supply and demand situation under the free-float system. The attraction of a floating exchange rate system is that, at least in theory, it provides a kind of automatic mechanism for keeping the balance of payments in equilibrium.

The devaluations and their effects on the economy subjected the governments to regular criticism by those affected by the same. Under the floating rate system, the need for official devaluation of the currency will cease. The floating exchange rate system is not totally devoid of official influence. The Bangladesh Bank is likely to resort to buying and selling of foreign currency from time to time to indirectly play a stabilizing role in exchange rate operations.

Donors had also been putting pressure on Bangladesh adopt the floating exchange rate system and reportedly, obtaining foreign assistance from them also depended somewhat on introducing the new floating exchange rate system. Hence, it can be argued that pressure from the International Monetary Fund (IMF) and the World Bank (WB) was an important factor behind the regime change.

3. Condition of Foreign Exchange Market in Bangladesh

Currency reserve in Bangladesh is now $10 billion (July 2012). Though the country has enough reserve to meet its export payment demand, the taka is depreciating day by day. After liberation the price of US dollar (USD) was Tk. 7-8. At that time financial institutions were newly born and state owned. Exchange rate was Tk.14 (During 1975-1978) after denationalization policy was taken in 1976. Historical data to analyze the situation is shown in table I.

Table I: Yearly Exchange Rate-BDT/USD (Fixed Rate Regime)

Year (December 31)	Exchange rate BDT/USD	Yearly Change (%)	Change/decade(%)
1974	08.08		
1975	14.83	83.5%	
1976	14.95	0.81%	
1977	14.40	-3.6%	
1978	14.93	3.6%	
1979	15.64	4.7%	
1980	16.25	3.9%	1975-1988
1981	19.85	22.15%	
1982	24.07	21.25%	
1983 (October)	25.00	3.9%	
1984	26.00	4%	(32.27-14.83)/14.83
1985	31.00	19.23%	=117.6%
1986	30.00	-3.2%	
1987	31.20	4%	
1988	32.27	3.4%	
1990	35.79	10.9%	1990-2002
1991	38.58	7.8%	
1992 (March)	39.90	3.4%	
1993	39.85	-0.13%	
1994	40.25	1.0%	(49.09-35.79)/35.79
1995	40.75	1.2%	=37.16%
1998	42.20	3.6%	
2000	43.89	4.0%	
2002	49.09	11.84%	

Source: Bangladesh Bank

Table II: Yearly Exchange Rate BDT/USD (Floating Rate Regime)

Year (December 31)	Exchange rate BDT/USD	Yearly Change (%)	Change/decade (%)
2003	52.142	6.2%	2003-2012
2004	55.807	7.0%	
2005	57.756	3.5%	
2006	58.150	0.68%	
2007	69.893	20.2%	(82.1-52.142)/52.142
2008	68.554	-0.02%	=57.45%
2009	69.270	1.0%	
2010	70.750	2.1%	
2011	81.990	15.9%	
2012	82.100	0.13%	

Source: Bangladesh Bank

If we observe the exchange rate historically, it is evident that the rate is increasing year after year. Percentage change column shows the ups and downs of the rate and sometimes skyrocketing without any justified reasons. Change over the decade column shows the significant rise of the rate over a decade.

To make the market stable, floating exchange rate system was introduced in May 30, 2003 but the instability of the market continues anyway. The average change in exchange rate was 37.16% (1990-2002) which rose to 57.45% (2003-

2012) under the floating rate regime. Bangladesh did not get the advantages of metallic standard regime due to its birth after second world war and specially after 1971 when the IMF influences all its member countries to covert their gold based exchange rate systems to dollar based one. Bangladesh under this floating regime, will not be able to curb the foreign exchange market as it pertains to the dollar. This fluctuation problem is related to standard of currency and almost the same scenario persists in other south Asian countries neighboring Bangladesh.

Table III: Exchange rate of some third world countries with US dollar (Average January)

Country	2008	2009	2010	2011	2012	(2008-2012) % change
Bangladesh(USD/BDT)	68.554	69.27	70.75	81.99	82.10	19.75%
India (USD/INR)	39.2	48.4	45.8	46.0	53.3	35.96%
Pakistan(USD/PKR)	62.2	79.8	84.9	86.4	90.1	44.85%
Sri Lanka(USD/LKR)	108.83	114.65	115.14	111.84	114.87	5.55%

Source: Central Banks' web

As shown in Table III, in comparison to the average change of currency rate in Bangladesh, 19.75% (2008-2012), the average change of currency rate in India and Pakistan is relatively high 35.96% and 44.85% respectively (2008-2012). India's economic policy reforms of 1991 sought to globalize. At the same time, India moved from a fixed to a floating exchange rate. However, the economy continued to have features of the closed economy and fixed exchange rate regime that had prevailed for a long period, even after rates were supposed to be market determined. Historically, the Indian forex market, which is basically the market for USD-INR (Indian Rupee), has been within 1 to 4 percent monthly volatility. The exchange rate was broadly maintained within 39 to 45 INR in last one year. (Neeti & Sethi, 2011) In December, 2012, the rate stood about INR 55/USD.

The exchange rate regime in Pakistan has gone through five different phases. The first phase (1947-1972) of the Pakistan's exchange rate policy was characterized by a fixed exchange rate regime. In the second phase (1972 – 1982) the rupee was unified and the system of multiple exchange rates, developed in 1960s, was abolished. In the third phase (1982-1998) the rupee was put on the managed float system, and a targeted exchange rate policy was adopted to achieve a target path for the nominal effective rate of PKR (Pakistani Rupee). In the fourth phase (1999-2007) the multiple exchange rate system followed by a fixed pegged system was adopted to run the markets smoothly. In the fifth stage from 2007 onwards, managed floating exchange is in place to alleviate the impact of global financial crises and to put the economy on a growth path. (Nasir et. al., 2012) In spite of taking these initiatives one after another, the rate was not stable, in December, 2012 it stood at about PKR 99/USD.

The investment climate statement- Sri Lanka (2012) published by the US State Department, states Sri Lankan inflation decreased to 6% in 2011 which was double digit in the previous war years. Its exports grew by about 23% whereas imports grew by about 50% resulting in a massive trade deficit of $9 billion, up from $5.2 billion in 2010. In 2009, Sri Lanka received IMF assistance to overcome a balance of payments crisis. Increased foreign commercial borrowing reached $6 billion (4 month of imports) in 2011. The IMF has cautioned Sri Lanka about the declining non borrowed reserves. Despite the widening current account deficit, the Central Bank of Sri Lanka intervened in the foreign exchange markets throughout 2011 to keep the rupee stable until it was depreciated 3% in November. As a result the exchange rate decreased in 2011. The Lankan Rupee (LKR) is still overvalued and rising again. In November 2012, it stands at about LKR132/USD.

From the above discussion it can be concluded that the US dollar is not doing well, the system of dollar as a reserve currency is the main cause of the problem. It is worth mentioning that all of the countries stated above follow the dollar standard regime. It is the fundamental reason behind the turmoil in the foreign exchange market in Bangladesh.

4. Causes of the Instability

The causes of instability in the foreign exchange market in Bangladesh are the exchange rate system under US dollar regime. Because of the fiat currency- the dollar, economy inherently creates inflation. Purchasing power of fiat currency decreases over time which is time value of money. Time value of money concept revolves around interest manifesting as determinant of exchange rate. Elaborately, the causes can be identified as follows-
i)   Inflation under dollar regime
ii) Interest rate under dollar regime

Inflation and interest do affect the exchange rate. High inflation increases the exchange rate which would subsequently decrease the demand for various goods in foreign countries. This would decrease foreign currency in the producing country. As a general rule, a country with a consistently lower inflation rate exhibits a rising currency value, as its purchasing power increases relative to other currencies. Countries with higher inflation typically see depreciation in their currency in relation to the currencies of their trading partners. This is also usually accompanied by higher interest rates.

Table IV: Comparison of Inflation and Interest Rate with Exchange Rate

Year	Exchange Rate (Depreciation against Dollar)	CPI Inflation Rate (Average Yearly Change)	Interest Rate (Average Yearly Change)
1972-1974	9.3%	48.3%	35%
1975-1979	9.2%	9.8%	-8%
1980-1982	7.3%	14.0%	2%
1983-1990	7.4%	9.8%	7.8%
1991-1999	1.9%	5.6%	10.2%
2000-2002	7.92%	5.7%	11.4%
2003-2012	6.92%	8.4%	8.2%

Source: Bangladesh Bank (raw data)

Table IV shows the relationship between inflation, interest rate and the exchange rate change over time. Bangladesh experienced high inflation during the early 1970s, caused primarily by excessive monetary expansion. Annual inflation averaged 48% during 1972-74, the highest rate the country had experienced since the 1950s. Exchange rate during this period was depreciated by 9%. The inflation rate situation declined sharply, to about 10% during 1975-79. Exchange rate also depreciated by about 9% a year during this period. In 1979 the government pegged currency to pound sterling (pound was pegged to dollar) as the intervention currency

resulting 7% depreciation of exchange rate during the next there years. Since 1983 taka is pegged to dollar till 2002. Exchange rate depreciated by about 7% a year during 1983-1990s. Annual inflations during 1991-99 averaged about 6%, yet the exchange rate depreciated by only 2%. The causes of less depreciation were political instability that affected inflation but not too much on exchange rate. Price spiral after 2000 was significant and crossed the single digit in 2008 (11.8%) though average inflation is single digit from 2000-2012. (5.7%-8.4%)

Interest rates, inflation and exchange rates are all highly correlated. By manipulating interest rates, central bank exerts influence over both inflation and exchange rates and changing interest rates, impact on inflation as well as currency value. Higher interest rates offer lenders in an economy a higher return relative to other countries. Therefore, higher interest rates attract foreign capital and cause the exchange rate to rise. Table IV shows the relationship between interest and exchange rate. In 1975-79 interest rate was negative because of political ramification and financial maneuver. Exchange rate depreciated slightly (1.9%) though average interest rate changed to 10.2% in 1991-1999 due to political instability and turmoil condition in financial market. Other than this incident, the exchange rate was dependent on interest rate like inflation.

After the introduction of a floating exchange rate the volatility appears tremendous. The depreciation of taka from 1990 to 2002 before the introduction of a floating rate was 37.16%. (Table I, 1990-2012) After the introduction, the volatility increases and the depreciation of taka reaches 57.45% (Table I, 2003-2012). Very recent, the turmoil in the foreign exchange market draws attention to this when the value of the taka declined to Tk.85 against the dollar in January, 2012. The extreme upward trend under a floating regime is apparent from July 2010 to January 2012. Conversely, the exchange rate was always volatile and in an upward trend irrespective of pegged, fixed or floating regime as the data above shows (Table I, II & IV).

However, dollar based economy creates more inflation as fiat money has no value itself. Similarly, interest is attached to money as it is the price of money or rate of borrowing or expected return from investment. On the other hand, inflation has impact on exchange rate. Bangladesh is practicing dollar as its currency standard partially or fully from its inception which makes the economy inflationary making exchange market unstable. Statistical data of the foreign exchange rate from 1974 and comparative data of inflation and interest rate (Table IV) make it clear that the bubble economy (dollar based) is the main reason of volatility. United States, being global super power and pioneer of developed economy is stumbling persistently due to its paper based monetary system.(housing bubble, subprime mortgage) Bangladesh as a country of developing economy, by following the currency system suggested by IMF, is facing economic doom manifesting in foreign exchange market volatility. (Table II)

5. Metallic Standard Makes the Market Stable
In metallic standard regime inflation is controlled and

purchasing power of currency remains stable over a long period. Metallic regime does not allow supply of money indiscriminately. Before the money supply is to be increased, the monetary base- gold should be increased, that makes the currency stable. On the other hand, in international trade, exchange rate becomes stable due to the gold standard. Historical data of inflation in Britain is presented as a model of controlled inflationary economy under a gold standard regime. Table V shows the minimum inflation under gold a regime and a rising trend after abandoning the gold standard by Bretton Woods.

Table V: Inflation in UK: Gold vs. Fiat Currency Regime (Average Annual Change)

Year	Inflation	Currency Standard
1750-1800	2%	Gold Standard
1801-1851	-1.2%	Gold Standard
1852-1902	0.03%	Gold Standard
1902-1914	0.5%	Gold Standard
1915-1925	5.4%	Gold Abandoned during WW1
1926-1931	-2.1%	Gold Standard
1932-1945	3.8%	Gold Abandoned during WW2
1946-1971	4.4%	Gold Abandoned by Bretton Woods
1972-1993	8.9%	Fiat Currency
1994-2003	2.6%	Fiat Currency
2004-2012	3.1%	Fiat Currency

Source: UK office of National Statistics

As table V shows above, inflation was controlled under the gold standard regime. The change in inflation (1750-1914) was a maximum 2%; on average, percentage change was fractional. This stable inflation made the foreign exchange market stable that was persisted in the gold standard regime. After the First World War (WW1), the gold standard regime ceased to exist and inflation rose to 5.4 (1915-1925). While the gold standard resumed (1926-1931) inflation dropped and there was deflation of 2.1%. After the Second World War (WW2), the gold standard was abandoned again and inflation is persistent at 2.5 to 9.0 percentage range till today. Bangladesh was not born at that time period but the world got the benefit of a gold standard regime.

Findings of the analysis, made on dollar based economic system indicate the requirement of a metallic standard, i.e. gold or silver. It will eradicate the problem we are facing today under dollar based regime. The following points will justify the benefits of a gold standard regime.
i) The gold basis necessitates the balance among gold reserve, real production and money circulation. It ensures the stability of exchange rates between various countries by smoothing the export import balance.

ii) If the gold standard was employed, central banks and governments would not be able to expand the issuance of banknotes without increasing gold reserve, which would control inflation making the price of commodities stable. (Table IV)

iii) Gold standard will make the economy interest free which is one of the main reasons for exchange market volatility.

6. Recommendations and Conclusion
As a gold standard is the most stable currency, the return to

the gold standard requires the removal of the reasons that lead to abandoning it and the removal of the factors that lead to its decline. Bangladesh, to save its currency from decline and to turn back economically, requires the following:

- Inflation of the country should be curbed by stopping the fiat currency and restoring the dealings with a gold based currency.
- Interest based economy, i.e. capitalistic economic system should be converted to gold based-real production based economy. It will eradicate interest which is related to market volatility.
- Fixed or floating regime should be converted to controlled open market policy. The government should trade with those countries whose currency will accelerate gold based economy, as USA did during 1971 by converting the currency system of all member countries of IMF into dollar based, surrendering gold reserve to IMF.
- As for it to be implemented, Bangladesh should purchase gold and replace the dollar with it. The economic vision of the country can subdue the hindrances and influence trade partners to adopt gold standard. Inept policies, suggested and unduly influenced by IMF can never pave the way for solution. Independent economic policy of the country with vision to be a regional economic power is inevitable to achieve the goal. Bangladesh, an agricultural country having industrial investment opportunities, seemingly has bright future and penchant for turning into an economic power.

References:

Bangladesh Bureau of Statistics (2001-2007) Monthly Statistical Bulletin, BBS, Ministry of Planning, Bangladesh Chowdhury, Mainul I. Siddique.S.F (2006) 'Exchange Rate Pass-Through in Bangladesh', Working Paper No. 0607, Policy Analysis Unit, Research Department, Bangladesh Bank

Currency Quotation, The Daily Star (May 23, 2003), (The Daily Star is one of the leading national English daily newspapers of Bangladesh)

Hossain and Ahmed (2009) 'An Assessment of Exchange Rate Policy under Floating Regime in Bangladesh', The Bangladesh Development Studies, Vol. XXXII, No. 4 http://www.bbs.gov.bd/ (Official Website of the Bangladesh Bureau of Statistics)

http://en.wikipedia.org/wiki/2007%E2%80%932012_global_financial_crisis

http://mpra.ub.uni-muenchen.de/19466/1/MPRA_paper_19466.pdf

http://www.state.gov/e/eb/rls/othr/ics/2012/191238.htm http://www.worldbank.org/ (Official Website of the World Bank. The Website has been used to collect some of the data that have been used in the paper)

Islam, Mirza Azizul (2003) 'Exchange Rate Policy of Bangladesh: Not Floating Does Not Mean Sinking', Center of Policy Dialogue (CPD) Occasional Paper series, Paper 20

Madura, Jeff (2000) International Financial Management, South Western, USA, pp. 402-407

Ministry of Finance (2010) Bangladesh Economic Survey, Dhaka, Bangladesh

Nasir, M, Iqbal,W, Sheikh, J and Shams-ud-Deen (2012) 'Central Bank Intervention in The Foreign Exchange Market and Exchange Rate Volatility: Evidence from Pakistan', Interdisciplinary Journal Of Contemporary Research In Business, April 2012, Vol. III, No.12

Neeti and Sethi (2011) 'Measuring the Volatility of Foreign Exchange Market in India', Research Journal of Finance and Accounting, ISSN 2222-2847 (Online), Vol.II, No 9/10

Renée, A and Sumila,W (2012) 'Foreign Exchange Intervention and Volatility Evidence from an Emerging Market', Centre for Applied Macroeconomic Analysis (CAMA), Research School of Economics, The Australian National University, Online Paper no. 43

World Economic Outlook (October, 1997) 'Exchange Rate Arrangements and Economic Performance in Developing Countries', Washington, D.C. International Monetary Fund

Younus, Sayera and Chowdhury, M (2006) 'An Analysis of Bangladesh: Transition to Flexible Exchange Rate Regime', Working Paper Series: WP 0706, Bangladesh Bank

Taslim Hasan
Lecturer in Finance
Bangladesh Islami University
taslim_ibs@yahoo.com

An Overview of Employee Suggestion Schemes:

The Past, Present and the Future

Flevy Lasrado

Abstract:

Innovations are becoming increasingly important for organizations to remain competitive in the dynamic business environment. Employee Suggestions Systems (ESS) is a useful tool used in the organization to elicit employees' creative ideas. Over the past decades, suggestion schemes have been studied from many perspectives. The objective of this paper is to present the history and evolution of suggestion schemes, from their early beginnings to sophisticated computer based systems that are widely popular in many countries. It begins with the discussion of origins of suggestion systems, followed by discussing how they have evolved over the years, and understands a typical process involved in suggestion system. The future model is discussed that can sustain and contribute significantly towards the success of the organizations. Through a literature review, it's described the existing research on suggestion schemes to understand the critical drivers and barriers for the success of the suggestion schemes. This paper also cites and illustrates the well-known suggestion systems used by UAE organizations and their benefits.

This paper should be of value to practitioners of suggestion schemes and to academicians who are interested in knowing how this program has evolved, and where it is today and what future it holds. This paper has assimilated the existing knowledge on suggestion systems to provide a quick run through to the field and has extended the search for drivers and barriers to suggestion scheme from creativity and innovation literature.

Keywords: *Employee, Suggestion System, Creativity, Innovation, Employee Involvement, Ideas Management.*

1. Introduction

An Employee Suggestion Scheme (ESS) is described as a formalized mechanism that encourages employees to contribute constructive ideas for improving the organization in which they work (Milner et al., 1995). Another elaborate definition explains "suggestion schemes elicit suggestions from employees, classify them, and dispatch them to "experts" for evaluation" (Cooley et al., 2001). After this, the suggestion might be adopted, in which case the suggestion maker will be rewarded. But even if a suggestion is rejected, the suggestion maker may still be rewarded with a token gift. So the managers or dedicated committees evaluate the suggestions and implement the one that works (Chaneski, 2006). The reward may range from a certificate to a reward commensurate with the savings generated by the suggestion. Researchers in this area explain that the suggestion scheme is a mechanism or a tool that fosters creativity, elicits untapped reservoirs of ideas and fuels both product or process innovations, triggers a work place improvement, improves process effectiveness, saves money or helps generate new revenue and increases organizational commitment and accountability among employees (Carrier,1998; Buech et al., 2010; Fairbank and William,2001.Townsend,2009;Islam, 2007;Arthur et al., 2010 Lloyd,1996). Thus they are structured to have many goals and purposes (Kanna et al., 2005).

There are others who view suggestion systems as mechanism to improve quality as well (Islam, 2007; Kanna et al., 2005). It is a known fact that no one would know the job, its specific processes(Darragh –Jeromos, 2005) better than the employees themselves as they are on the shop floor and are experiencing the advantages of what they are doing(Du plessis et al., 2008). Therefore, the suggestion scheme can be an advantageous way to gather suggestions in the work place by fostering this concept and taping into all employee creativity (Darragh-Jeromo, 2005).

Over the past decades, suggestion schemes have been studied from many perspectives. In this paper, our objective is to present the history and evolution of suggestion schemes, from their early beginnings to sophisticated computer based systems that are widely popular in many countries. We start by discussing the origins of the suggestion system, followed by how it has evolved over the years, and understand a typical process involved in the suggestion system. Through a literature review, we describe the existing research on suggestion schemes in order to understand the critical drivers and barriers for the success of suggestion schemes. This paper also identifies future research opportunities in this field.

The History and Evolution of the Suggestion Schemes

In 1721, Yoshimune Tokugawa, the 8th Shogun, placed a box called "Meyasubako" at the entrance of the Edo Castle for written suggestions from his subjects (Arif et al., 2010). Although this is the most basic system known, an industrialized suggestion systems origin traces back to the 19th century. In 1880, William Denny, a Scottish shipbuilder asked his employees to offer suggestions in order to build ships in better ways (Islam 2007). Following this, the Kodak company became pioneer in this endeavor with its program being introduced in 1896 (Carrier, 1998). Industry associations, such as the Employee Involvement Association (EIA), then came into existence and they have contributed greatly to the increased formalization, objectivity, and professionalism of suggestion programs (Townsend,2009). Formerly, the National Association of Suggestion

Systems, the EIA has instituted educational, statistical, and professional development programs to raise the bar of best practices in the encouragement, evaluation, development, and implementation of ideas that add value to their organizations. The IdeasUK, UKs foremost association for the promotion of employee involvement programmes was founded in 1987, its prime purpose being to assist organizations in both the public and private sector, an organization with more than 100 members worldwide. On the other hand in Japan the program was well known as the Kaizan Program. While Kaizen-oriented suggestion systems are primarily interested in generating many small improvements, western suggestion systems encourage the pursuit of innovation (Ohly et al., 2006). Simultaneously, suggestion schemes also became popular in many countries and they have a considerable history that includes USA, Europe, Asia and the Middle East (Cooley et al., 2001).

The well-known suggestion schemes have been in existence for over 60 years and companies like Japan's Toyotas and India's Tata Steel Mill represent a usage of these historic systems. Around the 1990s suggestion schemes became increasingly popular. In 1994, one employee suggestion alone saved British Gas £4.4 million. The research around 1996 reported that the world class suggestion systems are exceeding 40 ideas per person annually, with greater than 80 percent implementation rates and high levels of participation (Savageau, 1996). The ETA 2004 annual suggestion program provided statistics from 41 of its member organizations in the United States. From this limited sample, a total of more than $811 million in savings and other benefits were realized as a result of employee suggestion programs (Townsend, 2009). The latest 2009 Annual Survey of IdeasUK highlighted the following benefits amongst their membership organizations such as Boots, HSBC, Ministry of Defence and Dubai Aluminum.

- Cost savings of over £100m with the average implemented idea worth £1,400.00.
- Return on Investment of at least 5:1.
- Employee involvement increased with average participation rates of 28%

The trend of cost savings due to employee suggestions continues till today.

The Existing Research on Suggestion Systems
An illustration of a formal process involved in the suggestion schemes
Suggestions systems have come a long way (Arif et al., 2010) transiting from anonymous postboxes (Crail, 2006) or suggestion box to a sophisticated computer based electronic suggestion system (Fairbank and William 2001; Ahmed, 2009). The suggestion system is a process of two or more stages comprising mainly the suggestion making, the evaluation and implementation of the idea (Van and Ende, 2002; Prathur and Turrel, 2002; Lipponen et al., 2008; Bakker et al., 2006; Marx, 1995; Griffiths et al., 2006). There has been a negligence of research on the initial ideas generation phase that precedes the innovation mainly because one major group of researchers, who consider organizational creativity is fostered through the personal characteristics and motivations of creative individuals turned its attention to context and organizational factors(Carrier,1998).

In recent times the suggestion schemes have also been known as Idea Capture Systems or Idea Management Systems. Leach (2006) claims that the Idea capture system can fall into four categories:
1. Centralized suggestion schemes
2. De-centralized suggestion schemes
3. Work based systems
4. Informal systems

Literature shows that the subject of suggestion schemes is multidisciplinary. Broadly the theoretical base for suggestion schemes emerges from the literature on creativity and innovation. This is mainly because the researchers describe suggestion systems as tools that stimulate creativity or innovation (Carrier,1998). Innovation begins with creative ideas (Amabile et al., 1996) and thus creativity and innovation are interlinked and the process in the suggestion system is mainly focused on eliciting the employee's creative ideas and implementing them to fuel innovations. The creativity and innovation literature also highlights the contextual, organizational and individual factors that foster creativity and innovation but it is also evident that the contextual factors that foster creativity and innovation would also foster the suggestion making as well (Ohly et al.,2006). The factors cited to be drivers to creativity, suggestion system and innovation are identified below.

Factors fostering Suggestion Making, Creativity and Innovation
A good suggestion scheme should play a vital role in improving communication and promoting and enhancing the sense of common purpose (McConville, 1990). People need social, informational, and economic support to be able to create something new (Majdar, 2005). The creativity in an organizational context emerges from a process of sharing information with other people within the organization (Bakker et al., 2006). Although the social networking alone cannot be considered as an important source of information for innovation (Bigliardi et al., 2009), the high quality social exchange relationships (Kudisch, 2006), social influences (Klijn et al., & 2010), collaboration (Björklund, 2010; Fairbank et al.,2001), and diverse group exchanges (Shalley et al.,2004) can stimulate employee creativity. Even in a field where innovation is essential, most of the acute challenges do not concern innovation skills, but rather the organizational context of innovation – the work communities' culture, habits, and practices (Björklund, 2010). Creativity and innovation will only be sporadic occurrences and will not thrive without a supportive environment and culture (Malaviya & Wadhwa, 2005;Amabile et al.,1996). Every organization has its own culture and needs, and its suggestion system should be molded around that (Marx, 1995). The organization structure often hinders tacit knowledge sharing by establishing wrong authorities (Alwis et al., 2008). Several studies have shown how certain organizational structures facilitate the creation of new products and processes, especially in relation to fast changing environments (Lam, 2010). Organization structures have to be modified in different industries so that

the organizational structure of a company or a department supports transfer and transmission of tacit knowledge in the best way (Alwis et al., 2008).

Management practices of the organization play a role in the success of the suggestion programs (Carrier, 1998). Management has a responsibility to satisfy the need for employee participation and they are required to create a culture which is supportive of employee involvement in the decisions which affect their work (Reychav et al., 2010). Senior management ought to demonstrate their faith in the scheme, promote and support it and encourage all managers to view it as a positive force for continuous improvement (McConville, 1990). Management must get actively involved by creating the opportunities for employees to submit their ideas, get those ideas properly evaluated, give recognition when it is due and implement them as soon as possible (Du plessis, 2008). Converting managers, particularly those in the "middle" is crucial (McConville,1990). Undoubtly, people will produce creative work when they perceive for example that the management is required to encourage (Amabile et al., 1996). Therefore, an observable commitment from top management can encourage employee's active participation in the scheme.

Studies have shown that a traditional, autocratic management style results in low levels of employee engagement and motivation (Hayward, 2010). Empowering leadership has the capacity to positively influence employee psychological empowerment -an element of importance in affecting creative outcome (Zhang, 2010). On the other hand leadership styles that include threats, intimidation, and coercive tactics appear to universally discourage creative behavior on the part of employees (Anderson et al., 2008). The coworker support (Madjar, 2008; Majdar 2005; Shalley et al., 2004; Arif et al., 2010) is another important element that can trigger employees to make suggestions. Tatter (1975) notes that, the best way to kill the system is to let an idea remain in limbo for four, five or six months. The goal should be to completely process a suggestion in about 30 days – and in no more than 60 days. To handle employee creativity effectively, it is important to organize the process of idea extraction to idea follow-up properly, otherwise employees will not be motivated to put their ideas forward and many ideas will be lost (Van & Ende, 2002). The knowledge possessed by individual employees can only lead to a firm competitive advantage if employees have the motivation and opportunity to share and utilize their individual knowledge in ways that benefit the organization (Arthur et al., 2005). Therefore the development of an infrastructure (Marx 1995) with simple methods (Hultgren, 2008) for submitting suggestions (McConville, 1990) is a key aspect of the suggestion scheme. The companies' lack of action on suggestions provided by non-managerial employees can de-motivate employees from participating in employee relation programs (Cho and Erdum, 2006). Fairbank (2003) argues the formal Employee Suggestion Management systems(ESMS)s are superior to the stereotypical suggestion box because they make it easier for employees to submit ideas that will eventually be implemented, provide a transparent process for evaluating the suggestions, and generate timely feedback regarding the fate of the suggestions and any

rewards they earn. Such a system can help to monitor the progress of the scheme on a regular basis (Hultgren, 2008). The more comfortable employees are with the format, the more suggestions will be received, and the more money will be saved (Mishra, 1994).

Good ideas can come from anyone, at any level, any place, anytime (McConville, 1990; Majdar ,2005). Therefore a suggestion scheme should make all its employees at all levels eligible to participate (McConville, 1990; Lloyd, 1996). The involvement can be increased if employees develop a sense of belonging to the organization (Cruz et al., 2009). Empowerment is necessary so that the workers evaluate their own ideas before making a suggestion, as suggesting many ideas do not necessarily mean greater cost reduction and at the same time, it would be an added cost to process and may cause delays (Wynder, 2008). The biggest obstacles in the suggestion cycle lie in the area of review, evaluation and guidance (Neagoe et al., 2009). When the review, evaluation and guidance aspect of the system functions properly, it can be a great motivating force that will attract many excellent proposals (Neagoe et al., 2009). If ideas are made public, these ideas, good and bad, could have started other creative ideas elsewhere in the organization (Stenmark, 2000). A modern well-managed suggestion scheme lies not in the immediate financial returns, but in the contribution made to achieving greater involvement and team- work (McConville,1990). Creative ideas are more often the product of social interaction and influence than of periods of thinking in isolation (Majdar, 2005) The cash rewards and recognition alone will not make a suggestion system successful (Strane,2000). Employee morale should be boosted by creating success stories and measuring the success of the scheme through the implementation of ideas (Marx, 1995; Hultgren, 2008; Lloyd, 1996; Cho & Erdem 2006).

A suggestion system is clearly a money saver in an organization (Mishra, 1994). Employees must be rewarded not only with tangible but also intangible benefits (Ahmed 2009). Incentives are important for employees to feel that submission of their useable ideas will be rewarded (Du plessis et al., 2008). It was also found that the volume of employee suggestions over time will be positively related to the amount of payout (Arthur et al., 2010). Depending on the attention given to advertising the schemes and how participation is rewarded, organizations could improve the return on the idea capture system (Leach et al., 2006).

Individuals have the greatest possible number of characteristics that positively influence their creative performance (Muñoz-Doyague, 2008). Keeping workers intrinsically motivated is the key part for improving creativity and performance. No doubt, intrinsic motivation is a universally important and substantial factor (Suh et al., 2008). Sending individuals to state-of- the-art seminars, training programs, and conferences as a reward for their creativity might increase the positive impact (Griffiths-hemans et al., 2006). This will be the energy of renewal and the drive to a successful future.

The Barriers to suggestion systems
Research also reports on barriers that could hinder the

success of the suggestion scheme. They are mainly cited as work load pressure, task reutilization, task standardization, unsupportive climate, aversive leadership, co-worker mistrust, coworker incompetence, budget problems, impractical idea, technical issues, competition, delay in assessment, controlled supervision, lack of support, fear of evaluation, free riding, lack of self-confidence, low commitment to organization and system, rigid rules, self-interest, challenge of the work and resistance from middle managers(Alwis & Hartmann 2008;Amabile et al.,1996;Anderson & Veillette 2008;Bakker et al., 2006;Carreir 1998; Oldham and Cummings 1996;Lyold 1999;Mclean 2005; McConville 1990;Toubia,2006; Sadi,2008;Wong& Pang).

Finally, the existing research also evidences that although the interest and practice in Continuous Improvement (CI) are widespread in many organizations, many of them have major problems in sustaining success in their CI programs (Rapp and Eklund, 2007). Despite the increasing popularity of the gain sharing plans, evidence for their effectiveness has remained mixed (Arthur et al., 2010). Suggestion systems should not exist primarily as a means to recognize employees only (Darragh – Jeromos 2005) but to utilize the scheme to its fullest extent. So a well designed system will accomplish both these goals resulting in tangible as well as intangible benefits (Ahmed, 2009). Overall suggestion system is a great mechanism that involves individual and teams in improving the organization performance (Crail, 2006) and they have a strong and significant effect on both process and product innovation (Townsend, 2009). It perfectly matches today's market need to deal with knowledge based workers who expect their involvement to be recognized and utilization of their skills to its fullest (Kesting et al., 2010).

#	Indicators	Source
1	Supervisory encouragement	Mclean 2005;Marx 1995;Shalley & Gilson 2004;Tatter 1975;Frese et al 1999;Lloyd 1996;Ohly et al 2006;Arif et al 2010;Hardin 1964
2	Co worker support	Madjar 2008;Majdar 2005;Shalley & Gilson 2004;Arif et al 2010
3	Top Mgt Support	Huang & Farh 2009.;Amabile et al 2004;Carreir 1998;Egan 2005;Jong & Hartog 2007;Marx 1995;McConville 1990;Du plessis 2008;Ahmed 2009;Mishara 1994;Powell 2008;Prather & Turrell;Rice 2009;Zhang 2010;Khairuzzaman;Bell 1997 ;Unsworth 2005;Hayward 2010.
4	organizational Encouragement	Fairbank and Williams 2001;Alves et al 2007;Ahmed 1998;Alwis & Hartmann 2008 Amabile et al 1996;Arthur & Kim 2005;Björklund 2010;Darragh-Jeromos 2005;Ellonen et al., 2008;Griffiths-hemans & Grover 2006;Janssen, O., 2004;Klijn & Tomic 2010;Kudisch 2006;Neagoe & Klein 2009;Mclean 2005;Malaviya, P., 2005;McConville 1990;Powell 2008;Prather & Turrell; Recht & Wildero ,1998;Shalley & Gilson 2004;Al-Alawi et al 2007;Rietzschel 2008;Zhou& George(2001);Stranne 1964;Van & Ende 2002;Bell 1997 ;Khairuzzaman;Bigliardi & Dormio 2009
5	Communication	Alves et al 2007;Aoki 2008;Arthur et al 2010.;Binnewies et al 2007;Björklund 2010.;Klijn & Tomic 2010;Kudisch 2006;Madjar 2008;Majdar 2005;Madjar 2008;Majdar 2005;McConville 1990;Ahmed 2009; Recht & Wildero ,1998;Shalley & Gilson 2004;Tatter 1975;Khairuzzaman;Monge ;Al-Alawi et al 2007;Clark 2009;Fairbank and Williams 2001;Stranne 1964
6	Evaluation	Egan 2005; Rietzschel 2008;Neagoe & Klein 2009;Marx 1995;McConville 1990;Ahmed 2009;Powell 2008;Tatter 1975;Van & Ende 2002;Hultgren 2008;Lloyd 1996; Winter 2009;Sarri et al ,2010;Fairbank and Williams 2001.
7	Publicity	Reuter 1976;Mishara 1994;Tatter 1975;Fairbank and Williams 2001. Kudisch 2006;Neagoe & Klein 2009;Leach et al 2006;Marx 1995;McConville 1990;Prather & Turrell;Lloyd 1996;Winter 2009;Crail 2007
8	Resources	Alves et al 2007;Amabile et al 1996;Griffiths-hemans & Grover 2006;Klijn & Tomic 2010;Mclean 2005;McConville 1990;Shalley & Gilson 2004;Van & Ende 2002;Lloyd 1996;Bigliardi & Dormio 2009;Clark 2009
9	Rewards	Lloyd 1996; Klijn & Tomic 2010;Arthur & Kim 2005;Arthur et al 2010. ;Bartol & Srivastava 2002;Darragh-Jeromos 2005;Neagoe & Klein 2009;Leach et al 2006;Lloyd.1999;Marx 1995;McConville 1990;Du plessis 2008;Ahmed 2009;Mishara 1994;Rapp and Eklund 2007;Rice 2009;Shalley & Gilson 2004;Tatter 1975;Teglborg-Lefevre, a.C.,2010;Van & Ende 2002;Arif et al 2010;Bell 1997 ;Frese et al 1999;Winter 2009;Al-Alawi et al 2007;Baird& Wang 2010;Bartol & Srivastava 2002;Clark 2009;Crail 2007;Rietzschel(2008);Suh& Shin 2008. ;Lyold 1999
10	Training	Paulus 2008;Tatter 1975;Baird& Wang 2010;Stranne 1964;Birdi 2005
11	Effective simple System	Reuter 1976;Lloyd 1996 Arthur & Kim 2005;Marx 1995;McConville 1990;Fairbank 2003;Mishara 1994;Prather & Turrell;Rapp and Eklund 2007;Tatter1975;Van & Ende 2002;Arif et al 2010;Frese et al 1999;Hultgren 2008; Winter 2009;Bigliardi & Dormio 2009;Clark 2009;Fairbank and Williams 2001;Lyold 1999;Bassadur 1992;Hultgren 2008
12	feedback	Cho & Erdem 2006 ;Bakker et al 2006 ;Buech et al 2010;Leach et al 2006;Mishara 1994;Powell 2008;Rapp and Eklund 2007;Arif et al 2010;Hultgren 2008;Fairbank and Williams 2001. ;Stranne 1964;Bassadur 1992;Van & Ende 2002;Du plessis 2008
13	Implementation of suggestion	Marx 1995;McConville 1990;Hultgren 2008;Lloyd 1996;Cho & Erdem 2006
14	Job factors	Amabile et al 1996;Anderson & Veillette 2008. ;Björklund 2010 ;Buech et al 2010;Griffiths-hemans & Grover 2006;Hirst 2009;Powell 2008;Rego et al 2009;Shalley & Gilson 2004;Shalley & Gilson 2004;Frese et al 1999;Axtell et al 2000;Muñoz-Doyague et al(2008);Unsworth 2005;Cruz et al 2009;de Jong & den Hartog 2010.
15	Empowerment	Recht & Wildero ,1998;Lipponen et al 2008;Mclean 2005;Powell 2008;Axtell et al 2000;de Jong & den Hartog 2010; Unsworth 2005
16	Expertise	Bantel & Jackson 1989;Björklund 2010;Griffiths-hemans & Grover 2006;Klijn & Tomic 2010;Madjar 2008;Majdar 2009;Verworn 2009;Bigliardi & Dormio 2009
17	Individual attributes and self efficacy	Huang & Farh 2009.;Egan 2005;Lipponen et al 2008;Verworn 2009;Frese et al 1999;Axtell et al 2000;Aoki 2008 ;Lipponen et al 2008;Binnewies et al 2007;Björklund 2010. ;Griffiths-hemans & Grover 2006 ;Klijn & Tomic 2010 ;Lipponen et al 2008;Litchfield 2008;Malaviya, P., 2005;Powell 2008; Recht & Wildero ,1998;Shalley & Gilson 2004;Verworn 2009;Janssen 2004;Litchfield 2008;Cruz et al 2009;Huang & Farh 2009.;Aoki 2008.;Arthur et al 2010. ;Björklund 2010.;Darragh-Jeromos 2005;Egan 2005;Muñoz-Doyague 2008
18	job control	Anderson & Veillette(2008);Mclean, L.D., 2005;Sadi (2008);Anderson & Veillette(2008) Wong& Pang (2003);Neagoe, L.N. & Klein, V.M., 2009;McConville(1990)
19	Organizational impediments	Stenmark(2000);Alwis& Hartmann(2008). Anderson, T.a. & Veillette, a., 2008;Wong& Pang (2003);Toubia 2005;Bakker, H., Boersma, K. & Oreel, S., 2006;Amabile et al (1996);Lyold (1999);Fairbank, J.F., Spangler, W.E. & Williams, S.D., 2003.Du Plessis, AJ, Marx, AE & Wilson, G 2008 Fairbank, J.F., Spangler, W.E. & Williams, S.D., 2003. Carrier C., 1998;Fairbank, J.F., Spangler, W.E. & Williams, S.D., 2003;Du Plessis, AJ, Marx, AE & Wilson, G 2008;BaMcConville(1990);Mostaf & El-Masry(2009)
20	Team work	Rapp and Eklund 2007; Amabile et al 1996;Aoki 2008;Carreir 1998;Darragh-Jeromos 2005;Mclean 2005;McConville 1990;Shalley & Gilson 2004;Baird& Wang 2010;Egan 2005;Pissarra & Jesuino 2005;Fairbank and Williams 2001.
21	Competition	Bakker, H., Boersma, K. & Oreel, S., 2006)
22	Support for innovation	Lipponen et al 2008;Hultgren 2008
23	employee participation	Alves et al 2007;McConville 1990;Lloyd 1996;Fairbank and Williams 2001. ;Cruz et al 2009; Neagoe, L.N. & Klein, V.M., 2009

Discussion

Suggestion systems have evolved from a traditional suggestion box to sophisticated electronic systems aiming to encourage all employees to take part in suggestion schemes. Large organizations are focusing on achieving bigger goals at company level as well as at employee level to accrue the tangible as well as intangible benefits. However, company's need is to carefully implement the program. It needs to be tailored to meet their organization needs and what they expect from this system must be clearly known. Research in this field has been mainly focused on features of suggestion schemes, guidelines for implementation and critical success factors and critical barriers encompassing the organizational as well as the individual contexts.

The suggestion making and suggestion implementation are two crucial stages and both are equally important for the success of the scheme and are influenced by a number of factors. Organizations must therefore identify these critical factors to nurture both these stages. The schemes can be applied in any sector to elicit employee creative ideas but must have a formal mechanism to action this. Managers need to be aware of critical success factors that are essential for the success of the schemes. It is clear that suggestion schemes will not yield results without the active involvement of everyone in the organization, and the required resources and support from top management. The suggestion schemes are here to stay mainly because they are the vehicle for innovations. Today we live in a knowledge economy where innovation is not only significant but a key corner stone for an organization's growth and sustainability. Therefore, there is a future for suggestion scheme as a tool for fueling innovation. Organizations need to recognize and evaluate their schemes to yield its potential benefits. There needs to be sustainability in suggestion schemes. Organizations need to assess their schemes to recognize if the right conditions exist for their schemes to flourish.

Conclusion

In this paper, we have traced the evolution of suggestion schemes from their early inception as suggestion boxes to the more sophisticated systems that can be used in any organization. The literature, while extolling the many virtues of suggestion program makes it clear that achieving the expected results from the programs is quite challenging as it involves organizational as well as individual level factors with a need to focus on creativity and transformation of the creativity into innovations.

This paper will be of value to practitioners by providing guidance in implementing a suggestion scheme. It should also be useful to academics who are interested in how suggestion schemes have evolved, and where the development is today.

More importantly it gives an account of critical success factors and critical barriers to the development of suggestion schemes.

Although much research has been conducted on identifying these critical success factors to the author's knowledge, little focus has been directed towards developing a framework or model that would enable an organization to assess their schemes and identify their current status. Thus, an interesting topic to pursue in the field of suggestion schemes could be to develop a mechanism for assessing the sustenance in their suggestion schemes.

References

Ahmed, A. M. M. B. (2009). Staff suggestion scheme (3Ss) within the UAE context: Implementation and critical success factors. Education, Business and Society: Contemporary Middle Eastern Issues, 2(2)

Al-Alawi, A.I., Al-Marzooqi, N.Y. and Mohammed, Y.F.(2007), Organizational culture and knowledge sharing: critical success factors, Journal of Knowledge Management, Vol. 11 No 2, pp.22-42

Alves, J., Marques, M.J., Saur, I. and Marques,P.(2007), Creativity and Innovation through Multidisciplinary and Multisectoral Cooperation, Creativity and Innovation Management, Vol. 16 No. 1,pp 27-34.

Alwis, R.S. and Hartmann, E. (2008), The use of tacit knowledge within innovative companies: knowledge management in innovative enterprises, Journal of Knowledge Management, Vol.12 No.1, pp.133-147.

Amabile, T.M., Conti, R., Coon,H.,Lazenby,J., and Herron,M. (1996), Assessing the work environment , Academy of Management ,Vol. 39 No. 5, pp. 1154-1184

Amabile,T.M., Schatzela, E.A., Monetaa,G.B., and Kramerb,S.(2004), Leader behaviors and the work environment for creativity : Perceived leader support, Leadership Quarterly, Vol.15 No.1, pp.5 – 32

Aoki, K. (2008), Transferring Japanese activities to overseas plants in China, International Journal of Operations & Production Management, Vol.28 No. 6, pp.518-539.

Arif, M., Aburas,H.M., Al Kuwaiti,A. and Kulonda,D. (2010), Suggestion Systems: A Usability-Based Evaluation Methodology, Journal of King Abdulaziz University-Engineering Sciences, Vol. 21 No. 2 pp.61-79.

Arthur, J.B. & Kim, D.-O. (2005), Gainsharing and knowledge sharing: the effects of labour–management co-operation, International Journal of Human Resource Management, Vol. 16 No. 9, pp.1564-1582

Arthur, J.B., Aiman-smith, L. and Arthur, J.E.F.B.(2010), Gainsharing and organizational learning: suggestions over time an analysis of employee, Management, Vol. 44 No. 4, pp.737-754.

Axtell, C.M., Holman,D.J., Unsworth, K.L., WaU T.D. and Waterson,P.E.(2000), Shopfloor innovation: Facilitating the suggestion and implementation of ideas, Journal of Occupational and Organizational Psychology, Vol.73 No. 3, pp.265-285

Baird, K. and Wang, H.(2010), Employee empowerment: extent of adoption and influential factors, Personnel Review, Vol. 39 No. 5, pp.574-599

Bakker, H., Boersma, K. and Oreel, S.(2006), Creativity (Ideas) Management in Industrial R & D Organizations : A Crea-Political Process Model and an Empirical Illustration of Corus RD & T., Creativity and Innovation Management, Vol. 15 No. 3, pp.296-309.

Bantel, K. A. and Jackson, S.E.(1989), Top management and innovations in banking: Does the composition of the top team make a difference?, Strategic Management Journal, Vol.10 No. S1, pp. 107-124.

Bartol, K.M. and Srivastava, A.(2002), Encouraging Knowledge Sharing: The Role of Organizational Reward Systems, Journal of Leadership & Organizational Studies, Vol. 9 No.1, pp.64-76

Baruah, J. and Paulus, P.B.(2008), Effects of Training on Idea Generation in Groups, Small Group Research, Vol.39 No. 5, pp.523-541.

Basadur, M.(1992),Managing creativity: a Japanese model. Management, Vol 6. No 2

Bell, R.(1997), Constructing an effective Suggestion System, IIE Solutions, Vol. 29 No. 2, pp.24

Bigliardi, B. and Dormio, A.I.(2009),"An empirical investigation of innovation determinants in food machinery enterprises", European Journal of Innovation Management, Vol.12 No.2, pp.223-242

Binnewies, C., Ohly, S. and Sonnentag, S.(2007), Taking personal initiative and communicating about ideas: What is important for the creative process and for idea creativity?, European Journal of Work and Organizational Psychology, Vol.16 No.4, pp.432-455.

Birdi, K.S.(2005), No idea? Evaluating the effectiveness of creativity training" Journal of European Industrial Training, Vol.29 No. 2, pp.102-111.

Bjo¨rk,J. and Magnusson, M.(2009),Where Do Good Innovation Ideas Come From? Exploring the Influence of Network Connectivity on Innovation Idea Quality, Journal of Product Innovation Management, Vol.26, No. 6, pp. 662–670.

Björklund, T. A.(2010), Enhancing creative knowledge-work: challenges and points of leverage, International Journal of Managing Projects in Business, Vol. 3 No.3, pp.517-525.

Buech, V.I.D., Michel, A. and Sonntag, K.(2010), Sugges-

tion systems in organizations: what motivates employees to submit suggestions?, European Journal of Innovation Management, Vol. 13 No. 4, pp.507-525.

Carrier, C.(1998), Employee Creativity and suggestion systems programs: An Empirical study, Creativity and innovation Management, Vol .7 No. 2,pp 62-72.

ChaneskiWayne S., Modern Machine Shop, The Suggestion Box Syndrome (And A Better Alternative). By: Chaneski 00268003, Feb2006, Vol. 78, Issue 9

Cho, S. and Erdem,M.(2006), Employee Relation Programs and Hotel Performance : Impact on Turnover , Labor Productivity , and RevPAR,.Journal of Human Resources in Hospitality & Tourism, Vol. 5. No. 2, pp. 57-68

Anderson,T.A. and Veillette,A. (2008), Contextual Inhibitors of Employee Creativity in Organizations: The Insulating Role of Creative Ability, Group & Organization Management, Vol.34 No. 3, pp.330-357.

Cooley, R.E., Helbling, C. and Fuller, U.D.(2001), Knowledge , Organisation and Suggestion Schemes,.ISMICK 01, Management of Industrial and Corporate Knowledge, pages 47-56
Crail, M. 2006. Fresh ideas from the floor. Personnel Today, June 20, 2006, p30.

Cruz, N.M., Pérez, V.M. & Cantero, C.T.(2009), The influence of employee motivation on knowledge transfer, Journal of Knowledge Management, Vol.13 No.6, pp.478-490

Darragh-Jeromos, P. (2005), System that works for you,Super Vision, Vol. 66,No 7, pp. 18

Du Plessis, A.J., Marx, A.E. and Wilson, G.(2008), Generating ideas and managing suggestion systems in organisations: some empirical evidence, International Journal of Knowledge, Culture and Change Management, Vol 8, No. 4, pp.133-140.

Egan, T.M.(2005), Factors Influencing Individual Creativity in the Workplace: An Examination of Quantitative Empirical Research, Advances in Developing Human Resources,Vol 7. No. @, pp. 160-181

Ellonen, R., Blomqvist, K. and Puumalainen, K.(2008), The role of trust in organisational innovativeness, European Journal of Innovation Management, Vol 11 no 2, pp.160-181

Fairbank, J.F. and Williams, S.D.(2001), Motivating Creativity and Enhancing Innovation through Employee Suggestion System Technology, Creativity and Innovation Management, Vol. 10 No. 2, pp.68-74.

Fairbank, J.F., Spangler, W., and Williams, S.D.(2003), Motivating creativity through a computer-mediated employee suggestion management system, Behaviour & Information Technology, Vol. 22 No. 5, pp.305 — 314

Fenton-O'Creevy, M.(1998), Employee involvement and the middle manager: evidence from a survey of organizations, Journal of Organizational Behavior, Vol.19, No.1, pp.67-84.
Frese, M., Teng, E. and Wijnen, C.J.D.(1999), Helping to improve suggestion systems: predictors of making suggestions in companies, Journal of Organizational Behavior, Vol. 20. No.7, pp.1139-1155

Gorfin, C.C.(1969),)The Suggestion Scheme: a Contribution To Morale or an Economic Transaction?", British Journal of Industrial Relations, Vol.7 No. 3, pp.368-384

Griffiths-Hemans, J.(2006), Setting the Stage for Creative New Products: Investigating the Idea Fruition Process, Journal of the Academy of Marketing Science, Vol.34 No. 1, pp.27-39.

Hardin, E. (1964), Characteristics of Participants in an Employee Suggestion Plan, Personnel Psychology, Vol.17 No.3, pp.289-303

Hayward, S.(2010), Engaging employees through whole leadership, Strategic HR Review, Vol.9 No.3, pp.11-17

Hirst, G.(2009), A cross-level perspective on employee creativity : goal orientation , team learning behavior , and individual creativity, Academy of Management Journal, 52(2), 280-293.

Huang, J. and Farh, J. (2009), Employee learning orientation, transformational leadership, and employee creativity: the mediating role of employee creative self-efficacy, Academy of Management Journal, Vol. 52 No.4, pp.765-778.

Hultgren,P. (2008), The motivating suggestion system, Master thesis in industrial engineering and management Department of management, BTH.

Islam,R.(2007), Evaluation of suggestions by the analytic hierarchy process: a case study on a public university in Malaysia, viña del mar, chile, august- 8-3, 2007.

Janssen, O.(2004), How fairness perceptions make innovative behavior more or less stressful",. Journal of Organizational Behavior, Vol.25 No. 2, pp.201-215

Janssen, O., Vliert, E. van de & West, M., 2004. The bright and dark sides of individual and group innovation: a Special Issue introduction. Journal of Organizational Behavior, 25(2), p.129-145.

Jong, J.P.J.De. & Hartog, D.N.D.(2007), How leaders influence employees' innovative behavior, European Journal of Innovation Management, Vol. 10 No. 1, pp. 41-64

Jong,J.P.J. De. & Hartog, D.N.D. (2010), Measuring Innovative Work Behaviour",. Creativity and Innovation Management, Vol. 19 No. 1, pp.23-36.

Kesting, P. and Ulhoi, J.P.(2010),Employee-driven innovation: extending the license to foster innovation,Management

Decision, Vol.48, No.1, pp.65-84.

Khairuzzaman, W., Ismail, W. and Abdmajid, R.(2007), Framework of The Culture of Innovation: A Revisit, Jurnal Kemanusiaan, 9 . pp. 38-49

Khanna, A., Mitra, D., and Gupta, A.(2005), How shop-floor employees drive innovation at Tata Steel,KM Review, Vol.8 No.3, pp.20-23.

Klijn, M. and Tomic, W.(2010). A review of creativity within organizations from a psychological perspective, Journal of Management Development, Vol. 29 No.4, pp.322-343

Koc, T. and Ceylan, C.(2007),Factors impacting the innovative capacity in large-scale companies, Technovation, Vol 27. No. 3, pp.105-114.

Kudisch, J.D.(2006),Contextual and Individual Difference Factors Predicting Individuals: Desire to Provide Upward Feedback, Group & Organization Management, Vol. 31 No.4, pp.503-529.

Lam, A.(2010),Organizational innovation to improve the efficiency of health care markets, National Bureau of Economic Research bulletin on aging and health, Vol.(2), p.1-2.

Leach, D.J., Stride, C.B. & Wood, S.J.(2006), The effectiveness of idea capture schemes, International Journal of Innovation Management, Vol. 10 No. 3, pp.325-350

Lipponen, J., Bardi, A. and Haapamäki, J., 2008, The interaction between values and organizational identification in predicting suggestion-making at work, Journal of Occupational and Organizational Psychology, Vol.81 No.2, pp.241-248

Litchfield, R.C. (2008), Brainstorming rules as assigned goals: Does brainstorming really improve idea quantity? Motivation and Emotion, Vol.33 No. 1, pp.25-31

Lloyd, G.C.(1996), Thinking beyond the box, Health manpower management, Vol.22 No.5, pp.37-9.

Lloyd., G.C.(1999), Stuff the suggestion box , Total Quality Management, Vol, 10 ,No 6, pp.869-875

Madjar, N.(2005), The Contributions of Different Groups of Individuals to Employees' Creativity, Advances in Developing Human Resources, Vol.7 No. 2. pp.182-206.

Malaviya, P., and Wadhwa,S.(2005), Innovation Management in Organizational Context: An Empirical Study, Global Journal of Flexible Systems Management. Vol. 6, No. 2, pp. 1-14

Marx, A.E.(1995), Management commitment for successful suggestion systems, Work Study, Vol. 44 No. 3, pp16-18

McConville, J.(1990), Innovation through involvement The TQM Magazine, Vol 2

McLean, L.D.(2005), Organizational Culture's Influence on Creativity and Innovation: A Review of the Literature and Implications for Human Resource Development, Advances in Developing Human Resources, Vol. 7 No. 2, pp. 226-246

Milner, E., Kinnell, M. & Usherwood, B.(1995), Employee suggestion schemes: a management tool for the 1990s? Library Management, Vol.16 No. 3, pp.3-8

Mishra, J. M. (1994), Employee Suggestion Programs in the Health Care Field: The Rewards of Involvement, Public PersonnelManagement, Vol. 23 no. 4, pp. 587

Monge,P.R., Cozzens, M.D., and Contractor N.S.(1992), Communication and Motivational Predictors of the Dynamics of Organizational Innovation, Organization Science, Vol. 3, No. 2, pp. 250-274

Mostafa, M.M. and El-Masry, A.(2008), Perceived barriers to organizational creativity: A cross-cultural study of British and Egyptian future marketing managers. Cross Cultural Management: An International Journal, Vol. 15 No. (1), pp.81-93.

Muñoz-Doyague, M., González-Álvarez, N. and Nieto, M.(2008), An Examination of Individual Factors and Employees' Creativity: The Case of Spain, Creativity Research Journal, Vol20(1), 21-33.

Neagoe, L.N. and Klein, V.M.(2009), Employee suggestion system (kaizen teian) the bottom-up approach for productivity improvement, Control, Vol.10 No. 3, pp.26 - 27. No.5, pp. 295-297.

Ohly, S., Sonnentag, S. and Pluntke, F.(2006), Routinization, work characteristics and their relationships with creative and proactive behaviors, Journal of Organizational Behavior, Vol.27 No.3, pp. 257-279.

Pissarra, J. and Jesuino, J.C.(2005), Idea generation through computer-mediated communication: The effects of anonymity, Journal of Managerial Psychology, Vol 20 No.3/4, pp.275-291.

Powell, S.(2008), The management and consumption of organisational creativity, Journal of Consumer Marketing, Vol. 25 No. 3, pp.158-166.

Prather, C. W., & Turrell, M. C. (2002), Involve everyone in the innovation process, Research Technology Management, Vol 45, pp.13-16

Rapp, C. and Eklund, J.(2007), Sustainable Development of a Suggestion System: Factors Influencing Improvement Activities in a Confectionary Company, Human Factors,Vol. 17 No. 1, pp.79-94.

Rapp, C. and Eklund, J. (2002), Sustainable development of improvement activities – the long-term operation of a suggestion scheme in a Swedish company, Total Quality Management, Vol. 13 No. 7, pp. 945-69.

Recht, R. and Wilderom, C.(1998), Kaizen and culture: on the transferability of Japanese suggestion systems, International Business Review, Vol.7, No. 1,pp.7-22.

Rego, A., Machado,F.,Leal,S.Cunha,M.P.E.(2009), Are Hopeful Employees More Creative? An Empirical Study, Creativity Research Journal, Vol. 21 No. 2,pp. 223-231.

Reuter. V.G. (1976), Suggestion systems and the small Firm, American Journal of small Business,Vol 1,No 2. pp.37

Reychav, I. and Sharkie, R.(2010), Trust: an antecedent to employee extra-role behavior, Journal of Intellectual Capital, Vol.11, No. 2, pp.227-247

Rietzschel, E.F., Nijstad, B. A. & Stroebe, W.(2010), The selection of creative ideas after individual idea generation: choosing between creativity and impact, British journal of psychology,Vol 101 No. 1, pp.47-68.

Sadi, M.A. and Al-Dubaisi, A.H.(2008), Barriers to organizational creativity: The marketing executives' perspective in Saudi Arabia, Journal of Management Development, Vol. 27 No.6, pp.574-599.

Sarri, K.K., Bakouros, I.L. and Petridou, E.(2010), Entrepreneur training for creativity and innovation,Journal of European Industrial Training, Vol.34 No.3, pp.270-288

Savageau, J. (1996), World class suggestion systems still work well,Journal for Quality & Participation,Vol. 19 No.2, pp-86

Shalley, C.E. and Gilson, L.L.(2004). What leaders need to know: A review of social and contextual factors that can foster or hinder creativity, The Leadership Quarterly, Vol.5 No.1, pp.33–53.

Shalley, C.E., Zhou, J. & Oldham, G.R.(2004), The Effects of Personal and Contextual Characteristics on Creativity: Where Should We Go from Here?, Journal of Management, Vol. 30 No. 6, pp.933-958.

Stenmark, D.(2000), Company-wide Brainstorming : Next Generation Suggestion Systems ? Proceedings of IRIS 23. Laboratorium for Interaction Technology, University of Trollhättan
Uddevalla, 2000. L. Svensson, U. Snis, C. Sørensen, H. Fägerlind, M. Magnusson, C. Östlund (eds.)

Stranne.L. V. (1964), Morale – The Key Factor In A Suggestion System, Industrial Management, Vol. 6 No. 11, pp.17

Suh, T. and Shin, H.(2008). When working hard pays off: testing creativity hypotheses. Corporate Communications: An International Journal, Vol.13 No.4, pp.407-417.
Tatter, M.A. 1975, Tuning Ideas into Gold, Management review

Teglborg-Lefevre, A.C.(2010), Modes of approach to employee-driven innovation in France: an empirical study,

Transfer: European Review of Labour and Research, Vol.16 No.2, pp. 211-226

Toubia, O.(2006). Idea Generation, Creativity, and Incentives,Marketing science, vol 25 No 5, pp. 411-425

Townsend,W(2009). The Use of Suggestion Program Metrics for the Measurement of Innovation", Perspectives in Business. Vol. 6 No 1,pp 1-5.

Unsworth, K.L.(2005), Creative Requirement: A Neglected Construct in the Study of Employee Creativity? ,Group & Organization Management, Vol 30, No 5, pp.541-560

Van Dijk, C. & Van den Ende, J. (2002), Suggestion system: transferring employee creativity into practicable ideas,R&D Management, Vol. 32 No. 5, pp 387 – 395.

Verworn, B.(2009). Does Age Have an Impact on Having Ideas? An Analysis of the Quantity and Quality of Ideas Submitted to a Suggestion System, Creativity and Innovation Management, Vol. 18 No 4, pp.326-334

Winter(2009),Staff suggestion schemes. Management Services; Winter2009, Vol. 53 Issue 4, p6-7, 2p

Wong, C.-keung S. & Pang, W.-L.L. (2003), Barriers to creativity in the hotel industry – perspectives of managers and supervisors, International Journal of Contemporary Hospitality Management, Vol. 15 No. 1, pp.29-37.

Wynder, M.(2008), Employee Participation in Continuous Improvement Programs: The Interaction Effects of Accounting Information and Control, Australian Journal of Management, Vol. 33 No. 2, pp.355-374.

Yuan, F. and Zhou, J. (2008), Differential Effects of Expected External Evaluation on Different Parts of the Creative Idea Production Process and on Final Product Creativity. Creativity Research Journal, Vol. 20 No. 4, pp.391-403.

Zhou, J. & George. J.(2001), When job dissatisfaction leads to creativity: encouraging the expression of voice, Academy of Management Journal , Vol. 44, No. 4, pp.682-696

Zhang, X., & Bartol, K. M. (2010). Linking Empowering Leadership and Employee Creativity: the Influence of Psychological Empowerment, Intrinsic Motivation, and Creative Process Engagement. Academy of Management Journal, 53(1), 107-128.

Dr. Flevy Lasrado
University of Salford,UK
f.lasrado@edu.salford.ac.uk

Quality of Work Life and its Impact on Behavioural Outcomes of Teaching Faculty: An Empirical Study in Oman Higher Education Context

Sathya Narayanan. S, Umaselvi. M, & Mohammed Ibrahim Hussein

Abstract:

This empirical study focuses at the role of Quality of Work Life (QWL) dimensions in determining the behavioural dimensions of teaching faculty in Oman Higher Education institutions. A nationwide study across the public and private higher education institutions in the Sultanate of Oman revealed that work-time pressure and job security (QWL factors) are significantly affecting the behavioural outcomes (satisfaction and performance) of teaching faculty in the Sultanate. Further, the teaching faculty in Public higher education institutions differs significantly in terms of QWL factors namely perceived supervisory support, job security and skills discretion, in comparision to the Private higher education institutions. This study provides a platform for policy makers and administration of higher educational institutions in the gulf region to create necessary infrastructure so as to retain and develop their teaching talents.

Keywords: *Quality of Work Life, Sultanate of Oman, Higher Education, Teacher Performance, Job Satisfaction.*

1. Introduction

The psychological contract of individuals with their organization seems to have changed in congruence with the changes in employees' needs in recent years. Thus, quality of work life has gained recognition, as employees want to feel respected at work for what they do and who they are. Modern organizations operate in a hyper dynamic environment characterized by technological changes which impact employee opportunities, skill requirement, management policies, strategies and styles, expectations and aspirations of employees and the physical working conditions. These factors manifest a crucial challenge on 'Quality' and how to nurture a 'Quality culture'.

Quality of human input is the greatest asset to any Academic Institution. Maintaining the quality of such human input rises from maintaining the quality of work life perfectly and an attempt to capitalize the human assets of the organization. Research has shown a significant correlation between organizational work climate and employee productivity and job satisfaction (Bartels et al 1998). A study by Al-Neizi and Amzat (2012) on the job satisfaction of teachers in Al-Dahirah, Al- Dakelya and Muscat regions of the Sultanate of Oman reveals that teaching overload and its incompatibility with the salary structure is the main reason for job dissatisfaction and the resulting high turnover of the teachers. Similarly Al-Belushi (2004) in her study on Gender roles and career choice as teacher has identified the need to establish special work structures which could accommodate the multiple roles played by women in the society so as to achieve real commitment and intrinsic motivation to the teaching job. With the increasing necessity to create a quality work life for the teachers, the policy makers in the Sultanate of Oman need specific identified factors to focus in order to create a conducive working climate for teachers.

The necessity to improve the quality of work life for teachers in the schools of Sultanate of Oman is emphasized through previous research. What could be the plight of lecturers in higher education institutions in the Sultanate of Oman? No previous research has explored the quality of work life of lecturers and if their work climate has any impact on performance levels? The question trigged this research. Moreover, the study also intends to find out the differences in quality of work life (QWL) between the public and private higher education institutions in the Sultanate of Oman. This research paper is attempting to answer the above questions through a well established methodology which addresses the sampling, reliability and validity issues of the constructs used for the study. Interestingly, the analysis brings out a clear relationship between the QWL factors and their impact on the performance level of lecturers.

Literature Review

Quality of work life is a broad and comprehensive concept which measures the work related well being of an individual and sets a scale for any job's satisfying, fulfilling and stress free design and work climate. It is defined as the employee feeling towards their work place ambience, colleagues and the job itself in initiating a series of outcomes and behaviour resulting in overall profitability and growth of an organisation (Shamir & Saloman, 1985). Lawler (1982) explains the QWL on the basis of working conditions and job characteristics. He further suggests that the basic operating premise of the QWL in an organisation is to encourage the productivity levels and the general well being of the employees. In an organization with positive ethical climate, employees hold the view that "the right thing to do is the only thing to do" Verbos et al (2007) p.17. Similarly, Schminke, et al (2007) describe that the ethical work climate includes the prevalent ethical values, norms, attitudes, feelings, and behaviors of the members (employees) that make up the social organization. Cullen et al (2003) further explain that the ethical work climates are not simply based on an individual's ethical standards or level of moral development. They instead represent components of the employees' work environment as perceived by its members.

In Organisational research, Job satisfaction is considered as one of the most widely and intensely studied variables (McCue & Gianakis, 1997). The worker's cognitive, affective, and evaluative response and behaviour toward their work is considered as job satisfaction (Greenberg & Baron, 1997). In line with that, Newstrom and Davis (2000) opined that the positive and negative emotions and feelings that employees experience at their work place is viewed as job satisfaction. In similarity to job satisfaction, Job involvement refers to the degree to which a person is showing interest and commitment to the assigned job (Steers and Black,1994). Thus, employees who demonstrate job involvement and job satisfaction are more likely to accept the work ethics prescribed in the organisation. Such employees also show higher levels of

motivation towards growth and willingly participate and take relevant tasks in their job (Newstrom & Davis, 2000).

In any organisation, the quality of work life and ethics are coupled and entwined together. The perceptions of the ability of the organisational climate in providing a wider range of well being for employees determines the QWL. Whereas, ethics is considered to be the governing standards or rules of professional conduct for the members or individuals of any group or organisation (Cascio,1998; Sirgy et al., 2001). As a result of plaguing ethical problems confronting modern day organisations, ethical standards are introduced in recent years to discourage unethical practices among employees. (Chonko et al., 2003; Somers, 2001; Valentine and Fleischman, 2008). An ethical work environment can be nurtured only when the employees feel trust and confidence in the actions of the managers (e.g., Cascio, 1998; Shaw, 2005; Walker, 1992). Guest (1980) opines that the prevalence of such an environment can influence the quality of work life of employees in a significant way. As reviewed by Vitell and Singhapakdi (2008), various studies demonstrate how work attitudes of employees positively influence the ethical work climate of organisations.

Elci and Alpkan (2009) discovered a significant positive relationship between the egoistic work climate and low levels of work satisfaction. The study specifically showed that a self-interest climate type proved to have a negative influence on job satisfaction, whereas team interest, social responsibility, and principled climates positively impact work satisfaction. A principled work climate proposes that the decisions are made in accordance with the established rules and codes. Deshpande (1996) concludes that in a principled climate, law and professional codes lead to a positive overall satisfaction. Further, it is discovered that climate types did not significantly influence satisfaction with pay, but it did influence employee's satisfaction with other job facets such as, promotions, supervisors, and workload.

Cascio (1998) emphasises that organisations which display high QWL characteristics will make their employees feel that the work is fulfilling and satisfying their needs. The research findings from Louis (1998) reported that QWL is strongly related to work commitment and sense of efficacy. Lee et al. (2007) revealed that QWL generally has a positive influence on job satisfaction, organizational commitment, and esprit de corps. A set of similar studies by Valentine et al.(2002) and Valentine and Fleischman (2008) showed that once an organisation incorporates ethical values in its work culture it can easily generate employee's commitment and job satisfaction. It will make the employees feel like an integral part of the organisation.

Gap in the Literature: Based on the literature in this review, it is identified that there are many studies on the relationships between QWL and organizational productivity or performance. But, there are only a very few studies which relate to the ethical work climate, quality of work life and the resultant work outcomes and behaviours. Also, based on this literature review, it is understood that there are no relevant published studies on these variables in Gulf countries. Given the increasing importance of both quality of work life and ethics in academic institutions in the recent years and the fact that there are not many studies on quality of work life in higher educational institutions in the Sultanate of Oman, this study addresses the gap in the literature. Moreover, the outcomes of this study will contribute to all the higher education institutions in the Gulf area and particularly in the Sultanate of Oman.

Objectives of The Study

- To measure the teaching faculty perceptions on the Quality of Work Life (QWL) and its impact on the job satisfaction and performance level of teaching faculty in Higher Education institutions in the Sultanate of Oman.
- To identify the significant differences in the Quality of Work Life (QWL) and Ethical Work Climate dimensions amongst private and public higher education institutions in the Sultanate of Oman.

Methodology
Sampling Procedure: Cluster sampling is used to effectively attain the desired sample size of at least 100 which will give reliable estimates while undergoing statistical analysis. For multi-variate analysis the minimum sample size required is calculated based on the number of parameters to be estimated. For each parameter it requires at least 10 samples (Nunnally, 1978). Initially clusters of sample are created for teaching faculty based on private and public higher education institutions through access to email databases of faculty. Then a census approach is followed to send the questionnaires to all the selected clusters.

Data Collection Procedure: The QWL perceptions of the teaching faculty in Oman is collected as primary data using a questionnaire which was designed and uploaded in the survey website "Survey monkey". The web link to the questionnaire is sent to more than 2000 teaching faculty members in Oman higher education institutions through e-mails. The process yielded 143 completely filled in responses with a response rate of 7%.

Validation of the Questionnaire: The Quality of Work Life questionnaire's content validity is ensured by initially developing a list of 157 statements on quality of work life by referring to the QWL questionnaire used by Umaselvi et al (2010) to study the teaching faculty QWL perceptions and the Leiden Quality of Work Life measure. Apart from that, variables reflecting the local context are also added to the list. This process ensured the content validity of the measurement scale. All the statements are subject to a face validity process involving five judges and a list of 40 relevant items are shortlisted by the judges to be included in the final questionnaire. The ethical work climate questionnaire is adapted from the Victor and Cullen's ethical climate instrument. It originally had 28 items which after the face validity process its shortlisted to 17 items. The teaching faculty's performance instrument consists of 7 items. As there are no extant scales available to measure the performance of teachers, the items were developed by the researchers which emphasized the performance standards of the academic fraternity in general. Job commitment and job satisfaction are measured through a three item scale respectively.

Reliability of the Measurement Scales: The reliability of the instruments was measured using Cronbach's alpha (refer Table 1). It is a coefficient of reliability which ensures that the instruments are internally consistent. The alpha values for the test should ideally be above 0.7 to be acceptable and the values over 0.8 are considered to have good reliability (George & Mallery, 2003). The analysis reveals that all the scales have reliability co-efficients of above 0.8 except for the job satisfaction measure which is on the weaker side with a value of 0.658. As job satisfaction measure is very sensitive in nature, socially desirable bias might have affected the results.

Analysis and Interpretation

The individual variables of each factor are added together to represent a single score for each factor (Trochim, 2000). This is based on Likert's summated scale principle. This led to a total of eight factor scores for Quality of Work Life (QWL) scale and five factor scores for Ethical Work Climate (EWC) scale. Similarly, the performance measures are not summated and each variable is individually analysed to identify the variations in each variable. The job satisfaction and job commitments measures are obtained by adding together the three variables respectively for each scale. The data are initially subject to hierarchical regression analysis to identify the effect of independent variables over that of the dependent variables. The advantage of this model is that the additional variance shown by an independent variable over and above a control or intervening variable can be measured (Cohen and Cohen, 1983). Further, the data is subject to percentage analysis, where the summated scores are converted into percentage scores to facilitate comparision between the perceptions of teaching faculty in the public and private higher education institutions in Oman. The significant differences in percentage between the two groups are established using independent two- sample t-test (two groups with un-equal variances- Welch's test) (Fadem, 2008). This will ascertain whether the means of the two groups are statistically different.

Hierarchical Regression Analysis (Public Institutions): Initially, the perceptions of the teaching faculty at the public higher education institutions are taken for analysis. Job satisfaction and performance of the teaching faculty are treated as dependent variables and two regression models are used keeping the demographics and Quality of Work Life (QWL) perceptions as independent variables. Hierarchically, the demographic variables (Gender, Nationality, Current Experience and Total Teaching Experience) are entered in step 1 as control variables and the QWL variables (Skill Discretion, Decision Authority, Task Control, Work Time Comfort, Role Clarity, Job Security, Manager Support and Peer Support) in the step 2. Both the models turned out to be significant and their Durbin-Watson scores are within the acceptable range of 1.5 to 2.5, indicating lack of auto-correlation (refer Table 2). The quality of work life has a significant impact on Job Satisfaction of the teaching faculty in Public institutions with an additional variance of 29.1 % over and above the effect of demographic variables on Job Satisfaction (p<.01). The demographics also show significance in variance on the quality of work life of teachers. A closer look at the contribution of the individual QWL variables towards the impact on Job Satisfaction reveals that (refer Table 3) the work-time comfort variable is having a significant impact on the Job Satisfaction of the teachers with $\beta=0.229$, t (80) =2.981 and p<.01. The Beta (β) value represents standardised regression coefficient of dependent variable. It measures the resultant change in dependent variable for every single unit change in dependent variable. The Manager Support variable also significantly predicts the Job Satisfaction of the teachers in public institutions with $\beta=0.21$, t (80) = 1.992 and p<.05. All other variables do not have any say in the variance of the job satisfaction factor. Amongst the demographic variables, the nationality of the teachers have a significant say in their Job Satisfaction with $\beta=-.331$, t (88) = -2.708 and p<.01.

The impact of QWL on the performance of the teachers in public institutions is significant and it explains a significant variance in performance scores, R2=.435, F (8, 80) = 5.660 and p<.01. R2 is an indicator of how well the model fits the data. The closer the value is to 1, better is the model fit. This variance is over and above the reported variance of demographic variables on the performance of teachers. Analysis of the contribution of the individual QWL variables on the performance of teachers (refer Table 3) reveals that skill discretion and role clarity variables have a significant say on the performance level of the teachers.

Hierarchical Regression Analysis (Private Institutions): Similarly, the impact of the QWL variables on the job satisfaction and performance of teachers in private institutions is tested with two models of hierarchical regression. The order of building the variables in the model is similar to that of the model built for public institutions. The QWL variables explained a significant proportion of variance in the job satisfaction of the teachers after controlling for the demographic variables, with R2=.529, F (8, 37) = 5.516 and p<.01 (refer Table 4). Equally, the QWL variables have a significant impact on the performance level of the teachers in private institutions after controlling for the demographic variables with R2=.411, F (8, 37) = 3.870 and p<.01. For both the models Durbin - Watson measures are within the accepted range (Montgomery et al, 2001).

Verification of the individual contribution of the QWL variables on the job satisfaction of the teachers in private higher education institutions reveals that work – time comfort variable has a more significant impact on job satisfaction of teachers in private institutions than any other QWL variable. The performance of the teachers in private institutions is again determined strongly by the skill discretion in the job. These results are very similar to that of the teacher perceptions in public institutions. All other QWL variables do not have any significant impact on job satisfaction and performance.

Welch's Test (t-test) of significant difference between Public and Private Institutions: This study strives mainly to identify the differences in the perceptions of the teaching faculty between public and private institutions, on their quality of work life (QWL), ethical work climate (EWC), and performance levels. As the sample size and variances of the two groups are different (Public n=93 and Private n=50) and the purpose of the test is to highlight only the significant differences (how far the mean is different) and not the repeat measures where the samples over lap, Welch's test is applied on the data sets (Sawilowski, 2002). The factor scores are converted into percentages for easy and lucid understanding of the perceptual differences between the teachers from the two groups of institutions. The analyses are carried out in an in-depth fashion by segregating the data into various subgroups based on the demographics of the teaching faculty from both the group of institutions respectively.

Perceptual Differences between Female Faculty in Public and Private Institutions: Amongst the female employees in both the group of institutions, there are no reported differences on their perceptions on the quality of work life and their performance levels in the respective institutions (refer Table 6). There is a significant difference between the female faculty in private and public institutions on their perceptions on a caring and efficient work climate.

Perceptual Differences between Male Faculty in Public and Private Institutions: Male faculty in the private and public institutions differ significantly in the Quality of Work Life variable Skill Discretion (refer Table 6). In the Ethical Work Climate dimensions, there is a significant effect on the rules and regulations existing in the organization (refer Table 7). The perception of male faculty on the rules and orderliness in the public institutions is significantly different than the

climate in private institutions . Among the Performance level dimensions, the male faculty's performance levels in Private institutions are significantly different in terms of academic research, realization of potential talents and achieving better student results in comparison to the public institutions (refer Table 8).

Perceptual Differences between Less Experienced Faculty in Public and Private Institutions: Teaching faculty with less than two years (new teachers) of current experience in the public and private institutions are treated demographically as Less Experienced faculty. When Welch's test of differences is applied to the two groups, significant effect is observed where Quality of Work Life dimensions, Ethical Work Climate Dimensions and the Performance levels of the less experienced faculty in Private institutions are significantly different than in Public institutions (refer Tables 6, 7 & 8). In Private institutions, the new faculty members feel that there are more opportunities to exhibit diverse skills, high managerial support and improved job security. These are significantly different than the perceptions of the new faculty members at public institutions. But, the test did not reveal any significant difference in perceptions for more experienced employees (faculty with more than 2 years experience in the current institution), along the QWL, EWC and performance levels (refer Tables 6, 7 & 8).

Perceptual Differences between Omani Faculty in Public and Private Institutions: The test of differences revealed that there is no significant point of differences between the two groups in QWL dimensions. Omani Faculty feels significant difference in independent work climate of Private institutions and Public institutions. In Performance dimensions the Omani faculty in Public institutions significantly differ in engagement in professional academic associations and publication in peer reviewed journals in comparision to private institutions (refer Table 8).

Perceptual Differences between Expatriate Faculty in Public and Private Institutions: The Expatriate faculty members do not feel any significant difference in Ethical Work Climate dimensions between a private and public institution. But they feel a significantly different levels of Job Security and Skill Discretion between Private institution and Public institution (refer Table 6). Similarly the Performance levels of expatriate faculty in Private institutions are significantly different in terms of involvement in academic research, realization of their talents and obtaining better student results in comparision to their performance in Public institutions (refer Table 8).

Discussion
Summary of Findings and Implications:
- Quality of Work Life (QWL) is having a significant impact on the Job Satisfaction and Performance of the teaching faculty in both the public and private higher education institutions in Oman. An in-depth analysis reveals that QWL variable 'Work and Time Pressure' is having a significant impact on the Job Satisfaction of teaching faculty in both public and private institutions. Additionally, in public colleges, the QWL variable, the Supervisor's Care and Support is considered to be important to achieve job satisfaction. Similarly, the QWL variable Skill Discretion plays a major role in both public and private institutions in determining the Performance levels of the teachers. This emphasizes the fact that, if more the opportunities are given to the faculty in exhibiting

their skills, then their performance will be better. The academic setting should be invigorating enough to give more room for innovations and opportunities for displaying special abilities of the teacher.
- While comparing the QWL, Ethical Work Climate (EWC) and Performance levels of Female faculty members in public and private institutions, significant differences are reported in the caring and efficient environment which has to be evened out. The Male faculty members feel that Private colleges significantly differ in giving opportunities to display their variety skills than Public institutions.
- New faculty members (with less than 2 years experience in the current work place) in Private institutions feel significant difference in Quality of Work Life than in comparision to Public institutions in terms of choice given to express their variety skills, increased Job Security and Line Manager Support.
- Omani teaching faculty in Private Institutions perceive significant difference on the perception of independence in work climate in comparision to Public institutions. However, their Performance in terms of Research publications and academic associations are significantly different in Public institutions and Private institutions. There is no perceived difference in terms of their QWL in both the institutions.
- Expatriate teaching faculty in Private colleges feels significant difference in Quality of Work Life (QWL) in terms of Skill Discretion and Job Security in comparision to Expatriate faculty in Public institutions.

Limitations and Future Directions:
The study is purely cross-sectional in nature which necessitates the requirement for a longitudinal research in the future which can measure the QWL effects over a longer period of time. Here, the role of other influencing factors on the QWL of teaching faculty can be studied in a more thorough manner. Such a study also warrants a study to measure cause and effect relationship using Structural Equation Models. The sample size may not be adequate for external validation of the results as the response rate from the data collection procedure yielded only a limited set of responses, even though they are collected through a random process. As the data entry by respondents is not controlled, and the typical weaknesses of online data collection with inherent bias towards socially desirable answers, measurement errors may be higher.

Future studies should aim at a problem solving approach to look deeper into the cause and effect of the quality of work life of teaching faculty in the Sultanate of Oman. This will allow the policy makers and top management of the institutions to pursue their commitment towards quality not just with student community, but also with the teaching community which is fulcrum of the academic growth. More studies can be initiated to measure the retention levels of teaching faculty in higher education institutions and the factors that promote the retention level of faculty members in those institutions. Such studies will give a better ground for the stakeholders in higher education, to make strategic plans for the academic community in the Sultanate of Oman.

Conclusion
This study revealed that the quality of work life of the teaching community in higher education institutions of Oman seems to significantly differ between private and public institutions. The institutions have to prioritise and sensitise

their strategic plans towards providing a work climate which is ethically sound and providing adequate work life comfort to the teaching fraternity. This further stresses the need to establish quality of work life standards for teaching faculty in the Sultanate of Oman. This will ensure that the long range plans towards quality commitment and enhancement in higher education institutions are catalysed through the effective performance of the teaching faculty.

References
Al-Belushi, A. (2004). Gender Issues in Teacher Development: Career Choice and Commitment in Oman. English Language Teacher Education and Development, 8(1), 16-27.

Al-Neimi,R. K. R. & Amzat, I. H. (2012). Teachers' Perceptions of Their Job Satisfaction and Turnover: A Case Study of Some Schools in Sultanate of Oman. OIDA International Journal of Sustainable Development, 3 (9), 93-104. Available at SSRN: http://ssrn.com/abstract=2035614

Bartels, K. K., Harrick, E., Martell, K., & Strickland, D. (1998). The Relationship between Ethical Climate and Ethical Problems within Human Resource Management. Journal of Business Ethics, 17(7), 799-804. doi: 10.1023/A:1005817401688

Cascio, W.F. (1998) Managing human resources: productivity, quality of work life, profits. Boston, MA: Irwin McGraw-Hill Chonko L.B., Wotruba T.R. & Loe T.W. (2003). Ethics code familiarity and usefulness: views on idealist and relativist managers under varying conditions of turbulence. Journal of Business Ethics, 2003; 42:237–52. doi: 10.1023/A:1022261006692
Cohen, J., & Cohen, P. (1983). Applied multiple regression/correlation analysis for the behavioral sciences (2nd ed.). Hillsdale, NJ: Erlbaum.

Cullen, J. B., Parboteeah, K. P., & Victor, B. (2003). The effects of ethical climates on organizational commitment: A two-study analysis. Journal of Business Ethics, 46, 127-141. doi: 10.1023/A:1025089819456

Deshpande, S. P. (1996). The impact of ethical climate types on facets of job satisfaction: An empirical investigation. Journal of Business Ethics, 15(6), 655-660.

Elci, M., & Alpkan, L. (2008). The impact of perceived organizational ethical climate on work satisfaction. Journal of Business Ethics, 84(3), 297-310. doi: 10.1007/s10551-008-9709-0

Fadem, B. (2008). High-Yield Behavioral Science (High-Yield Series). Hagerstwon, MD: Lippincott Williams & Wilkins.

George, D., & Mallery, P. (2003). SPSS for Windows step by step: A simple guide and reference. 11.0 update (4th ed.). Boston: Allyn & Bacon.

Greenberg, J. & Baron, R. A. (1997). Behavior in Organization (6th ed.). Prentice-Hall Inc. pp. 178, 190.

Guest R. H. (1980) Quality of work life: prospects for the 80s. Vital Speeches of the Day 46(10):310–3.

Hofstede G. (1980). Culture's consequences: international differences in work-related values. Beverly Hills, CA: Sage Lawler, E.E.III., (1982). Strategies for improving the quality of work life. American Psychologist, 37: 486-493. doi: 10.1037/0003-066X.37.5.486

Lee, D.J., Singhapakdi, A & Sirgy M.J. (2007). Further validation of a need-based quality-of-work-life (QWL) measure: evidence from marketing practitioners. Applied Research in Quality of Life, 2:273–87. doi: 10.1007/s11482-008-9042-x

Louis KS. (1998). Effects of quality of work life in secondary schools on commitment and sense of efficacy. School Effectiveness and School Improvement, 9(1):1-27. doi: 10.1080/0924345980090101

McCue, Clifford P., & Gianakis, Gerasimos A., (1997). The Relationship between job satisfaction and performance: The case of local government finance officers in Ohio. Public Productivity & Management Review, Vol. 21, No. 2, pp. 170-91.

Montgomery, D. C., Peck, E. A. and Vining, G. G. (2001). Introduction to Linear Regression Analysis. 3rd Edition, New York, New York: John Wiley & Sons

Newstrom, J. W., & Davis, K. (2000). Organizational Behavior: Human Behavior at Work (10th ed.). Houghton Mifflin Company. pp. 83, 103-11.

Nunnally, J. C. (1978). Psychometric theory (2nd Ed.). New York: McGraw-Hill.

Schminke, M., Arnaud, A., & Kuenzi, M. (2007). The power of ethical work climates. Organizational Dynamics, 36(2), 171-186. doi: 10.1016/j.orgdyn.2007.03.005
Sawilowsky, S. S. (2002). Fermat, Schubert, Einstein, and Behrens–Fisher: The Probable Difference Between Two Means When $\sigma_1 \neq \sigma_2$. Journal of Modern Applied Statistical Methods, 1(2).

Shamir, B. and I. Salomon, (1985). Work-at-home and the quality of working life. Academy of Management, 10: 455-64. doi: 10.5465/AMR.1985.4278957

Shaw W.H. (2005). Business ethics. Belmont, CA: 2005. Thomson Wadsworth;

Sirgy M.J., Efraty D., Siegel P. & Lee D.J. (2001). A new measure of quality of work life (QWL) based on need satisfaction and spillover theory. Social Indicators Research 2001; 55:241–302. doi: 10.1023/A:1010986923468

Somers M.J. (2001). Ethical codes of conduct and organizational context: a study of the relationship between codes of conduct, employee behavior and organizational values. Journal of Business Ethics; 30:185–95.

Steers, R. M. & Black, S. J. (1994). Organizational Behavior. (7th ed.). Harper Collins College Publications. pp. 86-88.

Trochim, W. (2000). The Research Methods Knowledge Base, 2nd Edition. Atomic Dog Publishing, Cincinnati, OH.

Umaselvi, M. and Bharathi, Subbu Rethina (2010), A Study on Quality of Work Life as Perceived by the College Teachers in Trichy City (June 27, 2010). Available at SSRN: http://ssrn.com/abstract=1631051

Valentine S. & Fleischman, G. (2008). Ethics programs,

perceived corporate social responsibility and job satisfaction. Journal of Business Ethics. 2008;77:159–72. doi: 10.1007A10551-006-9306-Z

Valentine S., Godkin L. & Lucero M. (2002). Ethical context, organizational commitment, and Person-organization fit. Journal of Business Ethics;41(4):349–60. doi: 10.1023/A:1021203017316

Vitell S.J. & Singhapakdi A. (2008). The role of ethics institutionalization in influencing organizational commitment, job Satisfaction and esprit de corps. Journal of Business Ethics; 81:343–53. doi; 10.1007/sl0551-007-9498-x

Verbos, A. K., Gerard, J. A., Forshey, P. R., Harding, C. S., & Miller, J. S. (2007). The positive ethical organization: Enacting a living code of ethics and ethical organizational identity. Journal of Business Ethics, 76(1), 17-33. doi: 10.1007A10551-006-9275-2

Walker J.W. (1992). Human Resource Strategy. New York: McGraw-Hill.

Appendix

Table 1: Reliability Scores of Measurement Scales

Measurement Tools	Cronbach's Alpha	Scale Mean	Scale Variance
Quality of Work Life	0.908	3.56	.157
Ethical Work Climate	0.859	3.10	.067
Performance	0.836	3.67	.091
Job Commitment	0.836	3.53	.041
Job Satisfaction	0.658	3.44	.236

Table 2: Hierarchical Regression for Public Institutions

PUBLIC INSTITUTIONS QWL Vs Job Satisfaction and Performance	Job Satisfaction			Performance		
	R^2	Change R^2	F	R^2	Change R^2	F
Step I: Demographics	.146	.146	.007**	.115	.115	.028*
Step II: Quality of Work Life (QWL)	.436	.291	.000**	.435	.320	.000**
Durbin – Watson Measure	2.057#			1.730#		

** p<.01   *p< .05   # Durbin-Watson statistic within acceptable range

Table 3: Individual Beta values for Public Institutions

PUBLIC INSTITUTIONS QWL FACTORS	Job Satisfaction			Performance		
	Beta	t-value	p-value	Beta	t-value	p-value
Skill Discretion	0.196	1.634	0.106	0.316	2.629	0.010*
Decision Authority	0.17	1.375	0.173	-0.152	-1.223	0.225
Task Control	-0.017	-0.159	0.874	0.202	1.839	0.070
Work Time Comfort	0.299	2.981	0.004**	-0.01	-0.103	0.918
Role Clarity	0.025	0.236	0.814	0.357	3.402	0.001**
Job Security	0.026	0.193	0.847	-0.224	-1.676	0.098
Manager Support	0.21	1.992	0.050*	0.109	1.035	0.304
Peer Support	0.069	0.677	0.500	0.146	1.421	0.159

** p<.01   * p< .05

Table 4: Hierarchical Regression for Private Institutions

PRIVATE INSTITUTIONS QWL Vs Job Satisfaction and Performance	Job Satisfaction			Performance		
	R^2	Change R^2	F	R^2	Change R^2	F
Step I: Demographics	.027	.027	.867	.097	.097	.319
Step II: Quality of Work Life (QWL)	.556	.529	.000**	.508	.411	.002**
Durbin – Watson Measure	2.401#			2.467#		

** p<.01   # Durbin-Watson statistic within acceptable range

Table 5: Individual Beta values for Private Institutions

PRIVATE INSTITUTIONS QWL FACTORS	Job Satisfaction			Performance		
	Beta	t-value	p-value	Beta	t-value	p-value
Skill Discretion	0.001	0.009	0.993	0.455	2.768	0.009**
Decision Authority	0.168	1.261	0.215	0.212	1.51	0.139
Task Control	-0.25	-1.929	0.061	-0.049	-0.361	0.721
Work Time Comfort	0.339	2.393	0.022*	-0.199	-1.332	0.191
Role Clarity	0.309	1.563	0.127	0.045	0.218	0.828
Job Security	0.289	1.99	0.054	0.26	1.702	0.097
Manager Support	-0.187	-0.91	0.369	-0.237	-1.094	0.281
Peer Support	0.097	0.497	0.622	-0.256	-1.244	0.221

** p<.01   *p< .05

Table 6: Quality of Work Life differences between Public and Private Institutions

Quality of Work Life	Female		Male		More Experienced		Less Experienced		Locals		Expats	
	Public	Private	Public	Private	Public	Private	Public	Private	Public	Private	Public	Private
Skill Discretion	67.8	67.0	66.9*	73.9*	69.2	70.0	63.5*	74.9*	72.9	75.7	65.5*	70.7*
Decision Authority	51.3	48.9	48.5	50.5	52.2	50.7	44.2	45.6	54.5	57.5	47.9	49.5
Task Control	44.5	45.5	48.5	49.6	50.3	48.4	41.8	45.0	55.0	45.0	45.1	47.9
Work Time Comfort	41.1	47.7	45.9	48.4	44.1	48.7	45.0	45.6	40.0	45.0	45.7	48.2
Role Clarity	68.3	70.3	74.7	74.2	73.5	71.7	71.5	75.9	73.7	75.0	72.6	72.3
Job Security	59.8	62.9	60.2	59.8	62.3	60.5	55.8*	64.1*	71.4	63.3	56.7*	61.1*
Manager Support	66.3	65.4	68.8	69.4	68.9	66.1	66.6*	74.7*	68.9	72.0	67.8	67.4
Peer Support	71.3	73.9	76.7	77.7	75.8	75.9	73.7	76.7	82.4	85.0	72.9	75.7

*p< .05

Table 7: Ethical Work Climate differences between Public and Private Institutions

Ethical Work Climate	Female		Male		More Experienced		Less Experienced		Locals		Expats	
	Public	Private	Public	Private	Public	Private	Public	Private	Public	Private	Public	Private
Rules and Regulations	47.32	49.85	53.90*	48.68*	51.80	47.68	52.14	56.11	49.79	47.50	52.54	49.27
Caring Environment	52.62*	60.61*	60.70	59.73	59.92	60.30	55.26	59.26	59.86	66.67	57.80	59.84
Independence	61.19	60.26	64.47	67.18	64.77	64.72	61.14	61.48	61.79*	80.00*	63.97	63.47
Efficiency	51.67*	68.41*	66.36	59.79	63.31	61.77	59.43*	71.85*	61.65	66.67	62.02	63.46
Trust	71.67	80.72	86.95	83.50	85.41	81.64	76.78	85.19	82.24	86.67	82.38	82.09

*p< .05

Table 8: Performance Level differences between Public and Private Institutions

Performance	Female		Male		More Experienced		Less Experienced		Locals		Expats	
	Public	Private	Public	Private	Public	Private	Public	Private	Public	Private	Public	Private
Academic Research	67.86	69.91	74.06*	84.01*	76.36	77.32	64.61*	80.00*	83.44	60.00	68.91*	78.55*
Realize full potential	61.43	71.38	69.28*	77.26*	70.71	73.50	60.02*	80.00*	80.03	90.00	63.09*	74.04*
Innovations	79.29	77.16	80.54	83.67	82.49	81.47	75.94	77.78	85.25	90.00	78.68	80.42
Student results	72.14	77.20	74.49*	80.62*	73.51	80.97	74.28	75.56	81.60	70.00	71.51*	80.41*
Academic associations	70.00	69.21	75.38	73.37	76.04	71.64	69.62	71.11	72.15*	60.00*	74.23	72.02
Student Rating	77.14	78.29	77.52	83.29	76.66	81.82	78.77	77.78	80.08	70.00	76.63	81.56
Peer reviewed journals	54.29	61.84	64.38	66.41	63.66	62.93	57.14	71.11	63.01*	40.00*	60.86	65.42

*p< .05

Dr. S. Sathya Narayanan
Faculty in Business Management
P.O. Box: 710, PC 112, RUWI
Majan College (University College)
Muscat, Sultanate of Oman
promisenarayanan@yahoo.co.uk

Dr. M.Umaselvi
Faculty in Business Management
P.O. Box: 710, PC 112, RUWI
Majan College (University College)
Muscat, Sultanate of Oman
umaselvia@yahoo.co.in

Dr. Mohammed Ibrahim Hussein
Faculty in Business Management
P.O. Box: 710, PC 112, RUWI
Majan College (University College)
Muscat, Sultanate of Oman
mabubilal@gmail.com

Expression of Dissatisfaction in Relation to Managerial Leadership Strategies and Its Impact in Information Technology Organizations

Harold Andrew Patrick

Abstract:

The study emphasizes on IT managers' leadership strategies and what influence these leadership strategies have on IT employees expression of dissatisfaction. The dependent variable was response to dissatisfaction; Leadership strategies adopted by IT managers and Leadership strategies impact were the independent variables. Three standardized, valid and reliable tools were adopted to collect data. Respondents were drawn from Indian, Indian multinational and multinational IT companies. The article maps the behavioral variations and their implications in IT organizations based on leadership strategies/impact and response to dissatisfaction. The major findings indicate that in IT organizations prescriptive strategies were engaged more than restrictive strategies. The leadership strategies have a constructive impact on IT employees. The most preferred expression to dissatisfaction was voice i.e. constructive and active way to express dissatisfaction. The detail findings and implications are discussed in the article in detail.

Keywords: *Employee dissatisfaction, Leadership Strategies, organizational behaviour, Human resources management, Expression of dissatisfaction.*

1. Introduction

Leaders inspire and stimulate others to achieve worthwhile goals. Most definitions of leadership emphasize; Firstly, leadership is a social influence process and cannot exist without a leader and one or more followers. Secondly, leadership elicits voluntary action on the part of followers. Finally, leadership results in followers' behaviour that is purposeful and goal-directed in some sort of organized setting. Although leadership is the most frequently studied topic yet the precise nature of leadership and its relationship to key criterion variables such as subordinate satisfaction, commitment, and performance is still uncertain, to the point where Fred Luthans, in his book 'Organizational Behaviour' (2005), said that "it [leadership] does remain pretty much of a 'black box' or unexplainable concept."

Leadership Strategies: The literature generally suggests that effective leaders express their need for power and influence in ways that benefit the organization.

The learning strategies action, thinking, and accessing others are significant in predicting transformational leadership but learning through feeling is not a significant predictor. There was no difference between men and women in the use of learning strategies and transformational leadership. Gentry et al (2011) found the biggest gaps among generations in leading employees, change management, and building and mending relationships. Most of the recent literature review highlights the fact that freeing, autonomous, interdependent and prescriptive leader behavior creates the right climate for employees to be more able, willing, agile and ready to engage in meaningful and innovative behaviors at the workplace. Arie et al (2007) job satisfaction of subordinates was found to be higher when the style of strategic influence practiced by their supervisor fit their regulatory mode orientation. Bono et al (2007) found employees who regulated their emotions experienced decreased job satisfaction and increased stress, but those with supervisors high on transformational leadership were less likely to experience decreased job satisfaction.

Job satisfaction and dissatisfaction: Job satisfaction has the potential to affect a wide range of behaviours in organizations and contribute to employees' levels of wellbeing. In the west

research has indicated a decline over the past decade Korentz (2003) and dissatisfaction was with companies promotion, bonus policies, pension and health plans Bachman (2005). Employees with high job dissatisfaction exhibited the highest creativity when continuance commitment was high and when (1) useful feedback from coworkers, or (2) coworker helping and support, or (3) perceived organizational support for creativity was high Zhou and George(2001). The rationale for measuring job satisfaction through action tendencies is that positive and negative emotional experiences associated with job will evoke respectively approach - avoidance action tendencies Alt Powell (2006). Perry and Mankin (2007) examined the interrelationships among employee trust in the chief executive of the organization, trust in the organization and work satisfaction. Rao et al (2005) found organizational culture to significantly affect how employees view their organizational responsibilities and their job satisfaction. Thomas and Au (2002) found cultural groups responded differently to low job satisfaction with exit, voice, loyalty, or neglect. Daley (1992) found a challenging job and a collegial workgroup tend to enhance voice and loyalty while minimizing tendencies lean toward exit and neglect behaviours. Rusbult et al (1988) found high satisfaction and investment encouraged voice and loyalty and discouraged exit and neglect.

Need and Rationale for The Present Study

The emphasis on leadership and dissatisfaction in IT organizations has not been methodologically researched and its implications scantly available in India. Very few studies have been done internationally on these variables individually. The present study is a serious attempt to understand and explore in the Indian IT context the behavioral variations and their implications that these variables have on employees. The insights will contribute towards the basic understanding of the leadership strategies and how these strategies impact employees in IT organizations. It is an earnest attempt to bridge the gap especially in this area by highlighting the relevance and importance of leadership to management, individual, and organizations and hoping this study will initiate a series of serious and productive discussions on the subject. The study will bring in sharp focus the major challenges in these

behavioural domains encountered and the solutions that will aid IT organizations to deal more scientifically in increasing their effectiveness.

The major objective of the study was to find out the leadership strategies adopted by managers and the impact it has in the IT organizations. The study also investigates the relationship between leadership strategies/impact and expression of dissatisfaction.

Method
Operational definitions of the variables under investigation: Leadership/Impact® The definitions given by Cooke (1997) from the manual Leadership/Impact®-measuring the impact of leaders on organizational performance was adopted in this study. Leadership Strategies : The extent to which managers personally act in Prescriptive versus Restrictive ways. Prescriptive Leadership Strategies – those techniques that guide or direct the activities and behaviors of others toward goals, opportunities, and methods for task accomplishment. Restrictive Leadership Strategies – those that constrain or prohibit activities and behaviours with respect to goals, opportunities, and methods for task accomplishment. Impact on Others : The extent to which managers motivate or drive people to behave in Constructive versus defensive ways. Constructive Impact on Others - Motivate people to think and behave in Achievement-oriented and cooperative ways that emphasize growth and development. Defensive Impacts on Others - Drive people to think and behave in either aggressive or passive ways to protect their status and position. Passive/ Defensive Impact - Possibly inadvertently, these leaders adopt strategies that lead others to feel insecure or apprehensive, controlled and constrained, and uneasy about interpersonal relations within the organizations. Aggressive/Defensive Impact - Directly or indirectly, these leaders exhibit strategies that lead others to feel anxious about their status and influence, worry about how they look relative to others, and fixate on short-term (and sometimes irrelevant) performance criteria. Responses to Job Dissatisfaction - The definitions given by Rusbult and Lowery (1985) were adopted. Exit: Behavior directed towards leaving the organization, looking for a new job as well as resigning. Voice: Actively and constructively attempting to improve conditions like suggesting improvements and discussing problems with superiors. Loyalty: Passively but optimistically waiting for conditions to improve like speaking up for the organization in the face of external criticism and trusting the organization and its management. Neglect: Passively allowing conditions to worsen like chronic absenteeism, lateness, reduced efforts including error rates.

Sample Size
515 IT employees from 87 Indian, Indian multinational corporations and multinational IT companies were surveyed for the study. The sample was drawn from all the three levels of management. 305 IT employees from the junior level executives, 148 from the middle level managers and 62 from the senior level management were administered the questionnaire. Respondents who have worked for at least one year and have known their boss for at least one year were included for the present study. The stratified random sampling technique was adopted for the present study. Employees with minimum one year work experience and have known their boss for one year were only asked to fill the questionnaire. Two standardized, reliable and valid tools - Robert A. Cooke's (1996) Leadership/Impact® instrument and response adopted by employees to express dissatisfaction was developed by the researcher based on the model developed by Rusbult and Lowery (1985) were adopted.

Sample Profile
Respondents were drawn from 87 I.T companies. Entry level managerial level (59.2%), followed by middle level (28.7%) and top management (12%). For most respondents this was their first organization (43.5%) followed by one organization already worked for (20.8%), two organizations already worked for (16.7%), three organizations already worked for (13.2) and the maximum was eight organizations already worked for (0.6%). 30.1% were female and 69.9% were male respondents. The maximum was in the age group 21-25 yrs (48.3%), followed by 26-30 yrs (30.1%), 31-35 yrs (13.4%), only 0.2% were drawn from the above 50 yrs age group. The highest education level attained was bachelor degrees (60.6%) followed by masters degree (33%), Diplomas (3.7%), and other qualifications that include certificate and diplomas and degrees outside the formal educational structure. The marital status was that 69.1% were single, followed by married (29.7%) and the least were in the others category (1.2%) i.e. divorcees, widows or widowers. The work experience of the respondents show that most respondents had 1-3 yrs (40.8%) experience followed by 1 yr experience (16.5%), 3-5 yrs (16.3%), 5-7 yrs (9.7%), above 11 yrs (8%), 9-11 yrs (4.7%) and the least 7-9 yrs (4.1%) work experience. The majority had known their boss for 1 yr (45.8%) followed by 1-3 yrs (42.9%), 3-5 yrs (6.4%), above 11 yrs (1.9%), 5-7 yrs (1.6%), 7-9 yrs (1.2%) and the least being 9-11 yrs (0.2%).

Results
Manages often adopted strategies which guide or direct the activities and behaviours of their subordinates toward goals, opportunities, and methods (Prescriptive Mean = 3.49). Prescriptiveii leadership provides subordinates a direction to channel their efforts, leader acts as a model regarding how things should be done, engages in positive reinforcement to encourage the repetition of desired behaviors, and sets parameters specifying subordinates sphere of influence.

Sometimes managers adopted strategies which constrain or prohibit activities and behaviours with respect to goals, opportunities, and methods (Restrictive Mean = 3.04). Restrictiveii leadership provides subordinates directions that should not be pursued, the leader acts as a model regarding behaviors to be avoided, leader engages in negative feedback to discourage the repetition of undesired behaviors, and sets parameters restricting subordinates sphere of influence.

When the mean is 4.0 and above the prescriptive strategies are said to be strong and do have a constructive impactiii on others. When the mean is 2.0 – 2.5 the restrictive strategies are strong and will have defensive impact on others. When the restrictive and prescriptive strategies are equal then they cancel out each other and this will decrease the constructive impact and increase the passive/defensive impact on others. However when both restrictive and prescriptive strategies are weak then these behaviours are not exhibited by managers in IT organizations.

IT managers leadership strategies to a great extent has a constructive impact (Mean = 3.37) on others i.e. it motivates employees to think and behave in achievement-oriented and cooperative ways that emphasize growth and development. This was followed by defensive impact (Mean = 2.79) i.e. drive people to think and behave in either aggressive or passive ways to protect their status and position. The leadership strategies have a moderate passive/defensive impact on subordinates i.e. possibly inadvertently; these leaders adopt strategies that lead others to feel insecure or apprehensive, controlled and constrained, and uneasy about

interpersonal relations within the organizations. They also have a moderate aggressive/defensive impact (Mean = 2.75) i.e. directly or indirectly, these leaders exhibit strategies that lead others to feel anxious about their status and influence, worry about how they look relative to others, and fixate on short-term (and sometimes irrelevant) performance criteria.

Table 1 Indicating the relationship between responses towards dissatisfaction and variables.

Table1: Indicating the Frequency and percentage on the response to job dissatisfaction items.

Response to Dissatisfaction	EXIT		VOICE		LOYALTY		NEGLECT	
Job Satisfaction Items	**FQ**	**%**	**FQ**	**%**	**FQ**	**%**	**FQ**	**%**
Job security	121	23.5	211	41.0	147	28.5	36	7.0
Interest (from intrinsic aspects of job)	31	6.0	301	58.4	159	30.9	24	4.7
Opportunity for advancement	52	10.1	292	56.7	153	29.7	18	3.5
Appreciation from management	50	9.7	243	47.2	192	37.3	30	5.8
Company policies and management practices	49	9.5	239	46.4	184	35.7	43	8.3
Intrinsic aspects of job (excluding ease)	38	7.4	284	55.1	160	31.1	33	6.4
Salary	99	19.2	254	49.3	132	25.6	30	5.8
Supervision	55	10.7	282	54.8	148	28.7	30	5.8
Social aspects of job	48	9.3	266	51.7	161	31.3	40	7.8
Working conditions (excluding hours)	42	8.2	276	53.6	173	33.6	24	4.7
Communication	22	4.3	300	58.3	161	31.3	32	6.2
Hours (from working conditions)	59	11.5	274	53.2	150	29.1	32	6.2
Ease (from intrinsic aspects of job)	43	8.3	281	54.6	156	30.3	35	6.8
Benefits	62	12.0	240	46.6	188	36.5	25	4.9
Fair treatment	89	17.3	243	47.2	152	29.5	31	6.0

IT employee's most preferred response to dissatisfaction was voice followed by loyalty, exit and neglect was least preferred. This pattern was observed on all the fourteen items except communication item where neglect is preferred after voice and loyalty and exit was least preferred. Exit was mostly preferred when dissatisfaction was with job security (23.5%), salary (19.2%), and fair treatment (17.3%) and least preferred when dissatisfied with communication (4.3%), interest (from intrinsic aspects of job) (6%), and intrinsic aspects of job (excluding ease) (7.4%). Voice was most preferred response to dissatisfaction for interest (from intrinsic aspects of job) (58.4%), communication (58.3%), and opportunity for advancement (56.7%) and lesser preferred response towards job security (41%), company policies and management practices (46.4%) and benefits (46.6%). Loyalty was the most preferred response to appreciation from management (37.7%), benefits (36.5%) and company policies and management practices (35.1%) and was preferred lesser for salary (25.6%), job security (28.5%) and supervision (28.7%). Neglect response was preferred as a response to company policies and management practices (8.3%), social aspects of job (7.8%) and job security (7%) and least preferred for opportunity for advancement (3.5%), interest (from intrinsic aspects of job), working conditions (excluding hours) (4.7%) and benefits (4.9%).

The chi square indicating the strength of relationship between variables, that is, 245.394, more the value higher the relationship between two variables. Since Sig. Value is less than .01 the relationship is statistically significant.
H1: There will be no significant relationship between leadership strategies and leadership impact in IT organizations. The results shown in Table I of the Appendix indicate that the null hypothesis H1 is rejected and the alternate hypothesis is accepted that there was significant relationship between leadership strategies and leadership impact in IT organizations.

It was found that Restrictive (.480**) leadership strategies were positively correlated to Constructive leadership strategy impact. Restrictive leadership strategy was positively correlated to Passive/Defensive (.424**) and Aggressive/

Defensive (.428**) defensive.

The strongest correlation was found between Prescriptive leadership strategy and Constructive impact (795**).

H2: Leadership strategies of managers have no influence on the leadership impact on employees in IT organizations.
The results shown in Tables II,III and IV of the Appendix indicate that the null hypothesis H2 is rejected and the alternate hypothesis is accepted. Leadership strategies of managers did influence the leadership impact on employees in IT organizations.

Prescriptive and Restrictive leadership strategies significantly influenced Constructive impact. Prescriptive leadership strategy had the strongest influence followed by Restrictive leadership strategy. Together these two variables explained 98.5% (R Square = .985) of the variation in the Constructive impact on respondents and the model was found to be significant at the 0.01 level of significance.

Prescriptive and Restrictive leadership strategies significantly influenced Passive/Defensive impact. Restrictive leadership strategy had the strongest influence. Prescriptive leadership strategy had a Negative influence on Passive/Defensive impact. Together these three variables explained 96.5% (R Square = .965) of the variation in the Passive/Defensive impact on respondents and the model was found to be significant at the 0.01 level of significance.

It was found that Restrictive, Prescriptive leadership strategies significantly influenced Aggressive/Defensive impact. Restrictive leadership strategy had the strongest influence. Prescriptive leadership strategy had a Negative influence on Aggressive/Defensive impact. Together these two variables explained 96.2% (R Square = .962) of the variation in the Aggressive/Defensive impact on respondents and the model was found to be significant at the 0.01 level of significance.

H3: Leadership strategies' impact on employees does not affect the expression of job dissatisfaction of employees in IT organizations.

Results from Table V of the Appendix indicate that H3 is rejected as leadership strategies did affect the expression of job dissatisfaction of employees. Standard Canonical Discriminant Function - stepwise discriminant analysis was performed to identify which Independent variables distinguished and affected response to dissatisfaction with reference to job satisfaction dimensions.

The pattern of response to dissatisfaction towards job security was that (all variables remaining unchanged) when managers used higher restrictive leadership strategy respondents were more likely to choose the neglect response. Higher passive/defensive impact on respondents, they were more likely to choose the loyalty response -interest (from intrinsic aspects of job). When managers experienced higher aggressive/defensive impact, they were more likely to choose the neglect response (opportunity for advancement). Higher passive/defensive impact on respondents, they were more likely to choose the exit response. When managers used prescriptive leadership strategy, respondents chose loyalty response appreciation (from management). When managers used higher restrictive leadership strategy respondents were more likely to choose the exit response (company policy and management practices). When managers used higher constructive impact on respondents, they were more likely to choose the neglect

response for intrinsic aspects of job (excluding ease). When employees experienced higher passive/defensive impact, they were more likely to choose the exit response (social aspects of job). When employees experienced passive/defensive impact they were more likely to choose the exit response for working conditions (excluding hours). When employees experienced higher passive/defensive impact they were more likely to choose the exit response (communication). When employees experienced higher constructive impact they were more likely to choose the neglect response (from intrinsic aspects of job). The pattern of response to dissatisfaction towards salary, supervision, hours (from working conditions), benefits and fair treatment was mixed.

Discussion

Leadership strategy: Prescriptive and restrictive leadership strategies significantly influenced constructive impact. Managers today apart from guiding and directing need to in some way engage in transforming, shaping or influencing the organizational context of members and the ways in which they approach their work and interact with one another. Managers potentially have numerous tools at their disposal for increasing their effectiveness. The most important tool revolves around the strategy, skills and behaviours that have been shown through research to be related to measures of leadership performance. Prescriptive strategies generally are more effective than restrictive strategies. It serves to define a direction for the system, establish structures for organization learning and adaptation, and support processes for problem solving and the integration of organizational components. They create and reinforce an organizational culture that communicates constructive norms and expectations to members.

Leaders with constructive impact motivate people to think and behave in achievement oriented and cooperative ways that emphasize growth and development. The benefits are better performance, higher levels of personal satisfaction and lower levels of stress. Leaders with defensive impact drive people to think and behave in either aggressive or passive ways to protect their status and position. Effective leaders organizationally tend to be visionary and future oriented, promoting empowerment and productivity, bringing out the best in people and concerned with long-term performance. Personal effectiveness of leaders is viewed as relaxed and at ease, ready for promotion to a higher level, accepting of feedback, and interested in self–development.

Improve leadership effectiveness by having a more constructive and less defensive impact by emphasizing prescriptive over restrictive strategies. Processes to increase the understanding/awareness of managers of their impact they currently are having on others should be mirrored. These include the degree to which they rely on prescriptive and restrictive strategies. The roots of this approach is grounded in the classic works of Rensis Likert, Douglas McGregor, Warren Bennis (1985) and James O'Toole (1995).

Both prescriptive and restrictive strategies reflect and effect leadership and the fact is that leaders use a combination of prescriptive and restrictive strategies. IT employees are knowledge workers, able and willing to engage in task accomplishment indicating high maturity. In a context like this it is desirable that leaders adopt prescriptive rather than restrictive strategies as they are more functional in IT organizations. This in turn will increase the constructive impact on IT employees.

The methods to be used by leaders in IT organizations to move the organization and its members towards the desired state of future affairs are by providing employees with − a direction to channel their efforts, provide for models regarding how things should be done, engaging in positive reinforcement to encourage the repetition of desired behaviours and communicate a set of parameters specifying their sphere of influence. The restrictive strategies are usually used for reasons such as ease of implementation, time pressures, and the capabilities and diagnostics of those being led. It also increases defensive behaviours by employees. Processes to engage in are to recollect the past, determine what one wants in the future, prepare a vision statement, act on one's intuition, test basic beliefs, and look into the future (Kouzes and Posner, 1995). Methods such as reversal, use of analogies, challenging of assumptions, choice of entry points etc. (de Bono, 1970) are helpful.

Restrictive strategies may be implemented to correct deviations, to discourage undesirable behaviours, to keep problem solving on-track and rational, or to achieve administrative efficiencies. They do have a desired effect on a short run. In the long run their effects are unanticipated and counterproductive leading to a passive and aggressive culture which will interfere with the employees and managers performance. These behaviours will lead managers to use more directive and restrictive leadership tactics and less supportive ones which are less dependent on the situation.

Leadership impact: As constructive impact significantly influenced working conditions, (excluding hours), social aspects of job, supervision and other job satisfaction dimensions, managers in IT can increase their constructive impact when they move towards a defining/envisioning and facilitating/creating a setting and move away from constraining behaviours. They have an impact on employees' self-actualizing behaviours when they move away from vertical and toward lateral/stimulating thinking behaviours and move away from constraining and toward facilitating/ creating a setting behaviours.

Response to dissatisfaction: IT organizations need to pay closer attention to the diversity of the workforce and design company policies that increases inclusion and reduces discrimination in the workforce regarding recruitment, selection, induction and socialization, training and development, career and succession planning, promotion and transfer policies, pay and benefits administration, challenging jobs and work design, opportunities to engage in decision making, autonomy and freedom to plan and execute work, empowerment and participation, employee welfare and involvement programs, employee engagement and talent acquisition programs, performance management systems and healthy employer-employee relations, and finally the exit process. All these processes and policies need to be fair to all employees irrespective of the diversity. This will increase the commitment and loyalty of employees and they will be able to engage in active and constructive ways in responding to dissatisfaction. Increases constructive impact on employees and reduce defensive impact. These will certainly decrease i the level of dissatisfaction of IT employees and create a psychologically non-threatening work environment which will increase the likelihood of IT employees choosing voice and loyalty as responses to dissatisfaction more frequently and not exhibiting exit and neglect responses when dissatisfied.

Limitations of the study: The self-report of leadership strategies and impact and response to dissatisfaction that

were taken from each respondent present the problem of common method variance. This problem is reduced as the reliability and validity of the instruments were found to be high. Genuineness in self-report is taken for granted in the present study like in any other surveys and interviews. The scope of the present study can be extended to do a path analysis among the variables.

Suggestions for further research: This study should be replicated in other sectors to ascertain if the findings hold true in all organizations. Attempts should be made to obtain measures of exogenous and endogenous variables at different periods of time on leadership strategies and impact, and response to dissatisfaction. Other models and relationships can be developed and tested and critical human resource management and organizational behaviour variables can be investigated as Dependent variables.

Conclusion: The findings of the present study pinpoint certain relevant conclusions, particularly focusing on the centrality of leadership as critical Independent variable affecting the response to dissatisfaction of IT employees. The study indicated that Prescriptive leadership strategy had a Constructive impact on employees; organizations need to nurture and imbibe as part of their organization culture the behaviours that reinforce Prescriptive leadership behaviours and decrease Restrictive leadership strategy so that Passive/ Defensive and Aggressive/Defensive behaviours are reduced. The employee's response to dissatisfaction was more Active and Constructive when the use of Prescriptive leadership strategy and Constructive impact was more. Therefore organizations need to create shared meaning among their managers to engage in these behaviours more. Organizations need to factor in demographic differences while planning and executing manpower, recruitment, training, and development policies Career and succession plans, empowerment and involvement programs, benefits and compensation policies, safety, health and welfare programs and any other policies introduced should ensure that diversity of the workforce needs to be taken care of and should be perceived as fair to all groups of knowledge workers.

References

Agrusa, E. D. (2010). Exploring the relationship of learning of learning strategies and transformational leadership for business managers. University of Southern California). Pro-Quest Dissertations and Theses,99.

Alt Powell, E. (2006), 'Fewer people mean doing more with less', The Houston
Chronicle, January 23, p. D1, D4.

Ballinger, G. A., & Schoorman F. D. (2007), 'Individual reactions to leadership succession in Workgroups', Academy of Management Review, Vol. 32(1), 118-136.

Bajpai, N., & Srivastava, D. (2004), 'Sectorial comparison of factors influencing job satisfaction in Indian banking sector', Singapore Management Review, 26(2), 89– 99.

Boies, K., Lvina, E,&Martens, M. L. (2010), 'Shared leadership and team performance in a business strategy simulation', Journal of Personnel Psychology, Vol. 9(4), 195-202.

Bono, J.E., Foldes, H. J., Vinson, G., & Muros, J. P. (2007), ' Workplace emotions: The role of supervision and leadership', Journal of Applied Psychology, September, Vol. 92, Issue 5, 1357-1367.

Blank, Warren, B., Weitzel, J. R., & Green, S. G. (1990), 'A test of the situational leadership Theory',Personnel Psychology, 43, 579–597.

Caryl E. Rusbult, C. E., Farrell, D., Rogers, G., & Mainous III, A. G (1988). Impact of Exchange Variables on Exit, Voice, Loyalty, and Neglect: An Integrative Model of Responses to Declining Job Satisfaction,The Academy of Management Journal, Vol. 31,(3).

Colbert, A. E., & Witt, L. A. (2009), 'The role of goal-focused leadership in enabling the expression of conscientiousness', Journal of Applied Psychology, vol. 94(3), May, 790-796.

Clements,C & Washbush BJ, (1999) 'The two faces of leadership: considering the dark side of leader-follower dynamics', Journal of Workplace Learning', Vol. 11, 5, 170 - 176

Cooke, R. A. (2008). Leadership/Impact® Feedback Report. Plymouth, MI, USA: Human Synergistics International.

Dale, K., & Fox, M. L. (2008), 'Leadership style and organizational commitment: Mediating effect of role stress', Journal of Managerial Issues, Spring, Vol. 20 (8), 109-130.

Daley, D. M. (1992), 'When bureaucrats get the blues: a replication and extension of the Rusbult and Lowery analysis of federal employee responses to job dissatisfaction, Journal of Public Administration Research and Theory, J-PART, Vol. 2(3), July, 233-246.

Luthans, F. (2002), 'The need for and meaning of positive organizational behavior',Journal of Organizational Behavior, 23: 695–706.

Fix, B., & Sias, P. M. (2006), Person-Centered communication, leader-member exchange, and employee job satisfaction. Communication Research Reports, Vol. 23(1), January, 35–44.

Frank, D., Wilfred, H., & Zong, D. (2007), 'The impact of effective strategic planning and leadership on employee satisfaction', Competition Forum, Vol. 5, Issue 1, 243-252.

Farrell, D. (1983). Exit, voice, loyalty, and neglect as responses to job dissatisfaction: a multidimensional scaling, The Academy of Management Journal, December, Vol. 26(4), 596-607.

Gentry, W. A., Griggs, T. L., Deal, J. J., Mondore, S. P., & Cox, B. D. (2011), 'A comparison of generational differences in endorsement of leadership practices with actual leadership skill level', Consulting Psychology Journal: Practice and Research, Vol. 63(1), March, 39-49.

Hunter, S. T., Thoroughgood, C. N., Myer, A. T., & Ligon, G. S. (2011), 'Paradoxes of leading innovative endeavours: Summary, solutions, and future directions', Psychology of Aesthetics, Creativity, and the Arts, Vol. 5(1), February, 54-66.

Kim, S. (2002). Participative management and job satisfaction: Lessons for management leadership. Public Administration Review,62(2), 231-241.

Korentz, G. (2005). U. S. job satisfaction keeps falling. The Conference Board Reports Today, The Conference Board, February 28,http://www.conference-board-org/utilities/pressPrinterFriendly.cfm? press ID=2582.

Kouzes, J.M. & Posner, B.Z. (1995), 'The Leadership Challenge' , Jossey-Bass, San Francisco.

Krishnan, V. R., & Arora, P. (2008), Determinants of transformational leadership and organizational citizenship behaviour. Asia-Pacific Business Review, January - March, Vol. 4(1), 34-43.

Madlock, P. E. (2008), The link between leadership style, communicator competence, and employee satisfaction. Journal of Business Communication, Vol. 45(1), 61-78.

Manning, T. T. (2002). Gender, managerial level, transformational leadership and work satisfaction. Gender in Management, 17(5), 207-216. Retrieved from http://search.proquest.com/docview/213153678?accountid=38885

Lapierre, L. M. & Hackett, R. D. (2007), 'Trait conscientiousness, leader-member exchange, job satisfaction and organizational citizenship behaviour: A test of an integrative model', Journal of Occupational and Organizational Psychology, 80: 539–554.

Likert, R. (1967) The Human Organization: Its management and value, New York, McGraw-Hill.

Patrick, H. A (2012). Influence of power bases on leadership strategies adopted by managers' in Information technology organizations, European Journal of Business and Management, Vol 4, No. 11, 94-100.

Perry, R., & Mankin, L. (2007). Organizational trust, trust in the chief executive and work satisfaction. Public Personnel Management, 36(2), 165-179.

Rusbult, C. E., Farrell, D., Rogers, G., & Mainous III, A. G. (1988), Impact of exchange variables on exit, voice, loyalty, and neglect: An integrative model of responses to declining job satisfaction. The Academy of Management Journal, September, Vol. 31(3), 599-627.

Rusbult, C. E., & Lowery, D. (1985). When bureaucrats get the blues: Responses to dissatisfaction among federal employees. Journal of Applied Social Psychology, 15: 80-103.

Schulte, M., Ostroff, C., & Kinick, A. J. (2006), 'Organizational climate systems and psychological climate perceptions: A cross-level study of climate-satisfaction relationships', Journal of Occupational and Organizational Psychology, Vol. 79, 645-671.

Suar, D., Tewari, H. R., & Chaturbedi, K. R. (2006), 'Subordinates' perception of leadership styles and their work behaviour', Psychology and Developing Societies, Vol. 18(1), 95-114.

Schaubroeck, J., Lam, S. S., & Peng, A. C. (2011), 'Cognition- based and affect-based trust as mediators of leader behaviour influences on team performance', Journal of Applied Psychology, March, Abstract.

Sosik, J. J., and Cameron J. C. (2010), 'Character and authentic transformational leadership behaviour: Expanding the ascetic self toward others'. Consulting Psychology Journal: Practice and Research, Vol. 62(4), December, 251-269.

Stenmark, C. K., Shipman, A. S., & Mumford, M. D. (2011), 'Managing the innovative process: The dynamic role of leaders'. Psychology of Aesthetics, Creativity, and the Arts, Vol. 5(1), February, 67-80, Abstract.

Thomas, D. C and Au, K. (2002), 'The Effect of Cultural Differences on Behavioral Responses to Low Job Satisfaction', Journal of International Business Studie Vol. 33, No. 2 (2nd Qtr., 2002), pp. 309-326.

Turnley, W. H.; Feldman, D. C. (2000), 'Re-examining the Effect of Contract
Violations: Unmet Expectations and Job Dissatisfaction', Journal of Organizational Behavior ,21: 25–42. doi:10.1002/(SICI)1099- 1379(200002)21:1<25::AID-JOB2>3.0.CO;2-Z

Vecchio, R. P., Justin, J. E. & Pearce, C. L. (2008), 'The utility of transactional and transformational leadership for predicting performance and satisfaction within a path-goal theory framework'. Journal of Occupational and Organizational Psychology, 81: 71–82.

Wallace, J. C., Johnson, P. D., Mathe, K., & Paul, J. (2011), 'Structural and psychological empowerment climates, performance, and the moderating role of shared felt accountability: A managerial perspective'. Journal of Applied Psychology, March, Abstract.

Withey & Cooper(1989),'What's loyalty ?Employee responsibilities and Rights',5(3),231-240.

Yaffe, K., & Kark, R. (2011), 'Leading by example: The case of leader OCB'. Journal of Applied Psychology, March, Abstract.

Zhang, Z., & Peterson, S. J. (2011). 'Advice networks in teams: The role of transformational leadership and members' core self-evaluations', Journal of Applied Psychology, April, Abstract.

Zhou.J and George, J. M. (2001),''When job dissatisfaction leads to creativity: Encouraging the expression of voice'', Academy of Management Journal,44(4),682-696.

Appendix

Table I Indicating Pearson correlations among leadership strategies adopted by managers and its impact in IT organizations

Leadership Strategies	Leadership Strategies Impact[a]					
	Constructive	Sig.	Passive/ Defensive	Sig.	Aggressive/ Defensive	Sig.
Prescriptive leadership strategy	.795**	.000	.009	.415	-.065	.072
Restrictive leadership strategy	.480**	.000	.424**	.000	.428**	.000

* Significant at the 0.05 level. ** Significant at the 0.01 level.
aFrom **Leadership/Impact®** Feedback Report by R.A. Cooke, Human Synergistics. Copyright © 2008 by Human Synergistics International. Adapted by permission

Table II indicating Model Summary of squared multiple correlations of Leadership Strategies (Prescriptive and Restrictive) with Constructivea leadership impact

Model	R	R Square(a)	Adjusted R Square	Std. Error of the Estimate
	.992(d)	.985	.985	.42790

d Predictors: prescriptive, restrictive

Table III indicating Model Summary of squared multiple correlations of Leadership Strategies (Prescriptive and Restrictive) with Passive/Defensivea leadership impact)

Model	R	R Square(a)	Adjusted R Square	Std. Error of the Estimate
	.983(d)	.965	.965	.53101

d Predictors: restrictive, prescriptive

Table IV indicating Model Summary of squared multiple correlations of Leadership Strategies (Prescriptive and Restrictive) with Aggressive/Defensivea leadership impact)

Model	R	R Square(a)	Adjusted R Square	Std. Error of the Estimate
	.981(f)	.962	.962	.55028

f Predictors: restrictive, prescriptive

Table V Indicating discriminant analysis for managerial leadership strategiesa, and leadership impacta) and response to dissatisfaction on dimensions

Standardized Canonical Discriminant Function Coefficients		Canonical Discriminant Function Coefficients Unstandardized coefficients				%ACCURATE
JOB SECURITY						
	Function 1		Function 1		Function 1	
Restrictive Strategies	-.890	Restrictive Strategies	-1.849	Neglect	-.974	73.5
INTEREST (from intrinsic aspects of job)						
Passive/Defensive	.875	Passive/Defensive	1.602	Loyalty	.250	54.7
OPPORTUNITY FOR ADVANCEMENT						
Aggressive/Defensive	.971	Aggressive/Defensive	1.783	Neglect	1.289	78.4
APPRECIATION (from management)						
Passive/ Defensive	-.714	Passive/ Defensive	-1.328	Exit	-.866	70.4
Prescriptive	-.626	Prescriptive	-.904	Loyalty	-.224	56.4
COMPANY POLICY AND MANAGEMENT PRACTICES						
Restrictive	1.000	Restrictive	1.961	Exit	-.242	60.9
INTRINSIC ASPECTS OF JOB (excluding ease)						
Constructive	1.038	Constructive	1.394	Neglect	1.027	77.5
SOCIAL ASPECTS OF JOB						
Passive/Defensive	.525	Passive/Defensive	.819	Exit	.479	75.6
WORKING CONDITIONS (excluding hours).						
Passive/Defensive	-.800	Passive/Defensive	-1.274	Exit	-.627	77.3

		COMMUNICATION				
Passive/ Defensive	-.648	Passive/Defensive	-1.005	Exit	-1.223	85.2
		EASE (from intrinsic aspects of job)				
Constructive	-.683	Constructive	-1.022	Neglect	-.572	69.2

From **Leadership/Impact®** Feedback Report by R.A. Cooke, Human Synergistics. Copyright © 2008 by Human Synergistics International. Adapted by permission.

Dr. Harold Andrew Patrick
Associate professor and Head - OB and HRM
Institute of Management
Christ University
haroldpatrick@christuniversity.in
haroldapatrick@hotmail.com

Consumer Experiences Calling Vanity Toll–Free Numbers - An Exploratory Study

K. Shivakumar

Abstract:

This study examines the experiences of consumers using vanity toll free numbers during the following three phases (pre-usage, usage, post-usage). This includes, the source from where they came to know the vanity toll-free numbers, perceptions about using vanity toll-free numbers, frequency of usage, industries and organizations they have tried to contact, problems encountered by them and their post usage reactions and managerial implications

Data were collected from 250 respondents residing in and around the Emirates of Sharjah and Dubai of the United Arab Emirates. The survey results indicate the following: that the sample came to know about the vanity toll free numbers through print media, audio-visual media, radio and word of mouth in that order. The respondents find vanity toll free numbers are easy to operate and helpful. The respondents used vanity toll- free numbers to call the following institutions and services: Banking, Fast – food outlets, Airlines, Travel Agencies, Insurance and Taxi respectively, to gather the required information, to get solutions for the problems faced by them, and/ or to get the desired service.

The survey revealed that the respondents faced problems such as long waiting time and unable to speak to the right person. It is suggested that to improve the services of vanity toll free numbers, professionally trained staff should be available round the clock to attend consumers' calls. Organizations can prepare a list of frequently asked questions and orient the staffs who attend vanity toll free calls. Also staff handling vanity toll free calls should be trained to be thorough professionals who can communicate effectively the relevant information in a polite and courteous manner. To successfully meet this requirement, organizations can customize their training program and these training programs can be periodically updated and modified to suit the changing needs of the consumers and the organization.

It is further suggested that studies taking samples from other Emirates can be carried out on specific service industries or manufacturing organizations.

Keywords: *Consumers, Vanity Toll – free numbers, Phases, Frequency, Problems, Training.*

1. Introduction

Successful business organizations continue to put in every possible effort for getting satisfied and loyal consumers to survive and grow. However, these efforts can work well only when the consumers are satisfied every time they make a purchase. Organizations aspiring to secure the continued support and patronage of their consumers should design strategies for their consumers to voice their compliments, complaints, and suggestions.

Such strategies may well include feedback surveys, or service provider / employee evaluation forms, toll- free numbers and customer service calls (Kelli Bodey, Debra Grace, 2006).
AT&T developed 1-800 numbers in 1967 as a convenient way for businesses to pay the tolls for their customers who contacted them (Gaebler.com). However, Vanity toll-free numbers came in to use in the mid-nineties almost two and half decades after the toll-free numbers were launched (Answer.com)

Toll free numbers are an integral part of doing business today. They combine a powerful sales and marketing tool with added benefits over a local line. Small and large business alike use toll free numbers to appeal to a larger percentage of consumers, establish confidence with customers, and take advantage of features not offered on local lines (Brandi Cummings, 2006).

A toll free number motivates a potential customer to satisfy his curiosity of the product or service in a convenient and hassle free manner since he is not charged for making calls to the company.

In addition, toll free numbers serve as a user friendly marketing tool (Mark Richardson, 2008).Consumer research shows that customers who search phone book listings, when faced with a choice of several similar businesses, are much more likely to call a business with a toll free number than a business with a long- distance number. In addition, toll free numbers boost consumer confidence. Consumers assume that business with toll- free numbers are larger and more stable than their competitors (Yahoo! Small Business). Toll- free numbers are also increasingly popular for personal use. For example, parents can obtain toll-free numbers to give to a young adult who is away at college (FCC Consumer Facts, 2008).

According to the US Census Bureau, every 31 seconds a limited- English speaker enters the US. But there is a silver lining. Typically, a pharmacist in a health system, clinic or community pharmacy setting initiates a three-way call over an 800- line via a dual hand set among the patient, pharmacist, and physician. An interpreter assists the pharmacist in explaining to patients how to take medications, the proper dosage and potential interaction. (Anthony Vecchione, 2006). Even for a small association, an 800 service can still be a good investment. According to Mark B. Bundick of the National Association of Rocketry, when considering an 800 service, the combination of staff size, services offered, and the number of members who will be calling will help you determine whether you can provide a better service with an 800 number than with other methods (Gary Fetgatter, Susan Cheshire, Mark B. Bundick, 2007).

Due to liberalization and globalization of trade, commerce and services and developments in the field of information and

communication technology, the need for faster, reliable and inexpensive means of communication such as the toll-free number may become a necessity for companies operating in different industries (Mark Richardson, 2008).

2. Literature Review

A few studies have been undertaken to understand the experiences of consumers using vanity toll-free numbers.

Branding is important to every small business. It's what sets you apart from competitors and helps people remember your business name and products. There are numerous ways small business owners can brand their business, and one successful way is to invest in a vanity toll free number. A vanity toll free number instantly gives your business brand recognition and gives off the impression of a reputable company. If your business is still small, a specialized number will also give consumers the impression of a larger business that can handle a large call volume. (Brandi Armstrong, ezienarticles.com) Toll free vanity numbers make it easy for your customers and prospective customers to remember your number, and that means that your business gets more calls. It also helps to brand your business. Keep this in mind when you're brainstorming toll free vanity numbers and don't stop coming up with ideas until you hit the right one. (Tim Paulino, freedom800.com) When it comes to marketing a business vanity number plays a very essential role because these toll free numbers provide an additional benefit of memorability. Vanity phone numbers can be a great way to promote your business if they are dealt with a little creativity and professionalism. Accurately chosen vanity number can grab the loads of clients to your business. (bukisa.com)

Regardless of the size of your business, toll free vanity numbers have the potential to increase your profits and achieve a greater customer base. A vanity number also has the potential to boost your chances of existing customers finding you more easily and sharing your unique phone number with their friends. (Tim Paulino, freedom800.com)

Acquiring a vanity number can be quite expensive especially if the company is just starting but the benefits can be endless and beneficial at the same time. The vanity advertising system is a powerful marketing technique that many companies have dared to use to attain a higher marketing level. All huge corporations nowadays choose to have a vanity number instead of just a local number to set themselves apart from other companies. The benefits of a vanity number can be timeless for a company that knows how to use the benefits to their advantages.(Alena,2010)

The power of vanity number was conducted by Michael J. Motto Advertising (New Providence, NJ) that found it pulled 14 times more calls than its numeric equivalent when used in identical radio spots (Adeptel.com, 2008)

A number of research studies were carried out by Response Marketing Group, on the effectiveness of toll-free numbers including:
Toll-free Numbers in Television Commercials
Fortune 500 SM Companies- Use of Toll-Free Numbers on the Internet
Use of Toll-Free Numbers in Radio Advertising
Use of Toll-Free Numbers in Magazine Advertising
Use of Toll-Free Numbers in Billboard Advertising
 Some of their major findings are listed below:
 Use of Toll Free Numbers as direct response mechanism in television advertising was undertaken and the results of

this study show that 35% of commercials display a phone number: the response mechanism, with 82% being toll-free, additionally, 74% use the use toll-free 800 prefix (as opposed to 866, 877 or 888), and 61% being 800 vanity numbers.

In the study on the General use of Toll-free Numbers as direct response vehicles in television advertising it was found that 24% of commercials viewed use toll-free number as response mechanisms, with 91% being toll-free 800 numbers (as opposed toll-free 888, 877 or 866), and 57% being 800 vanity numbers.

Use of Toll-free Numbers on the internet, the results of this study, focusing on the use of toll-free numbers by companies on the Fortune 500SM list, shows 86% of these companies use a toll-free numbers and 80% of them use a number with the 800 prefix, 50% of these companies with toll-free numbers used a vanity number (numbers that translate into a word for easy recall), with the 800 Prefix (as opposed to toll-free 888,877,866) being used 80% of the time.

Use of Toll-Free numbers in radio advertising: The results of this study show that radio advertisements featuring a vanity 800 number yield fifty- eight percent more phone calls than radio advertisements that mention a numeric toll-free number. Direct Response in Radio Advertising : The results of this study show 29% of advertisements use toll-free numbers as response mechanisms, with 66% being toll-free 800 numbers (as opposed to toll-free 888,877 or 866), and 72% being vanity 800 numbers.

Telephone Number recall in Radio Advertising: This study quantified how consumers retain toll-free numbers used in radio advertisements. The findings show that after only one exposure to a radio spot 58% of the subjects could recall a vanity 800 numbers, which compares very favorably with "hybrid" numbers – which were recalled correctly by 44% of subjects.

Use of Toll-free Numbers as Direct Response Mechanisms in Billboard advertising: This study examined vanity toll-free numbers as response device in billboard advertising in two markets. The study data reveals that almost 30% of the surveyed billboard advertising included a telephone number. Toll-free numbers made up the largest percentage – approximately 71% - of the telephone numbers included in the advertisements. Vanity numbers predominated; make up 76% of the total toll-free numbers. (Response Marketing Group, 2008)

One of the best tools to use in advertising is a toll free number that's easy to remember. Whether your ads are on Television, billboards, or business cards you want a good number of customers who associate with you positively.

Take some of the highest ranking companies on Fortune's 500 lists. Verizon communications is ranked at number twelve whereas their competitors are ranked amazingly lower.

It could be due to the fact that Verizon communications uses a customized toll free number, 1-800-Pick-DSL, while competitors use increasingly harder to remember numbers. Customized numbers should convey a positive meaning to their audience as well as being easy to remember.

The world is a competitive marketplace and in order to get your own business in a highly ranked position you have to take all the necessary steps. Best of all, the necessary steps

don't have to cost you a fortune. Use a vanity/custom phone number to be remembered. (Tollfreenumber.org, 2008)

The results of this study not only confirm conventional wisdom that vanity numbers draw more calls, they remove even the slightest doubt said Sandra Murray, President of Response marketing group (Business Wire, Jan 19, 1999)

Top ten benefits of a vanity number are increased response rates, credibility & prestige, instant brand name, customer focused image, stronger presence, better domain name availability, repeat and second hand marketing, better customer service, improving customer feed back, additional sales avenue. The bottom line is that anyone that does business or deals with customer over the phone can reap huge benefits from a great vanity number (Telecentrex LLC, 2008)

As an ecommerce site owner, ensure to go step ahead of the normal website to provide instantaneous support and help to your customers. If it's possible to offer live help service, it would be great. If not, display your customer care contact information very prominently on all pages and encourage your customers to call on your toll free numbers to sort their problems.

Also having a toll free number that spells your company name adds a little credibility that shows very easily too. It gives you a bigger company image, even if it's just you and the toll free number forwards to your cell phone! The definition of good customer service is having a live person that knows what they're doing answer the phone today (Bill Quimby, Toll free numbers.com, 2008)

Kerry Lauricella, founder of 1- 800 REPAIRS has listed the following advantages for contractors with vanity toll- free numbers:
Improved advertising results, improved credibility, service providers do not pay a percentage of the job, customer calls are dispatched to only one service provider, long-term contact not required, service provider maintains their identity, marketing service provided, advertising networking.
Greenfield noted some advantages of the vanity numbers, such as building brand awareness and refocusing marketing dollars. "It is a very cost effective way to continue to build a business," she said.

The bottom line is that people remember letters more so than numbers," Greenfield said. "It's been proven with all the Fortune 500 companies using those catchy 1-800GOFEDEX, 1-800-FLOWERS, etc.

1-800 REPAIRS give consumers free access to local, licensed, and insured companies that stand behind their work with a written guarantee.

"1-800 vanity phone numbers become imprinted in a prospect's memory, long after an advertising campaign is completed and these numbers continue to produce calls. That's because vanity phone numbers spell out exactly what you do."(John R Hall-Air Conditioning, Heating and Refrigeration News July 30, 2007 Vol. 231)

According to a recent study, the lodging industry is the most frequent user of vanity toll-free telephone numbers (including 866,877, and 888 prefixes) in TV advertising. The Toll-free numbers in television advertising study found that, despite the growth of the World Wide Web, usage of toll-free numbers in TV ads continue to grow (Anonymous-

Marketing Management. Chicago: Nov/Dec 2005. Vol. 14, ISS 6; 6, 1 pgs)

If you want to make your business line ring more often, get a toll free vanity number where the number spell words. According to a demographically representative in-house study of 110 adults conducted by Response marketing group, 58% of consumers can recall a toll-free vanity number after hearing it just once in an advertisement. (John Fetto-American Demographics, Ithaca: Nov 2002, Vol.24, ISS.10, Pg.15, 1 Pgs)

3. Research Objectives

Present study has been undertaken with the objective to know from the consumers the experiences they have had when they used the vanity toll-free numbers. This includes:
- The source from where they came to know the vanity toll-free numbers
- Perceptions about using vanity toll-free numbers
- Frequency of usage
- Industries and organizations they have tried to contact using vanity toll-free numbers
- The problems encountered by them
- Post usage reactions and managerial implications

4. Research Design
A pre-designed questionnaire on a five point scale was used to collect the primary data from the respondents (experiences). The questionnaire was framed to elicit the experiences of the respondents on the following three usage phases.

4.1 Pre-usage phase
- Awareness about vanity toll free numbers
- Perceived utility of vanity toll free numbers

4.2 Usage phase
- Frequency of vanity toll free numbers called
- Reasons for usage
- Organizations / Institutions called

4.3 Post – usage phase
- Problems encountered while using vanity toll free numbers
- Perceived training need for the staff

Three hundred questionnaires were distributed and after repeated calls two hundred and sixty two questionnaires were got back and out of which two hundred and fifty questionnaires were found to be complete in all respects and the same have been taken as the sample for the study. Convenient sampling was used to collect the primary data from the residents of both the Emirates of Sharjah and Dubai. This was because the residents of UAE come from different countries having social, economical and cultural background.

5. Sample Profile
Demographic information reported on the survey indicated the following:
Male respondents represented 55% of the sample, while female respondents represented the remaining 45%, with 58% percent being under 25 years of age, 40% between 35 to 50 years of age and 2% over 50 years. The report also indicated that 66% of the respondents to be single and the remaining 34% to be married.

Tables Showing the Sample Profile

Table1: Gender details

Gender	Count	Percentage
Male	137	54.8
Female	113	45.2
Total	250	100.0

Table2: Age distribution

Age distribution	Count	Percentage
Under 25	144	57.6
25-34	74	29.6
35-49	27	10.8
50-59	5	2.0
Total	250	100.0

Table3: Marital Status

Marital status	Count	Percentage
Unmarried	165	66.0
Married	85	34.0
Total	250	100.0

Table4: Education Level

Education Level	Count	Percentage
High School	24	9.6
Higher Secondary	55	22.0
Bachelor Degree	114	45.6
Master Degree	43	17.2
Others like diploma	14	5.6
Total	250	100.0

Table5: Income Range

Income Range	Count	Percentage
Below AED 3000	80	32.0
AED 3000- AED 5000	53	21.2
AED 5000- AED10000	63	25.2
AED 10000- AED15000	28	11.2
Above AED.15000	26	10.4
Total	250	100.0

About 32% of the respondents reported to have studied up to school level, while 46%of the sample has done a bachelor degree and about 17% have done their masters and the remaining 5%of the respondents are diploma holders. The income levels of the respondents were 53% of the sample getting up to AED 5000 per month, while 25% earned between AED 5000 and 10, 000, and 22% of the respondents earned over AED 10000 per month.

6. Survey Results

Table 7: Distribution of respondents count showing sources of Information
SA=Strongly Agree, A= Agree, SD= Strongly Agree
D= Disagree

Source of Information	SA/ A	Neutral	SD / D
Print media	201(80.4%)	22(8.8%)	27(10.8%)
Audio Media	161(64.4%)	39(15.6%)	50(20%)
Word of Mouth	129(51.6%)	49(19.6%)	72(28.8%)

Table - 8 Distribution of respondents count showing Perception about
Vanity toll free numbers
SA=Strongly Agree, A= Agree, SD= Strongly Agree, D= Disagree

Perception	SA / A	Neutral	SD / D
Easy to Register	167(67.6%)	40(16%)	43(17.2%)
Easy to Recall	169(67.6%)	46(18.4%)	35(14.0%)
Easy to Use	186(74.4%)	25(10%)	39(15.6%)

6.1 Sources of Information
Print media 80%, radio 64% and word of mouth 52% in that order indicated the respondents as the sources through which they came to know about the vanity toll-free numbers.

6.2 Perception about Vanity toll free numbers
Seventy-four percent of the respondents informed that vanity toll-free numbers are easy to use, while 68% feel that vanity toll-free numbers are easy to recall and 68% of the sample opined that vanity toll-free numbers are easy to register.

6.3 Frequency of Usage
About 50% of the surveyed respondents informed that they have made up to 10 calls, 24% have made between 10 and 20 calls and 26% more than 20 calls.

Table 9A: Distribution of respondents count on Frequency of calls made

Frequency of usage	Up to 10 calls	Between 10 and 20 calls	More Than 20 calls
Number / % of respondents	126(50.4%)	59(23.6%)	65(26%)

Table 9B : Distribution of respondents count on Period when calls made

Period when calls made	Last 2 months	Last 4 months	Last 6 months	Last 8 Months	Last 1year
Number / % of respondents	74(29.6%)	53(21.2%)	33(13.2%)	26(10.4%)	64(25.6%)

6.4 Period when calls made
Regarding the period during which these calls were made, 30% have called in the last two months, 26% during the last one year, 21% in the last four months and 23% in the last six and eight months.

6.5 Institutions / Organizations called
The survey reveals that respondents used vanity toll- free numbers to call the following institutions and services: Banking 83%, Fast – food outlets 63%, Airlines 62%, Travel Agencies 62%, Insurance 54%, and Taxis 52%. The other institutions called by the respondents include Hospitals and Medical centers and Educational institutions each about 48%, and both Hotels and Drinking water each about 45%.

Table 10: Distribution of respondents count on usage across various Institutions/ Organizations
SA=Strongly Agree, A= Agree, SD= Strongly Agree
D= Disagree

Institutions/ Organizations Called	SA/ A	Neutral	SD/D
Banking	208(83.2%)	09(3.6%)	33(13.2%)
Insurance	136(54.4%)	40(16.0%)	74(29.6)
Fast-food	158(63.2%)	37(14.8%)	55(22.0%)
Travel Agencies	154(61.6%)	37(14.8%)	59(23.6%)

	156(62.4%)	27(10.8%)	67(26.8%)
Airlines	156(62.4%)	27(10.8%)	67(26.8%)
Taxis	131(52.4%)	41(16.4%)	78(31.2%)
Hospitals & Medical centers	121(48.4%)	32(12.8%)	97(38.8%)
Educational Institution	120(48%)	39(15.6%)	91(36.4%)
Hotels	113(45.2%)	49(19.6%)	88(35.2%)
Drinking water	112(44.8%)	57(22.8%)	81(32.4%)

6.6 Purpose for which calls made

The survey disclosed that 82% of the respondents used the vanity toll-free numbers to gather the required information, 75% to get solutions for the problems faced by them, and 66% to get the desired service.

Table 11: Distribution of respondents count on purpose for which calls made

SA=Strongly Agree, A= Agree, SD= Strongly Agree
D= Disagree

Purpose	SA / A	Neutral	SD/ D
Solve the problem	187(74.8%)	30(12.0%)	33(13.2%)
Get the required information	205(82%)	22(8.8%)	23(9.2%)
Get the desired services	166(66.4%)	41(16.4%)	43(17.2%)

6.7 Type of problems encountered

The survey, however, showed that the respondents encountered problems while using the toll-free numbers. They disclosed the following as the major problems encountered by them: Long waiting time/ being put on hold 72%, no response / no answer 52%, unable to speak to the right person 45% and communication problems 38%. Apart from these problems, about 26% of the respondents informed that the persons answering the calls to be not informative and 25% felt the persons answering the call to be rude in their behavior.

Table 12: Distribution of respondents count on problems encountered

SA=Strongly Agree, A= Agree, SD= Strongly Agree
D= Disagree

Problems Encountered	SA / A	Neutral	SD/ D
No response/Answer	127(51.9%)	43(17.9%)	70(29.2%)
Long Waiting time/ Put on Hold	181(72.4%)	28(11.2%)	41(16.4%)
Not informative	66(26.4%)	91(36.4%)	93(37.2%)
Rude Behavior	63(25.2%)	62(24.8%)	125(50%)
Communication Problem	96(38.4%)	69(27.6%)	85(34%)
Unable to speak to the right person	113 (45.2%)	61(24.4%)	76(30.4%)

6.8 Post usage reactions

Four-fifth of the surveyed respondents have opined that to improve the effective usage of vanity toll-free numbers, staff should be available to attend calls; 73% and 71% of the sample respectively feel that customers should not be put on hold or made to wait and only the right person should respond.

Table 13: Distribution of respondents count on post usage reaction

SA=Strongly Agree, A= Agree, SD= Strongly Agree,
D= Disagree

Post Usage Reaction	SA/ Agree	Neutral	SD/ D
Staff Availability	200(80%)	22(8.8%)	28(11.2%)
Customers not to be put on hold	182(72.8%)	23(9.2%)	45(18%)
Right person should respond	177(70.8%)	38(15.2%)	35(14%)

Training to Enhance	SA/ A	Neutral	SD/ D
Professional approach	202(80.8%)	20(8%)	28(11.2%)
Being Polite and courteous	198(79.2%)	18(7.2%)	34(13.6%)
Being Informative	191(76.4%)	20(8%)	39(15.6%)
Communication Skills	194(77.6%)	20(8%)	36(14.4%)
Giving relevant information	192(76.8%)	24(9.6%)	34(13.6%)

The survey reveal that not less than 76% of the sample strongly feels proper training should be given to staff answering vanity toll-free calls. Training should focus on both making these staff to be more professional, polite and courteous when answering calls, and improve their communication skills to make them to be more informative and provide relevant information to the consumers

7. Hypothesis Testing

No significant level of dependency or association could be established between variables and the major phases taken for the study.
However, significant level of association could be noted between the following phases.
H1 There is a significant level of association between vanity toll free awareness and perceived utility of vanity toll free operations

Table – 1 Vanity toll free awareness classification * Perceived Utility of vanity toll free operations
Count

		Perceived Utility of Vanity toll free Operations			Total
		Low	High	Very High	
Vanity Toll free awareness classificati on	Less Awareness	45	25	6	76
	Good awareness	14	63	29	106
	Very Good Awareness	11	23	34	68
Total		70	111	69	250

Chi-Square Tests

	Value	df	Asymp. Sig. (2-sided)
Pearson Chi-Square	70.550	4	.000

Table – 1 above shows that there exists a very significant association between vanity toll-free awareness and perceived utility of vanity toll free operations
Sample who have good and very good awareness about vanity toll free classification perceive the utility of vanity toll free to be high or very high

H2 There is a significant level of association between vanity toll free awareness and perceived training need for staff / employees handling vanity toll free calls
Table –2 Vanity toll free awareness classification * Perceived training need for employees handling vanity toll free calls - Cross tabulation
Count

		Perceived training need for employees handling Vanity toll free calls			Total
		Low	Medium	High	
Vanity Toll free awareness classification	Less Awareness	45	8	23	76
	Good awareness	14	20	72	106
	Very Good Awareness	10	10	48	68
Total		69	38	143	250

Chi-Square Tests

	Value	df	Asymp. Sig. (2-sided)
Pearson Chi-Square	55.511	4	.000

Table – 2 above shows that there exists a very significant association between vanity toll-free awareness and perceived training need for vanity toll free employees

Sample who have good and very good awareness about vanity toll free classification feel strongly that the employees handling vanity toll free calls needs to be professionally trained

H3 There is a significant level of association between perceived utility of vanity toll free numbers and problems encountered by the respondents

Table – 3 Perceived Utility of vanity toll- free Operations * Problems encountered while using vanity toll free numbers - Cross tabulation
Count

		Problems encountered while using vanity toll free numbers			Total
		Low	Medium	High	
Perceived Utility of vanity toll free Operations	Low Utility	58	7	5	70
	High Utility	16	77	18	111
	Very High Utility	12	24	33	69
Total		86	108	56	250

Chi-Square Tests

	Value	df	Asymp. Sig. (2-sided)
Pearson Chi-Square	165.942	4	.000

Table – 3 above shows that there exists a very significant association between perceived utility of vanity toll-free operations and problems encountered by the respondents using vanity toll free numbers

Sample who perceived the utility of the vanity toll free operations to be high or very high, have encountered more problems.

H4 There is a significant level of association between perceived utility and perceived training need for staff / employees handling vanity toll free calls

Table –4 Perceived Utility of vanity toll free Operations * Perceived training need for employees /staff handling vanity toll free calls - Cross tabulation
Count

		Perceived training need for employees/ staff handling vanity toll free calls			Total
		Less Training need	More Training need	Intense Training need	
Perceived Utility of vanity toll free Operations	Low Utility	59	5	6	70
	High Utility	7	27	77	111
	Very High Utility	6	6	57	69
Total		72	38	140	250

Chi-Square Tests

	Value	df	Asymp. Sig. (2-sided)
Pearson Chi-Square	230.413	4	.000

Table – 4 above shows that there exists a very significant association between perceived utility of vanity toll-free operations and perceived training need for staff/ employees handling vanity toll free calls

Sample who have perceived the utility of the vanity toll free operations to be high or very high, feel strongly that staff / employees handling vanity toll-free calls should be properly and professionally trained.

Managerial Implications

Study shows that the respondents come to know about vanity toll free numbers through print media, audio visual media, radio and word of mouth. This being the case organizations instead of spending their promotion budget on other media can spend more on these media, to advertise the vanity toll free number.

This can be done by increasing the frequency of the advertisements giving the vanity toll free number appearing in the print media currently used (e.g., newspapers, magazines) or can advertise the vanity toll free number in other newspapers and magazines so far not advertised. Similarly ads announc-

ing the vanity toll free numbers can be repeated more often in the audio visual channels, radio channels, where it is presently advertised or new audio visual channels and radio channels can be identified to broadcast the vanity toll free number. To improve the effective usage of vanity toll free numbers consumers must be able to contact the organizations during any time of the day and organizations should ensure that there is always some staff available to attend customers' calls.

In case the requirement of the consumers can not be met immediately, instead of putting the consumers on hold or make them wait, the staff can inform the consumer that they will call back at the time which is suited to the consumer. This will also provide an opportunity for the right person to speak to the consumer.

As a part of improving customer service, internal marketing should be done to all the staffs who attend vanity toll free calls, so that they are better informed and equipped to provide improved service to consumers.

Organizations can prepare a list of frequently asked questions and orient the staff who attend vanity toll free calls with this information so that they can provide a more professional and thorough service to consumers. This list can be periodically updated as and when new questions are repeatedly raised or when new products / services are introduced or launched. Staff handling vanity toll free calls should be trained to be through professionals who can communicate effectively the relevant information in a polite and courteous manner. To successfully meet this requirement, organizations can customize their training program and these training programs can be periodically updated and modified to suit the changing needs of the consumers and the organization.

Limitations and Future Research

Firstly, any survey based method, including that adopted in this study, involves measurement error. In other words, the elicitation of a scale measurement, respondent's ability to accurately report their level of agreement with the survey statements (Kelli Bodey, Debra Grace, 2006). However, efforts were made to design the administered tool to be simple, easy to understand and respond. Convenient sampling was used to collect the data from residents living in and around the Emirates of Sharjah and Dubai.

Regarding future research, it is suggested that more samples from other Emirates can be taken for study. Further, separate studies can be undertaken on service industries and manufacturing organizations.

Conclusion

While organizations have started to respond to the voices of their consumers, still plenty of scope is there for them to listen to their consumers more intently and fine tune their customer service strategies. This will encourage more and more consumers to ventilate their views and help the organizations immensely not only to improve their performances and strengthen relationships with their consumers but also their bottom line.

References
Journal Articles

- Anthony Vecchione. (2006). Immigrants fueling demand for interpreters. Drug Topics. 150 (23), HSE32.
- Anonymous. (1999). Study finds toll-free numbers used in 58% of magazine ads. Direct Marketing. 62 (1), p8.
- Anonymous. (1998). Study: Toll-free numbers used in many TV spots. Direct Marketing. 61 (7), p15.
- Charles L. Martin, Denise T. Smart. (1994). Consumer experiences calling toll-free corporate hotlines. The Journal of Business Communication 31.
- Gary Fetgatter, Susan Cheshire, Mark B Bundick. (1997). Reason for an 800 service. Association Management. 49 (10), p97.
- Herbert Jack Rotfeld. (2000). Misplaced marketing Meanwhile, at the service desk: "Hello! Is there anyone here?". Journal of Consumer Marketing. 17 (7), p573 - 575.
- Kelly Bodey, Debra Grace. (2006). Segmenting service "complainers" and "non-complainers" on the basis of consumer characteristics. The Journal of Services Marketing. 20 (3), p178.
- Tom Duncan. (1999). By phone or online, customer contact bungles hurt brands. Advertising Age (Midwest region edition). 70 (22), p34.

Websites
- Brandi Cummings. (2006). Can Your Business Succeed Without A Toll Free Number. Available: http://www.telecentrex.com/2006/09/01/can-your-business-succeed-without-a-toll-free-number?. Last accessed 31 Dec 2008
- Consumer & Governmental Affairs Bureau. (2008). What is A Toll-Free Number And How Does it Work?. Available: http//www.fcc.gov/cgb/consumerfacts/tollfree.html. Last accessed 3 Nov 2008
- Mark Richardson. (2006). Advantages of Toll Free Number. Available: https://www.amazines.com/article_detail.cfm/163067. Last accessed 31 Dec 2008.
- Alena.(2010). Custom Toll Free-Vanity Number www.sooperarticles.com/communications-articles/custom-toll-free-vanity-number.Last accessed 24Dec.2012
- (n.d). Last accessed 26 May 2008, form http://www.Gaebler.com
- (n.d). Last accessed 3 Oct 2008, from http://smallbusiness.yahoo.com
- (n.d). Last accessed 24 Dec 2012 from http://ezinearticles.com
- (n.d). Last accessed 24 Dec 2012 from http://www.freedom800.com
- (n.d). Last accessed 24 Dec 2012 from http://www.bukisa.com
- (n.d). Last accessed 24 Dec 2012 from http://www.freedom800.com

Dr. K. Shivakumar
Professor
Department of Marketing Studies
Skyline University College
P. O. Box - 1797
University City, Sharjah, U.A.E
skumar@skylineuniversity.ac.ae

Impact Of Economic And Life Style Factors On Real Estate Prices In India

P. Praveen Kumar., R. Kasilingam

Abstract:

Real estate industry is one of the booming industries in India. The real estate prices are driven by many factors in the country. The industry is more amenable to the changing environment. In other words growth rate in real estate industry changes according to changing environment. In order to study the factors which are influencing real estate prices the present study is carried out. This study attempts to find out the impact of demographic, economic and lifestyle indicators of India on residential prices. Forecasting of real estate prices growth rate is also carried out in this study. The study finds that all the independent factors have influence on real estate prices but lifestyle indicator (number of new passenger car registrations) has independent and significant influence on real estate prices. From the study, it is also clear that there will be rise in real estate price in future.

Keywords: *Real Estate prices in India, Growth rate in real estate prices, Factors determining real estate prices.*

Introduction

The residential prices in India are fluctuating due to many factors. The investors in real estate markets are so keen in watching the price movements in order to invest efficiently without any risk. So there is a need to find out the factors which are having influence on real estate prices in different places. For the purpose of simplicity four places across India were chosen for the study. The independent factors may be economic, political, social and life style of the people. The study will help the investors by explaining the key factors which are having direct impact on the residential prices in India. This study also focuses in forecasting the real estate price growth rate for 4 quarters. The forecasting rate will also guide the investors in correct way for investing in near future periods.

Review of Literature

Raymond Y.C. Tse (1997) stated ARIMA model application to real-estate prices in Hong Kong and discussed the stationary in the time series data by unit root test. The estimated parameters are Office Property ARIMA(2,1,1) and Industrial Property ARIMA(2,1,1). The study says that psychological factors are to be considered in financial and futures markets. This paper shows the office and industrial property prices are fitted into the ARIMA equation.

Anthony Mills, David Harris and Martin Skitmore (2003) state the accuracy of housing forecasting in Australia. The study mentioned that this is the first attempt made in investing the accuracy of both the private as well as public sector forecasting. The study is similar to Stephan McNees at the Federal Reserve Bank in Boston, USA.

Tim Dixon (2005) studies the impact of ICT - information and communications technology on commercial real estate in the new economy. This was based on a qualitative assessment of existing frameworks and the study suggests that "socio-technical framework" is better to observe the ICT impact in real estate than other "deterministic" frameworks.

Lawrence Chin & Gang-Zhi Fan (2005) discussed the vibrant prices in the private housing market of Singapore using ARIMA modeling. The study also discussed some of the models like ARMA and GARCH. The study finds the subsistence of positive autocorrelation in housing price changes at the first lag. The study concludes that the private housing market in Singapore is described by the weak-form inefficiency. DeimantėZalieckaitė, Vytautas Snieška, Jovita Vasauskaitė, Rita Remeikienė (2007) studies the price fluctuations in the Lithuanian real estate market. Onur O¨zsoy and Hasan S ahin (2008) studies the factors that are affecting the housing prices in Istanbul, Turkey. This study uses CART approach for the analysis. Chyi Lin Lee (2009) studies the housing price volatility in Australia. In order to study the price volatility this study uses EGARCH model.

Kim Hin David Ho & Faishal bin Ibrahim Muhammad (2010) states the DCGE model - dynamic computable general equilibrium model and the model explains the dynamic interaction system and impact analysis due to the macro-economy and macroeconomic policy. Based on ex post and ex ante model estimates it is found that suburban retail real estate is more liable to GDP growth policy.

Ali Heps¸en & Metin Vatansever (2011) described the trend forecasting in Dubai housing market. The study uses Dubai Residential Property Price Index (DRPPI) data for forecasting by using Box-Jenkins autoregressive integrated moving average method. The study uses ADF, PP, and KPSS tests for checking stationary in the series. The study finds that average monthly percentage increase in the Reidin.com. Jing Li and Yat-Hung Chiang (2012) examines the factors that behind China's real estate with the help of housing price and macro economic variables. Hassan Gholipour Fereidouni and Ebrahim Bazrafshan (2012) examine the determinants of returns on housing in Iran using GMM. Vijay Kumar Vishwakarma (2013) studied the forecasting of real estate business in the Canadian market. This study has compared three different ARIMA models like ARIMA, ARIMAX and ARIMAX-GARCH.

Research Methodology

This study is based on descriptive research design. For the purpose of the study the popular residential areas in India like

Adayar in Chennai, Koramangala in Bangalore, Sarvodaya Enclave in New Delhi and Bandra West in Mumbai are chosen. The time period taken for this study is ranges from 2009 to 2011. The real estate prices in Rs. per Square feet of these places starting from the 3nd quarter of the calendar year of 2009 (i.e., July-September 2009) to the 4th quarter of the calendar year of 2011(i.e., October-December 2011) are taken as dependent variable. The independent variables for this study are demographic, economic and life style indicators of India. Data for the dependent variable (real estate prices) are collected from magicbricks webpage and data for the independent variables are collected from euromonitor webpage. In order to find out the impact of the demographic, economic, and life style indicators of India on the real estate prices simple and multiple regression analysis is used. For forecasting the future real estate price growth rate ARMA model is used.

Variables

Dependent variables: This study includes Adayar average quarterly prices (Rs. per Square feet), Koramangala average quarterly prices (Rs. per Square feet), Sarvodaya Enclave average quarterly prices (Rs. per Square feet) and Bandra West average quarterly prices (Rs. per Square feet) as dependent variables.

Independent variables: Independent variables of the study are grouped under three heads namely demographic, economic and life style indicators of India. Demographic & economic indicators of India include variables like inflation, density of population, GDP measured at purchasing power parity, consumer expenditure and annual disposable income. Whereas lifestyle indicators of India includes internet usages and number of new passenger car registrations.

Present Trends In Real Estate Prices

Adayar average quarterly prices (Rs. per Square feet): Adayar is one of the popular residential areas situated in Chennai along the banks of the river Adayar and Chennai airport is approximately 5km away from Adayar and the Guindy railway station is considered to be the nearest railway station for Adayar. These features attract the people to settle over there.

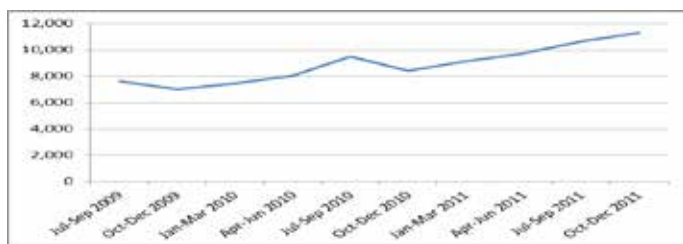**Chart 1: Real Estate price movement in Adayar**

Chart 1 reflects the fluctuating trend in the real estate prices in Adayar. In Oct-Dec 2009 average price falls by 7.5 percent and after that there is a slow growth in the trend. It has reached peak in Jul-Sep 2010 with growth rate of 17.7 percent. In the next quarter there is fall by 11.2 percent. After 2010 third quarter there is steady and continuous rise in real estate prices in adayar.

Koramangala average quarterly prices (Rs. per Square feet): Koramangala is said to be the popular residential area in Bangalore and it covers Jakasandra, Venkatapura and Madivala. Koramangala consists the famous education institutions namely St. John's Medical College, Jyoti Nivas College, St. John's Research Institute, etc.,

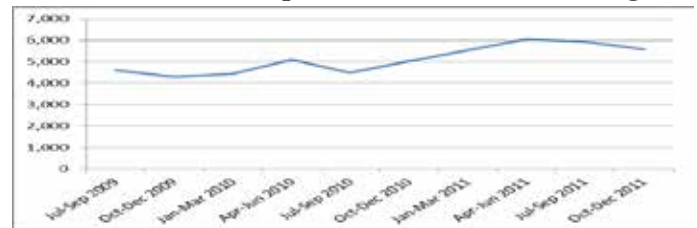**Chart 2: Real Estate price movement in Koramangala**

Chart 2 explains the decreasing trend by fall of 5.8 percent in the last quarter of calendar year of 2011. From 1st quarter to 2nd quarter of 2010 there is a steady peak of growth rate of 15.20 percent from 3 percent. But the 3rd quarter shows the deep fall of 12.06 percent from past. From this trend it is inferred that there is wide range of fluctuations in the trend of the real estate prices in Koramangala.

Sarvodaya Enclave average quarterly prices (Rs. per Square feet): Sarvodaya Enclave is considered to be one of the finest residential places in New Delhi. It has mixture of Schools, Colleges, Banks, Religious places, etc., people likes this place because of these favoured sign.

Chart 3: Real Estate price movement in Sarvodaya Enclave
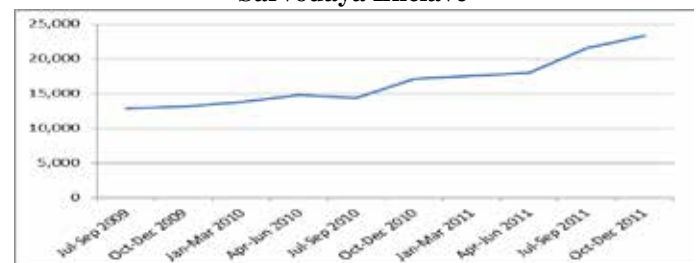

Chart 3 indicates steady rise in the trend of Sarvodaya Enclave average quarterly prices. From 3rd quarter of calendar year of 2009 to 2nd quarter of calendar of 2010 reflects slow increase but from Jul-Sept 2010 to Oct-Dec 2010 there is incredible growth of 19.7 percent from fall of 3.1percent in Jul-Sept 2010. After that the trend shows the positive growth.

Bandra West average quarterly prices (Rs. per Square feet): Bandra (pronounced Baah-ndra) is the popular place in Mumbai and from 20th century, west-side called as Bandra West and in the past this place has no popular on restaurants but in the present stage Bandra West is getting so popularity on restaurants in the quality aspects.

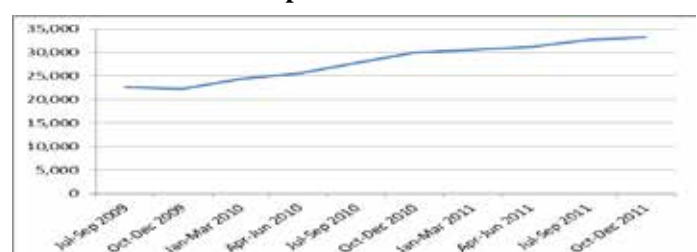**Chart 4: Real Estate price movement in Bandra West**

Chart 4 shows decreasing trend in the last quarter of 2009 by 1.2 percent and from Jan-Mar 2010 there is a positive growth in the Bandra West average quarterly prices. In Jan-Mar 2011 and Apr-Jun 2011 there is no much deference in the growth of average quarterly price and it has only 1.9 percent and 1.8 percent respectively.

Present Trends in Demographic, Economic and Life Style Indicators

Inflation: Inflation is said to be the level of price raise of goods in India. In the 2010 there is a huge rise in inflation to 12.1 percent from 10.8 percent in 2009. The inflation is at controllable level in the year 2011 at 9.2 percent.

Density of population: Density of population can be measured as the population in a country per unit area. The density of population in India is 394.9, 401 and 407 during the period 2009, 2010 and 2011 respectively. the density of population (persons per sq km) are 394.9, 401 and 407 respectively, This shows that there is no much difference in the growth rate (1.5 percent only) in density of population during last three years.

GDP measured at purchasing power parity: GDP measured at purchasing power parity means value of goods and services produced in the year which are valued at the price prevails in United States. In India there is a high growth in 2009 of 12.6 percent when compared to the growth of 9.1 percent in 2010 and 10.1 percent in 2011.

Consumer expenditure: Consumer expenditure means amount spent by people to buy consumer goods. The growth rate in consumer spending is 25.98 percent in the year 2010 which is considered to be one of the highest levels when compared to growth rate of 4.33 percent in 2009 and 15.7 percent in 2011.

Annual disposable income: Annual disposable income = Income – Tax paid, and which is available for spending and savings activities. In India the growth rate of annual disposable income in 2009 is just 2.06 percent but after that in 2010 there is a tremendous increase in the growth by 26.65 percent. In 2011 the growth rate comes to 13.98 percent.

Internet usages: Internet usages in India are growing year by year with incredible growth rate. In 2009 there is a growth rate of 18.5 percent only but after that two following subsequent years has the growth of 22 percent and which is considered to be the steady trend in the internet usages.

Number of new passenger car registrations: Number of new passenger car registrations means total number of new passenger cars which are registered in a year. In India in 2009 the growth rate is only 4.77 percent but year 2010 has the growth rate of 11.33 percent and this is considered to be increasing trend and in 2011 the growth rate is only 6.3 percent.

Impact of Demographic & Economic Indicators of India on Real Estate Prices

To study the impact each economic indicator on real estate prices at Adayar, Koramangala, Sarvodaya Enclave and Bandra West simple regression is applied. The equation is
Average quarterly prices = α + β independent variable

Table 1: Impact of Demographic & Economic indicators of India on real estate average quarterly prices

Independent variables	Inflation			Density of population			GDP measured at purchasing power parity		
Dependent variables	R	R Square	Coefficients (t)	R	R Square	Coefficients (t)	R	R Square	Coefficients (t)
Adayar	.641	.411	-.641 (- 2.361)**	.834	.695	.834 (4.268)*	.842	.708	.842 (4.406)*
Koramangala	.768	.590	-.768 (-3.394)*	.870	.758	.870 (5.001)*	.887	.787	.887 (5.435)*
Sarvodaya	.695	.482	-.695 (-2.731)**	.832	.692	.832 (4.240)*	.844	.713	.844 (4.459)*
Bandra West	.608	.370	-.608 (-2.167)	.918	.843	.918 (6.564)*	.919	.844	.919 (6.588)*

*significant at 1% level **significant at 5% level

Table 1 shows R the correlation and R square the degree of determination, β the co-efficient and the t- value with level of significance. From the T values it is clear that all the variables have significant impact on real estate prices of all four places except inflation on Bandra West. Impact of Inflation on prices in Adayar shows the standardised coefficient of -.641and which is considered to be the significant impact. Influence of Density of population and GDP measured at purchasing power parity on real prices in Adayar shows the standardised coefficient of .834 and .842 respectively. Influence of Inflation on Koramanga real estate price has significant effect with standardised coefficient of -.768. The standardised coefficient for impact of Density of population on Koramangala price is .870. This means when Density of population increases by 100 percent the Koramangala quarterly average price increases by 87 percent.

Table 2: Impact of Demographic & Economic indicators of India on real estate prices

Independent variables	Consumer expenditure			Annual disposable income		
Dependent variables	R	R Square	Coefficients (T Value)	R	R Square	Coefficients (T Value)
Adayar	.818	.670	.818 (4.029)*	.808	.653	.808 (3.881)*
Koramangala	.844	.712	.844 (4.452)*	.828	.685	.828 (4.173)*
Sarvodaya	.811	.658	.811 (3.919)*	.798	.636	.798 (3.739)*
Bandra West	.912	.832	.912 (6.292)*	.906	.821	.906 (6.062)*

*significant at 1% level **significant at 5% level

Table 2 shows all the independent variables such as consumer expenditure and annual disposable income have significant influence on the real estate price in Adayar, Koramangala, Sarvodaya and Bandra West. The single * indicates that the independent variables have significant influence at 99 percent level of confidence. The R square value indicates the degree of determination. The R square value for the influence of consumer expenditure on Bandra west price is 0.832. This means that 83 percent of variance in Bandra price can be determined by consumer expenditure of India.

Impact of Lifestyle Indicators of India on Real Estate Prices

The life style factors taken for the study are internet users and number of passenger car registration. The dependent variables are real estate price in Adayar, Koramangala, Sarvodaya Enclave and Bandra West. To find out the influence of each variable on real estate price simple correlation is performed. The results of the analysis are given in the table 3. The equation for the model is Dependent variable = α + β (dependent variable).

Table 3: Impact of Lifestyle indicators of India on real estate pricesrices

Independent variables	Internet usages			Number of new passenger car registrations		
Dependent variables	R	R Square	Coefficients (t)	R	R Square	Coefficients (t)
Adayar	.842	.709	.842 (4.411)*	.802	.644	.802 (3.800)*
Koramangala	.888	.788	.888 (5.451)*	.819	.670	.819 (4.033)*
Sarvodaya	.845	.714	.845 (4.466)*	.790	.624	.790 (3.644)*
Bandra West	.919	.844	.919 (6.585)*	.902	.815	.902 (5.927)*

*significant at 1% level **significant at 5% level

Table 3 indicates that the lifestyle indicators have significant impact on average quarterly prices at 1 percent significant level. The R value also explains that there is a great correlation between the lifestyle indicators and the average quarterly prices. Model fitness also seems to be perfect in this case. The R square values for internet users are more than R square values for number of new passenger car registration. This means that influence internet usages is more on real estate prices.

Relationship Among Independent Variables

In this section all the independent variables are tested for the collinearity. In order to find out the collinearity among independent variables correlation is performed. The results of the correlation is given below

Table 4: Correlation among Independent variables

		Inflation	Population	GDP	Consumer expenditure	Annual Income	Internet usages	Car registrations
Inflation	Correlation	1						
	Sig.							
Population	Correlation	-.630	1					
	Sig.	.051						
GDP	Correlation	-.679*	.998**	1				
	Sig.	.031	.000					
Consumer expenditure	Correlation	-.564	.997**	.989**	1			
	Sig.	.090	.000	.000				
Annual Income	Correlation	-.527	.992**	.982**	.999**	1		
	Sig.	.118	.000	.000	.000			
Internet usages	Correlation	-.681*	.998**	1.000**	.989**	.981**	1	
	Sig.	.030	.000	.000	.000	.000		
Car registrations	Correlation	-.508	.989**	.977**	.998**	1.000**	.977**	1
	Sig.	.134	.000	.000	.000	.000	.000	

* Correlation is significant at the 0.05 level (2-tailed) ** Correlation is significant at the 0.01 level (2-tailed).

Table 4 explains relationship among independent variables such as economic and life style variables. The significant values are less than 0.05 for many cases which means there is significant relationship among independent variables. GDP has 1 percent significant relationship with Population and 5 percent relationship with Inflation. Consumer expenditure has 1 percent significant relationship with Population and GDP. Annual Income has 1 percent significant relationship with Population, GDP and Consumer expenditure. Internet usage has 1 percent significant relationship with Inflation and 5 percent significant relationship with rest variables. Car registration has 1 percent significant relationship with all the variables except Inflation. The table infers that population, Consumer expenditure, Annual Income and Car registrations have not related with the Inflation.

Factors Determining Real Estate Average Quarterly Prices

Multiple regression is performed by using all the demographic, economic and the lifestyle indicators of India as independent variables and real estate prices as dependent variable. This will indicate independent impact of each variable on dependent variable. The equation of this model is Average quarterly prices = α + β1 inflation + β2 density of population + β3 GDP measured at purchasing power parity + β4 consumer expenditure + β5 annual disposable income + β6 internet usages + β7 number of new passenger car registrations.

Table 5: Factors affecting real estate price

Independent variables			Inflation	Number of new passenger car registrations
Dependent variables	R	R Square	Coefficients (t)	Coefficients (t)
Adayar	.847	.717	-	.642 (2.754)**
Koramangala	.915	.838	-.475 (-2.690)**	.578 (3.270)*
Sarvodaya	.860	.740	-	.589 (2.636)**
Bandra West	.919	.845	-	.800 (4.629)*

*significant at 1% level **significant at 5% level

When multiple regression is performed independent effect of each independent variable on dependent can be estimated. Table 5 shows real estate prices are determined by new passenger car registrations in India. The car registration is having influence on real estate prices in all four places such as Adayar, Kormangala, Sarvodaya and Bandra West. The real estate prices in Kormangala are influenced not only by car registration but also by inflation rate prevailing in India. . R represents the entire model correlation and R square represents the degree of determination. In this case, all the four models have the significant R and R square values. This indicates that inflation and car registration India have significant influence on real estate prices.

Forecasting of Real Estate Prices Growth Rate

Real estate prices are forecasted by using ARMA model. For forecasting Koramangala and Bandra West real estate price, ARMA (1,1) model is used and for Adayar and Bandra West forecasting, ARMA (1,2) model is used. ARMA models are carried after satisfying with unit root test result. The model is chosen by taking variables which are having significant influence. In this study attempt has been made to predict the growth rate in real estate prices rather than the actual real estate prices. The forecasted growth rate in real estate prices in four different places are given in the table 5.

Table 5: Forecasted Real estate prices growth rate

	Adayar	Koramangala	Sarvodaya Enclave	Bandra West
Jul-Sep 2012	6.470146	4.738632	8.713569	4.12873
Oct-Dec 2012	5.739194	4.738633	8.718283	4.12873
Jan-Mar 2013	6.279702	4.738633	8.715966	4.12873
Apr-Jun 2013	5.880019	4.738633	8.717104	4.12873
Jul-Sep 2013	6.175568	4.738633	8.716545	4.12873

Table 5 explains the future growth of real estate prices in four selected places in India. The growth rate in real estate prices in Adayar is varying from 5.7 percent to 6.4 percent. The growth rate in Koramangala, Sarvodaya Enclave and Bandra are not varying very much. The growth rate in real estate prices are around 4.7 percent, 8.7 percent and 4.1 percent in Koramangala, Sarvodaya Enclave and Bandra West respectively.

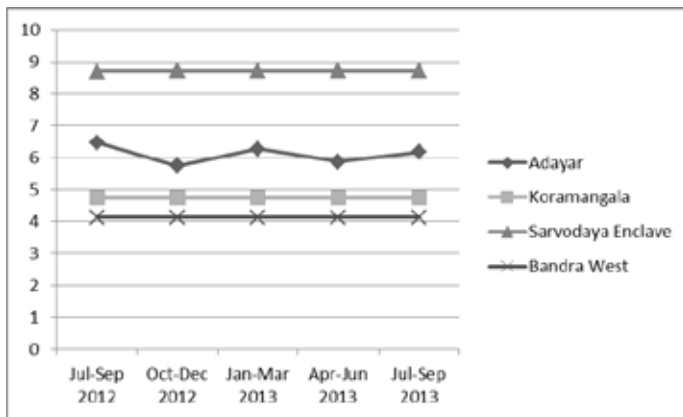## Chart 5: Forecasted Real estate prices growth rate

Chart 5 shows the pictorial representation of forecasted growth rate of real estate prices. The Chart shows future growth rate in real estate prices Adayar are varying from year to year wheras growth rate in Koramangala, Sarvodaya Enclave and Bandra West remains same. Sarvodaya Enclave has highest growth rate in near future.

Conclusion

The simple regression analysis reveals that the all the independent variables including demographic, economic and lifestyle indicators in India have the significant impact on the real estate prices in all four cities. The correlation analysis shows that there is a significant relationship among independent variables. Therefore multiple regression is performed. The multiple regression analysis indicates that number of new passenger car registrations in India drives the real estate prices of India. The price in Koramangala in Bangalore is influenced not only by car registration but also by inflation. This means that real estate prices moves according to changes happening in the lifestyle. The forecasted real estae prices shows that the growth rate in real estate prices in Adayar are varying from year to year wheras growth rate in Koramangala, Sarvodaya Enclave and Bandra West remains same. Sarvodaya Enclave has highest growth rate.

References

1. Ali Heps̨en & Metin Vatansever. 2011. Forecasting future trends in Dubai housing market by using Box-Jenkins autoregressive integrated moving average. International Journal of Housing Markets and Analysis, 4(3): 210-223.

2. Anthony Mills, David Harris & Martin Skitmore. 2003. The accuracy of housing forecasting in Australia. Engineering, Construction and Architectural Management, 10(4): 245-253.

3. Chyi Lin Lee. 2009. Housing price volatility and its determinants. International Journal of Housing Markets and Analysis, 2(3): 293 – 308

4. DeimantėZalieckaitė, Vytautas Snieška, Jovita Vasauskaitė & Rita Remeikienė. 2007. Price bubble in the Lithuanian real estate market?. Economics & Management, 946-953.

5. Hassan Gholipour Fereidouni & Ebrahim Bazrafshan. 2012. Determinants of returns on housing: the Iranian case. International Journal of Housing Markets and Analysis, 5(4): 351 – 360.

6. Jing Li & Yat-Hung Chiang. 2012. What pushes up China's real estate price?. International Journal of Housing Markets and Analysis, 5(2): 161 – 176

7. Kim Hin David Ho & Faishal bin Ibrahim Muhammad. 2010. Explaining the macro-economy and retail real estate sector dynamic interaction between prime and suburban retail real estate sectors. Journal of Property Investment & Finance, 28(2): 77-108.

8. Lawrence Chin & Gang-Zhi Fan. 2005. Autoregressive analysis of Singapore's private residential prices. Property Management, 23(4): 257-270.

9. Onur Özsoy & Hasan Sahin. 2009. Housing price determinants in Istanbul, Turkey: An application of the classification and regression tree model. International Journal of Housing Markets and Analysis, 2(2): 167 – 178

10. Raymond Y.C. Tse. 1997. An application of the ARIMA model to real-estate prices in Hong Kong. Journal of Property Finance, 8(2): 152-163.

11. Tim Dixon. 2005. The impact of information and communications technology on commercial real estate in the new economy. Journal of Property Investment & Finance, 23(6): 480-493.

12. Vijay Kumar Vishwakarma. 2013. Forecasting real estate business: Empirical evidence from the Canadian Market. Global Journal of Business Research, 7(3): 1-14.

P. Praveen Kumar
Research Scholar
Department of Management Studies,
Pondicherry University,
Kalapet,
Pondicherry-605 014
ppkmessages@gmail.com

Dr. R. Kasilingam
Reader,
Department of Management Studies,
Pondicherry University,
Kalapet,
Pondicherry-605 014
kasimeena@gmail.com

Book Review

Tourism in the Middle East: Continuity, Change and Transformation

Editor: Rami Farouk Daher
Channel View Publications 2007
ISBN 1-84541-050-5

The term Middle East remains enigmatic despite its frequent use in world politics, economy, culture, and of course tourism. There are several other terms that have regularly appeared in related literature to identify the geographic region spanning southwest Asia, northeast Africa and some parts of southeast Europe. Terms like West Asia and Near East have been used synonymously to denote the area which has great political and economic significance for the modern world while Bilad Al Sham, Mashreq or the Levant have had historical references to parts of the region. In the emerging world order Middle East holds the key for economic growth with its oil resources, and world peace with the conflict between Israel & Palestine. Tourism is often viewed as a harbinger of prosperity and peace and if, in the Middle East region, these are carefully handled we can have hope of a better future for planet Earth.

"The Middle East marks the point where Europe stops being Europe and gradually, untidily, and somewhat uneasily morphs into another place and culture. Here, globalization is a new phenomenon. Over the years a great imagining of difference relating to the Middle East has constantly veered from romanticized fascination and engagement, to that of suspicion and fear on both sides of the perceptual divide". These few lines have been taken from the Preface written by Mike Robinson, of the book 'Tourism in the Middle East: Continuity, Change and Transformation' edited by Rami Farouk Daher. Tourism in the Middle East has a very long and enchanting history. Middle East is, not only the geo-political expanse that divides Europe from Asia, but as rightly pointed out by Robinson in the preface, "the very place that binds them together".

Divided in eleven chapters this edited book 'explores' tourism in the Middle East. This claim of the Editor is quite relevant in the context of the book which covers a vast range of issues. Physical specifications of the book give an ordinary feel. The book is a paperback and small with unimpressive looks, though the small size provides a rather comfortable handling while reading. The book does not have a glossary of terms

and subjects, making it very difficult for the reader to search topics on a re-read. This surely is a flaw in the organization of the book. The paper quality and typesetting also fail to impress.

The first chapter, itself sets the tone for the scope of the book. The editor has contributed two chapters in the book the first and the tenth and the common term that appears in the title of both is 'heritage'. Both these chapters reflect the deep interest and understanding of the author in regard to the significance of heritage and its causal relation with modern tourism. Being a trained architect and belonging to the core of Middle East gives Rami Farouk the sensitivity to comprehend the nuances of Middle Eastern culture and polity which is the high light of his contribution. Development of tourism in the Middle East has been traced from the 'colonial encounters' in search of 'orientalism' to the present geopolitical mosaic of nations. The first chapter traces the historical, geopolitical and cultural dimensions of the region which the author prefers to call a 'multi discursive' approach. This introductory chapter, in the process of describing in some details the area and heritage of the Middle East region, also includes an introduction to the rest of the chapters of the book. It is heartening to read the transformation of the Arab world which was primarily explored as a getaway for Europeans in search of some form of oriental culture into an amalgam of modernity and tradition. The lucid details of cities, heritage sites, mosques, souqs, and coffee joints and the tourist activities related to these take the reader on a trip or cultural voyage of the Arab world. The highlight of this first chapter is its continual explanation of current tourism trends in regard to the sites and cities dealt with. The tour operatives and their methodology in attracting and delivering the product has added value to the comprehensive discourse. Egypt, Jordan and Syria form the nucleus of the chapter for details with references to Saudi Arabia, U.A.E., and Oman along with specific mentions of important cities like Cairo, Luxor, Damascus, Amman and Dubai. The chapter also deals with government policies towards development of tourism and has been able to attract meaningful attention towards the anomaly of

global versus local. Investments in tourism projects by multinational companies are encouraged in many countries of the Middle East at the same time depriving the locals of any significant benefits. "The irony is that same planning and development ordinances that have prohibited one local community's development initiatives can swiftly be changed when the 'right' investor or global capital proposes their own development scheme." The chapter has drawn attention to a significant issue here.

'A Historiography of Tourism in Cairo: A Spatial Perspective', is the second chapter authored by Noha Nasser. The nature of tourism in Cairo and its main features from the Islamic era through the Imperialist period to the post-revolution period of about a thousand years is an interesting narrative. 'The chapter has traced the way in which the changing nature of tourism has impacted on the evolution of Cairo' providing an insight into its position of being a 'commodity catering for European-colonialist leisure and taste'. It also touches upon the ramifications of the economic impacts ensuing due to tourism as it is practiced presently.

A chapter by Saba Al Mahadin and Peter Burns on Visitors, Vision and Veils critically examines the portrayal of the Arab world in western media. The inconsistency in perception of the worlds belonging to the host and that of the guests as advertised by promoters of tourism is the focus of discussion. The inconsistencies lead to misinterpretation of 'Orientalism' into backwardness, the   authors argue. The chapter offers valuable suggestions in areas of international relations, public administration and policy studies in tourism to bridge the gap between reality and perception and improve the benefits of tourism politically, economically and socially.

Chapters seven and eight discuss tourism of two of the Gulf countries Oman and Saudi Arabia respectively. Oman is comparatively a progressive state with a 'Ministry of Tourism' in place and is in the process of attracting high spenders to its main tourism destinations. Brigit Mershen in this article though has focused on another important issue, that of 'community tourism' with the participation of the locals where the benefits too should accrue to the community. The article by Peter Burns on Saudi Arabia, on the other hand, has its focus on 'the paradoxes and dilemmas facing Saudi Arabia as it embarks on a sustained program of tourism development'. It is a well researched article bringing out the predicaments of a

society which wants to keep its deep rooted traditions and at the same time reap the fruits of modernity. Overall the book is a good collection of articles on the Middle East. It provides a deep insight into the psyche of the people, culture and governments of countries which have often been misunderstood. Tourism has provided the backdrop to the 'discourses' throughout the book while the conflicts and contradictions of the mid-eastern society have been beautifully brought forth for the reader to comprehend. The articles are analytical, critical and forthright in their approach, the credit of which should go to the editor. Upon casual browsing of the 'contents' the book seems just a collection of articles on the Middle East but when the reader absorbs the inference of the chapters one after the other the coherence of the compilation shores up. In fairness to the editor it can be accepted that it was not possible to cover all that is tourism in the Middle East in one volume. There still are several pertinent issues which are very relevant in the modern context of tourism which have not been touched upon. One of them is the issue of Tourism Organizational Structures, especially in the comparatively peaceful Gulf region, all of which are some sort of 'kingdoms'. Governance in general and tourism governance in particular depends upon the outlook of the ruling clan. On one hand Dubai has become a modern metropolis and on the other, cash rich Saudi's still run away to Bahrain for seeking pleasure. Issues related to Palestine and Israel too needed specific treatment in a book that covers so much in the Middle East. Not much light has been thrown on Iraq and probably Iran was never taken into consideration for the purpose of this collection.

The book fills a long awaited void on literature on tourism of the Middle East. It is probably the first collection of its kind. Efforts of all the contributors are praiseworthy. The book is an attempt to compile various facets of tourism in the Middle East and has heavily relied upon historical evidence. Middle East tourism certainly deserves a better treatise and this book may encourage other authors to follow up a well researched comprehensive book.

Reviewed by:
Dr. Amitabh Upadhya
Professor, Skyline University College,
Sharjah UAE

Forthcoming Conferences

No.	Location	Dates	Area	Website Address
1.	Osaka, Japan	6th to 9th June 2013 Osaka, Japan	ACSS 2013 - The Fourth Asian Conference on the Social Sciences 2014	http://acss.iafor.org
2.	Bacau, Romania	7th to 9th June 2013	SMART2013 - Social Media in Academia: Research and Teaching	http://smart2013.edusoft.ro
3.	Vancouver, Canada	13th to 14th June 2013	Thirteenth International Conference on Knowledge, Culture and Change in Organizations	http://ontheorganization.com/the-conference
4.	Beijing, China	13th to 14th June 2013	Call for Papers: 7th Global Business and Social Science Research Conference	http://www.chinaconfo.com
5.	Bad Hofgastein (outside Salzburg), Austria	17th to 21st June 2013	Euro-American Conference for Academic Disciplines (2013)	http://www.internationaljournal.org/badhofgastein.html
6.	Istanbul, Turkey	19th to 21st June 2013	European Conference on Social Science Research	http://www.iassr.org/
7.	Kuala Lumpur, Malaysia	25th to 26th June 2013	Global Conference on Business, Economics and Social Sciences Research	http://www.worldresearchconference.com
8.	Dubrovnik, Croatia (Hrvatska)	27th to 28th June 2013	Business and Social Science Research Conference: Dubrovnik 2013	http://macrotheme.com/international_conferences/dubrovnik_2013_business_and_social_science
9.	Seoul, Korea (north)	28th to 30th June 2013	International Conference on Business and Social Sciences	http://www.icbass.org
10.	Bangkok, Thailand	2nd to 4th July 2013 Bangkok, Thailand	2013ICOI, International Conference of Organizational Innovation	http://www.iaoiusa.org/2013icoi/index.html
11.	Brighton , United Kingdom	4th to 7th July 2013	ECSS 2013 - The European Conference on the Social Sciences	http://ecss.iafor.org/
12.	Toronto, Ontario, Canada	6th to 7th July 2013	8th International Conference of Management and Behavioural Sciences - "An Interdisciplinary Conference"	http://www.smbs.in/newsdetail.php?id=22
13.	Rhodes, Greece	11th to 13th July 2013	Twentieth International Conference on Learning	http://thelearner.com/the-conference
14.	Cape Town, South Africa	22nd to 25th July 2013	World Academy of Researchers, Educators and Scholars in Business, Social Sciences, Humanities and Education	http://www.worldacademyofresearchers.com/
15.	Istanbul, Turkey, Turkey	27th to 28th July 2013 Istanbul, Turkey, Turkey	IACSS 2013 - International Academic Conference on Social Sciences	http://www.iacss2013.com
16.	Liverpool, United Kingdom	10th to 12th September 2013	British Academy of Management Conference 2013 - Managing to Make a Difference	http://www.bam.ac.uk/bamconference2013
17.	Rome, Italy	20th to 22nd September 2013	3° International Conference on Human and Social Sciences	http://mcser.org/index.php?option=com_content&view=article&id=5&Itemid=2

No.	Location	Dates	Area	Website Address
18.	Istanbul, Turkey	25th to 28th September 2013	ICHSS 2013 Rome-Italy EMECON'13: EMERGING ECONOMIES CONFERENCE	http://www.emeconconference.org/
19.	Rome, Italy	22nd to 25th October 2013	International Conference for Academic Disciplines (Rome 2013)	http://www.internationaljournal.org/rome.html
20.	Madrid, Spain	14th to 15th November 2013	Sixth International Conference on Ubiquitous Learning	http://ubi-learn.com/the-conference

SKYLINE BUSINESS JOURNAL
Call for Papers

Skyline Business Journal (SBJ) is an Annual publication of Skyline University College, Sharjah, U.A.E. SBJ invites original papers / Management Case Studies / Book Reviews from academicians and practitioners on management, business, tourism, finance, human resource management, information systems, marketing and organizational issues. Papers based on theoretical / empirical research or experience should illustrate the practical applicability and or the policy implications of work described.

Instructions for the Author

1. Electronic Copy: Authors are required to submit an electronic copy (soft copy) of the papers in MS-WORD format (.Doc format) via email to sbj@skylineuniversity.ac.ae. A single article (including charts, diagrams and pictures etc.) should not exceed six thousand words. Times New Roman -Font size 12- to be used to type the manuscript.

2. Mailing Address: Complete Mailing Address along with Telephone and E-mail Address should be given.

3. Cover Page: The first cover page shall contain the title of the manuscript, the author's name, and affiliation including acknowledgement, if any. This page will be removed before the manuscript is sent to a referee. The first page of text should show the title but NOT the author's name.

4. Abstract and Keywords: Each manuscript should include an abstract of about 100-150 words. Key words used in the paper should also be given.

5. References: References must be typed on a separate page, double-spaced, at the end of the paper. American Psychological Association's (APA) referencing method should be followed.
   Articles Referred should be given as follows:
   Swann, W.B.,Jr., Milton, L.P., & Polzer, J.T. (2000). Should we create a niche or fall in line? Identity negotiation and small group effectiveness. Journal of Personality and Social Psychology, 79: 238-250
   Books Referred:
   Swann, W.B., Jr., Rentfrow, P.J & Guinn, J.S. (2002). Self verification: The search for coherence. In M.Leary & J.Tagney (Eds.). Handbook of self and identity: 367-383. New York: Guilford Press.

6. Main Conclusions: The article should end with a non-technical summary statement of the main conclusions. Lengthy mathematical proofs and very extensive detailed tables should be placed in appendix or omitted entirely. The author should make every effort to explain the meaning of mathematical proofs.

7. Tables: Tables must be numbered consecutively with Roman numerals. Please check that your text contains a reference to each table. Type each table on a separate page. Authors must check tables to be sure that amounts add up to the totals shown and that the title, column headings, captions, etc. are clear and to the point.

8. Figures: Figures must be titled and numbered consecutively with Arabic numerals (1, 2, 3……..0).

9. Equations: All but very short mathematical expressions should be displayed on a separate line and centered. Equations must be numbered consecutively on the right margin, using Arabic numerals in parentheses.

10. Clarity and Consistency: Please check your manuscript for clarity, grammar, spellings,punctuation, and consistency of references to minimize editorial changes.

11. Submission Fees: There is no fee for publication of articles.

12. Submission Deadline: Articles should be submitted before 15th June of every year for publication in the annual issue.

13. Editing: SBJ reserves the right of making editorial amendments in the final draft of the manuscript to suit the requirement of the journal.

14. Copyright: SBJ will have the copyright of all the materials accepted for publication.
    Wherever copyrighted material is used, the authors should be accurate in reproduction and obtain permission from copyright holders, if necessary. Articles published in SBJ should not be reproduced or reprinted in any form either in full or in part without prior written permission from the Editor-in-Chief.

15. Management Case Studies: Management Case Studies describe a real-life situation faced, a decision or action taken by an

individual manager or by an organization at the strategic, functional or operational levels.

16. Book Reviews: Book Reviews cover review of current book on business.

17. Complimentary Copy: A free copy of the Journal will be mailed to the author whose article is published.

Please send your research papers to: